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STATEMENTS RELEASED IN 1987

AMERICAN ACADEMY OF ACTUARIES

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BUSINESS SESSION

ANNUAL MEETING
SAN ANTONIO, TEXAS
NOVEMBER 17, 1987

President John A. Fibiger: I'd like to thank the Casualty Actuarial Society (CAS) for sharing an hour of their program with us. From every report I get, you have had a very interesting meeting so far. In a few moments, we're going to present a panel, which Mavis Walters will chair, on some of the activities of the Academy of particular interest to members of the CAS. But before that, we do have some important formalities to take care of. First, I'm going to call on Stan Hughey, chairman of the Nominating Committee.

Nominating Committee Chairman M. Stanley Hughey: In accord with Academy procedures, the officers of the American Academy of Actuaries have been elected by the Board of Directors. The board has elected: W. James MacGinnitie, president-elect; Joseph J. Stahl, II, vice president; Phillip N. Ben-Zvi, vice president; Virgil D. Wagner, secretary; and Daniel J. McCarthy, treasurer.

The Nominating Committee is placing in nomination the following directors, all for a three-year term: Michael Fusco, LeRoy J. Simon, Robert J. Callahan, Ardian C. Gill, Thomas D. Levy, and Lawrence N. Bader. As director for a one-year term: William T. Tozer. Mr. Chairman, that completes the report of the Nominating Committee, and with your approval, I put these names in nomination.

Fibiger: Thank you, Stan. Are there any further nominations from the floor? I would encourage anyone who wishes to nominate anyone to have advance knowledge of their willingness to serve. If there are none, I will declare the nominations closed and entertain a motion that the secretary cast a unanimous ballot for the nominees. Is there such a motion? So moved. Is there a second? Seconded. Any further discussion? There being none, all in favor say "aye." Ayes. All opposed say "nay." Silence. That completes the election. And to Messrs. Fusco, Simon, Callahan, Gill, Levy, Bader, and Tozer, I extend my congratulations.

Now I'm going to ask for brief reports from the secretary, from the executive director, and from the treasurer of the Academy. Virgil?

Secretary Virgil D. Wagner: Thank you, John. As has been mentioned, I will be assuming the position of secretary at the close of this annual meeting. I'm happy to give this report for our retiring secretary, Robert H. Dobson, who is unable to be with us today. Bob has served for three years as secretary and has done an outstanding job for the Academy.

Since our last annual meeting, some fourteen months ago in this very hotel, the Executive Committee and the Board of Directors of the Academy have each met four times. Our agendas for these meetings are getting longer in recognition of the significant increase in Academy activities. Following each board meeting, a summary of non-routine board actions has appeared in The Actuarial Update. Also, the complete text of the minutes of each board meeting is compiled and printed each year in the Academy's Journal. We are committed to open communication with the Academy membership, and we

welcome any questions, comments, and suggestions that you may have throughout the year.

During the past year two amendments to the bylaws were approved. One amendment dealt with categories of members eligible for dues waiver, while the second removed gender references from the bylaws, themselves. Both of these were ratified by a vote of the membership, and their text will appear in the 1988 Yearbook, which you should receive in late January.

The secretary is also responsible for oversight of the Admissions Committee. During the first nine months of 1987, there were 337 new members admitted to the Academy, which is an annualized rate of approximately 450 per year. I wish to commend the efforts of both the committee and Academy staff for keeping the average processing time at a very low 2.3 months for the past year. The total membership of the Academy as of November 1, 1987 is 8,797. Although the large majority of eligible actuaries in the U.S. are members of the Academy, there remains a number who are not. We hope to reach out to these actuaries with a positive message about the value of Academy membership during the coming year.

In closing, I would like to express my appreciation for being selected secretary. I am looking forward to serving the membership during the year ahead.

Fibiger: Thank you Virgil. Now I'm going to call on Stephen G. Kellison, the executive director of the Academy, for a brief report on staff activities.

Executive Director Stephen G. Kellison: Thank you, John. It is a pleasure for me to give this report on Academy staff work. The Academy has three primary program areas: (1) government relations, (2) public information, and (3) standards. All three of these areas are presently in a state of transition. Decisions have been made by the Academy leadership during the past year to expand activities in each of these arenas. These expansions will result in significant increases in staff support required to achieve our goals.

With regard to government relations, the Board of Directors on October 14-15 approved the creation of a new position on staff: director of government relations. This action was taken to provide the resources to increase significantly our level of interaction at both the federal and state level. We intend to become more proactive in our approach. This represents the first staff expansion in this program area in over five years. We are at present in the process of identifying candidates for this position. It is our intention at this juncture to hire an actuary for this position. You will be hearing from Mavis Walters' panel in a few minutes about a number of Academy public interface activities involving casualty actuarial issues.

The public information area has been an extremely busy one during the past year. In addition to a wide variety of regular activities, we have targeted for special emphasis the standards movement and issues relating to the solvency of continuing care retirement communities. This latter initiative is particularly exciting, since it involves establishing an actuarial identity and presence in an entirely new area of practice. I am also pleased to report that during the past year the Academy has agreed on an arrangement to provide publicity and public relations services for the Casualty Actuarial Society.

These services are in addition to the convention management services we have provided to the CAS for several years.

Finally, the Academy's actuarial standards initiatives may be in the most transition of all. Efforts are well underway to remove the "I" for the Interim Actuarial Standards Board (IASB) and to launch a permanent Actuarial Standards Board (ASB) mid-1988. Most of you have seen the IASB Boxscore, which was added to our monthly newsletter mailing during the past year to report on standards activity. The creation of the ASB is already having a significant impact on Academy staff. The Board of Directors in October approved two new staff positions for standards: (1) a technical writer, and (2) a clerical support position. We are currently in the process of hiring for both slots.

Casualty actuaries play a key role on the IASB. The chairperson of the IASB is Ron Bornhuetter and Tom Murrin is also a member. Both are past presidents of both the Academy and the CAS. Casualty actuarial standards are developed by the Casualty Committee of the IASB, which is chaired by Charles A. Bryan. Standards in the casualty area will be derived from principles being developed by the CAS. As all of you are aware, the development of principles by the CAS is well underway in both reserving and ratemaking. You should be hearing a lot more about standards with a major special subject supplement to The Actuarial Update, which will be distributed to the Academy membership in January.

In addition to all of the above, we have had significant changes in our administrative staff. Madeline Madden, who was located in the Itasca office, has recently retired after seventeen years of service. Also Cyndy Basile, our director of administration is leaving the Washington, D.C. area after eleven years of service with us. I want to express my appreciation to both of these fine individuals for their many years of dedicated work. I wish them well as their lives go in new directions.

Our annual staff report provides a detailed rundown of staff activities. It appears each year in the Academy's Journal. We would be pleased to answer any questions the membership may have about our activities. We also welcome any comments and suggestions which you, the members, may have concerning our work. In closing, I would like to express my appreciation for the strong support that has been afforded my staff by the Academy leadership. Our staff is in a real period of transition in view of all the items mentioned above. We are looking forward to doing our part to achieve the expanded goals the Academy has established for the future. Thank you very much.

Fibiger: Thank you, Steve. Dan, would you give a brief report about the finances of the Academy?

Treasurer Daniel J. McCarthy: In 1987, as we now estimate it, the Academy will take in an income of about $1,550,000, and spend about 90% of that. We had, as some of you may have noticed, a dues increase in the beginning of the year, raising the dues to $160. We anticipated that 1987 would be a year of surplus and that we would not have to increase dues again in 1988. And that has, in fact, proven to be the case. The Academy's estimated surplus or contingency fund as of the end of 1987 will be approximately $900,000, which

is well over our typical upper level target of about 50% of the year's expenses. I should acknowledge, in particular, that those of you and your compatriots who went to the Casualty Loss Reserve Seminar in Minneapolis contributed in some small way to that surplus. Many more people went to that event than were expected to attend, so we made more than we expected to make. Both the Academy and Casualty Actuarial Society benefited from that situation.

Looking forward to next year, we'll now talk about items that from a financial point of view will or may increase the Academy's costs, and they have already been mentioned: the expansion of the government relations program, and the expected establishment of the ASB. Each of these is a very important development for the profession; and each will cost money. To a certain extent, we've got the money for them built into our dues base already, and to a certain extent we do not. The Academy will be facing cost issues in future years as a direct result of decisions being made now to increase support to programs important, maybe even vital, to the profession.

There are two other issues that I would describe as less well-defined but gathering storm clouds. . . less well-defined, because they may never cost us a dollar. One of these is the current exploration of the possibility of launching an actuarial magazine directed at both actuarial and non-actuarial audiences. If that comes about, it is hoped that in the long run, it will be self-supporting; it is also guaranteed that in the short run it will not be. As the Academy grappels with this notion of becoming a magazine publisher, it will have to weigh the value of this kind of thing and decide if it should be seeded or not. The other storm cloud is the plan for the 1989 Centennial Celebration of the Actuarial Profession in North America. The Academy, like the CAS, the Society of Actuaries, and the Conference of Actuaries in Public Practice are co-underwriters of this event. That means that if it should turn out not to bring in as much money as it costs, that will be a one-time cost of the Academy. Fortunately, we are well situated to absorb a little bit of one-time cost.

The items that are more important to the Academy's finances are those that become built in on an ongoing basis to our cost base. In that connection, and I'll close on this point, President-Elect Jim MacGinnitie has directed me over the next year to form a group looking into Academy membership. The Academy has a large and growing membership, but there are still sizeable numbers of practicing actuaries who are eligible for Academy membership and are not members. Obviously, to the extent we can get full support from the profession by way of membership, we can do what we need to do, and do it without significant financial penalty to any one member. Thank you very much.

Fibiger: Thank you, Dan. This concludes the business session of the Academy's annual meeting.

MINUTES
BOARD OF DIRECTORS
Minutes of Meeting Held On
December 12, 1986

A meeting of the Board of Directors of the American Academy of Actuaries was held in Naples, Florida, at the Ritz-Carlton Hotel on December 12, 1986. The meeting was called to order by President Bassett at 8:30 a.m.

Present for all or part of the meeting were the following board members: Allan D. Affleck, Preston C. Bassett, Linda L. Bell, Darrel J. Croot, Robert H. Dobson, Charles E. Farr, John A. Fibiger, Edward H. Friend, Harry D. Garber, Harper L. Garrett, Jr., M. Stanley Hughey, Burton D. Jay, Norman S. Losk, Thomas M. Malloy, Daniel J. McCarthy, W. James MacGinnitie, Bartley L. Munson, Leroy B. Parks, Jr., Richard H. Snader, Virgil D. Wagner and Mavis A. Walters.

Also present for the meeting were the following individuals who were not members of the Board: David G. Hartman, Harold G. Ingraham, Jr., Stephen G. Kellison, Erich Parker, Cynthia A. Sharp, Gary D. Simms, William T. Tozer and Jack M. Turnquist.

The following members were not present: Robert A. Anker, Wayne H. Fisher, David P. Flynn, Myles M. Gray, Carlton W. Honebein, Stewart G. Nagler and Jay C. Ripps.

1. Minutes

The minutes of the September 5, 1986 meeting of the Board of Directors were approved. The minutes of the October 21, 1986 meeting of the Executive Committee were distributed for informational purposes, subject to approval by the Executive Committee at its next meeting.

2. Secretary

Upon motion duly made and seconded, the following individuals were approved for reinstatement: Michael Healy, David Edward Steven and William M. Roth.

3. Treasurer

Mr. McCarthy reported on the third quarter Treasurer's report. Major differences exist in convention income, which has been much higher than budgeted, and the new programs expense, which has been much lower than budgeted. Mr. McCarthy then presented the draft of the 1987 budget. He complimented Ms. Sharp and the other members of the Academy staff who had worked on this budget. He noted that convention income has been forecast in this budget as it was forecast for the prior year, rather than the higher level which actually occurred. This is appropriate since the various program committees control this item. The new programs/standards expense item is also forecast at a similar level to last year's forecast, rather than the lower level which actually occurred. He noted that the only significant change in the expected activity levels relates to the public relations item. Upon motion duly made and seconded, the 1987 budget was approved.

The Board then discussed proposed bylaw amendments. It was noted that no other amendments to the bylaws are foreseen at this time. There was a discussion of the discussion memorandum, specifically with regard to gender. Following this discussion, a motion was moved and seconded and unanimously approved authorizing the staff to submit the amendment to the bylaws to the membership for vote, subject to two additional gender changes to the bylaws, on pages 480 and 482, respectively, and further subject to changes by the general counsel to the discussion memorandum consistent with the comments of the Board concerning the discussion of degenderization.

The Board then approved waiver of dues for Richard H. Drake and the resignation of Richard H. Fitzpatrick. It was noted that no disciplinary actions are pending against Mr. Fitzpatrick.

Mr. Kellison reported that the calls to those who had not previously paid their 1986 dues helped retain some members that might otherwise have been lost. Mr. McCarthy noted that if the bylaw amendment passes, we will need to consider people that are currently in that status that have not paid prior years dues. He will give this some further consideration.

Upon motion duly made and seconded, the Board approved the Academy's share of a joint errors and omissions study. The Academy share will be $2,240 out of approximately $7,000 total.

4. Standards of Practice

Upon motion duly made and seconded, the Board approved the appointment of Walter N. Miller by the Interim Actuarial Standards Board Nominating Committee to fill a vacancy on the IASB created when Mr. Fibiger assumed the office of President-Elect.

Mr. Munson reported that Mr. Ingraham will replace Mr. Miller as Chairman of the Life Committee of the IASB. Mr. Fibiger then reported on the last IASB meeting. The Casualty Committee of the IASB withdrew their pending standard. The Specialty Committee discussed the standard on continuing care retirement communities, but no action was taken on this standard. Action is expected at the January meeting of the IASB, however. The Health Committee of the IASB discussed plans. The Life Committee also has activity under way regarding Recommendation 7 concerning the valuation actuary. The Pension Committee discussion was particularly significant, as a member of the Financial Accounting Standards Board and staff were in attendance. There is a controversy concerning Financial Accounting Standard 87, which is a continuing problem for actuaries and accountants.

Mr. Fibiger further reported that rules were adopted for attendance at IASB meetings and, in particular, the right to speak by outsiders. These rules were published in The Actuarial Update. A quarterly report on the Activities of the IASB is also to be published in The Update.

Mr. Turnquist made a suggestion at the IASB meeting concerning a standard form for standards of practice. Mr. Turnquist will be heading a subcommittee of the IASB to work on this subject.

Mr. Kellison reported on a proposed standard to deal with FAS 87. The Pension Committee of the IASB has separated a proposed exposure draft into two topics. The first topic will concern disclosure, and will be relatively short. Action could be taken on this standard at the January IASB meeting. The second topic will be longer and will concern guidance to actuaries. This latter piece will not be a standard, but was proposed to be distributed to members as quickly as possible at the October IASB meeting. However, since the IASB had not formally approved distribution of this paper, it was not included in the Academy's regular November mailing. Upon motion duly made and seconded, the Board authorized the staff to proceed to mail this piece with the Academy's December mailing, removing the reference to the IASB. An article on this topic which had appeared in the publication Pension and Investment Age was distributed to the Board.

Several other issues concerning standards of practice were then discussed. The Standards Operating Committee will be discussing and resolving certain issues during 1987 and reporting back to the Board of Directors. Issues of particular interest include governance - will the Actuarial Standards board be an independent body attached to another body? Will actuaries be able to avoid the standards by dropping their Academy membership? Will the financing be Academy only? Other? and Will there be an Academy interface committee?

The Board then moved to a discussion of the first standard which has come through the IASB to the Board of Directors for adoption. This was the proposed final standard on recommendations concerning non-guaranteed elements in life insurance and annuity contracts. William T. Tozer, chairperson of the Subcommittee on Dividends and Other Non-Guaranteed Elements of the Life Committee of the IASB was in attendance and led the discussion. He noted that the group working on the standard had begun as a subcommittee, then became a subcommittee of the IASB. Interface with the NAIC also became important. The changes have been endorsed by the NAIC Technical Committee. The NAIC Blanks Committee and Market Conduct Subgroup are also important, but adoption may depend on the Life Insurance committee of the NAIC. The key discussion at the NAIC level is whether the requirements should just involve a report to management or result in disclosure to the buying public.

Mr. Garber presented a historical perspective on the issue. He then made a motion to approve the IASB promulgation of recommendations concerning non-guaranteed elements in life insurance and annuity contracts. Mr. Fibiger seconded the motion and noted that eleven specific recommendations are included in the standard. An amendment to the motion was then made, seconded, and approved to include a note to the IASB concerning the need for an effective date of the standard, with the Board of Directors suggesting July 1. Following approval of the amendment, the original motion was approved by the Board of Directors.

Following approval of the final standard, there was further discussion of the implications of the standard. Mr. Simms noted that there were no particular anti-trust implications to the document. Communication of the new standard was discussed at length. A symposium or seminar to discuss the standard will be planned and will include discussion of existing standards that require reports from actuaries. A booklet will be prepared including background

information, an Actuarial Update cover article will be prepared, and then the final standard will appear without background information in the 1988 Yearbook. A task force was established to present this material to other interested organizations.

5. Continuing Education Recognition

Mr. Bassett reported that the Task Force on Continuing Qualification for Enrolled Actuaries report to the Joint Board for the Enrollment of Actuaries has now been made public. He further reported that the Academy task force, chaired by Daphne D. Bartlett, is expected to have a report for the Executive Committee in the near future. Mr. Ingraham reported that the Society of Actuaries views itself as a provider of continuing education, and will not be involved in recognition programs. The Society of Actuaries will be involved in anticipating needs in the area of recognition, however. The Society of Actuaries does intend to establish a task force with liaison representatives from other organizations concerning the provision of continuing education.

6. Valuation Actuary

Mr. Jay led a discussion of a November 1986 status report of the Joint Committee on the Valuation Actuary. Mr. Jay noted that implementation of a revised statement of actuarial opinion relating to cash flow analysis and the dynamic solvency issue may take between one and two years. The second phase, which is expected to take much longer, would expand the statement of actuarial opinion to encompass all assets. Action may also be appropriate to revise Financial Reporting Recommendation 7.

After an extended discussion of the subject, a motion was made, seconded and approved to ask the Joint Committee to provide additional information in the form of an overview focusing on the strategic direction of the valuation actuary movement and to defer the proposed mailing to the NAIC Life and Health Actuarial Task Force.

7. NAIC and State Issues

Mr. Jay reported that the Committee on Liaison with NAIC had presented a report to the NAIC earlier the same week. A copy of this report was distributed to the Board of Directors. Mr. Kellison noted that several items of interest were discussed at the NAIC meeting, but that most have been covered elsewhere on the agenda. He said that there are lots of key issues at the current time and that eight or nine Academy statements were distributed at the meeting. Mr. Simms added that the image and visibility of the Academy is increasing with the NAIC. A question was raised concerning distribution of Academy statements to Board members. All statements are currently sent to Executive Committee members, and Mr. Kellison noted that he would be happy to add any Board member to the mailing list.

Mr. Kellison then reported that the controversy relating to reserves for health insurance continues. The NAIC Life and Health Actuarial Task Force approved the proposal which the Academy Subcommittee on Liaison with NAIC Accident and Health (B) Committee of the Committee on Health had drafted, but by a very close vote. The issue was then taken to the NAIC (B) Committee. The HIAA asked the (B) Committee to postpone a decision on

this so that the HIAA could have additional time to come up with alternatives to the proposal. The (B) Committee granted a six month extension for comments on the proposal. Mr. Ingraham noted that the Society of Actuaries has experienced a delay in publishing a text book on health insurance because of this controversy. It was noted that the Academy position in this controversy has been appropriate in terms of assistance to the NAIC and communication with the membership.

The casualty loss reserve opinion is not on the NAIC Blanks Committee agenda for the coming year. There is also an NAIC task force on data availability which concerns casualty issues. Albert J. Beer is the Academy delegate to this task force. Mr. Beer chairs the Academy's Committee on Property and Liability Issues.

Mr. Kellison and Mr. Simms then led a discussion on miscellaneous state activity. Mr. Kellison noted that the number of special purpose statements of actuarial opinion in use has increased since the original study was done. Mr. Simms noted that an update of the prior supplement on this topic will be published in January. He further noted that the Committee on Qualifications had met the prior week to address qualifications required to sign the various opinions. Activity at the state level appears to have been particularly intense recently.

8. Government Relations

A proposed revision to guidelines for making public statements had previously been distributed to the Board. Mr. Simms noted that this would be considered by the Executive Committee in February and then discussed at the March Board of Directors meeting. Mr. Parker noted that he hoped the final version would not include letters to the editor of newpapers. Mr. Kellison encouraged all Board members to comment on the proposed revisions. He emphasized it is important to correct what is currently shown in the Yearbook, since the guidelines as published have not been followed. He added that the actions which have been taken are legitimate, but that the guidelines should be corrected to reflect reality. There was continued discussion of this topic and various suggestions were made, including the need for guidelines on how to respond to calls from the press and the need to insititute a fail safe mechanism if a committee goes too far. Mr. Munson suggested that membership comments on this subject would be appropriate at some point. Mr. Garber suggested that the Yearbook should just include general principles and that the procedural aspects should be handled outside of the Yearbook. Mr. Bassett asked Board members to get their comments to Mr. Simms by mid-January.

Mr. Friend then reported on proposals for a state government relations program. He noted that this topic has been discussed by the Executive Committee. While there is general agreement about taking a more proactive role with regard to state governments, there has been some disagreement about whether or not the Academy should propose regulations.

Mr. Simms reported that the notice about the new special services has gone out. He will report to the Board at a later meeting concerning interest from the membership in the services.

9. Federal Issues

Mr. Kellison reported on the Risk Retention Act which has been passed by Congress. This bill is significant because it references the Academy in the requirements for actuarial certification.

10. Committee Planning Process

Mr. Bassett reported that six committees have not yet turned in their plans for 1987. He asked the officers to encourage the committee chairpersons to get this in as soon as possible. Mr. Kellison reminded the officers that the committee progress report form should be used for the February Executive Committee meeting.

11. Washington Meeting in March

Mr. Bassett said that he will put an agenda together for the Executive Committee meeting with the committee chairpersons in March, but will circulate it to the whole Board for comments. He noted that the Board will meet on Tuesday afternoon and Wednesday morning, while the Executive Committee will meet from Monday noon to Wednesday noon. Committee chairpersons will be involved from Monday noon to Tuesday evening. Mr. Simms reported that the speakers have not yet been determined for the Washington luncheon.

12. Council of Presidents

Mr. Bassett reported on the recent Council of Presidents meeting. One item of particular interest was the report on the 1989 Anniversary Meeting. This meeting is scheduled to encompass a Monday, a Tuesday morning and a Wednesday morning. The proposed budget for the meeting is approximately $750,000. Expected attendance is 1,500 registered members with 60% accompanying persons. The registration fee would be $375 per member and $175 per accompanying person.

Another topic discussed at the Council of Presidents meeting was continuing education recognition. The Conference of Actuaries in Public Practice program resulted in 374 members receiving recognition for continuing education. This constitutes 42% of the membership.

Other items from the Council of Presidents meeting reported on briefly included flexible education, errors and omissions insurance, the Interim Actuarial Standards Board, public relations, publications, and a proposed joint Executive Committee meeting to be held in March, 1988.

A proposal from the Actuarial Education and Research Fund asking each actuarial organization to contribute $2 per member was discussed. After some discussion, a motion was made, seconded and approved to defer this item until more information is made available. Action is expected to be taken at the March Board meeting. Mr. Ingraham agreed to obtain this additional information.

Mr. Ingraham reported for the Society of Actuaries that Linda B. Emory will be the new editor of the Actuary, with Barbara J. Lautzenheiser assisting her

as a consultant. He further reported that they are going to consider accepting advertising in the Actuary.

13. Liability Insurance

Mr. MacGinnitie reported that a study had been delivered to the Council of Presidents. Mr. Bassett reported that the Council of Presidents had designated the agents and followed certain other recommendations from the study. No action was necessary for the Board. Mr. MacGinnitie noted that the study was designed primarily to assist small actuarial firms, and that a group of large firms is considering forming a captive.

Ms. Sharp reported that there are no new developments on the Academy's liability coverage. The Board of Directors are still without anti-trust coverage. A new application has been filed with CNA to cover committees and task forces. This coverage, if approved, would provide some anti-trust coverage.

14. Relations with Accountants

Mr. Garrett reported on the status of various topics with the Financial Accounting Standards Board. He then moved into a discussion of the Government Accounting Standards Board, which is becoming active. They have issued a statement #5 related to accounting for pension plans which will require more disclosure than the comparable FASB requirements. It was noted that they are also taking action on some insurance subjects which will involve the Committee on Property and Liability Insurance Financial Reporting.

Mr. Kellison then reported on an upcoming joint meeting between the AICPA Committee on Relations with Actuaries and the Academy Committee on Relations with Accountants, which is scheduled for January.

15. Staff Items

Mr. Kellison noted that third quarter staff report was included in the Board packet. He offered to respond to any questions. He also noted that the 1987 staff plan was in process, and he would welcome any input from Board members. Mr. Hartman asked for a copy of the valuation actuary legal analysis and raised a question concerning a mailing to Associates of the Casualty Actuarial Society. A question was raised concerning the quarterly updates to the Actuarial Calendar, and the staff agreed to mail the quarterly updates to the entire Board.

Mr. Kellison reported that the Board of Directors orientation kit has been completed. The staff attempted to reflect the Board of Directors' comments to the extent possible. Mr. Kellison said that he would like comments from the new Board members about what additional information might be helpful.

16. Publications

Mr. Parker reported that the Yearbook is on schedule, that the December issue of The Actuarial Update was to be mailed the following week and would include copies of the committee reports, and that there was information in

the Board's packet concerning wording about the Academy from a Society of Actuaries publication. Mr. Kellison noted that a booklet put out by the American Society of Pension Actuaries did not mention any actuarial organizations. Mr. Parker noted that the clip book was available for review and passed out copies of sample pages. He also noted a report on a radio spot that was in the Board's packet.

17. Public Relations

Mr. Parker reported that he hoped there would soon be an article published in Consumer Research on actuaries. He also reported that an interview with Barbara L. Snyder had been picked up on a national feed by over 550 stations.

18. Discipline

Mr. Simms asked for comments on the proposed discipline handbook by the middle of January. Mr. Munson noted that in giving comments the board members should consider the future where we will have more standards of practice in place.

19. Meetings

Mr. Dobson reported that the Academy is well represented on the joint Society of Actuaries, Conference of Actuaries in Public Practice, and Academy health meeting to be held April 2 and 3 in Nashville. In particular, Academy members who are not members of other actuarial organizations have several program spots.

Ms. Sharp reported that the Enrolled Actuaries Meeting scheduled for February could be the largest such meeting ever.

20. Future Board and Executive Committee Meetings

A list had been distributed to the Board in advance. Two additional meetings, November and December of 1987, have been added since the last such schedule was distributed.

21. Other Reports or Business

Upon motion duly made and seconded, the Board approved the appointment of Robert S. Miccolis as chairperson of the Joint Program Committee for Casualty Loss Reserve Seminar. Mr. Dobson will notify the Casualty Actuarial Society of this action by the Board.

22. Adjournment

Mr. Bassett adjourned the meeting at 4:20 p.m. He thanked Mr. Ingraham, Mr. Turnquist, and Mr. Hartman for their attendance representing the Academy's founding organizations.

Respectfully submitted,

(signed)

Robert H. Dobson, Secretary
February 5, 1987

MINUTES

BOARD OF DIRECTORS

Minutes of Meeting Held on

March 24 - 25, 1987

A meeting of the Board of Directors of the American Academy of Actuaries was held in Washington, D.C., at the Sheraton Grand Hotel on March 24 and 25, 1987. The meeting was called to order by President Bassett at 3 p.m. on March 24.

Present for all or part of the meeting were the following Board members: Allan D. Affleck, Robert A. Anker, Preston C. Bassett, Darrel J. Croot, Robert H. Dobson, Charles E. Farr, Wayne H. Fisher, David P. Flynn, Edward H. Friend, Harry D. Garber, Harper L. Garrett, Jr., Myles M. Gray, Carlton W. Honebein, M. Stanley Hughey, Burton D. Jay, Norman S. Losk, W. James MacGinnitie, Thomas M. Malloy, Daniel J. McCarthy, Bartley L. Munson, Leroy B. Parks, Jr., Richard H. Snader, Virgil D. Wagner, and Mavis A. Walters.

Also present for the meeting were the following individuals who were not members of the Board: Gary Corbett, David G. Hartman, Harold G. Ingraham, Jr., Stephen G. Kellison, Stephen P. Lowe, Roger N. Marietti, Eleanor L. Mower, John H. Muetterties, Thomas G. Nelson, Christine E. Nickerson, W. H. Odell, Erich Parker, Alwyn V. Powell, Patricia L. Scahill, Cynthia A. Sharp, Gary D. Simms, William T. Tozer, Jack M. Turnquist, P. Adger Williams, and Larry D. Zimpleman.

The following members were not present: Linda L. Bell, John A. Fibiger, Steward G. Nagler and Jay C. Ripps.

Mr. Bassett welcomed the representatives of the Academy's founding organizations. Mr. Hartman was present representing the Casualty Actuarial Society, Mr. Muetterties and Mr. Turnquist representing the Conference of Actuaries in Public Practice, and Mr. Corbett and Mr. Ingraham representing the Society of Actuaries.

1. Introductions

Mr. Bassett welcomed the Academy committee chairpersons that were in attendance for the first afternoon of the Board meeting, and invited them to participate in the discussions. He reported on a meeting that had been held the previous day between the supervisory officers and the committee chairpersons. He then asked each supervisory officer to introduce the committee chairpersons in attendance and reference those who were unable to attend.

2. Committee Chairpersons Meeting

After the introductions, Mr. Bassett reported that the meeting held the preceding day had been excellent. At that point, the group reviewed the committee chairpersons manual. The group then discussed the proposed changes to the guidelines for making public statements. Mr. Simms summarized the status of the revisions. After some discussion, Mr. Simms was asked to redraft the guidelines for the May Executive Committee meeting. Mr. Simms asked that any further comments be given to him as soon as possible.

Mr. Bassett then discussed several issues relating to committees. He noted difficulties with the Financial Accounting Standards Board, which affected the Committee on Relations with Accountants. He noted that this would be discussed later in the agenda. Mr. Bassett also mentioned committee staffing, desired rotation of the committee membership each three years, opinions concerning whether committees should be proactive or reactive, and the status with regard to state government relations, particularly Mr. Friend's involvement.

Mr. Marietti then presented a report on the Enrolled Actuaries meeting. There were a total of 1,472 participants, which constituted the largest increase from the prior year yet encountered. He noted part of the importance of the meeting is the opportunity to interact with representatives of the government. He also reported on the exhibit hall held in conjunction with the meeting. He further noted that the meeting has reached close to its maximum size to be held in a single hotel as it has been in the past. Mr. Bassett noted that with the probability that the Joint Board for the Enrollment of Actuaries will require continuing education for Enrolled Actuaries, the Committee may find even greater demand for the meeting. Additional meetings may have to be scheduled. Mr. Losk suggested considering regional meetings, particularly a meeting in the western part of the United States. Mr. Bassett thanked Mr. Marietti for his attendance at the meeting, for his report, and for all of the fine work done by him and his committee in connection with the Enrolled Actuaries meeting.

Mr. MacGinnitie then asked Mr. Powell to report on the Committee on Continuing Care Retirement Communities. Mr. Powell reported that this was a fairly new committee which has been covering new ground. A standard of practice has been developed which has been presented to the Interim Actuarial Standards Board for its April meeting. He noted that the challenges faced by the committee include raising the awareness of actuarial issues within the CCRC industry, covering regulations being implemented or proposed by several states, reviewing actuarial aspects of model regulation, working with the accounting profession, and responding to a request by the Society of Actuaries for study material on the subject.

Mr. MacGinnitie was asked whether any follow-up by the Committee on Property and Liability Issues was appropriate following the presentation by Representative Florio of New Jersey at the Academy's Washington luncheon which had been held earlier that day. Mr. MacGinnitie said that he thought no follow-up was necessary at the current time.

3. Committee on Planning

Mr. Bassett asked Mr. Odell, chairperson of the Committee on Planning, to report on the committee's activities and current issues. The primary issues identified were licensing, certification, need for a proactive role, and the strong link to a single industry. Mr. Odell began by expressing his thanks to the staff for their assistance, especially on a government relations project which had been recently undertaken. Mr. Kellison noted that the recommendations concerning government relations would have significant implications with regard to staff size.

4. Government Relations

Mr. Simms reported on the Academy Alert. A favorable response has been received from the readers. He thanked Ms. Nickerson for her work on this, noting that it was her idea and that she had handled it well.

5. Standards of Practice

Mr. Munson introduced Ms. Mower. He then gave a quick update on the IASB and on the Standards Operating Committee. He noted that it is the goal of both the IASB and the SOC to launch the Actuarial Standards Board in early 1988. He then said that he wished to discuss committee relationships to IASB activities. A discussion outline on this subject was distributed. There followed a lengthy discussion of various specific examples of committee relationships with the IASB. Following the discussion, Mr. Munson asked that anyone with any further comments send them to him.

6. Continuing Education Recognition

Mr. Bassett reported that the Joint Board for the Enrollment of Actuaries was preceding with mandatory continuing education, in spite of the majority opinion of the joint task force on this subject. Mr. Bassett expressed his hopes that the Joint Board would follow the task force's advice on how to structure the program.

Mr. Jay then summarized a report which had been done by the Academy's Task Force on Continuing Education Recognition, which is chaired by Daphne D. Bartlett. He noted that the Executive Committee had questioned why the program was geared to public relations, when it could be considered a first step towards

significant continuing education. The task force had met the previous week to prepare a new draft following the Executive Committee's comments. This revised draft will be submitted to the Executive Committee in May. Mr. Losk noted that continuing education programs do exist already, but that recognition programs are new. Mr. Meutterties reported on the CAPP recognition program, which he noted has been very successful. The Board discussed proposed similarities or differences between an Academy program and the Conference program. After some discussion of the issue, strong feeling was expressed that the recognition program should not differ significantly by organization.

Mr. Bassett asked Mr. Ingraham what the Society of Actuaries position was on the topic. Mr. Ingraham responded that the Society of Actuaries would prefer to continue to function as a provider of continuing education, not a score keeper. He has appointed a task force to make sure that the Society of Actuaries can accomplish what the Conference and the Academy need. Mr. Hartman noted that the Casualty Actuarial Society's position is the same as the Society of Actuaries in terms of providing continuing education rather than keeping score. The Casualty Actuarial Society has issued a catalog of continuing education which is available. Mr. Bassett noted that he thought the Canadian Institute of Actuaries was taking no current action, but was watching the other organizations.

7. Valuation Actuary

Mr. Tozer expressed his personal concerns about the status of the valuation actuary proposal. The Board listened to his comments and promised to consider them further after the evening recess. Following the recess, the Board discussed Mr. Tozer's concerns. Mr. Jay assured the Board that the process will be deliberate and that people with different views will have plenty of time to comment. The Board then discussed the strategic direction statement for the valuation actuary movement which had been distributed prior to the Board meeting. The Board had many comments and questions. In general, it was noted that the document as drafted assumes prior knowledge of the need for a change. It was suggested that more basic introductory material be added. Mr. Bassett asked Mr. Jay to redo the document prior to the next Executive Committee. This revision will be written for a larger audience. Mr. Jay reported that the joint committee will meet again in early April. He further reported that the upcoming valuation actuary symposium will be jointly sponsored by the Society of Actuaries, the Academy, the Canadian Institute of Actuaries, and the Conference of Actuaries in Public Practice. Mr. Bassett noted that the Board is supportive of the general direction the joint task force is taking.

8. Minutes

Minutes of the December 12, 1986 meeting of the Board of Directors were approved. The minutes of the February 11, 1987 meeting of the Executive Committee were distributed for informational purposes, subject to approval by the Executive Committee at its next meeting.

9. Secretary

Upon motion duly made and seconded, the following applicants were approved for reinstatement:

Charles Edgar Godfrey
Pauline Reimer
William A. Rocker
Richard E. Ullman
Cheryl Ann Valliere

Mr. Simms reported that the response to the bylaws amendment mailing had been heavier than normal thus far. The cut-off point for the voting is late April.

10. Treasurer

Upon motion duly made and seconded, the following requests for waiver of dues and resignations were approved:

Waiver of Dues - 1987 Retirement

E. Allen Arnold
Hugh G. Kessell
Paul F. Kinsey
Robert G. Robotka
William W. Roscoe
Ralph E. Young

Resignations

Francis L. Bacon
Alfred J. Beram
Barbara Colin
James Robert DuPuy
D. L. Gowing
Thomas O. King
William T. Swats, III

It was noted that no disciplinary action is pending on any of the individuals requesting resignation.

Upon motion duly made and seconded, the Board approved three banking resolutions, copies of which are attached to and hereby made a part of these minutes.

Mr. McCarthy noted that the favorable financial results for 1986 had not yet been audited or reviewed by the Budget and Finance Committee. The Budget and Finance Committee will meet preceding the May Executive Committee meeting. It was noted that part of the favorable deviation was a result of more new members than expected. Mr. McCarthy responded that no analysis of the cause of this has been performed as yet.

11. Standards of Practice

This agenda item had been moved to an earlier place in the agenda so that the committee chairpersons could participate in the discussion. Mr. Munson stated that there were no further issues to be discussed at this time.

12. Federal Issues

Mr. Simms reported that Richard Ostuw is chairing a task force of the Committee on Health and Welfare Plans. The task force is dealing with the valuation of health benefits required under the 1986 Tax Reform Act. Mr. Simms noted that the Academy has taken the initiative on this and that it is moving well. Other groups are looking to the Academy for leadership on this issue. Mr. Simms further reported that several of the Academy committees are interested in the catastrophic health proposals. Several Academy statements are being prepared, including one on the government's premium projections. Finally, he reported that the Pension Committee is working on the government pension legislation. The committee is trying to take a global view in evaluating proposals. The committee will be sharing information using the populations which were used in the pension actuarial cost study done recently.

Ms. Walters asked about the proposed repeal of the McCarren Ferguson Act. It was noted that the Committee on Property and Liability Issues is working on the McCarren Ferguson issue.

Mr. Bassett complimented the staff on remaining on top of the issues.

13. NAIC and State Issues

Mr. Jay noted that he had already reported on the December NAIC meeting. Mr. Kellison reported that the NAIC Life and Health Actuarial Task Force had met the previous week followed by a meeting of the NAIC Blanks Committee. A great number of changes had been proposed for the statutory annual statement blanks. Two particularly important ones to Academy members are changes in

Schedule P of the casualty blank and the the adoption of the recommendations regarding nonguaranteed elements in the life blank. Mr. Snader noted that the proposed changes to Schedule P are an interim move. The long range impact has not yet been defined. These changes are expected to be radified at the June NAIC meeting.

Mr. Kellison then reported on several key issues being considered by the NAIC Life and Health Actuarial Task Force. These include a revision to the Standard Valuation Law, changes to the Standard Nonforfeiture Law (which has resulted in a major assignment for the Academy's Committee on Life Insurance), reinsurance issues, AIDS, additional actuarial guidelines, and health valuation standards.

Mr. Corbett asked what was being done on AIDS by the Academy. Mr. Simms responded that the Committee on Risk Classification has studied this issue. The solvency question regarding life insurance companies has now been referred to the Committee on Life Insurance. Mr. Simms also noted that a statement was prepared for the State of Washington last year on this subject. Mr. Bassett asked Mr. MacGinnitie to coordinate activities in this area with Mr. Corbett.

14. Council of Presidents

Mr. Hughey reported on plans for the 1989 Centennial Celebration. The meeting is scheduled for June 12, 13 and 14, 1989. The Council of Presidents took the position that this meeting should be self-funding.

Mr. Corbett reported on changes to the Society of Actuaries education and examinations. The flexible education system which has been implemented for the associateship exams will be delayed about a year for the fellowship exams. A survey has been mailed to Society of Actuaries members concerning future education methods. Responses have been requested on this by July 1. He noted that he was hoping through the survey to receive comments from those in favor of the proposals as well as those opposed. He also reported that the Canadian Institute of Actuaries had requested a common core of exam material between the Society of Actuaries and the Casualty Actuarial Society.

The Council of Presidents also discussed errors and omissions insurance. Mr. MacGinnitie reported that the group purchasing agreement was now in place. Mr. Simms reported that a survey had been sent to the chief actuaries of actuarial firms asking if they were interested in participating.

Mr. Bassett further reported that the Council of Presidents had discussed the Actuarial Education and Research Fund, public relations, and unification of the profession.

Before moving to a discussion of unification of the profession, Mr. Bassett noted that six of the ten members of the Council of Presidents were in attendance at the Academy Board meeting. Mr. Ingraham gave some background concerning coordination of activities. Since it has now been 10 years since reorganization was seriously considered, it seemed appropriate to revisit the issue. The Society of Actuaries Executive Committee had asked the Council of Presidents to form a task force to study how and when any sort of consolidation could take place. The task force was to be given a one year time frame to make recommendations.

Mr. Bassett asked Mr. Affleck to lead the discussion on this matter. There was a great deal of discussion on the topic, particularly concerning whether or not the American Society of Pension Actuaries should be invited to participate. A motion to include ASPA in any task force which was formed was made, seconded, and approved by a substantial majority. The Board then made, seconded and approved the following motion:

> The Board endorses the concept of the Council of Presidents establishing a task force to explore how to strengthen the actuarial profession and to consider whether restructuring the organization of the profession would be helpful in achieving this goal.

15. Actuarial Education and Research Fund

During the discussion concerning the Council of Presidents meeting, Mr. Bassett reported that the Council intends to invite Douglas C. Borton, chairperson of the Board of Directors of the Actuarial Education and Research Fund, to the next Council of Presidents meeting to discuss this subject.

16. Staff Report

Mr. Kellison reported that the 1986 staff report will be in the Journal again this year. He also noted that the 1987 staff plan had been developed with Mr. Bassett and then given to the Executive Committee at its February meeting. He noted that any comments or questions from the Board of Directors would be welcome at any time. Mr. Friend asked a question concerning staff implications of the item listed under state government relations. A need for priorities was expressed because of the limited resources of the Academy.

17. Publications

Mr. Parker reported on the joint task force on the actuarial magazine. He said that the task force had held several meetings, but that there were problems concerning which organization would take financial responsibility. Mr. Parker further reported that the 1986 Journal was in the process of being mailed.

18. Public Relations

Mr. Parker distributed some information from the clips book, as has been his practice at other Board meetings. He noted that a broader number of issues was represented this time than was unusual. Mr. Parker also reported that the Issues Digest had been distributed the previous day, and will be included in the April Actuarial Update mailing to the membership. He further reported on additional radio and tv appearances by Barbara L. Snyder on continuing care retirement communities. He then passed out results from a recent radio spot and discussed a new one which had been developed.

Finally, Mr. Parker reported on a proposal to the Casualty Actuarial Society to provide public relations assistance. He said that he has not gotten response from them yet.

19. Liability Insurance

Mr. Simms reported that the Academy coverage still covers only the Board of Directors and officers. Committees and staff are not covered. Antitrust is still excluded. Mr. Simms was asked to investigate the possibility of obtaining broader coverage with regard to one particular discipline case which is pending. Upon motion duly made and seconded, the Board indicated its intent to indemnify the staff pending a formal resolution to that effect at the next Board of Directors meeting.

20. Relations with Accountants

Mr. Kellison reported that the annual meeting with the Financial Accounting Standards Board had been scheduled for June 1. There will be eight Academy representatives in attendance at this meeting. The FASB has a new chairperson, so this meeting could be particularly significant. There was some discussion about attempting to visit with the Government Accounting Standards Board at the same time. This contact may be informal and at the staff level. Mr. Kellison noted that the Academy would also like to have some health care representatives on the AICPA Committee for Relations with Actuaries, rather than just insurance and employee benefits accountants.

21. Discipline

Mr. Garber presented a report from the Committee on Discipline. He said the case load had been fairly slow lately. Only one new case had been introduced in the last six months. He reported on seven pending cases, but noted that several had been dropped. One particularly troublesome case is pending, however, and could pose a problem due to the lack of errors and omissions insurance for committee members. This subject was discussed under a separate agenda item.

Mr. Garber then made a recommendation to Mr. Bassett that the disciplinary process and committee be reconsidered. The current intent of the committee is to achieve broad geographical and speciality representation and to include primarily senior members. However, the committee workload varies considerably. Further, the committee never actually meets, which creates problems in choosing succeeding chairpersons. He also said that the committee has been reluctant to work on standards of practice cases, but more of these should occur in the future.

22. Meetings

Mr. MacGinnitie noted that a report on the 1986 Casualty Loss Reserve Seminar was in the Board packet. The meeting was considered a great success. Many non-actuaries have attended the meeting. Mr. Bassett asked Mr. MacGinnitie to convey his thanks to Jerry S. Miccolis, chairperson of the joint program committee.

Mr. Dobson reported that the joint health meeting was scheduled for the following week. He noted that more will need to be done in the area of joint health meetings, since the government continues to increase its regulation of health and welfare plans.

23. Future Board and Executive Committee Meetings

Mr. Bassett reported that Mr. Fibiger had prepared a list of future meetings. Executive Committee and Board members should let Mr. Kellison or Mr. Fibiger know of any conflicts with the dates.

24. Other Reports or Business

Mr. Friend asked that the draft regulation on continuing care retirement communities be put on a future agenda.

25. Adjournment

Mr. Bassett thanked everyone for attending and adjourned the meeting at 12:40 p.m. on March 25.

Respectfully submitted,

Robert H. Dobson
Secretary
April 17, 1987

MINUTES

BOARD OF DIRECTORS

Minutes of Meeting Held on

June 18, 1987

A meeting of the Board of Directors of the American Academy of Actuaries was held at the Summit Hotel in Hartford, Connecticut, on June 18, 1987. The meeting was called to order by President Bassett at 8:30 a.m.

Present for all or part of the meeting were the following Board members: Allan D. Affleck, Robert A. Anker, Preston C. Bassett, Linda L. Bell, Darrel J. Croot, Robert H. Dobson, Charles E. Farr, John A. Fibiger, Edward H. Friend, Harper L. Garrett, Jr., Myles M. Gray, M. Stanley Hughey, Burton D. Jay, Norman S. Losk, W. James MacGinnitie, Thomas M. Malloy, Daniel J. McCarthy, Bartley L. Munson, Stewart G. Nagler, Leroy B. Parks, Jr., Jay C. Ripps, Richard H. Snader, and Virgil D. Wagner.

Also present for the meeting were the following individuals who were not members of the Board: Cynthia A. Basile, Phillip N. Ben-Zvi, Harold J. Brownlee, Howard Fluhr, John H. Harding, Stephen G. Kellison, John H. Mutterties, Erich Parker, Walter S. Rugland, Gary D. Simms, and Michael A. Walters.

The following members were not present: Wayne H. Fisher, David P. Flynn, Harry D. Garber, Carlton W. Honebein, and Mavis A. Walters.

1. Minutes

Upon motion duly made and seconded, the minutes of the March 24 and 25, 1987 meeting of the Board of Directors were approved with two changes. The minutes of the May 6, 1987 meeting of the Executive Committee were discussed, subject to approval by the Executive Committee at its next meeting.

2. Secretary

Upon motion duly made and seconded, reinstatements were approved for the following individuals:

Debra L. Fulks
Brian Kavanagh
Betsy K. Uzzell

The Board also affirmed the Admission Committee disapproval of the application of:

Mohamed F. Amer

Mr. Simms reported on the bylaws amendment which had recently been passed. A member had initiated a complaint to the Illinois Attorney General on the procedures used with this bylaw amendment. The Attorney General had decided to take no action, however. The member asked the Executive Committee to appoint a special task force to study this issue. The Executive Committee will discuss this at its next meeting.

3. Treasurer

Upon motion duly made and seconded, the Board approved the following resignations:

Gary S. Copenhaver
John Garigliano
David M. Lipkin
D. Rae MacLeod

Mr. McCarthy then reported on various items concerning the treasurer, all of which had been discussed at a Budget and Finance Committee meeting held the previous evening. These items included establishing a zero dollar dues category for six full time students. These individuals will need to re-apply next year under the newly approved waiver of dues provision. Another item concerned a recommendation in the auditor's management letter concerning new signatories on the Academy's accounts. Upon motion duly made and seconded, the financial manager and convention manager were approved as signatories on the appropriate accounts.

Mr. McCarthy further reported that the first quarter Treasurer's Report was close to budget. Changes in the estimate in the year reflect a highly successful Enrolled Actuary's meeting. Mr. McCarthy also reported on the investment actions taken by the Budget and Finance Committee.

Mr. Losk than reported for the Audit Subcommittee of the Budget and Finance Committee. The Audit Subcommittee had met earlier that morning in executive session with the auditor. Mr. Losk reported that the audited statement was nearly identical to the December 31, 1986 Treasurer's Report. He also reported that all three items mentioned in the auditor's management letter had been handled. The subcommittee considered that the auditor gave the Academy a clean bill of health.

Mr. McCarthy concluded his report by mentioning that the Budget and Finance Committee will be working over the summer concerning

practices regarding dues under the new provisions for waiver and related reinstatements. He expects the Budget and Finance Committee to report to the Executive Committee on this topic at its September meeting.

4. Standards of Practice

Mr. Munson introduced Mr. Harding and Mr. Rugland for a presentation on standards of practice. He also referred the Board to the IASB box score which had been distributed with the Actuarial Update. Mr. Harding then reported on behalf of the Standards Organizing Committee on the status of the IASB. His presentation included the status on certain critical issues, including independence. Mr. Rugland then discussed funding for the IASB, including a proposed baseline budget approach. Upon conclusion of the presentation, Mr. Bassett thanked Mr. Harding and Mr. Rugland. The Board agreed to extend by one-half day its October 15 meeting for an in depth discussion of standards and any action which may be required at the time. This meeting will take place on the afternoon of October 14.

Upon separate motions duly seconded, the Board then approved the final adoption of the continuing care retirement communities standard and the FAS 87/ FAS 88 disclosure standard. One dissenting vote was noted concerning the latter standard.

5. Continuing Education Recognition

Mr. Jay reported on the Task Force on Continuing Education Recognition. Upon motion duly made and seconded, the Board approved exposure of the task force report as a discussion draft subject to minor changes, and allowing a three week period for additional comments from the Board.

Mr. Bassett reported that a task force had been set up, to be chaired by Mr. Farr, to be ready to move as soon as anything is published by the Joint Board for the Enrollment of Actuaries. Mr. Simms said that he expects a 90 day exposure period when anything is released.

Mr. Mutterties passed out the most recent description of the Conference of Actuaries in Public Practice continuing education recognition program. He pointed out two changes which had been made to the original program.

6. Future Enrolled Actuaries Meetings

Mr. Bassett introduced Mr. Fluhr, who was in attendance to provide a status report on how to deal with the growing attendance at Enrolled Actuaries meetings and the imminent continuing education requirements for enrolled actuaries. Mr. Fluhr reported that the Joint Committee for the Enrolled Actuaries Meeting had met in March

to discuss these topics in depth. The last Enrolled Actuaries meeting was a particularly large one because of FAS 87/88 and the Tax Reform Act of 1986. However, the committee does not project as big an increase in attendance for 1988. He noted that the intent was to limit attendance in 1988, and to give priority to enrolled actuaries. Information concerning this will be sent out earlier than usual and the registration date will be established earlier than normal. A survey is planned about how to split the meeting up if appropriate. Mr. Bassett indicated a concern over waiting until the survey results are available to book hotel space for 1988. Therefore, he has asked the staff to make preliminary inquiries without commitment for the fall of 1988 in Los Angeles pending survey results. Of course, the enrolled actuaries recognition requirement will probably not be effective during 1988. Mr. Bassett asked Mr. Fluhr whether he thought an additional committee would be necessary. Mr. Fluhr responded that it depends on the timing of the second meeting.

7. Guidelines for Making Public Statements

Upon motion duly made and seconded, the Board adopted the revised guidelines for making public statements.

8. Federal Issues

Mr. Simms responded to a question raised concerning purposed legislation.

9. NAIC and State Issues

Mr. Simms reported on litigation in Pennsylvania concerning unisex auto rates. After some discussion concerning the case, a motion was made, seconded and approved authorizing the President to direct filing of an amicus curiae brief when it was deemed appropriate.

Mr. Jay reported on the activities of the NAIC Liaison Committee. Mr. Kellison reported that several states have diverged from the NAIC model concerning casualty loss reserve opinions. Specifically, New Jersey, Florida and Delaware had deviated from the model. The Academy needs to get involved in this issue again.

10. Valuation Actuary

Mr. Jay reported on the status of activity with regard to the valuation actuary. Action can be anticipated for the September Executive Committee and October Board meetings. Mr. McCarthy raised a question concerning a letter from Mr. Tozer on this subject. This letter will be considered in formulating final recommended action.

11. Committee Issues

Mr. Jay reported on the status of the Committee on Qualifications. This committee is chaired by Mr. Rugland, who was also in attendance. Recommendations are expected for the September Executive Committee meeting. Mr. Rugland reported that this is a restructuring of existing qualification standards. It is currently geared to expression of public opinion. A core of education and experience requirements for any public opinion will be the key.

Mr. Simms thanked those on the Board that had responded to his request for a critique of the March meeting with the chairpersons. Mr. Fibiger reported that planning is under way for chairpersons for the 1987/88 Academy year.

12. Staff Issues

Mr. Kellison asked if there were any questions on the first quarter staff report.

Mr. Simms reported on the indemnification of staff. This was a follow up to the prior Board meeting. Upon motion duly made and seconded, the Board passed the following resolution:

WHEREAS, employees of the Academy are not now included within Article X of the Bylaws (relating to indemnification of legal expenses arising from Academy activity), and

WHEREAS, it is the desire of the Board of Directors to adopt a policy extending the protection of indemnification to employees of the Academy,

THEREFORE, BE IT RESOLVED, that the following is adopted as policy of the American Academy of Actuaries:

> "Each person who is an employee, or who was an employer, of the Academy (and such person's heirs, executors, administrators, and personal representatives) shall be indemnified by the Academy against all costs and expenses (including but not limited to legal fees, amounts of judgments paid, and amounts paid in settlement) reasonably incurred in connection with the defense of any claim, action, suit or proceeding, whether civil, criminal, administrative or other, in which such person may be involved by virtue of being or having been an employee of the Academy, or in connection with any appeal thereof; provided, however, that in the event of a settlement the indemnification provided herein shall apply only when the Board of Directors approves such settlement; and provided further that such indemnity shall not be operative with respect to any matter as to which such person shall have

been finally adjudged liable in such claim, action, suit or proceeding on account of his or her own willful misconduct. The rights accruing to such person under this Resolution shall be without prejudice to any right or benefits given by the Board of Directors inconsistent therewith in special cases and shall not exclude any other rights or benefits to which such person may be lawfully entitled."

13. Publications

Mr. Brownlee reported on the Joint Task Force on the Actuarial Magazine. The task force had agreed that if a magazine was to be developed, it should be done by the Academy. There were some questions and discussion on this topic. Upon motion duly made and seconded, the President was authorized to appoint a task force to review this subject further. An amendment to the motion was passed to include a $10,000 spending limit. One negative vote on the amended motion was recorded.

Mr. Parker reported on the Academy Alert. They have had a big response to half year subscriptions running July through December.

14. Public Relations

Mr. Parker reported on a letter agreement with the Casualty Actuarial Society. Services are already being delivered by the Academy, but the agreement is still being fine tuned. In general, the effort is going well.

Mr. Parker passed out various clips relating to print and broadcast media placements. He reported that a Changing Times article had dropped reference to the Academy, but still included reference to actuaries. He also noted that Barbara L. Snyder will be doing a media tour in late July.

15. Liability Insurance

Mr. Simms referred the Board to a memorandum that was included in the Board packet. He noted that he had had an encouraging conversation this week with the broker involved with the Academy coverage. Apparently the market for coverage of professional associations is easing somewhat.

Mr. MacGinnitie reported on coverage for actuaries. The broker involved on that side has not come up with anything yet, but was in London at the time of the Board meeting. This would be a program primarily for small actuarial firms.

16. ASPA Activities

Mr. Kellison discussed information received concerning an ASPA satellite seminar. He noted that this was interesting in view of the Academy's discussion concerning Enrolled Actuaries meetings and in view of continuing education in general.

17. Relations with Accountants

On June 1, representatives of the Academy had their annual meeting with the Financial Accounting Standards Board. Mr. Kellison reported that nine Academy representatives were present. Some significant issues were discussed.

On June 4 and 5, a joint meeting was held between the Academy Committee on Relations with Accountants and the AICPA Committee on Relations with Actuaries. Several projects are under way. A standard auditor confirmation letter has been finalized. Several issues that are pending have been controversial on the accountants side because of the difference between accountants specializing in health care and insurance accountants. Examples are loss reserves for medical malpractice, HMOs, and CCRCs.

18. Council of Presidents Report

Mr. Bassett noted that he had been unable to attend the Council of Presidents meeting. Mr. Fibiger reported on the meeting. A joint executive committee meeting is scheduled for March, 1988 in Arizona. The Council of Presidents discussed the Actuarial Education and Research Fund. The Academy Budget and Finance Committee was hoping to fund a project through the AERF. Mr. Fibiger noted that he would be asking Mr. Parker to comment on a proposed public relations audit. A maximum budget has been discussed for the 1989 Centennial Celebration, which would be a maximum loss, to be shared among all organizations, of $100,000. The Council of Presidents also discussed the proposed actuarial magazine, the Society of Actuaries new flexible education system and proposed flexible education methods, and core actuarial education requirements for casualty and life and health actuaries.

19. Restructuring the Actuarial Organizations

Mr. Bassett reported that the Academy had appointed two representatives to the task force studying this issue. Mr. Affleck will chair the task force. James J. Murphy will be the other Academy representative. Mr. Ingraham reported that each Board of the six organizations has completed their nominations as well.

20. Discipline

Mr. Simms led a discussion of the proposed discipline handbook. The Executive Committee had recommended adoption of this document. It is not intended for distribution. An article for the Actuarial Update will be prepared to point out the differences between this handbook and prior practices. Upon motion duly made and seconded, the discipline handbook was approved by the Board.

21. Meetings

Mr. Bassett reported that Mr. McCarthy was working on finances for the 1989 Centennial Celebration. Mr. Hughey reported that the Program Committee is making progress.

Mr. Fibiger reported that the 1987 Annual Meeting will be held in San Antonio in connection with the Casualty Actuarial Society meeting. The Academy's portion of the program will be on Tuesday, November 17, at the beginning of the program for that day. This will be followed by an Academy Executive Committee meeting.

22. Future Board and Executive Committee Meetings

A handout was distributed which included meetings for the rest of 1987 and for part of 1988. Some changes have been made to the previous schedule.

23. Other Reports or Business

Mr. Hughey reported for the nominating committee. The slate of officers to be proposed in the fall include the following:

President Elect:	W. James MacGinnitie
Vice President:	Joseph J. Stahl, II
Vice President:	Phillip N. Ben-Zvi
Secretary:	Virgil D. Wagner
Treasurer:	Daniel J. McCarthy

He also reported that five of seven open Board of Directors nominees have been chosen. William T. Tozer will be nominated to fill the remaining one year of the seat vacated by Virgil Wagner if he is in fact, elected Secretary. Other nominees for three year terms will include Robert J. Callahan, Michael Fusco, Thomas D. Levy and LeRoy J. Simon.

Mr. Friend reported on an Executive Committee discussion concerning the role of the Academy in the national health care debate. A small group of Executive Committee members had met with staff and made certain recommendations on this topic. After some discussion, the Board made, seconded, and passed a motion authorizing the President to appoint a task force or, if he deemed it more appropriate, to

refer this matter to the Committee on Health, to consider this further.

24. Adjournment

Mr. Bassett adjourned the meeting at 4:33 p.m.

Respectfully submitted,

Robert H. Dobson
Secretary
August 20, 1987 amended
September 22, 1987

MINUTES

BOARD OF DIRECTORS

Minutes of Meeting Held on

October 14-15, 1987

A meeting of the Board of Directors of the American Academy of Actuaries was held at the Westin Peachtree Plaza Hotel in Atlanta, Georgia, on October 14 and 15, 1987. The meeting was called to order by President Bassett at 1:30 p.m. on October 14.

Present for all or part of the meeting were the following Board members: Allan D. Affleck, Robert A. Anker, Preston C. Bassett, Linda L. Bell, Darrel J. Croot, Robert H. Dobson, John A. Fibiger, Edward H. Friend, Harper L. Garrett, Jr., Carlton W. Honebein, M. Stanley Hughey, Burton D. Jay, Norman S. Losk, W. James MacGinnitie, Thomas M. Malloy, Daniel J. McCarthy, Bartley L. Munson, Jay C. Ripps, Richard H. Snader, Virgil D. Wagner, and Mavis A. Walters.

Also present for the meeting were the following individuals who were not members of the Board: Cynthia A. Basile, Robert J. Callahan, Gary Corbett, Ardian C. Gill, David G. Hartman, David L. Hewitt, Stephen G. Kellison, Thomas D. Levy, Eleanor L. Mower, John H. Mutterties, Erich Parker, Gary D. Simms, William T. Tozer, and Jack M. Turnquist.

The following members were not present: Charles E. Farr, Wayne H. Fisher, David P. Flynn, Harry D. Garber, Myles M. Gray, Stewart G. Nagler, and Leroy B. Parks, Jr.

Mr. Bassett called the meeting to order and welcomed the three nominees for Board of Directors who were in attendance, Mr. Callahan, Mr. Gill and Mr. Levy. He also welcomed the guests including Mr. Turnquist of the Interim Actuarial Standards Board and immediate past President of the Conference of Actuaries in Public Practice, Mr. Mutterties and Mr. Hewitt, the President and President-Elect respectively of the Conference of Actuaries in Public Practice, Mr. Corbett, President-Elect of the Society of Actuaries, and Mr. Hartman, President-Elect of the Casualty Actuarial Society.

1. Standards of Practice

Mr. Munson led the discussion of the Standards Organizing Committee report which had been sent to the Board of Directors. Mr. Turnquist read an IASB memorandum giving comments on the SOC report. Ms. Mower gave a status report on current standards activities. Mr. Hughey discussed the selection process for ASB members. Mr.

McCarthy discussed financing of the ASB. Mr. Munson discussed the relationship of standards activities to public interface activities. Four specific implementation points were discussed: staffing by Mr. Kellison, discipline by Mr. Simms, the timetable by Mr. Munson, and public relations by Mr. Parker.

After extensive discussion and upon motions duly made and seconded, the Board of Directors:

1. Radified the action of the Executive Committee concerning approval of the technical writer position.

2. Endorsed the public relations plan.

3. First tabled and later approved procedures for the development of standards for publication in the Yearbook including a procedures manual for the IASB.

4. Received the SOC report, with thanks.

5. Endorsed the creation of the ASB in 1988, supported the general direction of the SOC report, asked the SOC to submit a revised document after reviewing notes of the Board of Directors discussion, asked the staff to prepare an issues piece to accompany the SOC report, and authorized the Executive Committee to release both of these documents without further Board approval.

There was also a discussion concerning whether or not the appendices to the SOC report should be included in the distribution. The sense of the Board was that they probably should not be, but this was left to the SOC and Executive Committee to resolve.

After discussion of travel reimbursement, the Board made, seconded and approved a motion to reaffirm its current practice of not reimbursing IASB travel. The Board also approved a motion to register its non-opposition to ASB travel reimbursement, noting that no position was being taken at this time.

2. Office Staff Report

Mr. Bassett reported that the Committee on Planning had recommended that the Academy increase its presence on Capitol Hill by hiring a director of government relations. The Executive Committee had decided to implement this recommendation, but wanted the approval of the Board of Directors since a high level position was involved. Upon motion duly made and seconded, the Board of Directors approved the hiring of a director of government relations.

Mr. Bassett also informed the Board that the staff work for the 1989 Centennial Celebration had been moved to the Society of Actuaries

staff, as approved by the Executive Committee, in connection with the resignation of Ms. Basile. Mr. Kellison then reported on several other staff issues including the fact that Ms. Basile would be leaving in January after 11 years of service with the Academy, that some other staff jobs would be enhanced in connection with a reorganization following her departure, and that the position for technical writer had been approved. Mr. Kellison further reported that Madeline Madden had retired after 17 years of service at the end of September. The Executive Committee had approved a gift for her, since she was technically a Society of Actuaries, rather than an Academy, employee. Mr. Kellison read a note to the Board from Ms. Madden thanking the Academy for the gift. Ms. Madden will be replaced by somebody on the Society of Actuaries staff who was previously part-time and will now be full-time in this area.

3. Minutes

Upon motion duly made and seconded, the Board approved the minutes of the June 18, 1987 meeting as amended. Minutes of the September 3, 1987 Executive Committee meeting had been made available to the Board for information. A summary of Academy policies prepared by Mr. Simms had also been distributed. Mr. Simms asked the Board to review this. He noted that, at the request of the Executive Committee, he will be preparing another document concerning policies not strictly being followed.

4. Secretary

Upon motion duly made and seconded, the Board of Directors radified the Admissions Committee action approving the reinstatement of the following individuals:

Warren Adams
Thomas H. Hope
William T. Morrison

5. Treasurer

Mr. McCarthy noted that the estimates for 1987 were quite favorable and that he expected a $100,000 excess of income over expenses by the end of the year. He noted that a surplus had been expected when the dues increase was approved last year, however. He then directed the Board to a memorandum he had prepared concerning dues for 1988. In spite of the fact that there are several unknowns concerning the preliminary budget for 1988, the Budget and Finance Committee had recommended no dues increase. Mr. McCarthy noted that a dues increase will probably be needed for 1989. The Board approved a motion to retain the same dues for 1988 as were in effect in 1987.

The Board then approved the following resignations and waivers:

Resignations

Geoffrey B. White

Waivers

William Hadigian
Frank J. Onstine
Robert G. Roenigk
Claude J. Trudel

Mr. McCarthy also reported that the Executive Committee had approved $10,000 for research. The first $5,000 of this amount has been committed to a specific project, but the second $5,000 is not yet committed.

6. Nominating Committee Report

Mr. Hughey presented the following slate of officers which had been recommended by the Nominating Committee:

President-Elect	W. James MacGinnitie
Vice President	Phillip N. Ben-Zvi
Vice President	Joseph J. Stahl, II
Treasurer	Daniel J. McCarthy
Secretary	Virgil D. Wagner

Upon motion duly made and seconded, these officers were approved for a term commencing with the Academy's Annual Meeting. Mr. Hughey also noted that three of the proposed nominees for Board of Directors positions were in attendance, Mr. Callahan, Mr. Levy and Mr. Tozer. The Board of Directors election will take place at the Annual Meeting. Mr. Bassett congratulated the new officers.

7. Continuing Education Recognition

Mr. Jay reported that the report of the Academy Task Force on Continuing Education Recognition was going out to the membership the next week. He noted that a questionnaire had been attached to encourage comments. A question was raised concerning what type of recognition would be given in the Yearbook. Mr. Jay responded that this had not been emphasized as an issue in this discussion draft, but that the task force would keep it in mind for any future exposure.

Mr. Bassett reported that the Joint Program Committee for the Enrolled Actuaries Meeting had met and that Leslie S. Shapiro had attended. The Joint Board for the Enrollment of Actuaries is committed to compulsory continuing education for Enrolled Actuaries. A proposed program has been submitted for approval and is expected to be effective July 1, 1988. The first period is expected to

extend through September 30, 1989, and then be annual thereafter. Essentially 36 hours of approved continuing education would be required over a three year period. Since there is expected to be no retroactive credit, this will not have an impact on the February, 1988 Enrolled Actuaries Meeting.

Mr. Bassett further reported on the survey of Enrolled Actuaries concerning the possibility of a second meeting. Since the response was divided, the space in Los Angeles which had been held was released. The chairperson of the Joint Committee for the Enrolled Actuaries Meeting will be in attendance at the November Executive Committee meeting to discuss this subject further. An enrollment cap of 1,300 will be enforced for the 1988 meeting, with priority given to the Academy and Conference members who are Enrolled Actuaries, followed by other Enrolled Actuaries. Mr. Bassett further reported that the Executive Committee had taken a position that the meeting budget should be set to make a profit.

Mr. Mutterties reported that the Conference of Actuaries in Public Practice program for continuing education recognition is in its second year. The Conference is hoping that the percentage participation will increase each year. He also asked that the other organizations consider printing the credit hours on the program, as the Conference does. It was noted that the Society of Actuaries position to be a provider of continuing education has not changed, and that the number of available seminars will be increased particularly with regard to seminars of interest to Enrolled Actuaries.

8. Liability Insurance

Mr. Simms referred the Board to a memorandum in the packet concerning new coverage for the Academy. This coverage is considerably broader than the prior coverage at a comparable cost.

9. Meetings

Ms. Basile reported that the Casualty Loss Reserve Seminar held in Minneapolis last month had attracted 670 people, the largest attendance ever. Since they had only expected 400, the meeting will be very successful financially. Forty percent of the attendees were non-actuaries. Next year the seminar will be held in Atlanta.

Mr. Bassett noted that the Academy Annual Meeting is scheduled for San Antonio in mid-November. He is hoping to arrange an Academy dinner for Monday evening. The business meeting will be held Tuesday morning, followed by a program being developed by Ms. Walters. Ms. Walters then described the program she had in mind, which centers around what the Academy does for casualty actuaries. Mr. Fibiger noted that an Executive Committee meeting will follow the program. Although the time will be limited, several significant issues will be on the agenda.

Mr. Simms reported that the annual Washington Luncheon is scheduled for January in the same place that it was held last year. He hopes to increase the attendance by Academy members. A presentation on standards is scheduled in the afternoon for Academy attendees.

Mr. Kellison noted that although the staff work for the 1989 Centennial Celebration was being moved to the Society of Actuaries, Mr. Parker will still be handling the public relations for the meeting. Thomas P. Bowles, chairperson of the meeting steering committee, has been working closely with the Council of Presidents concerning this meeting. Mr. Parker noted that the first information concerning this meeting had recently gone out to all actuaries requesting a response indicating interest in the meeting. Mr. Bassett reported that Ernest J. Moorhead is working on a history book in connection with this meeting. This will be managed by the Society of Actuaries.

10. Report of Task Force on Contributions of Actuarial Profession to the National Health Care Debate

Mr. Friend, the chairperson of the task force on this subject, presented the report. Following the task force recommendation, a succeeding task force will be formed, which will be chaired by Mr. Munson. Mr. Bassett noted that the task force did a good job and followed a positive approach. There was considerable discussion by the Board following the presentation of the report. In general, the discussion was quite supportive, but noted a need for caution to maintain the objectivity and credibility of the profession. The issues being raised are significant enough that it was agreed that any pronouncements coming from the new task force would be brought back to the Board of Directors before being released, rather than just to the Executive Committee as previously agreed.

Upon motion duly made and seconded, the Board accepted this report with thanks, and endorsed the recommendations of the task force.

11. Third Party Certification

Mr. Friend led the discussion on this topic related to an ASPA promulgation. This issue was first raised by the Conference of Actuaries in Public Practice a couple of years ago. Mr. Shapiro wants the profession to take a position on this issue. The Academy Committee on Guides to Professional Conduct had reviewed this topic and felt it was already covered. However, it may be preferable to work out a compromise position with something specific on this item.

In connection with the reference to ASPA, it was noted that they have been involved in the unification efforts.

12. Federal Issues

Mr. Simms reported on the Dixie Engine lawsuit, previously referred to as the Blessitt lawsuit in earlier minutes. Mr. Kellison then reported on detailed proposals with regard to pension legislation. The Academy testified on this topic in April. A task force has also been formed to deal with it. Mr. Kellison also reported on a paper developed by the Committee on Health and Welfare Plans relating to qualified health actuaries. This has been referred to the Committee on Qualifications. Mr. Dobson noted that he did not agree with the paper in that it assumes grandfathering of some non-actuaries. The Board indicated a good bit of interest in this topic. Mr. Hughey referred to the Planning Committee recommendations concerning attempting to obtain a statutory definition of qualified actuary. Mr. Jay agreed to follow up with the Committee on Qualifications to be sure that this matter is given high priority. He will also communicate the sense of the Board discussion.

Mr. Wagner reported that the ACLI has had some discussions with the Internal Revenue Service concerning how the IRS can hire some actuaries. This is a new issue, but the Academy should be involved. Ms. Walters reported that the Federal Trade Commission is studying medigap and property and casualty coverages.

13. NAIC and State Issues

Mr. Jay reported that a report had been delivered to the NAIC by the Committee on Liaison with NAIC in June. Mr. Kellison delivered this report. Another report is planned for the NAIC's December meeting. Mr. Kellison noted that a lot of issues are currently pending with the public interface committees, namely life, health and property and liability. Mr. Callahan then gave his views concerning relationships between the Academy and the NAIC. He noted a need for uniformity of regulation. A need for quicker response by the Academy in certain instances was also noted.

Mr. MacGinnitie reported on the AIDS statement which had been released by the Committee on Life Insurance with input from the Committee on Health. This was presented to the NAIC but has been widely distributed and resulted in good public relations. Mr. MacGinnitie further reported that the health insurance reserve standard continues to be a controversial issue. The Subcommittee on NAIC Liaison of the Committee on Health considered the most recent set of comments and is currently presenting another version of the standard to the NAIC Actuarial Task Force. Mr. Callahan noted that the NAIC Actuarial Task Force was also asking a subcommittee of its standing technical advisory committee, chaired by W. H. Odell, to comment. However, he also noted that the connection between the reserve standard and rating should, in the view of the NAIC Actuarial Task Force, be retained.

Mr. Kellison reported on current state requirements concerning casualty loss reserves. One issue concerned Delaware and related to the difference between a statement of actuarial opinion and a statutory audit. Mr. Hartman reported on a New York rate promulgation which had been over-ruled by a judge, who specifically stated that the superintendent of insurance had no actuarial justification. Mr. Fibiger noted that a Massachusetts judge had taken a similar action in granting preliminary injunction against a regulation on AIDS testing. Concern was noted about the continuing trend for states to differ from NAIC recommended opinion wording.

Mr. Simms reported on state taxes on services. Such taxes have been enacted in Connecticut, Florida, and Texas. Academy staff is following this issue where actuaries are treated differently than other professions.

14. Valuation Actuary

Mr. Jay presented the report of the Joint Committee on Valuation Actuary. He referred the Board to the request for action on page 22 of this report. Upon motion duly made and seconded, the Board approved the report. One dissenting vote was noted. The Board recommended two changes, however. Mr. Tozer asked whether by approving this report the Academy Board was directing the Committee on Life Insurance Financial Reporting to take an action which he understood they no longer supported. The response was that no such direction was implied, but that each involved committee can review the report.

Mr. Jay also reported on the recent Valuation Actuary Symposium. Three hundred people attended. Mr. Jay moderated a panel which included Carl R. Ohman, Edward S. Silins, and Robert W. Stein. He noted that in his opinion the symposium went very well.

15. Committee on Qualifications

Mr. Jay referred the Board to the report received from the Committee on Qualifications. He pointed out that a distinction was made between private and public users. Walter S. Rugland, chairperson of the committee, will attend the next Executive Committee meeting to discuss this topic further. Mr. Kellison pointed out that the Board of Directors had previously decided only to prepare qualification standards where a legally required statement of actuarial opinion existed. He noted that the current Board is free to change that direction, but a review of the history would probably be useful. Mr. Kellison agreed to circulate copies of prior Board minutes where this item was discussed to the Executive Committee.

16. Committee Issues

Mr. Bassett asked the supervisory officers to follow up on the points raised on the committee's quarterly reports. He further asked the supervisory officers to be certain to read the committee's annual reports. Mr. Ripps commented that it would be useful to Board members to have committees submit priority lists showing the items they were addressing and items which they had decided could not be addressed. The Board could then redirect the committees if it was appropriate.

Mr. Fibiger announced that in the future the President-Elect would serve as the chairperson of the Committee on Planning. He then directed the Board to the Committee on Planning report wherein legislation to exclude non-actuaries was discussed as an action step. This was the item previously referred to by Mr. Hughey in the discussion of qualified health actuary. The Board was generally supportive of this suggestion. Mr. Fibiger agreed that this would be brought back for further discussion at the December Board of Directors meeting. Mr. Kellison agreed to send the report to the other actuarial organizations and to ask that it be put on the agenda for the next Council of Presidents meeting. He also agreed to get more information on a situation developing in Indiana related to this topic.

The supervisory officers were reminded to write thank you letters to retiring chairpersons.

17. Staff Issues

Mr. Kellison directed the Board to the second quarter staff report which had been distributed previously. He noted that the third quarter report will be done shortly. The Board of Directors orientation kit and the committee chairpersons manual have been mailed. Board members should let Mr. Kellison know if they have not received their copies.

18. Publications

Mr. Parker reported that the Yearbook is on schedule and will be mailed in late January. The task force on the Actuarial Magazine is progressing. They have hired a consultant, as planned.

19. Public Relations

Mr. Parker reported that he had delivered a clipbook to the Casualty Actuarial Society, in connection with his public relations work for that organization. Mr. Snader noted that the Casualty Actuarial Society was very pleased with his effort and thanked Mr. Parker on behalf of the CAS.

Mr. Parker then passed out some clips relating to Academy public relations. It included a front page article from the National Underwriter concerning the AIDS paper. This paper received more attention than anything else Mr. Parker has done at the Academy. It was also picked up by UPI, AP, and others.

Mr. Parker reported that the planned media tour on continuing care retirement communities had finally occurred. This also generated lots of interest. Harold L. Barney had substituted for Barbara L. Snyder at the last minute. Jarvis Farley also assisted.

Mr. Bassett observed that Mr. Parker was doing an outstanding job.

20. Council of Presidents Report

Mr. Bassett reported that a joint executive committee meeting will be held in Phoenix in 1988. He also reported that the Society of Actuaries has asked for the opportunity to co-sponsor the Enrolled Actuaries Meeting. The current co-sponsors, the Academy and the Conference, have asked for a letter from the Society of Actuaries describing the proposal.

21. Discipline Handbook

Mr. Kellison noted that the final version of the discipline handbook was in the Board's packet. This will be sent to members upon request. A feature on this will be included in the Actuarial Update.

22. Future Meetings Schedule

Mr. Fibiger noted that the schedule was in the Board's packet. The Washington Luncheon has been rescheduled for January 19.

23. Other Reports or Business

There were none.

24. Adjournment

Mr. Bassett adjourned the meeting at 4:28 p.m.

Respectfully submitted,

Robert H. Dobson
Secretary
October 29, 1987
Amended November 9, 1987

FINANCIAL STATEMENTS

Years Ended December 31, 1986 and 1985

The following Balance Sheets and Statements of Revenue and Expenses for the years ending December 31, 1986 and 1985 are excerpts from the audited financial statements. The amounts include all balances in the General Fund, Enrolled Actuaries Meeting Fund, and the Casualty Loss Reserve Seminar Fund of the Academy.

1986 FINANCIAL STATEMENTS

AMERICAN ACADEMY OF ACTUARIES
BALANCE SHEET
December 31, 1986 and 1985

ASSETS	1986	1985
Current assets:		
Cash	$ 64,691	$ 125,059
Certificates of deposit	100,000	119,369
Money market funds	943,133	461,763
Accounts receivable	4,763	43,597
Accrued interest receivable	19,208	23,607
Due from Casualty Actuarial Society	7,766	5,570
Prepaid expenses	29,832	43,375
Deferred sublease expenses	1,389	
Deposit	--	3,500
Total current assets	1,170,782	825,840
Certificates of deposit - long-term	497,559	498,568
Deferred sublease expenses - long-term	3,525	-
Furniture, equipment and leasehold improvements (net of accumulated depreciation and amortization of $89,640 and $72,052)	70,945	78,064
	$1,742,811	$1,402,472

LIABILITIES AND FUND BALANCES		
Current liabilities:		
Accounts payable	$ 118,342	$ 137,432
Deferred membership dues revenue	745,755	328,170
Deferred rent credit	2,145	16,745
Deferred meeting revenue	16,075	115,722
Deferred revenue - other	3,321	-
Due to Conference of Actuaries in Public Practice	603	3,616
Due to Casualty Actuarial Society	38,320	1,536
Accrued expenses	5,268	3,750
Total current liabilities	929,829	606,971
Deferred rent credit - long-term	16,626	27,707
Fund balances	796,356	767,794
	$1,742,811	$1,402,472

1986 FINANCIAL STATEMENTS

AMERICAN ACADEMY OF ACTUARIES
STATEMENT OF REVENUE AND EXPENSES
Years Ended December 31, 1986 and 1985

Revenue:	1986	1985
Membership dues	$1,021,975	$ 977,265
Meeting registration fees	462,985	389,868
Exhibitors	22,150	20,950
Membership application fees	11,675	9,100
Interest	113,771	116,541
Administrative Services:		
Casualty Actuarial Society meetings	14,000	12,256
Sales of FASB Study (net)	-	10,728
Recoveries on FASB Study	-	15,400
Other	35,210	27,037
	$1,681,766	$1,579,145
Expenses (see next page for details)	1,653,204	1,446,976
Excess of revenue over expenses	$ 28,562	$ 132,169

AMERICAN ACADEMY OF ACTUARIES
STATEMENT OF EXPENSES
Years Ended December 31, 1986 and 1985

	1986	1985
Salaries	$ 476,578	$ 420,145
Employee insurance	23,848	22,639
Payroll taxes	32,043	29,884
Retirement plan	63,596	50,697
Temporary help and personnel fees	13,658	27,783
Rent	138,846	79,005
Telephone	12,213	13,375
Postage and freight	59,663	52,531
Travel and related expenses	61,821	56,949
Legislative luncheon	5,376	5,590
Committee meetings	26,084	27,035
President and President-elect travel	28,462	24,070
Interim Actuarial Standards Board	11,205	-
Actuarial club visits	6,195	-
Errors and omissions insurance project	3,428	-
FASB study	-	17,100
General office supplies and equipment rental	40,426	33,931
Relocation of office	-	8,557
Printing	164,036	167,322
Personnel development	985	1,833
Service agreement	54,965	51,352
Audit and accounting	12,656	9,800
Insurance	8,701	6,719
Depreciation and amortization	17,588	19,697
Subscriptions and periodicals	6,035	6,230
Loss on disposal furniture and leasehold improvements	-	1,197
Public information consulting	21,516	11,371
Hotel services	169,819	144,581
Speakers	25,148	17,207
Exhibitors	16,463	13,473
Printing, postage and meeting materials	39,527	37,673
Registration processing	12,728	10,045
Promotion	560	4,997
Transcripts and recording	26,494	41,275
Other	5,998	5,968
Distribution of net revenue from Enrolled Actuaries Meeting and Casualty Loss Reserve Seminar:		
Conference of Actuaries in Public Practice	28,223	25,409
Casualty Actuarial Society	38,320	1,536
	$1,653,204	$1,446,976

AMERICAN ACADEMY OF ACTUARIES
CALENDAR YEAR 1987 STAFF PROGRAM PLAN
ANNUAL REPORT
DECEMBER 31, 1987

1.0 INTRODUCTION

This report presents summary statements and accompanying milestone charts for the major accomplishments of Academy staff during calendar year 1987. Ongoing as well as anticipated and unanticipated significant activity is reported. Program elements are numbered to correspond with the numbering system of the 1987 Staff Program Plan. For quick reference, program elements that are highlighted with an asterisk indicate that a material change of some sort has occurred over what appeared in the staff program plan.

2.0 1987 PROGRAM ELEMENTS

The Academy's many and varied major activities fall under the general categories: **Internal Communications** (Section 2.1), **External Communications** (Section 2.2), **Government Relations** (Section 2.3), **Legal Counsel** (Section 2.4), **Financial Management** (Section 2.5), **Membership Systems Administration** (Section 2.6), **General Administration** (Section 2.7), **Convention Management** (Section 2.8), and **Actuarial Standards** (Section 2.9). They appear below.

2.1 Internal Communications

* (1) **Committee coordination and counsel** by senior Academy staff is an ongoing function designed to assist committees in the fulfillment of their charges. Staff implemented the new system of quarterly committee progress reports for Board and Executive Committee meetings which went into effect this year. Staff assisted in the coordination of the joint meeting of the Academy Board and committee chairpersons and surveyed attendees afterward to gauge their receptivity to similar events in the future. As a new initiative this year, staff drafted an operational plan for the 1987-88 Academy year for consideration by the Executive Committee. Staff solicited the members for volunteers, tabulated responses, and provided the results to those staffing committees. The Committee Chairperson's Manual was updated and redistributed.

(2) During the year **intra-professional liaison** activities included attendance at all Council of Presidents meetings, including one as host. Also, a new table top exhibit was designed and put into use at selected meetings during the second half of the year.

(3) As part of **Operation Contact**, staff assisted local actuarial clubs as requested in providing speakers and topics for their meetings. Also, one major mailing containing recent publications and statements of the Academy was sent to all clubs.

(4) **The Actuarial Update** was published monthly throughout the year. A new enclosure, the IASB Boxscore, was added at the beginning of the year. Three Special Subject Supplements were prepared and distributed. Topics were: guidelines for making public statements, annual committee reports, and the proposal to create an Actuarial Standards Board. The insert "In Search

Of" listing actuarial positions available in the government was distributed with eleven of the twelve issues.

* (5) The **Government Relations Watch** (GRW) was published monthly throughout the year. Two special state supplements were published during the year.

(6) The **Academy Alert** service was inaugurated on a subscription basis at the beginning of the year. It proved to be a highly successful venture during its first year of operation. A summary of activity appears below:

Category	No. of Issues	No. of Subscriptions
Property and Liability	15	202
Health	12	460
Life	19	491
Pension and Employee Benefits	16	606

A decision has been made to increase the annual subscription fee in 1988 in reflection of the larger number of issues than originally anticipated.

(7) The **Enrolled Actuaries Report** was published five times during the year, as scheduled.

(8) The **1987 Yearbook** was published and distributed in January, as scheduled.

(9) The **1986 Journal** was published and distributed in March, as scheduled.

(10) The **Issues Digest,** published in conjunctions with the annual Washington Luncheon, was well-received by our outside audiences. It was subsequently distributed to the entire membership.

(11) The **Actuarial Calendar,** showing the dates and locations of actuarial and other related meetings, was updated and distributed to the Council of Presidents prior to each of its quarterly meetings. It was also distributed quarterly to the Board. Monor changes in format and scope were instituted early in the year.

(12) **Official Academy pronouncements,** other than standards during the year included: a bylaw amendment package, a supplemental list of members to the Yearbook, and a discussion draft on continuing education recognition.

(13) The **Board of Directors Orientation Kit** was completed and distributed to the Board, as scheduled.

(14) Staff provided substantial support to the Task Force on the **Actuarial Magazine** in its efforts to explore the desirability and feasibility of launching a profession-wide magazine. The task force has utilized the services of a consultant with experience in association magazine start-ups.

* (15) A tabulation of the **1988 Enrolled Actuaries Listed Alphabetically and Geographically** was published to replace the prior 1986 edition.

2.2 External Communications

(1) The **general news campaign** is an issue-oriented, ongoing activity that encompasses the filing of news releases with trade and general audience print and electronic media. Stories appeared in a wide variety of such outlets on the following topics: AIDS, CCRCs, Social Security, liability insurance, tax reform, FAS 87, putting a value on human life, and pension funding and termination policy.

(2) **New member news releases** were prepared and distributed for 532 newly admitted members of the Academy.

(3) Three **syndicated news stories** were written and placed in small daily and suburban weekly newspapers across the nation. Topics were: tort reform, senior citizen housing, and CCRCs.

(4) Three **radio news scripts** were written and distributed to 3,400 talk and news-format radio stations nationwide. Topics were: historical mortality tables, CCRCs, and AIDS.

(5) **Radio news actualities** were produced on the long-term solvency of CCRCs. In addition, a major media tour and several individual appearances featured Academy spokespersons on CCRCs appearing on television and radio interview programs.

(6) **Public relations networking,** an ongoing activity, continued. During this year contacts were strengthened with the Insurance Information Institute and the American Association of Homes for the Aging.

2.3 Government Relations

(1) **Legislative monitoring,** the daily review of source documents and attendance at selected Congressional hearings, resulted in the referral of a number of issues to Academy committees for comment. This work resulted in the submission of 12 statements on legislative issues by Academy representatives. A special mailing was completed early in the year to greet members of the 100th Congress and their staffs.

(2) **Regulatory monitoring,** an ongoing function much like legislative monitoring except in the regulatory arena, also resulted in the referral of a number of issues to Academy committees for comment. This work resulted in the submission of seven statements on regulatory issues by Academy representatives.

* (3) The **state government relations program** comprises a number of separate, but interrelated activities. Legislative and regulatory monitoring at the state level is more limited than at the federal level due to resource limitations;" nevertheless, four Academy statements were submitted to individual states during the year. Outreach mailings to actuaries in state government and COIL were completed during the year. Continued emphasis on special purpose actuarial opinions resulted in the addition of more such opinions to our inventory and included discussions with the Committee on Planning and the Committee on Qualifications on an appropriate method of dealing with this complex issue. Staff contacts with Washington

representatives of state-level organizations were strengthened in order to facilitate information exchange. Finally, staff has assisted committees in developing "off-the shelf" papers that were distributed to all states on the following issues: liability insurance underwriting cycle and tort reform, unisex insurance pricing, AIDS, and CCRCs.

* (4) **Liaison with the NAIC** is a critical part of the state government relations program, and receives significant staff support and attention. Staff attended both major meetings of the NAIC and conducted regular Academy Briefing Sessions at those meetings. As an innovation, an Academy exhibit was on display at the December meeting. Introductory packages of material were distributed periodically to new commissioners and there was one general mailing to all commissioners containing a number of Academy documents and statements. Staff made a presentation at the new commissioners education program held by the NAIC. The significance of NAIC activities can be measured by the fact that there were 12 Academy statements submitted to the NAIC during 1987.

(5) Staff support for the **valuation actuary** project is ongoing. During the year staff monitored and participated in such areas as NAIC and state regulatory activities, standards preparation, and liaison with the accounting profession.

(6) The annual **Washington Luncheon and Briefing** was held as scheduled with excellent attendance by members of the Board and committee chairpersons. A total of 90 individuals attended the Luncheon, which was keynoted by Representative James Florio, who praised Academy activities in support of decision-making on Capitol Hill. An updated version of the Government Relations Handbook was distributed to Briefing attendees, and the Issues Digest was distributed to all.

(7) **Special studies coordination** is an ongoing function designed to unearth opportunities for the Academy, through its committee structure, to offer in-depth analysis and expertise to legislators and regulators. During the year noteworthy activites of this type occurred in the following areas: implementation of nondiscrimination rules for health and welfare plans by the IRS, analysis of the effect of proposed changes in pension funding standards, changes to the valuation and nonforfeiture sections of the NAIC Universal Life Model Regulation, and a yield index study for the NAIC.

(8) **Government relations status reports** were provided to the Board and Executive Committee as required. In addition, staff worked closely with the Committee on Planning in its deliberations on the future of the Academy's government relations program. This effort culminated in Board approval of a proposal to create the new position of Director of Government Relations and in an expanded, more proactive approach to government relations planning.

(9) **Liaison with the AICPA** continued with staff participation at the three scheduled meetings in 1987. One highlight of the year was completion and publication by both organizations of a standard confirmation letter for pension audits. During the year a total of three Academy statements were submitted to the AICPA.

(10) Staff **liaison with FASB and GASB** during 1987 included attendance at our annual meeting in Stamford, which included an exchange of views in several issues of mutual interest and an opportunity for Academy representatives to meet the new chairman of the FASB. In 1987 five Academy statements were submitted to the FASB and GASB. Steps are underway at year-end to strengthen the liaison of Academy representatives with the staff of the FASB and GASB.

(11) **Government relations networking**, the formation, maintenance, and use of Washington contacts to expand the scope of Academy involvement in issues of importance to the profession, continued as planned. Contacts were established or greatly strengthened with several groups, including the Washington Business Group on Health, American Association of Homes for the Aging, and the American League of Lobbyists.

2.4 **Legal Counsel**

* (1) The **review of Academy pronouncements** is a critical and ongoing function and includes a variety of documents, reports, statements, minutes, etc. Deserving special mention this year were handling one amendment to the bylaws, completion of the compilation of Academy policies from the minutes of the Board and Executive Committee since the inception of the Academy, and the discussion draft on continuing education recognition.

(2) **Antitrust compliance review** was heightened with the absence of antitrust coverage from our liability insurance early in the year. One project given special scrutiny was the yield index study being done for the NAIC.

(3) **Support of the Committee on Discipline** was provided on specific cases, as required. The new Discipline Handbook, under development for several years, was published and distributed. Staff assisted in the preparation of the two semiannual reports required by the bylaws. Ways of improving communication to the membership are being examined.

(4) **In-house legal support** was provided as needed for Academy administrative activities, such as contracts, service agreements, personnel policies, etc. During the year a part-time law clerk was hired to support the General Counsel in this area of operations.

(5) No **legal briefs** were required during 1987. However, several active cases which could lead to the need for briefs in the future were closely monitored during the year and are still pending at the end of the year.

(6) **Litigation monitoring and reporting,** an ongoing function, continued in 1987. Selected cases were reported to the Board and Executive Committee. Also an occasional legal lines article appears in The Actuarial Update.

(7) There was no use of **outside legal counsel** during the year. However, several issues were pending at the end of the year that may require outside legal counsel in the future; namely, legal briefs described above, creation of an actuarial magazine, and standards.

(8) **Liability insurance** was a major priority during the year. Staff was successful in securing a major improvement in coverage for the Academy during the third quarter. During the year significant staff support was provided to the joint task force exploring options for a profession-sponsored program of liability insurance for actuaries. Finally, staff assisted a number of actuaries and actuarial firms in identifying potential sources of coverage.

(9) **Legal networking**, consisting of maintaining and broadening contacts with lawyers in Washington, D.C., is an ongoing function which continued during the year. The ASAE Legal Section proved to be a valuable new source of contacts.

2.5 **Financial Management**

(1) During 1987 **accounting and reporting** functions were completed on schedule. These activities included financial records processing, monthly financial statements, disbursements, payroll, billing, internal control procedures, and production of draft budgets and four quarterly treasurer's reports for the Board and Executive Committee. A revised chart of accounts was adopted in 1987.

* (2) Under contract with applicable co-sponsoring organizations, staff provided **convention fund management services** for the Enrolled Actuaries Meeting (AAA/CAPP) and the Casualty Loss Reserve Seminar (AAA/CAS). Each of these convention funds is maintained as a separate entity with its own books, financial reports, budgets, and policies. During the year a checking account was opened and financial records set up for the 1989 Centennial Celebration.

(3) **Cash flow and investment management** activities for the year included investment of dues income received early in the year, implementation of the investment decisions made by the Budget and Finance Committee, and routine monitoring of account balances to maximize investment income. Revised cash flow projections were prepared during the year to assist the Budget and Finance Committee in making long-term investment decisions.

(4) The 1986 **audit** was completed on schedule. The audit report and management letter were reviewed by the Budget and Finance Committee and submitted to the Board. Staff implemented all the minor housekeeping recommendations contained in the management letter. Convention funds were included in the audit.

(5) The **expense report by function** was completed on schedule. For the first time standards was shown as a separate functional category. During the year staff worked with the Budget and Finance Committee in redefining categories for the future. Late in the year, staff developed a timesheet for all employees to commence using on January 1, 1988.

(6) **Budget and Finance committee** liaison consisted of preparing numerous reports for the two committee meetings during the year.

2.6 Membership Systems Administration

(1) Routine **maintenace of the membership data base** included revisions resulting from new admissions, waivers, resignations, deaths, suspensions and expulsions, as well as title and address changes for continuing members. 1987 dues receipts were processed throughout the year, and 1988 dues notices were distributed in November, one month earlier than usual.

* (2) **Member recruitment** activities this year included congratulatory/invitation letters to new non-Academy Fellows and Associates of the CAS and SOA and new enrolled actuaries. In addition, there was an annual recruitment mailing to all potential new members, targeted according to specialty area.

(3) During 1987, staff received and processed 440 new applications; 427 new members were admitted through its **admissions system.** Average processing time was held at a low 2.3 months.

(4) **Continuing education recognition** involved staff support for the task force in this area. A discussion draft with a survey was produced and distributed to the membership during the year. Preliminary consideration has been given to administrative procedures and systems to implement such a program should one be adopted.

(5) The **Membership Systems Administration Manual** was revised and expanded during the year. It is now complete enough to afford protection against disruption in the event of turnover in either the Washington or Itasca offices.

2.7 General Administration

(1) **Personnel administration** activities were performed as planned. A low level of turnover was experienced this year. New staff members were hired to fill vacancies and the new positions created without disruption to ongoing activities. A change in the procedures for handling personnel records was instituted upon the departure of the Director of Administration.

(2) Senior staff devoted material time to the **evaluation of staff requirements and resources** during all of 1987. Early in the year, senior staff spent considerable time exploring various options for structuring the office. During the course of the year the Executive Director provided extensive input to the special task force of the Executive Committee dealing with staffing issues. This effort culminated with a set of proposals implemented late in the year. The primary issues involved: approval of the new position of Director of Government Relations, increased staffing to meet the needs of the IASB/ASB, and restructuring the administrative functions in the office in response to the departure of the Director of Administration. In addition, steps were taken to provide for a smooth transition upon the retirement of the Membership Manager in Itasca. As a result of the reorganizations, total staff size increased from 14 to 18 employees.

(3) 1987 was an active year in the **evaluation of office equipment requirements.** During the year a staff report on telecopy equipment was produced and equipment installed. This new telecopier has already produced

very substantial operational improvements during the short time since it was installed. During the year, there was also extensive investigation of options for replacing the obsolete word processing system in the office. Late in the year the leadership approved a staff recommendation for the purchase of a new word processing system on January 1, 1988.

(4) **Word processing continuing education** is an ongoing activity that included additional NBI technical training for several employees. In addition, a number of informal in-house sessions were held to improve the skills of all employees in the office who use the system.

(5) No **sublease management** activites were required in 1987, since all existing sublease space was leased past the end of the year. Preliminary discussions were held on options concerning the sublease which expires in 1988.

(6) Staff prepared the 1986 staff report, the 1987 staff plan, and three quarterly reports during the year, as scheduled. In addition, **staff planning and reporting** activities included regular monthly meetings between the Executive Director and individual senior staff, as well as periodic senior staff meetings to discuss office-wide management. Late in the year the approach to staff planning and reporting was redefined to be consistent with the office restructuring.

(7) The **Employee Policies and Procedure Manual** was reviewed and revised and an updated version was distributed to all employees.

2.8 **Convention Management**

(1) The annual **Enrolled Actuaries Meeting and Exhibition,** cosponsored by the Academy and the CAPP, was held February 12-13, 1987 in Washington, D.C. This was the largest meeting to date with 1,472 attendees, 21 exhibitors, and was covered by 11 press representatives. Significant staff effort was devoted to exploring options for the needed future expansion of the meeting to accommodate more attendees.

* (2) The annual **Casualty Loss Reserve Seminar,** cosponsored by the Academy and the CAS, was held September 10-11, 1987 in Minneapolis, MN. Attendance was 680, which was much higher than expected.

(3) As planned, the **Annual Meeting** was held in San Antonio, TX in conjunction with the CAS.

* (4) **Meeting publicity** was carried out for the Enrolled Actuaries Meeting, Casualty Loss Reserve Seminar, and the Academy's Annual Meeting. These pre-, during-, and post-event activities include the issuance of news releases, contacts with working press, on-site press services, and the writing and placement of feature articles on meeting sessions. During the year the Academy entered into a new agreement with the CAS to provide public relations services for the CAS. Meeting publicity was provided for both CAS meetings during the year, and the results exceeded the expectations of both staff and the CAS leadership.

* (5) As planned, staff provided convention management services in connection with the **Casualty Actuarial Society Spring and Annual Meetings,** held in Orlando, FL in May and San Antonio, TX in November. Staff also provided support for the CAS Ratemaking Seminar held in Philadelphia, PA in March. The staff is in the process of restructuring services provided to the CAS in order to accommodate the hiring of a part-time employee to work on meetings by the CAS. At year-end the Academy and the CAS were in the process of renegotiating the service agreement under which the Academy provides services to the CAS.

(6) During the year staff provided services for the **1989 Centennial Celebration,** as requested by the steering committee. During the third quarter convention management services were transferred to the SOA staff in Itasca. However, staff support on public relations activities, which remain in the Washington office, accounted for a significant time commitment. Major activites included: work on an audio-visual presentation, design and approval of a logo, and preparation and distribution of the first meeting announcement. In addition, the General Counsel has been asked to review all contracts before they are signed.

(7) **Board of Directors, Executive Committee and committee meetings** were arranged by staff as required.

* (8) The development of a **Convention Management Manual** was not completed and was deferred until 1988. Staff was asked during the year to develop a companion piece covering volunteer committee guidelines and policies, which will also be completed in 1988.

2.9 **Actuarial Standards**

(1) Staff handled the processing of **exposure drafts and final standards** during the year. There were a total of one discussion paper, three exposure drafts, and three final standards in 1987. Staff revised the Procedures for the Development of Standards of Professional Conduct, Qualification Standards, and Standards of Practice which appear in the Yearbook. Significant staff support was devoted to the development of the IASB Procedures Manual which was completed late in the year.

(2) The **legal review** of all standards-related documents, agendas, and minutes is an ongoing requirement of staff. All discussion papers, exposure drafts, and final standards now must receive a written legal opinion prior to their release.

(3) An extensive **public relations program** related to standards was developed and approved in 1987. Some segments of it were implemented in 1987, while others are scheduled for 1988. Noteworthy activities for the year include the following: the inauguration of the monthly IASB Boxscore, developing a standards exhibit which was displayed at all the annual meetings of the various actuarial organizations in the fall, and development of a major special subject supplement on standards to be sent to the membership.

* (4) During the year there was significant staff participation in **financial management planning** for standards in the development of a standards baseline budget. During the year financial records were

functionalized, so that standards expenses for 1988 and beyond can be accurately measured.

(5) **Technical support for research** will be undertaken by staff as requested by the IASB. Staff's role in connection with the structural framework project and the actuarial primer project has been primarily to monitor activity. Staff has become actively involved in the development of a uniform format for standards.

(6) Considerable attention was devoted to the **staffing** of the IASB during the year. As part of the baseline budget process, the decision was made to hire two new employees for standards, i.e. a technical writer and a secretary. These two positions were filled in late December.

(7) **Administrative support services** were provided to the IASB as required, and included meeting scheduling and arrangements, preparation of agendas and minutes, distribution of mailings, and other miscellaneous assignments. The IASB held one more meeting than originally scheduled in 1987.

(8) **Public interface coordination** has been an ongoing activity for staff, requiring delicate balancing of the needs of the IASB and the public interface committees of the Academy. Staff has joined with the IASB, the SOC, and the Board in discussions concerning the future role of the ASB, public interface committees, and staff in this process. Staff anticipates playing a major role in making public interface coordination work smoothly and effectively.

* (9) The need for significant staff **support of the Standards Organizing Committee** developed during the year. This included such matters as meeting coordination (including the joint IASB/SOC meeting), preparation of agendas and minutes, mailings, reviewing and drafting on the SOC report, and other administrative support. Also, staff provided significant legal and public relations counsel. Finally, staff played a major role in the half-day presentation on standards at the October Board Meeting.

3.0 MATERIAL CHANGES, DELAYS AND ADDITIONS

2.1 (1) The **Committee Chairperson's Manual** update was completed two months ahead of schedule.

2.1 (5) A third **special state supplement to the GRW** was cancelled due to lack of sufficient new information to warrant an issue.

2.1 (15) The **1988 Enrolled Actuaries Listed Alphabetically and Geographically** was delayed two months due to computer programming changes in Itasca, but the publication was still available well in advance of the 1988 Enrolled Actuaries Meeting.

2.3 (3) The **outreach mailing to actuaries in state government** was delayed two months due to the press of other matters.

2.3 (4) **NAIC** President Muhl was unable to address an Executive Committee meeting as planned due to a scheduling conflict.

1987 STAFF PROGRAM PLAN

2.4 (1) The completion of the **compilation of Academy policies** was delayed to coincide with the distribution of the Board of Directors Orientation Kit.

2.5 (2) The final audited **financial report for the Casualty Loss Reserve Seminar** was completed two months ahead of schedule.

2.6 (2) The annual **recruitment mailing** was delayed for two months while a new supply of Fact Books was being printed.

2.8 (2) The 1986 **Casualty Loss Reserve Seminar transcript** was delayed two months due to difficulty in obtaining edited copy.

2.8 (4) **Public relations services for the CAS** was a major addition to the original staff plan.

2.8 (5) The staff services provided for the **CAS Ratemaking Seminar** were an addition to the original staff plan.

2.8 (8) The **Convention Management Manual** was delayed until 1988 due to staff turnover and the office restructuring.

2.9 (4) The development of a **standards baseline budget** was delayed two months due to the need to reconcile some differences among the IASB, the SOC, and the Academy Treasurer.

2.9 (9) A much greater level of **staff support for the SOC** was required than anticipated in the original staff plan.

SUMMARY OF 1987 STATEMENTS

Each year's Journal includes the text of the statements released by the Academy during that year. The summary that follows provides background information, including cross-references to previous statements. Statements are assigned numbers by calendar year and order of release, e.g., 1987-1 is the first statement released during 1987.

The guidelines by which these statements are developed appear in the Academy's yearbook.

Index Code: 1987-1
To: Federal Trade Commission
Date: January 2, 1987
Length: 5 pages
Concerning: Insurance studies
Background: These comments were submitted to the Federal Trade Commission with regard to its final report on life insurance cost disclosure. The Academy had previously submitted comments on this study at its inception in 1983 (see statement 1983-46) and prior to its release in November 1985 (see statement 1985-42).
Drafters: The Committee on Life Insurance, chaired by Gary E. Dahlman.

Index Code: 1987-2
To: Financial Accounting Standards Board
Date: January 5, 1987
Length: 2 pages
Concerning: Accounting for income taxes
Background: This statement was submitted in response to the Financial Accounting Standards Board Exposure Draft on Accounting for Income Taxes dated September 2, 1986. The Academy had previously submitted comments by the Committee on Life Insurance Financial Reporting (see statement 1986-40).
Drafters: The Committee on Property and Liability Insurance Financial Reporting, chaired by Stephen P. Lowe.

Index Code: 1987-3
To: American Institute of Certified Public Accountants
Date: January 5, 1987
Length: 5 pages
Concerning: Accounting by prepaid health care plans
Background: This statement was submitted in response to the AICPA Exposure Draft on Accounting by Prepaid Health Care Plans dated October 6, 1986.
Drafters: The Subcommittee on Alternative Delivery Systems of the Committee on Health. The respective chairpersons are Harry L. Sutton and E. Paul Barnhart.

SUMMARY OF 1987 STATEMENTS

Index Code: 1987-4
To: Pension Benefit Guaranty Corporation
Date: January 5, 1987
Length: 3 pages
Concerning: Form 5500
Background: This statement was submitted to the Pension Benefit Guaranty Corporation in response to questions regarding an earlier statement (see statement 1986-36) on proposed changes in Form 5500.
Drafters: The Pension Committee, chaired by Larry D. Zimpleman.

Index Code: 1987-5
To: Department of Treasury
Department of Labor
Date: January 6, 1987
Length: 4 pages
Concerning: Continuation of coverage under group health plans
Background: This letter was sent to the Department of Treasury and the Department of Labor to comment on provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985 relating to continuation of coverage under group health plans.
Drafters: The Committee on Health and Welfare Plans, chaired by Thomas G. Nelson.

Index Code: 1987-6
To: General distribution to a variety of audiences
Date: January 9, 1987
Length: 20 pages
Concerning: Social Security
Background: This statement is a report on the measurement of the actuarial status of the Social Security system.
Drafters: The Committee on Social Insurance, chaired by Kenneth A. Steiner.

Index Code: 1987-7
To: Virginia Bureau of Insurance
Date: January 27, 1987
Length: 2 pages
Concerning: Smoker/nonsmoker mortality tables
Background: This statement was submitted to the Virginia Bureau of Insurance in response to proposed regulations pertaining to the use of smoker/nonsmoker mortality tables in determining minimum reserve liabilities and nonforfeiture benefits.
Drafters: The Committee on Risk Classification, chaired by Patricia L. Scahill.

Index Code: 1987-8
To: South Dakota Division of Insurance
Date: February 6, 1987

SUMMARY OF 1987 STATEMENTS

Length: 3 pages
Concerning: Insurance consultant laws
Background: This statement was submitted in response to a request from the South Dakota Divison of Insurance regarding information concerning actuarial designations.
Drafters: Executive Director Stephen G. Kellison.

Index Code: *1987-9*
To: Department of Treasury
Date: February 23, 1987
Length: 6 pages
Concerning: Health and welfare plans
Background: This statement was submitted to the Department of the Treasury in response to a request for comments on the valuation of accident and health benefits under the Tax Reform Act of 1986. The Academy proposed methodology to determine whether an employer's accident and health plans are *discriminatory*, and, if so, the *taxable value* of the discriminatory portion.
Drafters: The Task Force on Non-Discrimination Rules of the Committee on Health and Welfare Plans. The respective chairpersons are Richard Ostuw and Thomas G. Nelson.

Index Code: *1987-10*
To: Office of Personnel Management
Date: March 2, 1987
Length: 2 pages
Concerning: Federal Employees Retirement System
Background: This statement was submitted to the Federal Employees Retirement System Implementation Task Force of the Office of Personnel Management regarding the definition of an actuary in an interim rule published in the Federal Register in December 31, 1986 (51 FR 47185-9).
Drafters: Executive Director Stephen G. Kellison.

Index Code: *1987-11*
To: Department of Labor
Date: March 16, 1987
Length: 1 page
Concerning: Pension plan funding and PBGC premium proposals
Background: This letter was sent to David M. Walker, Deputy Assistant Secretary of the Pension and Welfare Benefits Administration, Department of Labor, regarding the Administration's proposal on the funding and termination of defined benefit pension plans.
Drafters: General Counsel Gary D. Simms.

Index Code: 1987-12
To: NAIC Life and Health Actuarial (EX5) Task Force
Date: March 24, 1987

SUMMARY OF 1987 STATEMENTS

Length: 44 pages
Concerning: Health insurance reserve standards
Background: This report to the NAIC Life and Health Actuarial (EX5) Task Force concerns the development of health insurance reserve standards by the NAIC. The report is revised from earlier documents and recommends to the NAIC adoption of the proposed standards. (See statements 1986-19, 1986-31, and 1986-41.)
Drafters: The Subcommittee on Liaison with NAIC Accident and Health (B) Committee of the Committee on Health, both chaired by E. Paul Barnhart.

Index Code: 1987-13
To: Financial Accounting Standards Board
Date: March 31, 1987
Length: 14 pages
Concerning: Accounting for universal life
Background: These comments were submitted to the FASB in response to the Exposure Draft of the proposed Statement of Financial Accounting Standards "Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Insurance Contracts and for Realized Gains and Losses from the Sale of Investments" dated December 23, 1986. The Academy had previously commented on this issue to FASB prior to the release of the Exposure Draft (see statements 1986-28 and 1986-38).
Drafters: The Committee on Life Insurance Financial Reporting, chaired by Edward S. Silins.

Index Code: 1987-14
To: Subcommittee on Oversight of the House Committee on Ways and Means
Date: April 9, 1987
Length: 9 pages
Concerning: Pension plan funding and PBGC premium proposals
Background: This statement was submitted as part of testimony at a public hearing before the Subcommittee on Oversight of the House Committee on Ways and Means on the Administration's proposals on pension plan funding and asset reversions and on the Pension Benefit Guaranty Corporation's variable rate premium proposal.
Drafters: The Pension Committee, chaired by Larry D. Zimpleman, who also presented the testimony at the public hearing.

Index Code: 1987-15
To: Congressman Leon E. Panetta
Date: April 14, 1987
Length: 1 page
Concerning: Limited practice status for enrolled actuaries
Background: This letter was sent to Congressman Panetta suggesting his proposed legislation to permit certified public accountants

and enrolled agents to practice before the U.S. Tax Court be expanded to include enrolled actuaries in pension matters.

Drafters: Executive Director Stephen G. Kellison.

Index Code: 1987-16
To: Subcommittee on Health of the House Committee on Ways and Means
Date: April 17, 1987
Length: 5 pages
Concerning: Catastrophic health insurance
Background: This statement was submitted for the record of a hearing of the Subcommittee on Health of the House Committee on Ways and Means on proposals to expand Medicare to include catastrophic coverage.
Drafters: The Committee on Health, chaired by E. Paul Barnhart.

Index Code: 1987-17
To: Subcommittee on Health of the House Committee on Ways and Means
Date: April 21, 1987
Length: 4 pages
Concerning: Long-term care insurance
Background: This statement was submitted for the record of a hearing of the Subcommittee on Health of the House Committee on Ways and Means on the issue of long-term health care.
Drafters: The Committee on Health, chaired by E. Paul Barnhart.

Index Code: 1987-18
To: Delaware Insurance Department
Date: May 15, 1987
Length: 2 pages
Concerning: Casualty loss reserve opinions
Background: This statement was submitted to the Delaware Insurance Department in response to Proposed Regulation No. 50, Audited Financial Statements. This proposed regulation would include a requirement for a casualty loss reserve opinion as part of an audit of the statutory financial statement.
Drafters: Executive Director Stephen G. Kellison.

Index Code: 1987-19
To: American Institute of Certified Public Accountants
Date: May 18, 1987
Length: 5 pages
Concerning: Standard confirmation letter on pension audits
Background: This document was developed jointly by the Academy and the AICPA for use by auditors reviewing pension plans.
Drafters: A special task force under the auspices of the Committee on Relations with Accountants. The respective chairpersons are Harper L. Garrett, Jr. and P. Adger Williams.

SUMMARY OF 1987 STATEMENTS

Index Code: 1987-20
To: Senate Committee on Finance
Date: May 26, 1987
Length: 1 page
Concerning: Catastrophic health insurance
Background: These comments, identical to comments submitted on April 17, 1987 (see statement 1987-16), were submitted to members of the Senate Committee on Finance as the committee began its markup of bill to expand Medicare to include catastrophic health insurance.
Drafters: The Committee on Health, chaired by E. Paul Barnhart.

Index Code: 1987-21
To: Subcommittee on Health and the Environment of the House Committee on Energy and Commerce
Date: May 28, 1987
Length: 2 pages
Concerning: Catastrophic health insurance
Background: These comments, identical to comments submitted on April 17, 1987 (see statement 1987-16), were submitted to the Subcommittee on Health and the Environment of the House Committee on Energy and Commerce for the hearing record on proposals to expand Medicare to include catastrophic health insurance.
Drafters: The Committee on Health, chaired by E. Paul Barnhart.

Index Code: 1987-22
To: General distribution to a variety of audiences
Date: May 31, 1987
Length: 8 pages
Concerning: Risk classification
Background: This statement is a white paper on the subject of risk classification and AIDS. It is an update of an earlier white paper issued in 1986 (see statement 1986-18).
Drafters: The Committee on Risk Classification, chaired by Patricia L. Scahill.

Index Code: 1987-23
To: NAIC Life and Health Actuarial (EX5) Task Force
Date: June 12, 1987
Length: 13 pages
Concerning: Universal life insurance
Background: This preliminary report was submitted in response to the task force's request for comments on possible changes to the valuation and nonforfeiture provisions of the NAIC Universal Life Insurance Model Regulation. The Academy had previously submitted comments on this model regulation in 1986 (see statement 1986-43).
Drafters: The Universal Life Task Force of the Committee on Life Insurance. The respective chairpersons are Douglas C. Doll and Gary E. Dahlman.

SUMMARY OF 1987 STATEMENTS

Index Code: **1987-24**
To: NAIC Technical Services (EX5) Subcommittee
Date: June 25, 1987
Length: 3 pages
Concerning: *Actuarial liaison with the NAIC*
Background: This report was presented at a public meeting of the NAIC Technical Services (EX5) Subcommittee and describes in outline fashion the major liaison activities between the Academy and the NAIC.
Drafters: The Committee on Liaison with NAIC, chaired by Burton D. Jay.

Index Code: **1987-25**
To: Governmental Accounting Standards Board
Date: July 7, 1987
Length: 5 pages
Concerning: Pension accounting
Background: These comments were presented to the Governmental Accounting Standards Board (GASB) in response to a request from GASB for the Academy's perspective on issues relating to pension accounting for state and local governments.
Drafters: The Committee on Pension Accounting, chaired by Harper L. Garrett, Jr.

Index Code: **1987-26**
To: General distribution to a variety of audiences
Date: July 31, 1987
Length: 5 pages
Concerning: Risk classification
Background: This report updates earlier Academy reports on risk classification and mandated sex-neutral insurance last released in 1983 (see statement 1983-23).
Drafters: The Committee on Risk Classification, chaired by Patricia L. Scahill.

Index Code: **1987-27**
To: Health Care Financing Administration
Date: July 31, 1987
Length: 4 pages
Concerning: *Continuing care retirement communities*
Background: This letter refers to an Academy presentation to the Health and Human Services Task Force on Long-Term Health Care on the standards of practice for continuing care retirement communities.
Drafters: The Committee on Continuing Care Retirement Communities, chaired by Alwyn V. Powell.

Index Code: **1987-28**
To: NAIC Life and Health Actuarial (EX5) Task Force
Date: September 10, 1987

SUMMARY OF 1987 STATEMENTS

Length: 6 pages
Concerning: Health insurance reserve standards
Background: This report to the NAIC Life and Health Actuarial (EX5) Task Force concerns the development of health insurance reserve standards by the NAIC. It incorporates comments received on the March 24, 1987 draft (see statement 1987-12).
Drafters: The Subcommittee on Liaison with the NAIC Accident and Health (B) Committee of the Committee on Health, both chaired by E. Paul Barnhart.

Index Code: 1987-29
To: NAIC Medicare Supplement Working Group
Date: September 11, 1987
Length: 2 pages
Concerning: Medicare supplement insurance
Background: These comments refer to the NAIC draft model regulation to implement the NAIC Medicare Supplement Insurance Minimum Standards Model Act. The comments specifically address loss ratio standards.
Drafters: The Subcommittee on Liaison with the NAIC Accident and Health (B) Committee of the Committee on Health, both chaired by E. Paul Barnhart.

Index Code: 1987-30
To: General distribution to a variety of audiences.
Date: September 22, 1987
Length: 16 pages
Concerning: AIDS and life insurance company solvency
Background: This report was prepared in response to a request from the NAIC Life and Health Actuarial (EX5) Task Force for information regarding the possible impact of AIDS on the solvency of life insurance companies.
Drafters: The Committee on Life Insurance, chaired by Gary E. Dahlman. One appendix to the report was prepared by the Committee on Health, chaired by E. Paul Barnhart.

Index Code: 1987-31
To: NAIC Life and Health Actuarial (EX5) Task Force
Date: September 28, 1987
Length: 3 pages
Concerning: Universal life
Background: This report was submitted in connection with possible changes to the NAIC Universal Life Model Regulation. This report supplements the preliminary report submitted on June 12, 1987 (see statement 1987-23).
Drafters: The Universal Life Task Force of the Committee on Life Insurance, respective chairpersons Douglas C. Doll and Gary E. Dahlman.

SUMMARY OF 1987 STATEMENTS

Index Code: 1987-32
To: General distribution to a variety of audiences
Date: October 1, 1987
Length: 12 pages
Concerning: The property and liability insurance underwriting cycle
Background: This report was developed by the committee to provide public policymakers with a basic knowledge of the cyclical nature of the property and liability insurance industry.
Drafters: The Committee on Property and Liability Issues, chaired by Albert J. Beer.

Index Code: 1987-33
To: Senator David Pryor
Date: October 21, 1987
Length: 3 pages
Concerning: Small Business Retirement and Benefit Extension Act
Background: This statement was submitted to Senator Pryor to offer comments on this bill and related pension issues.
Drafters: The Pension Committee, chaired by Larry D. Zimpleman.

Index Code: 1987-34
To: American Institute of Certified Public Accountants
Date: November 9, 1987
Length: 4 pages
Concerning: Audit guide for property and liability companies
Background: This statement was submitted in response to the AICPA Exposure Draft of Audits of Property and Liability Insurance Companies dated July 22, 1987. (Referenced attachments to the statement are not included here.)
Drafters: The Committee on Property and Liability Financial Reporting, chaired by Stephen P. Lowe.

Index Code: 1987-35
To: Financial Accounting Standards Board
Date: November 10, 1987
Length: 16 pages
Concerning: Accounting for postemployment health and welfare benefits
Background: This statement was submitted to FASB in response to a request for information on the recognition and measurement of postemployment health benefits. This statement follows numerous statements on this subject in 1984 and 1985 (most recent prior statement is 1985-7).
Drafters: The Committee on Health and Welfare Plans, chaired by Thomas G. Nelson

Index Code: 1987-36
To: Various individuals in Congress and the Administration
Date: November 11, 1987
Length: 11 pages
Concerning: Pension plan funding and PBGC premium proposals

SUMMARY OF 1987 STATEMENTS

Background: These comments were developed in response to proposals contained in the Omnibus Budget Reconciliation Act of 1987. They followed comments conatined in prior testimony on April 9, 1987 (see statement 1987-14).
Drafters: The Pension Committee, chaired by Larry D. Zimpleman

Index Code: 1987-37
To: Financial Accounting Standards Board
Date: November 12, 1987
Length: 1 page
Concerning: Accounting for universal life
Background: These comments were submitted to FASB regarding the universal life accounting project. They supplement prior comments submitted in response to the Exposure Draft on March 31, 1987 (see statement 1987-13).
Drafters: The Committee on Life Insurance Financial Reporting, chaired by John T. Glass, developed this statement.

Index Code: 1987-38
To: Various individuals in Congress and the Administration
Date: November 19, 1987
Length: 20 pages
Concerning: Taxation of life insurance companies
Background: These comments were developed in response to proposals dealing with the computation of life insurance reserves contained the Omnibus Budget Reconciliation Act of 1987.
Drafters: The Committee on Life Insurance, chaired by John J. Palmer.

Index Code: 1987-39
To: Florida Insurance Department
Date: December 2, 1987
Length: 2 pages
Concerning: AIDS and medical testing
Background: These comments were submitted to the Florida Insurance Department in response to proposed rules dealing with AIDS and medical testing for insurance purposes.
Drafters: The Committee on Risk Classification, chaired by Chester T. Lewandowski

Index Code: 1987-40
To: Representative James J. Florio
Date: December 3, 1987
Length: 1 page
Concerning: Casualty loss reserve opinions
Background: These comments were sent to Representative Florio in response to his speech on the lack of uniformity in insurance regulation.
Drafters: Albert J. Beer, chairperson of the Committee on Property and Liability Issues.

SUMMARY OF 1987 STATEMENTS

Index Code: **1987-41**
To: NAIC Life Cost Disclosure (A) Task Force
Date: December 4, 1987
Length: 3 pages
Concerning: Yield index study
Background: These specifications were submitted to the NAIC Life Cost Disclosure (A) Task Force regarding a study to compare product rankings under interest adjusted and yield index calculations for interest sensitive products. The committee intends to conduct this study for the NAIC.
Drafters: The Committee on Life Insurance, chaired by John J. Palmer.

Index Code: **1987-42**
To: NAIC Life Cost Disclosure (A) Task Force
Date: December 6, 1987
Length: 3 pages
Concerning: Disclosure of non-guaranteed elements
Background: This statement was submitted to the NAIC Life Cost Disclosure (A) Task Force to offer recommendations for changes to the NAIC Model Life Cost Disclosure Regulation regarding non-guaranteed elements. This statement follows a prior statement on this subject in 1986 (see statement 1986-37).
Drafters: The Task Force on Non-Guaranteed Elements, chaired by William T. Tozer.

Index Code: **1987-43**
To: NAIC Technical Services (EX5) Subcommittee
Date: December 10, 1987
Length: 44 pages
Concerning: Actuarial liaison with the NAIC
Background: This report was presented at a public meeting of the NAIC Technical Services (EX5) Subcommittee and describes in outline fashion the major liaison activities between the Academy and the NAIC (statement includes NAIC Actuarial Guidelines I - XXIV, as attachments).
Drafters: The Committee on Liaison with the NAIC, chaired by Burton D. Jay.

STATEMENT 1987-1

January 2, 1987

Mr. Robert Zwirb
Assistant to the Director
Bureau of Economics
Federal Trade Commission
2120 L Street, N.W.
Washington, D.C. 20580

Dear Mr. Zwirb:

You will recall that the Committee on Life Insurance of the American Academy of Actuaries submitted comments on the draft report of the Federal Trade Commission on life insurance cost disclosure on October 23 and October 31, 1985. The FTC issued its final report shortly thereafter.

In order to complete the record of Academy commentary on this report, the Committee on Life Insurance, at its meeting on October 14, 1986, voted to submit the attached comments. While we recognize that the study is complete and further action is not anticipated, our committee decided to submit these comments in order to point out areas in the study that are likely to be controversial, offer a professional view of topics that are clearly actuarial in nature, and suggest sources for research that may have been overlooked.

The Academy continues to be concerned that actuarial perspectives should be clearly understood and recognized in this area, in the event that the general subject matter is reviewed again at some point in the future. Accordingly, we request that these comments be added to the prior comments we have filed to finalize our efforts in this matter.

Yours truly,

(signed)

Stephen G. Kellison
Executive Director

STATEMENT 1987-1

COMMENTS OF THE COMMITTEE ON LIFE INSURANCE AMERICAN ACADEMY OF ACTUARIES ON THE 1985 FTC REPORT ON LIFE INSURANCE COST DISCLOSURE

A. Dividend Issues. It is common practice for actuaries to bear significant responsibility for dividend determinations.

(1) On p. 227 it is stated that "very little is known about either past or present dividend practices of life insurance companies..." Mutual companies have operated successfully for over 100 years, and dividend practices and disclosure have been important topics of discussion and study by industry groups especially over the last ten years or so. Much of the available information is in the journals of the Society of Actuaries or of the Academy itself. The Academy is always happy to discuss these sources of professional actuarial research.

(2) In footnote 58 on p. 267 the extent to which actual dividends have tended to differ from illustrated dividends is characterized as "conservatism." This implies that companies purposefully understate the dividends they expect to pay. However, during the study period most companies illustrated dividends on a "current experience" basis - that is, the overall interest earnings and mortality claims they were then enjoying were illustrated unchanged into the future; even though the trend in interest was up and mortality down. (This is correctly stated in the first sentence of the footnote.) One can see that the term "conservatism" is inappropriate by the situation of companies operating on the "current experience" basis in 1986, less than one year after the study's release. Dividend illustrations based on a continuation of earnings in 1985 will far exceed (for most companies) actual future earnings if the available interest rates on new investments stay at their current low levels. Dividends will be cut, should this happen, and dividend illustrations will have exceeded the actual dividends realized. On this "current experience" basis there is no element of "projection" in the sense of estimating what the scale will actually be. The measured variation in Linton yields is certainly more apparent than real, since the dividends actually paid will depend far more on the interest and mortality experience of the company in the year of their payment than on what the company's experience was in the year of original policy issue.

(3) On p. 189 #3 it is suggested that "UL long term rates seem at least competitive, and perhaps dominate both BTID and WL." On p. 167 it is noted that the first UL policy was introduced in 1978. Its growth in popularity and sales occurred during the later years of the study period. These were years of the highest interest rates of the last 50 years. Much UL business was written on a "new money" basis, and those few companies writing a portfolio base UL were for the most part newer companies not burdened with large amounts of lower yielding assets accumulated in prior years. Because of the portfolio dividend basis then in use for participating WL (see comment A.(2.)), care must be taken when comparing the dividend illustrations of 1982 provided by the WL companies and the UL illustrations, assuming the

continuation of "current rates." Broad generalizations and conclusions are dangerous. To see the effect of these different methods of disbursing excess earnings, one need only look again to 1986. With new investment rates at lower levels, most UL policies now provide lower excess earnings than in 1982, while portfolio WL policies have generally increased their dividend interest credits over that same period.

(4) Contrary to the statement in footnote 22 on p. 30, companies do "recognize" loan activity on an individual policy basis and had begun to do so by 1982. However, while most companies have by now adopted either direct recognition on loans, or a "market loan rate" for determining loan interest, (or both), few companies had succeeded in implementing either by 1983. This is not because companies were slow to recognize or deal with the problem (p. 32). It is more a result of a lack of enabling state regulation. In any case, "direct recognition" was not a tool available to companies until the very end of the study period, and more often after. Even then it was at first only applied to new business, so had no effect on cash values already accumulated, and could serve as no deterrent to borrowing.

(5) On pp. 268-9 there is a discussion of participating policies for which dividend illustrations are treated as upper bounds for actual dividends. This should not be a common policy form for mutual companies. According to the American Academy of Actuaries Dividend Recommendations and Interpretations adopted in 1980, recognition of experience factors is required for the application of the Contribution Principle to the determination of dividends. If actual dividends are limited to those illustrated at issue, the result is that at some point changes in experience factors would be ignored. According to Recommendation 7, differences in the value of experience factors should be based on differences in actual experience and the actuary should "be prepared to provide a demonstration necessary to support such differences." This recommendation is incompatible with arbitrary limits.

B. Controversial Aspects of the Analysis

(1) The simplified model of reality hypothesized by Dr. Lynch presumes a world in which "there is no uncertainty about future interest rates and that the pay-in-advance policy has no special options or features." Based on the assumption of such an environment, conclusions are drawn about the merits of WL versus BTID versus UL, and about the adequacy of consumer information for permanent policies. The special options of pay-in-advance policies are discussed in Chapter VIII. As for the world of 1978-83 being consistent with a world of certainty about future interest rates, it should be remembered that during this period (i) the Iranian hostage crisis occurred with the attendant second oil embargo, (ii) the Federal Reserve Board shifted its focus from control of interest rates to the control of the money sypply resulting in a run-up of interest rates and a lack of credit capacity, (iii) bank deregulation with respect to interest rates on deposits was effected, and (iv) IRA's were allowed by Congress for all wage earners. In spite of these changes, Dr.

Lynch opines that the real world is not sufficiently different from the model world to explain differences between Linton yields provided in dividend illustrations of the period and "market" rates. There is room for reasonable disagreement on this point.

(2) (p. 17) Although the life insurance industry was not subject to government imposed rate ceilings and participating "pay in advance" policies were by no means inflexible in the effective rate "they could pay," it should be remembered that like savings and loans they had lent funds long and borrowed short, and it was this fact that precluded them from quickly raising their rates credited, not regulatory limitations.

(3) On pp. 95-96 the potential savings from canvassing two sellers is discussed. It should be noted that in 1970 (the year chosen for illustrating the point) a $100,000 policy would have required a premium outlay of approximately 25% of annual salary for a 35 year old, $4 an hour wage earner. Few people spend that much of their income on life insurance. While the conclusion may be true, its effect is greatly overstated in this case.

(4) On page 147, footnote 3, it is stated that "if dividends are taken in cash each year, taxes would be due each year". This is incorrect. All dividends paid before the maturity or surrender of a contract are tax exempt to the extent they do not exceed the cost basis in the contract.

(5) p. 182. The report notes that "there is a significant difference between the WL Linton yield calculations made in Chapter V and the type 'B' UL calculations because of the increasing total death benefit in the 'B' design." Similarly, although not mentioned, the declining cash outlay for the participating WL policies versus the level outlay for non-par WL and U-Life calculations complicates the comparisons. It would have been instructive to compare the U-Life "B" yields to participating WL with dividends used to purchase additions, since this would have been a comparison of more similar policy designs. On p. 188 a comparison is made between the rates of return on UL "B" policies and whole life policies. Given the cautionary statement on p. 182 about the "significant differences" between the calculations, these comparisons would be more meaningful if a full discussion of the impact of the "significant differences" had been part of the discussion. A brief analysis of one $100,000 participating WL policy issued in 1982 to a select male age 35 show prospective rates of return that are 1.07%, .78% and .56% higher when dividends are used to buy paid-up additions (rather than to reduce premiums) over 5, 10 and 20 years, respectively.

(6) There is an apparent contradiction between the statement on p. 200, "It is possible that the explicit emphasis placed on the rate of return in the selling of these products provides an opportunity for policyholders to check more easily on how well their savings dollars are faring," and statement #5 on page 190, "The advertised 'current rates' rates are not a good guide to the underlying net rates." If the advertised rates are not fairly indicative of actual net rates earned,

they cannot give buyers a fair indication of how their saving dollars are faring.

(7) On both pp. 204-5 and 224 there are discussions of the federal income tax consequences of surrendering a policy. The example on pp. 211-15 then ignores the effect of the tax on the gain on surrender. This omission can be significant. Using the gain given on p. 224 and subtracting the tax from the initial deposit, the side fund interest rate required to make the replacement advantageous is increased by .47% or .98%, for marginal tax rates of 25% and 50%, respectively. A brief analysis of one other 20 year old participating policy issued in 1963 to a male age 25, with a somewhat larger 20 year gain, shows that for it, the side fund interest rate required to make the replacement advantageous is increased by .91% or 1.96%, for marginal tax rates of 25% and 50%, respectively. The effect of the tax can be important enough that it should be brought explicitly into the calculation.

STATEMENT 1987-2

January 5, 1987

Director of Research and Technical Activities
Financial Accounting Standards Board
High Ridge Park
Post Office Box 3821
Stamford, CT 06905-0821

Gentlemen:

You have requested comment on the Exposure Draft of proposed standards entitled "Accounting for Income Taxes," No. 025, September 2, 1986. This statement is submitted by the Committee on Property/Liability Insurance Financial Reporting of the American Academy of Actuaries. Our comments relate primarily to the property/liability insurance industry, although analogies are drawn to life insurance and other financial products. We hope you will be able to consider these comments prior to finalizing the proposed standards.

(1) We support the revision of accounting for income taxes which makes the deferred tax asset (or liability) a receivable (or payable). Because the tax code will require discounting of loss reserves, property/liability insurers may pay federal income taxes on income prior to its recognition in GAAP financial statements. Recognition of these prepaid taxes will help avoid distorting the insurer's after-tax results. Likewise, companies which defer less acquisition expense for GAAP reporting than the tax code requires will enjoy relief for the prepaid taxes on the excess equity in the unearned premium.

(2) We support the principle that only the effects of events that are inherently assumed in preparing the financial statements should be recognized in the determination of the deferred tax asset. We question, however, the limitation of the deferred tax asset to taxes already paid and recoverable. Property/liability loss reserves often take a long time to pay out -- far longer than the three-year carryback currently available under federal tax law. Over the life of the reserves, the underlying assets will generate at least coupon income, which can be sheltered by the amortization of the (tax) discount of loss reserves.

We would draw analogies to the life insurance concepts of "deferred policy acquisition costs" and "present value of future profits," and to the mortgage banking concept of a "servicing" asset. One can distinguish "future income" from the future recognition of current income.

(3) The accounting profession is currently studying the use and application of discounting for financial reporting. We urge that the accounting for taxes be consistent with the use and application of discounting, in two senses:

(a) Broadly, to discount a future cash flow is to assume certain investment income. This investment income, if discounting is proper, is to be considered an event inherently assumed in preparing the financial statement. This would have bearing on item (2).

(b) Narrowly, it would be incorrect to ignore the time value of those particular cash flows related to taxes.

We recognize that the issue raised by (a) is very difficult and that the Board specifically omitted (b), but in our view the long-term nature of the insurance contract makes the topic unavoidable.

(4) The Board's belief that "the tax consequences of individual events are separable" (paragraph 86 of the draft) might be modified to reflect the presence of an alternative minimum tax. The draft rightly recognizes differences in tax rates for any one year depending on level of income. It also rightly recognizes differences in tax rate depending on future year of emergece of income. The alternative minimum tax raises serious questions in our minds as to the separability of events.

Please feel free to contact us if further elaboration of our concerns is required. We would be happy to provide models that illustrate each concern.

Sincerely,

(signed)

Stephen P. Lowe, Chairman
Committee on Property/Liability
Insurance Financial Reporting

STATEMENT 1987-3

January 5, 1987

Mr. Frank S. Synowiec, Jr.
Technical Manager
Federal Government Relations
File G1406
AICPA
1620 Eye Street, N.W.
Washington, DC 20006-4063

Dear Mr. Synowiec:

As the current Chairman of the Alternative Delivery Subcommittee of the Committee on Health of the American Academy of Actuaries, I would like to outline a number of our comments on your Exposure Draft relating to accounting by prepaid health care plans. On August 4, 1983 I wrote a lengthy memorandum to Mr. Brian Zell of AICPA covering the same four areas outlined in the current summary.

Three of our Subcommittee members met here in Minneapolis in November to review the current draft and, while we have some disagreement with one of the points, I would like to forward our combined comments on the Exposure Draft.

SUMMARY

The current draft is simplified and improved over the draft reviewed in 1983, as well as earlier materials received from the AICPA in the 1970s. The approaches selected are reasonable, consistent with most current practice and provide a framework for developing more detailed standards of accounting systems by prepaid health plans. Nevertheless, there is a strong inherent leaning to the individual case reserving system which is so typical of casualty and liability insurance, but not at all typical of group health insurance and HMO accounting systems generally in use.

In general, we agree with the summary related to Items 1, 3, and 4. We do have considerable questions both of interpretation and rationale concerning Item 2, particularly as it relates to community-rated systems. We will discuss this in somewhat more detail below.

SPECIFIC DETAIL COMMENTS
Identified by Page and Paragraph Beginning on Page 5

Page 5, Introduction, Paragraph 2. Premium deficiency reserves have a specific meaning in individual insurance, based on formalized reserve bases. We do not believe this term is proper in a prepaid health care plan context at this time. We will discuss the contract losses question later.

Page 5, Scope, Paragraph 3. This paragraph includes a reference to PPOs. This reference should be removed since, at the present time, PPOs are nonrisk-bearing entities, and consequently not subject to any rules related to reserving and accounting systems. To the extent that PPOs become risk-bearing entities and become regulated under insurance or HMO statutes, then

the prepaid health care rules should apply. We suggest the reference either be removed or a clarification added.

Page 6, Paragraph 2. The reference to Date of Initial Service is a throwback to the prior casualty approach to reserving. Except where HMOs have an extension on total disability, or a similar contractual obligation, date of initial service is meaningless as outlined in my letter of August 4, 1983.

Page 6, Paragraph 3. The term is quoted "guaranteed renewal contract." 99% of the enrollees of a typical HMO are employer group contracts with a right of annual renewal or termination. Such nomenclature is not standard in prepaid health plans, although they do offer direct-pay coverage for conversions or occasionally individual enrollment. Renewal provisions may include that outlined in the paragraph, or also permit termination of contracts as a class.

Page 6, Paragraph 4. We think this language could be clarified. Certain types of HMO models have large general and administrative costs related to clinics, hospitals, etc. General, administrative and maintenance of health care facilities as opposed to corporate general and administrative should be included in the definition of health services. We think that interest and depreciation on medical and hospital facilities is part of health care cost as well, and may require allocation.

Page 6, Individual Practice Association. This definition should be expanded. The IPA very often may be a separate corporation, but many newer IPAs have individual contracts with physicians and there is no legal entity involved. Nevertheless, the HMO using individual physicians is called the IPA model. Perhaps a slightly improved definition of the IPA legal structure could include the following language: ". . . or other legal entity, whose members are usually physicians, but may include other independent professionals, organized to deliver or arrange for the delivery of health care services to enrolled members of an HMO or other prepaid health care plan. The IPA often receives a capitation fee per member, in turn reimbursing individual professionals. In some IPA models, the HMO pays the individual physicians directly, with or without an intervening IPA corporation."

Page 6, Maintenance Costs. This is not a normal term used in the HMO movement. We suggest there is some confusion with the term maintenance in terms of managing buildings, or the term "health maintenance." We suggest using the more normal term "premium billing, accounting and enrollment systems," or omitting this definition.

Page 7, Paragraph 1. Again, remove the word "PPO."

Page 7, Paragraph 7. The last sentence should be reworded as follows. "Most HMOs are also regulated by state agencies, typically the Department of Insurance, the Health Department or a general Department of Corporations."

Page 9, Paragraph 1. This text is really incorrect. The community assumed under a community-rating system may be all enrollees of the HMO, but is usually the total population with the exception of major components such as governmental agencies, Medicare, Medicaid, etc. Also, under experience rating, while the premium rates for larger groups may reflect their

experience, each contract certainly does not constitute a separate population base, except extremely large groups whose data is statistically credible. Most other experience-rated groups have rates based partly on their own experience and partly on the adjusted experience of all similar groups (an internal community).

Page 9, Section 15. Members cannot cancel contracts at any time, except individual contracts. Employers may cancel all of their employees with adequate notice, but generally exercise this right only at the end of a contract period, usually each twelve months.

Page 9, Paragraph 17. Some HMOs have limited benefits for pre-existing conditions, although they are generally not permitted to exclude them completely. The language is confusing, but correct in that there is no obligation to provide health care services past the period for which premiums are paid or due. Grace periods typically will cover some expenses past the date for which premiums are paid, but the premium during the grace period is a liability of the employer.

Page 10, Last Paragraph. Again, the text needs to be clarified reflecting the fact that most HMOs have 95% or more of their members in group contracts with employers. The employee or enrollee cannot continue a premium other than applying for a conversion. This is again a reference to individual liability coverage, which makes no sense except narrowly related to individual contracts or conversions. Of course COBRA may greatly expand the number of employees opting for an extension in the HMO following termination of employment.

Page 12, Paragraph 34. As I discussed at length in 1983, there are different methods of accruing hospital liablities, including allocating the hospital claims based on the actual calendar days in the fiscal period. While this may be adequate for plans which own their own hospitals and/or pay a capitation, standardized claim accounting should require accrual of the total hospital claim if the date of admission is prior to the close of the fiscal period. There is also a question of the medical or surgical services during the continuation of hospital confinement. We agree that the basis for making year-end liability estimates should make clear the system being used.

LOSS RECOGNITION

Most of our concerns relate to the section on loss recognition. We believe there are major questions and misunderstandings concerning community-rated systems or even group health insurance accounting. There is continuing eference to the right of a member to continue a premium when, in fact, it is the right of the employer to continue or discontinue the premium. There is a misunderstanding about the basics of community rating. While the target of community rating is to produce the same revenue per person insured from all groups, some groups will produce a lower premium and a majority of the groups produce a higher premium. In a community-rated or experience-rated system, the question is whether the aggregate revenue will be adequate to cover aggregate expenses.

Items 33-43 generally seem to support the concept of aggregating premiums and expenses for purposes of accounting for possible losses, particularly since

no refunds are due (a complication of group insurance accounting). In Paragraph 44, again the language is obscure, since no one experience rates individual contracts. Are you referring to experience rating individual employer contracts? There certainly is experience rating permitted under federal statutes for governmental agencies, Medicare and Medicaid.

The conclusion in Paragraph 45 is not comprehensible. What is meant by a "group" of existing contracts? Do we mean all conversions? All employer groups which seem to be losing money? All Medicare contracts? All contracts in the southern part of the state? Many community-rated programs, particularly staff models, do not keep any experience by group and consequently would be unable to comply with the analysis implied in this paragraph.

Our Subcommittee members who reviewed the proposed rules have a disagreement about the question of setting up a reserve for losses on conversion contracts. If the HMO is a going concern, the small number of conversion contracts will continue. Why not use the present value of surpluses built into the employer rates to cover the liability on conversions? In my work with major insurance companies, most do not set up in a current accounting period the present value of future losses, where premiums can be raised, and the total line is not significant.

In a case where a significant portion of business has renewal rates highly restricted, a loss reserve would seem appropriate.

All I can say is that our Committee is somewhat divided on what should be set up, if anything, for deficiencies in group conversions or minor lines of business with losses, but we are pretty well unanimous that the community-rating system should not require any additional loss reserves for regular employer/employee type business merely because some groups lose money, and other groups make money, under a community-rating system. We believe further discussion is in order.

ACCOUNTING FOR REINSURANCE; ACCOUNTING FOR ACQUISITION COSTS

We generally have no further comment on these last two items. Our only interest in the reinsurance is that the premiums and recovery be determinable from the accounting statements. We believe this is becoming even more important for investors because we have so many insurers being owned by HMOs or in joint ventures, where there may be intercorporate transfers through the reinsurance mechanism which should be determinable in the audited financial statement.

We certainly agree that, from the standpoint of conservatism, acquisition costs should be expensed as incurred. This may run into conflict with the use of GAAP accounting principles for insurance companies. We would be opposed to the deferral of acquisition expenses until the HMO movement is much more settled than it is now.

STATEMENT 1987-3

CLOSE

To summarize again, we feel the revised rules are much sounder and appropriate for the HMO community. We can also only repeat that all these accounting rules should be reviewed with the financial personnel of the HMOs themselves to weed out any other areas that may cause them problems. We appreciate the opportunity to provide some input and would be glad to explore in detail any of these questions with you at an appropriate time.

Sincerely,

(signed)

Harry L. Sutton, Jr.
8300 Norman Center Drive, Suite 600
Minneapolis, MN 55437

STATEMENT 1987-4

January 5, 1987

Mr. Emerson Beier
Pension Benefit Guaranty Corporation
Corporate Planning and Regulations Department
2020 K Street, N.W., Suite 7300
Washington, DC 20006

RE: Proposed Revisions to Form 5500

Dear Mr. Beier:

This is a follow-up response to our recent telephone conversation. I very much appreciate the opportunity to review with you the comments of the American Academy of Actuaries (AAA) Pension Committee on the proposed changes to Form 5500.

While we agree with your basic intent of wanting to have information on the Form 5500 and supporting schedules (in particular, Schedule B) that is as timely as possible, we must evaluate the impact of any changes in light of the difficulties it will cause for plan sponsors.

You specifically asked for any information that I could share with you on the practical effect of the switch to end-of-the-year reporting for items 6(c) through 6(e) of Schedule B to Form 5500. The proposed changes would require the Actuary to have these items as of the end of the plan year when the Schedule B is filed. The Form 5500 is due 7 months after the close of the plan year. This essentially gives the enrolled actuary only 7 months to secure the necessary census data from the plan sponsor and complete the actuarial valuation process. I indicated to you it was my personal feeling that a significant percentage of plans could not currently meet that 7 month timing.

Let me share with you some of the experience I have gathered from my employer (The Principal Financial Group). The Principal Financial Group has actuarial valuation responsibility for about 3300 plans. Our work is primarily on smaller and medium-sized plans (say, plans under 1000 lives).

We do not have statistics on how long it takes us to gather the census data from the plan sponsor. The request is sent before the end of the plan year, but it is usually several months before we receive it back. An optimistic estimate might be 60 days after the start of the plan year. That would leave 150 days to complete the updating of benefits and the completion of the actuarial valuation process. Here is our experience with the length of time to the completion of the actuarial valuation process for 1985 and 1986. It includes only January 1 anniversaries; other anniversaries would have a little better timing.

STATEMENT 1987-4

	1985		1986	
Days		Cumulative		Cumulative
0-60	5.75%	5.75%	6.59%	6.59%
61-90	15.66	21.41	16.76	23.35
91-120	20.40	41.81	15.80	39.15
121-150	14.80	56.61	19.09	58.24
151-180	10.78	67.39	15.66	73.90
Over 100	32.61	100.00	26.10	100.00

Please remember that these times are not just the time we need for processing -- we often have to go back to the sponsor and clarify census data, get additional information, etc. But this does accurately measure the time to complete the actuarial valuation.

If you optimistically say that the census data is gathered in 60 days, then about 40-45% of all plans would need to file for an extension of time to file Form 5500. This, in itself, is counterproductive to your goal of wanting to get information in a more timely fashion.

Even if the census data is gotten in 30 days, there are 25-30% of plans that could not meet the seven month timing.

I hope this statistical information will help to convince you that changing items 6(c) through 6(e) of Schedule B to end of the year reporting will cause a significant burden for enrolled actuaries and plan sponsors. We continue to believe that either clarifying the instructions so that end of the year values can be projected from the beginning of the year values or make the end of year reporting optional for a few years to allow refinement of the method. (It has been pointed out that even allowing a projection of Schedule B amounts from the beginning of the year values will not be a big help because the SFAS 87 investment return rate is unlikely to be the same rate used for the plan valuation. This means additional work would still be required for the Schedule B but would be somewhat more manageable).

I also wanted to make an additional comment on the proposed Form 5500 changes. This change is to item 7 of Schedule B -- Contributions made to the plans for the plan year by employers and employees. The overview of the instruction says item 7 should only include contributions actually made at the time the Schedule B is signed. This is not carried through to the instructions. If carried through, it will increase the paperwork for some plan sponsors and will create an unnecessary disruption in completing Schedule B. Many plan sponsors defer making their contributions until the due date (8 1/2 months for a plan year - fiscal year match). With the proposed change, the enrolled actuary has two alternatives:

1. File Schedule B showing a funding deficiency and file an amended Schedule B when the actuary knows the contribution is made.

2. File Form 5558 requesting a 2 1/2 month extension of time for filing the 5500.

Both of these require additional paperwork. Even the 5500 extension may not allow enough time (30 days) if the enrolled actuary is required to verify that the contribution has been made through checking trustee statements, etc. Our feeling is that all enrolled actuaries now refile Schedule B if the contributions are not made, and that it is rare that any Schedule B needs to be refiled because of inaccurate contribution information.

I hope this information will help you to understand our position. My plans are to be in Washington in early February and I would be happy to meet with you and anyone else to discuss this further.

Sincerely,

(signed)

Larry D. Zimpleman
Director
Pension Services
(515) 247-5752

STATEMENT 1987-5

January 6, 1987

Mr. Kent Mason
Tax Legislative Counsel
Department of Treasury
15th and Pennsylvania Avenue, N.W.
Washington, D.C. 20210

Dear Mr. Mason:

The Consolidated Omnibus Budget Reconciliation Act of 1985 (Public Law 99-272) includes provisions which require that certain employers offer continuation of coverage under group health plans to widows, divorced spouses, dependent children and terminated employees.

The Committee on Health and Welfare Plans (the Committee) of the American Academy of Actuaries (the Academy) has a great interest in this legislation and in the development of regulations for its administration. The Committee stands ready to assist the Department of Treasury in this endeavor. Our principal interest lies in increasing the likelihood of equitable and sufficient funding for benefits promised by employers. Attached is some background on the Academy and its role in government relations.

The Act provides that eligible continued persons be provided coverage at a cost level which may be no more than 102% of the applicable premium, where applicable premium means the cost of similarly-situated beneficiaries with respect to whom a qualifying event has not occurred.

For an insured plan, the applicable cost is a function of the insured premium expected to be paid over a twelve month determination period. This requires that the continuation rates reflect both the anticipated level and timing of rate changes by the insurance carrier. These continuation rates should be determined using generally accepted actuarial principles. These rates might recognize such factors as age, geographic location and the experience of the group, (even though the insurance carrier may bill a single averaged rate for all covereds), or alternatively, a continuation rate applicable to all covereds might be used.

Self-insured plans are required by the new statute to determine their cost on an actuarial basis, unless the plan administrator elects to have a special formula apply. In either case, the costs for these plans should be actuarially determined and recognize such factors as age, geographic location and actual experience of the group in a manner appropriate for the size and type of group.

COBRA also provides that the cost for self-insured plans be established on a basis which takes into account factors prescribed in regulation by the Secretary of the Treasury. These factors should include an appropriate estimate of inflation in the cost of the plan of benefits. This inflation will reflect a number of factors impacting on health benefits and will be quite different from commonly-used inflation measures, such as the CPI or the GNP deflator. The factors are:

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1. Unit cost increases - Medical care unit costs have traditionally increased at a higher rate than the CPI. For example, in the twelve months ending in June, the Medical Care component of the CPI increased 7.5%, while the Urban Consumer CPI increased 1.7%.

2. Utilization Changes - Historically, the increased tendency to use health care services has contributed 3% to 6% to plan cost inflation. Over the past two years, a marked decline in hospital admissions and days has mitigated this factor. However, in recent months, utilization levels appear to have turned upward again.

3. Intensity - New technologies often provide better, but more expensive, care. Additionally, with the decline in hospital lengths of stay, more ancillary services tend to be provided in a shorter period, thereby increasing costs.

4. Cost Shifting - In recent years government programs have limited payment for medical care. Providers are increasing charges to other private payors to recover any shortfalls.

5. Leveraging - Benefit design is a factor in plan cost inflation. Fixed cost sharing limits tend to decrease in their impact on plan costs. For example, consider a plan with a $200 deductible and a $250 expense. The benefit is $50. If the expense increases by 10% to $275, the benefit increases by 50% to $75.

All of these factors need to be considered in projecting future costs of a benefit plan. The financial integrity of the plan needs to be protected by considering all anticipated factors in the estimation process.

Another consideration in estimating plan costs is the effect of adverse selection. When employees have options with respect to coverage or benefits, some employees will make choices based on information known to them about future expenses. This process is known as adverse selection. Absent the continuation rules, group medical plans experience adverse selection due to the effect of employee choices, such as dual coverage and HMO availability. These effects are typically reflected in plan experience and are estimated in insurance rating. With the introduction of continuation and more choice, additional elements of adverse selection will be introduced and should be considered in the cost estimates for the future.

The magnitude of adverse selection due to the COBRA continuation provisions (including the extended notice and election periods) may be significant. Historically, experience on group conversion policies has been generally very poor when major medical benefits are provided. While premium for an individual conversion policy might be two to three times the group cost, claim costs are often higher. While the lower cost of continuation under the group plan might prompt more people to elect that option, and presumably have better experience, the continuation experience has the potential to be significantly worse than average. With group insurance, this additional cost is typically spread over the entire group.

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The Academy believes that actuarial estimation of cost levels and actuarial allocation among classes of employees, and dependents (including continued lives) should be an integral part of the health coverage continuation concept. The Academy believes that actuarial techniques should be used to enhance the fair and equitable treatment of all plan participants.

Our Committee stands ready to assist you in developing regulations, and would be pleased to work with you in your efforts. Please call me at (201) 980-7216 if questions arise, or if any clarifications are needed.

Alan D. Ford
for the Committee on Health and Welfare Plans

STATEMENT 1987-5

BACKGROUND ON THE AMERICAN ACADEMY OF ACTUARIES

The American Academy of Actuaries is a professional association of over 7,600 actuaries involved in all areas of specialization within the actuarial profession. Included within the Academy's membership are approximately 85% of the enrolled actuaries certified under the Employee Retirement Income Security Act of 1974 (ERISA), as well as comparable percentages of actuaries specializing in actuarial services for other employee coverages such as life, health and disability programs. As a national organization of actuaries, the Academy is unique in that its members have expertise in all areas of actuarial specialization. Dealing with issues associated with employee benefit plans is in part the responsibility of the Academy's Committee on Health and Welfare Plans.

The Academy does not advocate public policy decisions (such as regarding tax legislation), which are not actuarial in nature. The Academy views its role in the government relations arena as providing information and actuarial analysis to public policy decision-makers, so that policy decisions can be made with informed judgment. It is our belief that the training and experience of Academy members allow a unique understanding of current practices in employee benefits. Our intention is to communicate that understanding in ways that assist policy decision-makers.

STATEMENT 1987-6

MEASUREMENT OF THE ACTUARIAL STATUS OF THE SOCIAL SECURITY SYSTEM

REPORT OF THE COMMITTEE ON SOCIAL INSURANCE, AMERICAN ACADEMY OF ACTUARIES

January 9, 1987

Outline of Contents

STATEMENT 1987-6

MEASUREMENT OF THE ACTUARIAL STATUS OF THE SOCIAL SECURITY SYSTEM

REPORT OF THE COMMITTEE ON SOCIAL INSURANCE,
AMERICAN ACADEMY OF ACTUARIES

Purpose of Report and Summary of Recommendations

This report presents the views of the Committee on Social Insurance of the American Academy of Actuaries with regard to the measurement of the actuarial status of the U.S. Social Security system. As representatives of the actuarial profession with an interest in the system, the committee offers an independent professional perspective. This report is intended for members of the Federal Government who have a responsibility for the system and for other persons who are interested in the system.

The principal focus of this report is the definition of "long-range actuarial balance" as used in the annual Trustees Report. The measurement of the actuarial status of the system must be made in reference to a fixed standard, which in turn must rest on a particular funding basis. The standard set forth in this report is based on the premise (the validity of which will be examined) that the funding basis for the Social Security program is "current-cost" (or "pay-as-you-go").

As used here, the term "Social Security" includes not only the cash-benefits program of Old-Age, Survivors, and Disability Insurance (OASDI) -- which the general public refers to as "Social Security" -- but also the two parts of the Medicare program -- Hospital Insurance (HI) and Supplementary Medical Insurance (SMI). The committee believes that, as is the current practice, the actuarial status should be determined independently for each of the three component parts of the system.

In summary, the Committee finds that the current approach used to measure the long-range actuarial balance of the OASDI and HI systems is inappropriate if the systems are to be financed on a current-cost basis. The financing anticipated for OASDI under current law is not closely matched to its outgo even though a long-range actuarial balance exists according to the present criteria. Income for OASDI is expected to significantly exceed outgo from 1990 to 2015, and outgo is expected to significantly exceed income thereafter. Therefore, the Committee makes the following recommendation:

- The criteria for determining whether the OASDI and HI systems are in long-range actuarial balance should be as follows:

  (a) The estimated average income rate is between 95 percent and 105 percent of the estimated average cost rate (which is an existing criterion)

  (b) The fund ratio (i.e., the balance at the beginning of the year as a percentage of the outgo during the next 12 months) in every year in the 75-year valuation period is estimated never to exceed 125 percent and, during at least the first half of the period, is estimated never to be less than 75 percent (after it has attained this level, which should be reached within approximately the next 10 years).

It is important to note that for OASDI, under the intermediate (Alternative II-B) estimate in the 1986 Trustees Report, criterion (a) is met, but criterion (b) is not met -- nor is it met for any of the other estimates thereof.

Related to the measurement of the actuarial status of the system, the Committee makes the following additional recommendations:

- The present procedure for measuring the actuarial status of the SMI program is adequate. However, the cost projections should be made for the same 75-year period as is used for the OASDI and HI systems, showing the necessary premium rates and the income/outgo figures for future years which result from the assumptions made.

- In the interest of developing more public confidence in the system and of assuring the continued integrity and pressure-free nature of the actuarial estimates, an independent board of actuaries should be established to review the methodology of the actuarial estimates and the measures of actuarial status.

Format of Report

The analysis in this report will utilize the actuarial estimates in the several 1986 Trustees Reports (for OASDI, HI, and SMI separately) -- generally, the estimates based on the Alternative II-B (intermediate) assumptions, which are widely used as the "best estimate" ones among the four alternative sets of assumptions for which estimates are shown. The major emphasis will be placed on the OASDI system, although HI and SMI will also be considered. 1/ The report will cover the following topics:

(1) Discussion of the pros and cons of current-cost funding as against advance funding;

(2) Findings as to the intended funding bases of the present system;

(3) Discussion of the criteria used to measure the actuarial status of the system and the reasons for the recommended change thereto; and,

(4) Discussion of the creation of an independent board of actuaries for the system.

Appendix A gives a description of the American Academy of Actuaries and its Committee on Social Insurance.

Appendix B provides a detailed history of the funding bases of the Social Security programs, including analysis of the statements by the Board of Trustees.

1/ The Trustees Reports have, since 1957, been published as House Documents. Before then -- with the exception of the first Report (1941), which was not published -- they were either Senate or House Documents. The 1986 Reports were numbered as follows (all dated April 8): OASDI, 99-189; HI, 99-190; and SMI 99-191.

Appendix C presents two ways by which the present benefit provisions could be financed under a current-cost funding procedure.

Pros and Cons of Current-Cost Funding As Against Advance Funding

This section will briefly discuss the advantages and disadvantages of current-cost funding as against advance funding (full-reserve or partial-reserve funding) for a benefit system with rising relative costs (say, as a percentage of covered or taxable payroll) over the years. The discussion thus applies to systems like OASDI and HI.

Certain matters in connection with funding relating to plans of individual employers (especially non-governmental ones) are not applicable to national social insurance systems -- for example, the possiblity of going out of business or of not having any new entrants. The following discussion will relate only to social insurance systems.

The advantage of full-reserve funding -- and, similarly, to a considerable extent, of partial-reserve funding -- is simply that thereby the contribution rate ultimately can be lower than it would be under current-cost funding. This occurs because the interest on the assets accumulated from the excess of income over outgo in the early years (even, decades) of operation would be available to meet the benefit costs. Assuming that the assets are invested in government debt obligations (as seems to be the only proper procedure), the resulting interest income is "valid," because if the debt obligations had not been held by the social insurance system, they would have been held by the general public (assuming that general government spending was not affected by the availability of money to be loaned to the government by the system) -- and the same interest on them would have been paid.

At the same time, it could be argued that the higher contribution rates in the early years and the lower ones later (and ultimately) result in greater intergenerational equity. This is so because the initial covered population, especially those persons near retirement age at the start, almost always receive "windfalls" (as measured by comparing value of benefits against amount of contributions paid) as compared with the situation for future young new entrants. Accordingly, a level contribution rate (or, possibly even, a higher rate in the early years than later) -- as might be provided under a full-reserve (or even partial-reserve) funding approach -- would tend to alleviate the foregoing situation.

The disadvantages advanced against full-reserve, or even partial-reserve, funding are more of a "practical" or "political" nature than of a theoretical nature. One problem would result from the huge amounts of investments involved, which could absorb a very large portion of the national debt (or even all of it) and thus not leave sufficient for the general investment market. Another problem might be that the ready availability of large amounts of money would encourage excessive governmental spending.

Yet another problem might be that the presence of a very large balance in the fund would create politically irrestible demands for greatly liberalized benefits "because of all that money there." The difficulty then would be that, if such liberalization did occur, and the fund balance were drawn down, the costs in

future years would be correspondingly increased -- and the long-range financing problems would be that much greater.

There are still other aspects of the effect of advance funding of OASDI, which would result in the build-up of very large fund balances. These relate to such matters as the Federal budget, the National Debt, and indeed the national economy. With respect to the last item, the question arises as to whether higher tax rates, with resulting large trust-fund accumulations, would help or hinder savings in the economy. As actuaries, we do not believe that we can provide conclusive answers in these areas.

Summary of Findings as to Funding Bases of the Present System

Appendix B provides a detailed history of the funding bases of the present system. The findings of Appendix B are summarized below.

(1) The original Old-Age Benefits system (1935 Act) was funded on a partial reserve basis (and was not on a fully-funded basis, as is sometimes alleged). The 1939 Amendments, which expanded the system to include auxiliary and survivor benefits, was also funded on a partial-reserve basis (and did not institute current-cost funding, as is often erroneously stated), although being funded at a lower relative level than under the 1935 Act.

(2) During the 1960s and 1970s, the emerging experience of the OASDI system was such that the funding was on a more or less current-cost basis. However, until the 1972 legislation, the funding basis for the estimated future experience was still "partial reserve." The 1972 legislation introduced the concept of current-cost funding over the long range, but the 1977 Amendments (and the 1983 Amendments as well) did not follow this principle.

(3) Under current law, the funding basis of the OASDI system (if the intermediate-cost estimate can be said to portray reliably what the future experience will be) is such that very large fund balances will be built up in the period beginning in 1990 and continuing for at least 25 years under all four estimates (for about 40 years under the intermediate (Alternative II-B) estimate, and even longer for the two more optimistic estimates). Under the intermediate estimate, the fund ratio peaks at 526% in 2015. After the end of the build-up period, the assets of the trust funds will be drawn upon; under the intermediate estimate, they will be exhausted shortly after 2050, at which time -- if the benefit provisions are left unchanged -- additional financing, such as higher payroll tax rates -- will be necessary. No legislative intent has, however, seemed to have been present to change over to this basis in theory from the current-cost approach adopted in fact in 1972 and supported over the subsequent years by the Board of Trustees.

(4) The HI system, from its inception in 1965, has in its actual operations been financed on a current-cost basis. At least in part, this has been due to the fact that the program was in its early years of operation -- with an upward-graded contribution schedule, which under none of the legislative enactments would reach the ultimate rate before 1986. As a result, the developing fund balances have not been large (in relative terms). Then

too, it may properly be said that the legislative intent has always been to have current-cost funding.

(5) The SMI system has always been considered to be on a "renewable term insurance" basis, with the premium rates currently being established on an annual basis. The funding basis has always been to attempt to have assets at the end of each premium-rate period at least equal to the liability for outstanding paid claims -- and such situation has usually been the case. So, the SMI system too can be said to be funded on a current-cost basis.

Criteria Used to Measure the Actuarial Status of the OASDI System

It has been the general practice -- and it seems a proper one -- to consider the OASI and DI Trust Funds in combination, because the types of cash benefits available under each are so similar. If one part of the OASDI system is out of balance, and the other has ample financing, the problem can be solved by reallocating the combined OASDI tax rate between OASI and DI -- as has been done successfully several times in the past.

The actuarial estimate for the original 1935 Act showed a sizable fund building up in 1937-80, and then with income from contributions and interest receipts just about equalling outgo each year thereafter (under the assumption that income and outgo levelled off after 1980). 2/ Thus, from its inception there has been an attempt to "balance" expected system income and outgo.

In the late 1930s, the actuaries at the Social Security Board developed the "level-premium" concept of measuring the actuarial status of the system. This was done merely by determining the present values (through discounting at interest) of the contribution income and of the outgo for all future years, into perpetuity (assuming that both contribution income and outgo levelled off after some far-distant future year). These two present values were then divided by the present value of 1% of all future taxable payrolls (as was also the amount of the existing fund), so as to express them as level premiums. The results were then compared, so as to yield the actuarial balance. If the difference between the level-premium cost for the outgo for OASDI and the level-equivalent of the contributions and the fund balance was not more than 0.3% of taxable payroll (about 4-5% of the present value of the outgo), the system was said to be in actuarial balance. 3/

Combined with such standard of actuarial balance, there must, of course, be another one -- namely, that, except possibly for the last few years of the valuation period, the estimated fund balance must be positive at all times during all years. The obvious reason for this is -- like the well-known fallacy of the lake being completely safe to wade in because it has an <u>average</u> depth of one foot (although being nine feet deep in some places) -- that a situation could arise where the fund would fall below zero at some point (and benefits could not be paid without loans from other sources), even though later income would exceed outgo and build the balance to a positive position. The

2/ See Actuarial Study No. 8, Social Security Board, June 1938 (Table 11).
3/ The standard was mentioned in various Congressional Committee reports, not in the law itself.

exception stated in the first sentence is made to recognize that, even if only a small actuarial imbalance is shown, this necessarily means that the fund would be exhausted a few years before the end of the valuation period.

An equivalent way of looking at the situation as to actuarial balance as indicated by the fund balance is to consider the fund ratio in various future years in the valuation period. The fund ratio (referred to as the "contingency fund ratio" in recent Trustees Reports) is defined as the ratio of the balance in the fund at the beginning of the year (or of any month) to the estimated outgo during the next 12 months. This ratio, just like the fund blance, should be positive at all times. 4/ This second criterion is referred to as the "year by year" criterion for long-range actuarial balance.

In 1964, upon the recommendation of the Advisory Council on Social Security, the valuation period was changed from perpetuity to 75 years -- largely because the public had difficulty in understanding how an infinite series of figures running into perpetuity could be discounted at interest to yield a finite figure. The result of the changed procedure was to reduce the estimated cost of the system by 0.25% of taxable payroll, thus eliminating the then-existing small actuarial deficit (0.24% of taxable payroll). 5/ At the same time, the "allowable" margin of variation was reduced from 0.3% of taxable payroll to 0.1% (about 1% of the present value of the outgo).

In 1972, when the automatic-adjustment provisions for benefit computation and for the maximum taxable earnings base were adopted, and when dynamic (rather that static) assumptions were first used for various economic elements, the "average-cost" concept of measuring the actuarial status of the OASDI system was substituted for the "level-premium" concept. Under the new concept, the outgo each year in the 75-year valuation period is expressed as a percentage of taxable payroll (and is termed the "cost rate"). Then, the 75 cost rates are averaged to yield the average cost rate. Similarly, the estimated income each year from the income-taxation of benefits is so expressed and averaged over the valuation period, as are also the applicable contribution rates -- which together yield the average income rate. The difference between the average income rate and the average cost rate represents the long-range actuarial balance.

The current standard (established in the early 1970s, both in congressional committee reports and in the Trustees Reports (see, for example, page 78 in the 1986 Report) for measuring whether long-range "close actuarial balance" is present is that the average income rate in the intermediate-cost (Alternative II-B) estimate must be no less than 95%, nor more than 105%, of the average cost rate.

It is important to note that the average-cost procedure now used does not take into account either the existing fund on the valuation date or the interest income of the fund in future years. The latter exclusion could possibly be justified if there is to be current-cost funding, because only a small fund

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4/ Actually, the minimum ratio is 8-9%, so as to assure payment of the benefits for the previous month, which are paid in the next few days.

5/ See Robert J. Myers, Social Security (Richard D. Irwin, Inc., 3rd edition, 1985), page 692.

would then be accumulated. If the system were to be on an advance-funded basis, rather than current-cost, then the present procedure would not be actuarially consistent.

It is also important to note that the difference in the results under the level-premium and average-cost methods as applied currently (when the fund balance is relatively insignificant) is small because of counterbalancing elements. The failure to consider interest for payments made at different times is largely offset by the non-recognition of the larger dollar costs over the years as wage and benefits increase due to inflation. 6/

The OASDI Trustees Reports describe the foregoing measures and standards for the actuarial status of the OASDI Trust Funds in the following manner (page 30 of the 1986 Report):

> "The actuarial status of the trust funds is often summarized by the actuarial balance, which is the difference between the appropriate estimated average income rate and the estimated average cost rate (or, equivalently, the average of the appropriate annual balances). If the actuarial balance is positive, the program is said to have an actuarial surplus, and if negative, an actuarial deficit. Such a deficit, if it exists, is a warning that, unless the projected trends turn out to be too pessimistic, changes in the program's financing or benefit provisions will be needed in the future."
>
> "The concept of actuarial balance must be used with caution. The use of a single measure to describe the status of the program over a period of many years may mask adverse patterns within that period or problems which emerge soon thereafter. The addition or deletion of a few years to the time period could change a surplus into a deficit, or vice versa. In addition, while early deficits followed by later surpluses could result in a positive actuarial balance, the trust fund could be depleted before the annual surpluses occur. Conversely, while early surpluses followed by later deficits could result in a positive actuarial balance, the trust fund that would accumulate in the early years could eventually be depleted at some point beyond the end of the projection period, leaving the program unable to pay benefits at that time. Thus, it is also important to note the year-by-year patterns of income and outgo."
>
> "Related to the concept of actuarial balance is that of 'close actuarial balance.' The program is said to be in close actuarial balance for the long-range period if the estimated average income rate is between 95% and 105% of the estimated average cost rate."

If the OASDI system is intended to be funded on a current-cost basis (as seems to be the underlying legislative intent), the two criteria now used to measure the long-range actuarial balance -- (1) long-range close actuarial balance expressed as a percentage of taxable payroll and (2) the existence of a

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6/ For more details, see Robert J. Myers, Social Security (Richard D. Irwin, Inc., 3rd edition, 1985), page 380.

positive fund balance year-by-year 7/ (except possibly for the last few years of the 75-year valuation period) -- are not sufficient. A modification of the "year-by-year" criterion is needed, to include a requirement that the fund should be expected neither to fall below a certain prescribed level once it has reached that level (if it is currently lower), nor rise above another prescribed level at any time in the valuation period.

The Committee recommends that the range for the year-by-year criterion should be 75% to 125%, but recognizes that the selection of these percentages is somewhat arbitrary. As mentioned on page 16, these were the limits recommended by the 1971 Advisory Council on Social Security. Because the purpose of the trust fund, is "to be sufficient to allow time for executive and legislative action to prevent exhaustion of the trust fund during a period of continued annual deficits" (1980 Trustees Report, page 22), and because no scientific basis exists for knowing when legislative action will be taken, there can be no scientific basis for establishing precise limits. However, the Committee believes that the range of 75%/125% is reasonable.

The Committee believes that the lower limit of 75% -- once such a level has been attained (which should be accomplished within approximately the next 10 years) -- should be applicable during the first half of the valuation period (although, desirably, should be present in all years in the period), while the latter limit of 125% should be applicable over the entire valuation period. It is not necessary to require that the lower limit be applicable for the entire period, just as under the current year-by-year criterion, a positive fund balance is not required toward the end of the valuation period. The reason for this is that, if both of the recommended criterion are satisfied, it is quite likely that expected fund ratios will be less than 75% during at least some part of the latter half of the valuation period, especially the end thereof. With such close actuarial balance being present, mathematically when such balance is negative, the fund ratio in the latter part of the valuation period will almost certainly fall below 75 percent (especially when it never before had been above 125 percent). The Committee believes that this exception for the last half of the valuation period is reasonable, and further believes that it is unnecessary to require minor adjustments in the tax rates to be effective for years far into the future. Smaller fund ratios than the foregoing would be "allowable" if the procedure of automatically adjusting the tax rates according to the size of the fund ratio (as discussed in Appendix C) were followed.

Criteria Used to Measure the Actuarial Status of the HI System

The measurements and standards for the actuarial status of the HI system, as used in the past and as are used for the future, are virtually the same as those described previously for the OASDI system. The only differences are that the determination of the long-range actuarial balance has, until recently, been measured over a 25-year valuation (now, 75 years -- just as OASDI) and has involved, as a cost item, an amount for building and maintenance of the fund balance at a prescribed level (currently, 6 months' outgo; formerly, 12 months' outgo).

7/ Or else the exactly equivalent measure of always having a positive fund ratio.

The Committee believes that the present standard of long-range balance should be continued to be used and that the modification of the year-by-year criterion recommended for OASDI (namely, that the fund ratio should be expected to be maintained within the defined range of 75%/125% over the valuation period for the system to be considered as being in long-range actuarial balance) is appropriate for the HI system.

Criteria Used to Measure the Actuarial Status of the SMI System

As indicated previously (on page 6), the current method of measuring the actuarial status of the SMI system as of a recent date is quite satisfactory, and no changes or additions to it seem necessary. However, it would be desirable to make actuarial projections for 75 years, as is done for the OASDI and HI systems, rather than for only three years, as presently done. Such projections should show the future premium rates resulting from the assumptions made as to utilization-rate and unit-cost trends. They will give indication of future financial burdens, both for the enrollees and the General Fund of the Treasury (i.e., the general taxpayers).

Independent Board of Actuaries

The Committee has not considered the validity and nature of the many demographic and economic assumptions underlying the actuarial estimates or the methodologies used in applying these assumtions in order to derive the actuarial estimates. However, the Committee believes that the actuarial staffs of the Social Security Administration and the Health Care Financing Administration (which developed the estimates) have, over the years, done highly professional work, with complete integrity and without being influenced by political or philosophical pressures.

Nevertheless, it would seem desirable, in the interest both of developing more public confidence in the system and of assuring the continued integrity and pressure-free nature of the actuarial estimates, that an independent board of actuaries should be appointed to conduct a continuing review of the methodology underlying the actuarial estimates for the entire Social Security system, as well also as the measures of actuarial status used. This procedure would be similar to that currently being followed by the Civil Service Retirement System, the Military Retirement System, and the Railroad Retirement System.

APPENDIX A

THE AMERICAN ACADEMY OF ACTUARIES AND ITS COMMITTEE ON SOCIAL INSURANCE

The American Academy of Actuaries is a professional association of actuaries which was formed in 1965 to bring together into one organization all qualified actuaries in the United States and to seek accreditation and greater public recognition for the profession. The Academy includes members of three founding organizations - the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, and the Society of Actuaries.

STATEMENT 1987-6

The Academy serves the entire profession. Its main focus is the social, economic, and public policy environment in which the actuarial profession functions. Its primary activities includes the development of standards of professional conduct and practice, liaison with federal and state governments, relations with other professions, and public information about the actuarial profession and issues that affect it.

Over 8,200 actuaries in all areas of specialization belong to the Academy. Actuarial science involves the evaluation of the probabilities and financial impact that uncertain future events - birth, marriage, sickness, accident, fire, liability, retirement, and death - have on insurance and other benefit plans. These members are employed by insurance companies, consulting actuarial firms, government, academic institutions, and a growing number of industries.

Membership requirements can be summarized under two broad headings: education and experience. At present, the educational requirements can be satisfied either by passing certain professional examinations sponsored by the Casualty Actuarial Society or the Society of Actuaries, or by becoming an Enrolled Actuary under the Employee Retirement Income Security Act of 1974 (ERISA). The experience requirement consists of three years of responsible actuarial work.

As is the case with most national professioanl organizations, the Academy expresses its views on public proposals through its authorized committees. Its Committee on Social Insurance provides and promotes actuarial reviews and analyses of social insurance systems of the United States.

The membership of the Committee which worked on this report in 1985 and 1986 is as follows: Kenneth A. Steiner, Chairperson; Robert J. Myers, Vice Chairperson; Harry C. Ballantyne; Dwight K. Bartlett, III; Bradley C. Fowler; Sam Gutterman; Toni H. Hustead; Toland E. King; Stephen H. Klubock; Stephen H. Lehman; Warren R. Luckner; John I. Mange; A. Haeworth Robertson; Francis M. Schauer, Jr.; Samuel E. Shaw, II; James R. Swenson; and Gordon R. Trapnell.

APPENDIX B

HISTORY OF THE FUNDING BASES OF THE SOCIAL SECURITY PROGRAM

Funding Basis of OASDI System

There was -- and still is -- considerable misunderstanding of the financing basis adopted originally for the OASDI system. Many people believed that a full actuarial reserve system was being developed, especially since the estimated ultimate fund of $47 billion in 1980 seemed so large -- slightly greater than the national debt in 1935. Such was not the case, however, because the cost estimates showed the system to be self-supporting only when it was considered as operating into perpetuity. At any particular date, the fund available would by no means be sufficient to meet the accrued liabilities without the help of the scheduled future contributions.

Other evidence that the original act was not on a so-called full-reserve, actuarial basis can be found from the benefit structure. A worker retiring at

age 65 at the beginning of 1942 (the earliest possible date under the 1935 Act) with typical earnings of $1,000 per year would have contributed $60 (with the employer paying the same amount) and would have received a monthly benefit of $16.67. Thus, in four months, more would have been received in benefits than had been paid in taxes --hardly an actuarial, individual-equity plan!

Many people, even currently, believe that the 1939 Act changed the funding of the OASDI system to a current-cost basis. 8/ The Social Security Advisory Council of 1937-38 had recommended this, by having a relatively small contingency fund (with eventual contributions or subsidies from the General Fund of the Treasury). However, the 1939 Act did not specifically adopt this recommendation, and the system did not develop in this manner thereafter.

As evidence that the OASDI system as it was following the 1939 Act was not funded on a current-cost basis, the First Trustees Report, dated January 3, 1941 (unpublished) states (page 16) that, under the low-cost estimate, outgo would be less than tax income for about the next 35 years, and a fund balance would accumulate that would provide interest income such that total income would exceed outgo indefinitely. On the other hand, under the high-cost estimate, outgo would be less than tax income for about the first 25 years, and the interest income from the accumulated fund would maintain an excess of total income over outgo for another five years (after which the fund balance would decline, unless income from other sources were obtained).

The Second Trustees Report, dated April 9, 1942 (House Document No. 694, 77th Congress) makes similar statements (page 7).

In 1972, very significant changes in the OASDI system were made, particularly the introduction of automatic adjustments in benefits for current beneficiaries, based on increases in the CPI, which necessitated using dynamic, rather than static, economic assumptions for the future. The 1972 and subsequent Trustees Reports (which reports are usually issued on about April 1) made important statements as to the funding basis for OASDI, as follows:

(1) **1972 Report.** The Board of Trustees of the OASDI Trust Funds concurred with the recommendation of the 1971 Advisory Council on Social Security that "The financing of the program should be on a current-cost basis, with the trust funds maintained at a level approximately equal to one year's expenditures" and that the Board of Trustees should "report immediately to the Congress whenever it is expected that the size of any of the trust funds will fall below three-quarters of the amount of the following year's estimated expenditures, or will reach more than one and one-quarter times such expenditures" (page 26). Also, the Board supported the further recommendations that "the contribution rate schedule for the next

8/ An outstanding example of the repetition of this misconception is in the Social Security Bulletin, January 1986 (page 8), where it is stated that "the 1939 amendments altered program financing,...establishing the concept of 'pay-as-you-go' financing with a limited contingency reserve fund." A letter of July 7, 1986 from the Social Security Administration admits that this statement is not correct.

10 years should be designed to follow closely the principle of current-cost financing" and that "Contribution rates for the cash benefits program after the next 10 years would be shown in two steps, each based on average rates for an extended period of several decades."

Legislation amending the OASDI system was enacted on July 1, 1972 (P.L. 92-336), which primarily increased the benefit level by 20% and revised the financing provisions. This legislation contained a contribution schedule that followed the foregoing principles, with one tax rate for 1978-2010 and antoher (and significantly higher) rate for 2011 and after. As it so happened, the outgo expressed as a percentage of taxable payroll was estimated to be relatively level from the mid-1970's for the next 35 years, so that an "average rate" developed for 1978-2010 would give a close approximation to the varying rates which would arise under true current-cost financing. This, of course, was not the situation after 2010, but then the "average rate" developed for that period was a good indicator of ultimate costs and would, undobtedly, be modified as the time came nearer. According to the intermediate estimate, that tax schedule would "keep the ratio of trust fund to the following year's outgo above 80 percent for the first five years and increase slowly towards 100 percent, reaching that level about the year 1990" (from "Actuarial Cost Estimates for the Old-Age, Survivors, Disability, and Hospital Insurance System as Modified by the Social Security Provisions of Public Law 92-336," September 1972, Office of the Actuary, Social Security Administration, page 2). The legislation did not include a provision as to reporting to Congress when the fund ratio was outside of the 75-125% range.

The Social Security Amendments of 1972, enacted on October 30, 1972 (P.L. 92-603) revised the contribution schedule, but maintained the same principles (as was also the case for two pieces of legislation in 1973). There is some indication that Congress established the "tradition" of a test ratio of 75% (i.e., riding the lower end of the range) when it enacted the July 1973 amendments (which, to a large extent, were overridden by the December 1973 amendments), because then the Senate Finance Committee stated that this ratio was "considered by the Congress last year as an acceptable level of contingent funds on hand." 9/ However, this tradition was soon broken (or at least badly fractured) by the December 1973 amendments, which did not produce fund ratios of this magnitude in the near-future years.

(2) **1973-1975 Reports.** These reports were silent about the nature of the funding basis of the OASDI system. Presumably, however, it was believed that any statement on this subject was unnecessary because no change in the basic policy had been made (although the actual

9/ "Report of the Committee on Finance, U.S. Senate, to Accompany H.R. 8410, Senate Report No. 93-249, June 25, 1973 (page 19).

short-range experience had deteriorated, which was also the case for the estimated long-range situation 10/).

(3) **1976-1977 Reports.** The 1976 Report (page 41) stated about the OASDI system that "since the 1950's, (it) has operated on what might be termed a current-cost financing basis," and it defined current-cost financing as follows:

> "Under the current-cost method of financing, the amount of taxes collected each year is intended to be approximately equal to the benefits and administative expenses paid during the year plus a small additional amount to maintain the trust funds at an appropriate contingency reserve level. The purpose of the trust fund under current-cost financing is to absorb temporary differences between income and expenditures. Thus, whatever normal ratio of trust fund assets to expenditures is established, it can be expected that the funds will vary somewhat from that level from time to time as they absorb those fluctuations."

The foregoing statement about the financing basis of OASDI is correct if by "since the 1950's, has operated" is meant to refer to the actual past experience back only to the early 1960's (when the fund ratio -- assets on hand at the beginning of the year as percentage of the next 12 months' outgo -- was, at the most, only a little above 100%, and usually well below). The statement is not true if it was intended to relate to the anticipated future experience; for example, based on the 1966 Report (pages 35-36), the OASDI fund ratios under the intermediate estimate increased from 110% in 1965 to 193% in 1980, and then slowly, but steadily to 257% in 2025. What is true when the intended financing in the future is considered is that, for the first time in the history of the OASDI system, the 1972 amendments provided for current-cost funding over the long-range future.

The 1977 Report contained the identical language as in the 1976 Report.

(4) **1978 Report.** This report (page 22) stated that "There is general agreement that the OASDI system should be financed on the basis of a 'current-cost' method," and then it defined this concept in a similar manner to what was done in the 1976 Report.

The 1978 report was prepared after the enactment of the Social Security Amendments of 1977, which made a number of financing changes that were intended to solve the short-range financing problems referred to previously (item (2)), largely by providing

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10/ The benefit-indexing procedure adopted in the 1972 Amendments, as it so happens, was faulty unless "wages should increase in the future about twice as fast as the consumer price index" -- the premise on which that procedure was adopted (see Report of Committee on Ways and Means H.R. 1, House Report No. 92-231, May 26, 1971, page 128).

additional contribution income, and to solve the vast majority of the long-range financing problems, largely by providing a stable benefit-indexing procedure. However, the contribution schedule provided did not follow the two-step procedure recommended by the 1971 Advisory Council on Social Security (see item (1)), but rather had the ultimate rate be effective for 1990 and after. 11/ Moreover, this ultimate rate was insufficient, under the intermediate estimate, to provide adequate long-range financing.

That the 1977 Act, in fact, abandoned the current-cost financing procedure over the long range may be seen by considering the future OASDI fund ratios according to the intermediate estimate made at the time of enactment (from Actuarial Cost Estimates for the Old-Age, Survivors, Disability, Hospital, and Supplementary Medical Insurance Systems, as Modified by Public Law 95-216, WMCP: 95-68, Committee on Ways and Means, House of Representatives, March 3, 1978, page 16). Such ratio (based on the end of the year, rather than the beginning of the year) would rise from about 30% in 1978-80 to a peak of 318% in 2010 and then decrease to zero in 2028 and thereafter, indicating quite clearly that the long-range financing provided would be inadequate. Also, this makes it evident that the long-range funding was no longer on a current-cost basis, or was even intended to be so.

(5) **1979 Report.** This report (page 20) clearly brought out that the 1977 Amendments did not follow the current-cost funding basis which was established by the 1972 legislation, by stating as follows:

> "In recent years, until the enactment of the Social Security Amendments of 1977, the taxes collected each year have been intended to approximately equal the expenditures, and the trust funds have been intended only to absorb temporary excesses of expenditures over income that may occur during periods of adverse economic experience. Under this "current-cost" method of financing, the trust funds should not grow too large (through continued annual surpluses) not too small (through continued annual deficits). Although there is no general agreement as to the optimum trust fund size, the trust funds should have sufficient assets to allow time for

11/ The Senate version of the 1977 legislation did provide adequate long-range financing, with a contribution schedule that increased steadily over the year (in roughly 5-year intervals) until the ultimate rate was reached in 2011 and after -- namely, for OASDI 7.80% for both employers and employees, as compared with 5.95% under the previous law (in 2011 and after) and 6.20% under the 1977 Act (in 1990 and after). The House conferees insisted, successfully, that the long-range current-cost, self-supporting contribution scheule contained in the Senate-passed bill should be dropped and that the ultimate contribution rate should be that for 1990 --6.20% in the House-passed bill (as compared with 6.15% for 1990-94 in the Senate-passed bill). See Conference Report -- Social Security Amendments of 1977, Senate Report No. 95-612, December 14, 1977, pages 63-64 for these data.

executive and legislative action to prevent their exhaustion should the program experience continued annual deficits."

(6) **1980 Report.** This report finessed the subject somewhat by merely stating that "In recent years, the general philosophy of financing the OASDI program has been" the current-cost approach, without saying what the current situation was. It then went on to quantify the trust-fund size under this approach, as follows (page 22):

> "Although there is no general agreement regarding the optimum trust fund size, it should be sufficient to allow time for executive and legislative action to prevent exhaustion of the trust fund during a period of continued annual deficits. The 1979 Advisory Council on Social Security found that a trust fund balance of 75 percent of annual expenditures is sufficient for such a contingency."

This report, however, did not say whether the long-range funding was on a current-cost basis, or was intended to be so.

(7) **1981 and 1982 Reports.** These reports (pages 27 and 30, respectively), interestingly, went back to the language in the 1978 Report (see item (4)) -- namely, that there was "general agreement that the OASDI system should be financed on the basis of a 'current-cost' method;" then, they defined this concept in the same general manner as did the 1980 Report (see item (6)). However, these reports did not specify the desirable lower and upper limits for the fund ratio, nor did they say whether the long-range funding was on a current-cost basis, or was intended to be so.

(8) **1983 and 1984 Reports.** These reports (pages 35 and 31, respectively), in essence, went back to the language in the 1976 and 1977 Reports (see item (3)) in describing the funding basis in the past operations by stating:

> "The OASDI system has generally operated over the years on a 'current-cost' financing basis, under which total income in each year is intended to be approximately equal to total outgo plus an additional amount needed to maintain the trust funds at appropriate contingency-reserve levels."

Again, no mention was made of desirable lower or upper limits for the fund ratio, or as to whether the long-range funding basis was on a current-cost basis, or was intended to be so.

(9) **1985 and 1986 Reports.** These reports -- probably quite wisely -- did not go into the matter of current-cost funding, whether it is desirable, or whether it is present under current law.

In summary, it seems clear that, in practice, current-cost funding has been present -- by design or by chance -- in the actual financial experience of the OASDI program from the early 1960s up to the present time. The situation as to the intent for the long-range funding of the system is quite different -- (1) until the 1972 legislation, the intent was not to fund it on this basis; (2) the

1972-73 legislation had the clear intent to so fund it; and (3) both the Social Security Amendments of 1977 and the Social Security Amendments of 1983 -- probably by lack of concentration on the matter or by default -- moved away from the current-cost funding approach over the long run and toward what might be called a temporary partial funding approach. It may be said with regard to the 1983 Amendments that the main concern was the immediate restoration of short-run financial solvency of the OASI Trust Fund and the rebuilding of its balance over the next few years so that it would be at a reasonable level. 12/ Nonetheless, it seems fair to say that the Congress and the Board of Trustees have, in recent years, really believed that current-cost funding is the proper funding basis for OASDI.

Funding Basis of HI System

The long range funding basis of the HI system originally, at its inception in 1965, was not specifically defined (in the law, the congressional committee reports, or the initial Trustees Report, 1966). The system was intended to be self-supporting from the employer and worker contributions over the 25-year valuation period. 13/ The contribution rates were scheduled to rise in steps reaching the ultimate rate in 1987 (the 22nd year of operation) and were intended to keep the system on a self-supporting basis, under the intermediate-cost estimate.

Under these circumstances, the result was that this estimate showed the system as being funded on a current-cost basis, because the fund balance increased slowly over the years, and the fund ratio was almost 100% at the beginning of 1980 and was 112% at the beginning of 1990. 14/ However, it was not stated officially that this basis was being adopted.

The 1968 Trustees Report showed the same general situation as to the funding basis of the HI system as did the 1966 and 1967 Trustees Reports, although it took into account the increased financing provided by the 1967 Amendments (increased taxable earnings base and slightly higher contribution rates in all

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12/ Actually, on December 31, 1982, the OASI Trust Fund could be said to have been bankrupt, because its net assets, $4.6 billion (gross assets of $22.1 billion, minus its loans of $17.5 billion from the DI and HI Trust Funds), were insufficient to meet the December benefit payments of about $12 billion due on January 3, 1983. The same situation was also true (but to a much smaller extent) on November 30, 1982 -- and, of course, also after 1982 until the end of April 1985, when the net assets (not including the "advance tax transfers" authorized by the 1983 Amendments, which are made on the first day of each month, and which are really 1-month temporary loans) once again exceeded the benefit payments due three days later.

13/ A 25-year valuation period (rather than the 75-year one then used for the OASDI system) was used because it was believed that this was "as far ahead as should be considered because of the uncertainties as to future hospital practices" (1966 Trustees Report, page 8).

14/ The estimates were intended to be on a conservative basis, by assuming that the maximum taxable earnings base would not change, despite it being assumed that both earnings and hospitalization costs would rise.

future years). The fund ratio in 1990 was 131% according to the intermediate-cost estimate.

The 1969, 1970, and 1971 Trustees Reports, because of the developing experience, used higher-cost assumptions for the future. As a result, the estimated future fund balances were lower -- and, in fact, the fund was shown as being exhausted well before the end of the 25-year valuation period. 15/

The 1971 Advisory Council on Social Security recommended that "The financing of the program should be on a current-cost basis, with the trust funds maintained at a level approximately equal to one year's expenditure" and that "the law should be changed to require the Board of Trustees to report immediately to the Congress whenever it is expected that the size of any of the trust funds will fall below three-quarters of the following year's estimated expenditures, or will reach more than one and one-quarter times such expenditures" (1972 Trustees Report, page 12). The Board of Trustees concurred with those recommendations, but they were never specifically incorporated in the law.

The 1973 Trustees Report (page 18), following the increased financing provided by legislation in 1972, stated that the fund ratio would reach 100% at the beginning of 1979, but did not give data that could be used to derive such ratios for later years. Apparently, however, the fund ratio would rise somewhat thereafter, but not to very high levels.

The 1974 Trustees Report (pages 16-17) showed about the same general results as the 1973 Report, except that somewhat higher fund ratios were estimated for the late 1970s and early 1980s (in general, as a result of additional financing being provided). The 1975 Trustees Report (page 16) showed a slightly worsening situation, although the fund ratio under the intermediate-cost estimate was stated to be in excess of 100% throughout the 1980s (but below that level toward the end of the 25-year valuation period).

The 1976 to 1982 Trustees Report showed increasingly bleak pictures over time (not as between the various reports). The maximum fund ratio under the intermediate-cost estimate was usually only 50-75%, and the fund was shown to be exhausted at least by the early 1990s (as early as 1988 in the 1982 Report).

Following the enactment of a new method of reimbursing hospitals in the Social Security Amendments of 1983 and the significant decrease in hospital utilization in 1984 and after, the financial picture for the HI system became significantly brighter. By the time of the 1986 Trustees Report, the intermediate-cost estimate showed fund ratios of at least 75% for 1987-92 (peak of 83% in 1989), but nonetheless exhaustion of the fund in 1997.

15/ This was the case even when it was assumed that the maximum taxable earnings base would rise in the face of rising earnings levels, in a parallel manner.

In the actual experience, the fund ratio for the HI system as of the beginning of the year had a peak of 79% in 1975 and was above 40% in all subsequent years, being 62% in 1986. 16/

The 1972 to 1980 Trustees Reports had recommended that the desirable ultimate level of the HI Trust Fund should be such as to result in a fund ratio of 100% (the general recommendation of the 1971 Advisory Council on Social Security). The 1981 Report (and subsequent ones), without explanation 17/, lowered this goal to 50% -- which is now present and will, according to the intermediate-cost estimate in the 1986 Report, be maintained through 1993 (through 1991 for the pessimistic-cost estimate).

In summary, it seems clear that, in practice, current-cost financing has been present -- by design or by chance -- in the actual financial experience of the HI system ever since its start in 1966, up through the present time. In part at least, this has been due to the experience of the system and its graded contribution schedule, which has had the effect of holding down the accumulation of sizable fund balances. Current-cost financing will apparently be applicable for the future experience, especially considering that exhaustion of the fund is estimated to occur in about 10 years. Nonetheless, it seems fair to say that the general intention seems to be to have current-cost funding for the HI system.

Funding Basis of SMI System

The SMI system can properly be said to be designed as 1-year renewable term insurance, because its overall premium rate (currently, paid about 25% by the enrollee and 75% from the General Fund of the Treasury -- originally, on a 50-50 basis) is subject to change each year (originally, every two years). Various Trustees Reports have described SMI in this manner (e.g., see page 25 of the 1986 Report).

Over the years since the SMI system began operations in 1966, it has always had a positive cash balance, although relatively small until the early 1970s. However, when the assets are compared with the liabilities at the end of the premium-rate period (June 30 for 1967-83 and December 31 thereafter), deficits occurred in 1968-73. In recent years, assets have exceeded liabilities by substantial amounts (by $7.2 billion in 1985).

16/ For 1983-86, in accordance with proper accounting principles, the loan form the HI Trust Fund to the OASI Trust Fund (which was paid off completely in January 1986) is considered here as an asset of the former -- unlike the procedure in the Trustees Report, which disregards such value.

17/ According to Roland E. King, Chief Actuary, Health Care Financing Administration, the reason that this change was made by the Board of Trustees was that it was contemplated that legislation would soon be enacted to avert the impending depletion of the OASI Trust Fund and to bring that program into actuarial balance. Further, the Board of Trustees believed that, for purposes of consistency, the OASI, DI, and HI Trust Funds should have the same fund-ratio goals and that a goal of 100% would be too difficult for the OASI Trust Fund to achieve. As a result, the goal for the HI Trust Fund was lowered to 50%.

STATEMENT 1987-6

When, on a valuation date, liabilities have exceeded assets, an additional amount has been added to the estimated premium rate for the next year, so as to eliminate the deficit. In the reverse situation -- significantly large excess of assets over liabilities -- the premium rate otherwise estimated to be necessary has been reduced, so as to draw down the surplus to some extent.

APPENDIX C

METHODS BY WHICH CURRENT-COST PROCEDURES COULD BE LEGISLATED

If one accepts the view that the legislative intent with regard to the funding of the OASDI and HI systems has been that it is on the current-cost basis, the question then arises as to how this should be accomplished. Basically, two approaches are possible.

One way (which is the approach that would be followed according to what we believe is the underlying theory of the present law-- current-cost financing, with definite scheduled tax rates for all future years) would be to legislate a long-range future contribution (tax) schedule which, along with any income from the income-taxation of benefits, would closely approximate the curve of future "cost rates" (i.e., for each year, the outgo expressed as a percentage of taxable payroll). Such "close approximation" does not necessarily mean year-by-year changes in the rates, but rather there can be steps.

The other way would be to provide automatic adjustment (either upward or downward) of the tax rates so as to keep, as closely as possible, the fund ratio within a prescribed range. One procedure for doing this would be to determine the ratio of the fund balance on September 30 to the outgo in the preceding 12 months. Then, if this ratio fell outside of the range, the contribution rate for the next year would be increased or decreased (as the case may be) by 0.2% for both the employer and employee. Such an approach was discussed by the National Commission on Social Security Reform in 1982 (see its Memorandum No. 23, June 4, 1982 -- available from the Office of the Actuary, Social Security Administration), but was not adopted.

It may be noted that adoption of the foregoing automatic-adjustment procedure for the OASDI-HI system would have results somewhat similar to the present situation for the SMI system. However, the actuarial reports for OASDI and HI would show the contribution schedule which would arise over the valuation period under each of the several sets of assumptions. The premium rates for the SMI system would be shown in a similar fashion if the recommendation for its cost estimates being extended over a 75-year period were accepted.

STATEMENT 1987-7

January 27, 1987

Clerk's Office
Bureau of Insurance
Document Control Center
B1
Jefferson Building
1220 Bank Street
Richmond, Virginia 23209

RE: Insurance Regulation No. 29
Case Number: INS-860320

Dear Sir or Madam:

The Committee on Risk Classification of the American Academy of Actuaries has prepared the enclosed statement commenting on the Commonwealth of Virginia's proposed Insurance Regulations No. 29 which sets out rules permitting smoker/nonsmoker mortality tables for use in determining minimum reserve liabilities and nonforfeiture benefits.

If you have any questions, I can be reached at (301) 727-3345.

Sincerely,

(signed)

Patricia L. Scahill
Chairman, Committee on Risk Classification

STATEMENT 1987-7

AMERICAN ACADEMY OF ACTUARIES
COMMITTEE ON RISK CLASSIFICATION
COMMENTS ON THE COMMONWEALTH OF VIRGINIA'S PROPOSED RULES PERMITTING SMOKER/NONSMOKER MORTALITY TABLES
INSURANCE REGULATIONS NO. 29
CASE NUMBER INS-860320

The statement that follows is filed by the Committee on Risk Classification of the American Academy of Actuaries ("Academy"). The Academy is a professional association of over 8,000 actuaries which was formed in 1965 to bring together into one organization all qualified actuaries in the United States and to seek accreditation and greater public recognition for our profession. The Academy includes members of its three founding organizations - the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, and the Society of Actuaries. Membership also includes 85% of the total number of enrolled actuaries who are qualified under ERISA.

Our Committee appreciates the opportunity to comment on the proposed regulation. We are in general agreement with the first five sections and Section 7.

As pointed out in the Risk Classification Statement of Principles, a copy of which is attached, risk classification allows the development of equitable insurance coverage to the public through the grouping of risks. Risk classification is intended to group individual risks which have reasonably similar expectations of loss. It is not intended to reward or penalize certain groups of risks at the expense of others. Mortality tables have been separated by age and sex. Tables separating smoker and nonsmoker mortality are now available. Using these tables allows for a greater degree of equity in the insurance coverage.

One type of risk classification is no different from another in its purpose. Using factors such as age, sex, family medical history, and weight to classify an individual risk is well established. The individual has control over smoking habits and weight, but cannot control age and sex. A person whose weight is within the medically recommended range is expected to be healthier and is, therefore, charged lower rates for life insurance. The policy's nonforfeiture values also reflect the lower expected mortality. Similarly, a nonsmoker is expected to be healthier than a smoker and insurance rates and nonforfeiture values should reflect this.

Section 6 of the proposed regulation requires the statement "As a smoker you have been issued a policy that is not favorable as policies issued by this company to nonsmokers" to appear on the front page of policies with a minimum cash value in excess of $20 at any duration. However, no similar statement is required for policies classified as substandard because of a person's weight. This seems to be inconsistent.

Additionally, some substandard policies may not be less favorable to smokers depending on the reason for the substandard rating and the technique used to assess substandard charges and determine their nonforfeiture values.

We encourage the Bureau to delete Section 6 from the proposed regulation.

STATEMENT 1987-8

February 6, 1987

Ms. Darla L. Lyon
Assistant to the Director
Department of Commerce and Regulation
Division of Insurance
910 E. Souix
c/o State Capitol - 500 E. Capitol
Pierre, South Dakota 57501-5070

Dear Ms. Lyon:

I am writing in response to your request for information concerning actuarial designations. I apologize for the delay in getting a response to you. Unfortunately, this subject is complex and it has taken a while to compile all the pertinent information needed for a complete response.

Inclusion of Actuaries

We believe that it is appropriate to include actuaries within a law designed to license insurance consultants. In general, actuaries are as eminently qualified to serve as insurance consultants as the other groups to be recognized in the law. Furthermore, several other states with insurance consultant licensing laws have included actuaries among those deemed qualified to serve in this capacity.

Actuarial Designations

Unfortunately, the structure of the actuarial profession is complex. Your letter references four actuarial organizations:

- American Academy of Actuaries (AAA)
- Conference of Actuaries in Public Practice (CAPP)
- Casualty Actuarial Society (CAS)
- Society of Actuaries (SOA)

The latter two of these organizations directly give actuarial examinations on two parallel tracks. The former two of these organizations do not have separate examination systems, but do rely on the other two examination systems as a basis for membership.

Response to Your Questions

Your letter poses four questions:

1. An outline of the content of each program.

   Enclosed are booklets containing the content of the examination programs of the CAS and SOA.

2. How many parts and what type of exams must be passed for each program?

Associate of the Casualty Actuarial Society (ACAS) is granted after passing the first seven of the ten CAS examinations.

Fellowship of the Casualty Actuarial Society (FCAS) is granted after passing all ten CAS examinations.

Associate of the Society of Actuaries (ASA) is granted after passing the first five of the ten SOA examinations.

Fellowship of the Society of Actuaries (FSA) is granted after passing all ten SOA examinations.

3. What qualifications must be met before enrollment in each program?

The examinations are open to anyone who wishes to write them without restriction. The only way to achieve the designations cited above is to pass the examinations in question.

4. Is continuing education required in order to retain each designation?

AAA - A program is being developed at the present time, but has not yet been adopted.

CAPP - A voluntary program was adopted in 1986.

CAS - None contemplated.

SOA - None contemplated.

Academy Membership

Academy membership is open to any ACAS, FCAS, ASA, or FSA with three years of responsible actuarial experience.

Academy membership is also open to any "enrolled actuary" under the Employee Retirement Income Security Act of 1974 (ERISA). This is a federal designation granted in connection with private pension plans and is irrelevant in connection with insurance regulation in South Dakota (or any other state).

Recommendations

We recommend that South Dakota recognize "Member of the American Academy of Actuaries" (MAAA) as the definition of a qualified actuary for purposes of the insurance consultant licensing law in South Dakota.

Our recommendation is based on the following considerations:

1. The CAPP, CAS, and SOA created the AAA in 1965 exactly for this purpose, i.e., accreditation of the actuary. "Membership in the American Academy of Actuaries" is the actuarial profession's answer to the question "who is a qualified actuary in the United States?". The other three organizations do not seek recognition by the government at either the state or federal level.

2. AAA is the only organization including actuaries in all areas of specialization and practice. The other organizations include only subsets of the profession.

3. The NAIC and many other states have recognized Academy membership in a number of areas. If South Dakota went in another direction, it would be inconsistent with prevailing practice in the NAIC and other states.

4. Virtually all members of the CAS or SOA qualified to practice as insurance consultants in South Dakota are members of the Academy. The only significant group who is not are those with less than three years of experience. It is doubtful if South Dakota would wish to license such individuals until they are more experienced in any event.

5. Academy members are subject to strict standards in three areas:

   - Qualifications (training)
   - Conduct (ethics)
   - Practice (quality of work)

   The Academy is the only organization with standards in each of these areas.

Conclusion

If we can provide any further information, we would be happy to do so. We would appreciate a copy of your bill and also any law that may ultimately be adopted.

Again, my apologies for the delay in responding.

Yours truly,

(signed)

Stephen G. Kellison
Executive Director

STATEMENT 1987-9

VALUATION OF ACCIDENT AND HEALTH BENEFITS UNDER THE TAX REFORM ACT OF 1986

PRELIMINARY VIEWS BY THE TASK FORCE ON NON-DISCRIMINATION RULES

February 23, 1987

I. GENERAL

A. Purpose

The purposes of this proposed methodology are to determine (1) whether an employer's accident and health plans are discriminatory, and (2) if discriminatory, the taxable value of the discriminatory portion.

B. Approach

The proposed methodology is intended to be practical to administer with a minimum of subjectivity in application while resulting in reasonable precision and equity. A more refined approach would substantially increase the difficulty in administering the tests. A typical insurance company rate manual, for example, contains several hundred pages but still requires subjective adjustments for the benefit plans of many employers.

The benefit values are based only on the plan provisions. Demographic characteristics of employees are not reflected in the calculation of the values, except for retirees eligible for Medicare.

The geographic location of employees is not recognized for purposes of determining whether a plan is discriminatory. Differences in cost by area may be recognized, however, in determining the taxable value of discriminatory benefits.

The values reflect the benefits provided under the plans. Administration costs are not included because they vary greatly and they deliver no value to the employee.

The employer's actual cost will be disregarded for the following reasons:

- Actual costs will fluctuate greatly from year to year, especially for small groups of employees.

- The actual cost is difficult to measure because of the time delays in reporting by the administrator and problems in segregating data by plan and line of business.

- The estimate of cost for a future period is subjective.

- Actual cost is distorted by the demographic characteristics of the employees covered. A liberal plan covering a young executive

group, for example, would have a lower cost than a modest plan covering older hourly employees.

Because it is impossible to anticipate every benefit feature, a general statement will be necessary to prevent employers from discriminating by including benefit features that are not recognized in the valuation methodology for highly compensated employees.

For benefit features (such as the deductible) that vary with the employees pay, the plan is considered a single plan and is valued using the average for each of the highly compensated and non-highly compensated employee groups. The following illustrates the approach:

Deductible:	1% of annual salary, with a maximum of $400	
Deductible used to value the plan:	Average Deductible:	
	Highly compensated	$400
	Non-highly compensated	$200

Employee contributions will be valued as the actual dollar amount. An average amount may be used where the actual amount is a uniform percentage of plan cost and separate plan costs are reflected for different employee locations.

II. MEDICAL BENEFITS

A. Structure

The structure of the medical benefits methodology is:

- A standard plan will be defined and a value index of 100 will be assigned.
- Relative cost values and adjustment factors will be developed to determine the relative value of other common plans and variations in benefit features.
- The plan can be tested based on the value index.
- The value of the discriminatory portion, if any, can be calculated by multiplying (a) the number of units of discriminatory benefits by (b) a dollar value per unit. The factor will be based on U.S. population cost data.

An illustration of the structure is attached as an exhibit.

B. Elements

Following is a summary of certain elements in the preliminary approach:

- Factors will be developed for common benefit features. Where applicable, rules will be stated for interpolation, such as for unusual deductible amounts.

- The factors will reflect the value to employees of the benefits differential. The methodology assumes a standard level of medical care expense. Adjustments reflecting differences in utilization of various health care services caused by specific benefit features would be overly complex and would not reflect the value to employees.

- Administrative procedures will not be reflected in calculating the value even though they may affect the cost of benefits. Examples of such procedures are second surgical opinion, hospital utilization review and large case management. The nature and effectiveness of these procedures vary substantially, therefore precluding a practical and equitable valuation methodology.

- Plans using a schedule of benefits will be converted to an equivalent percentage of "reasonable and customary" fees based on a representative list of procedures.

- Plans will be valued based on the more liberal set of benefits within the plan where the benefit depends on the provider of care or on adherence to administrative rules, such as the following:

  - For a plan with a benefit of 100% of expenses at hospital A and 80% elsewhere, the 100% benefit is valued.

  - For a plan with a benefit of 100% of expenses if the employee receives a second surgical opinion and 80% otherwise, the 100% benefit is valued.

- Health Maintenance Organization (HMO) plans will be valued in accordance with their benefit features using the same methodology as for indemnity medical plans. As a result, two plans with identical benefits will be given the same value even if one is an HMO and one is an indemnity plan.

- Because many plans have distinct benefit features for psychiatric care, adjustment factors will apply based on the benefit percentage and maximum benefit amount for such services.

STATEMENT 1987-9

EXHIBIT

ILLUSTRATION OF VALUE INDEX

Standard Plan

$100 Deductible
80% Reimbursement
$1,000 Out-of-Pocket limit*

Assigned value of 100

Values for other plan provisions

Deductible	Out-of-Pocket Limit* $500	$1,000	$2,000
80% Plans			
$50	107	103	100
100	104	100	96
500	96	87	82
90% Plans			
$50	111	110	109
100	108	106	105
500	96	90	89

Dollar value per unit:

Region	Annual Amount Employee Coverage	Dependent Coverage
1	$6.00	$9.00
2	7.00	10.50
3	8.00	12.00
4	9.00	13.50
5	10.00	15.00

* Including deductible

III. OTHER BENEFITS

A. Dental

The methodology for valuing dental benefits should be similar in structure to that for medical benefits. Because of the greater uniformity of dental plans, however, a simpler approach will be practical.

B. Vision Care

A simple structure will be used for vision care based on the maximum benefits schedule under the plan. A more extensive approach is not justified since the benefits cost is relatively small.

C. Flexible Spending Amounts

The value of health care benefits provided under a flexible spending account plan will be valued as follows:

Type	Value
Employer funded without employee choice	70% of annual maximum
Salary reduction and other choice programs	100% of annual maximum elected by employee

D. Accidental Death and Dismemberment (AD&D)

AD&D benefits are valued at $.36 per year per $1,000 of death benefit, based on the 1980 mortality study conducted by the Society of Actuaries. A program with benefits that are a uniform percentage of pay or are based on a schedule that approximates a uniform percentage of pay will be considered a single plan for all eligible employees.

IV. BENEFITS NOT VALUED

A. Benefits of De Minimis Value

Certain benefits are of such small value that they do not warrant developing a valuation methodology. Hearing care and business travel accident insurance are examples.

Similarly, specific benefit features with a typical value of less than 3% of the average benefit value will not be reflected in the valuation methodology for medical and dental plans.

B. Benefits for Employer

Certain benefits should not be valued because they are provided primarily for the benefit of the employer, not the employee. Their purpose is to reduce employer costs. These include:

- routine physical examinations, often on a required basis,
- health screening programs for early detection of hypertension and other illnesses,
- wellness programs such as smoking cessation or exercise promotion,
- employee assistance plans, intended to assist employees and dependents with emotional, substance abuse and similar problems on a confidential basis.

V. TASK FORCE

Members

Richard Ostuw, Chairman
John D. Bohon
Ronald L. Homans
Martin J. Loughlin
William J. Miner
Jonathan L. Shreve
Edward J. Wojcik

AAA Staff

Gary D. Simms

STATEMENT 1987-10

March 2, 1987

Frank D. Titus, Director
FERS Implementation Task Force
Retirement and Insurance Group
Office of Personnel Management
1900 E Street, NW, Room 3311
Washington, DC 20415

Dear Mr. Titus:

In the interim rule published December 31, 1987 (51 FR 47185-9) to implement the Federal Employees Retirement System under Subpart D of Section 841.402, an actuary is defined as "an associate or fellow in the Society of Actuaries and one who is enrolled under Section 3042 of P.L. 93-406, the Employee Retirement Income Security Act of 1974." We suggest that "a member of the American Academy of Actuaries" be substituted for "an associate or fellow in the Society of Actuaries" in this regulation.

Our rationale for suggesting this change is as follows:

1. The Academy is recognized throughout the actuarial profession in the U.S. as the accreditation and public interface body for the profession. In fact, the Academy was created in 1965 by the Society of Actuaries jointly with three other actuarial organizations for exactly this purpose. These other actuarial organizations, including the Society of Actuaries, do not seek recognition by the government, but rather work through the Academy for purposes of accreditation.

2. The federal government has recognized Academy membership as the appropriate criterion for actuarial credentials in comparable situations. For example, the Liability Risk Retention Act of 1986 (P.L. 99-563) uses Academy membership in its definition of a qualified actuary under the bill (see Sec. 3(d)(3)(A). Thus, precedent and consistency within federal law and regulations support making this change.

3. Academy members are subject to strict standards, backed up with a disciplinary process, in three broad areas:

   - Qualifications (training)
   - Conduct (ethics)
   - Practice (quality of work)

   The Academy is the only actuarial organization with standards in each of these three areas.

Virtually all members of the Society of Actuaries who are also qualified as enrolled actuaries under ERISA are also members of the Academy, so that our suggested language will not adversely affect any group of practitioners. However, given the structure of the actuarial profession, it would be more appropriate and consistent language for OPM to use in this regulation.

We appreciate your consideration of this change. Please let me know if we can provide any background material relating to this issue that might be of use to you and others at OPM.

Sincerely,

(signed)

Stephen G. Kellison

STATEMENT 1987-11

March 16, 1987

David M. Walker, CPA
Deputy Assistant Secretary
Pension & Welfare Benefits Administration
U.S. Department of Labor
200 Constitution Avenue, NW, Room N-5677
Washington, DC 20210

Dear Mr. Walker:

Please recall our brief conversation on Thursday, March 5, following your briefing to the ERISA Advisory Council concerning the Administration's proposal on the funding and termination of defined benefit pension plans. During those remarks, you may recall that we at the American Academy of Actuaries have concern that the minimum benefit security level proposed would be calculated exclusively under the projected unit credit funding method.

The use of this methodology, which has been adopted by the Financial Accounting Standards Board for use in financial accounting of employers' pension obligations, may well be appropriate for a given plan at a give time for calculation of the MBSL under consideration. It is certain, however, that the use of this single method will not be appropriate for all plans at all times, even for the single purpose intended here.

We have long opposed the use of a single mandated cost-method; for an example, I enclose copies of testimony we have provided to FASB on the use of a single-cost method for their purposes. The points raised there are certainly applicable in this context.

During deliberations in Congress on the Tax Reform Act of 1986, we were quite concerned when Congress, in considering the alternative minimum tax (ATM) proposal, decided that the FASB calculation (using the single cost method decreed by FASB) was to be used for tax calculations as well. It is my recollection that FASB, itself, stated opposition to this particular provision.

We recognize the need for administrative efficiency and regulatory consistancy. However, in this context, the use of a single cost method for calculating the MBSL is inappropriate, and may serve to undermine the kind of enhanced funding status intended in the Administration's proposals.

We would be please to meet with you or your staff to discuss this matter at greater length. Thank you for taking the time to consider these views.

Sincerely,

(signed)

Gary D. Simms
General Counsel

STATEMENT 1987-12

March 24, 1987

To: Members of NAIC (EX5) Life and Health Actuarial Task Force

Subject: Report on Proposed NAIC Reserve Standards for Individual and Group Health Insurance Contracts: Follow up on issues raised at December meeting in Orlando

Our Academy Subcommittee has carefully reviewed the several issues and questions raised during the NAIC Orlando meeting in December, 1986 concerning the proposed health insurance reserve standards. In the process, we also agreed to participate in a discussion session sponsored by the HIAA, held in Chicago on February 11, 1987, in order to hear more fully the views, problems and suggestions of members of the HIAA actuarial subcommittees and of others who have expressed concerns about the proposed standards.

We then held a follow up meeting of our subcommittee on March 2, and agreed upon a number of revisions in the proposed standards that will respond to most of the concerns and which, in our opinion, further improve the proposed standards document. The resulting revised standards are enclosed, dated "March 5, 1987."

We recommend adoption by the NAIC of this revised document.

Here is an item by item commentary on the several issues addressed and the revisions, if any, that we have made in the standards in response. The item numbers relate to the "comment" numbers shown in the left-hand margin of the "March 5" document enclosed.

1. The subcommittee agreed that Waiver of Premium reserves are more appropriately addressed in the realm of "standards of actuarial practice" rather than within "minimum reserve standards," and we have deleted direct references to this from the standards proper.

   However, we believe that Waiver of Premium liability is often ignored or improperly reserved and needs attention, so we have added a brief "supplementary" Appendix C discussing this subject and have relabeled former "Appendix C" as "Appendix D." Appendix D itself has been revised to incorporate the revised method proposed for recognition of first year expense, which will be addressed as Item 6.

2. The subcommittee has again rejected the proposal that the definition of incurred but unpaid claim liability should be modified to provide more conservative minimum requirements. We believe that incurred liability is adequately and correctly defined in the page 2 text, unchanged from our previous proposal, even though we are fully aware that a wide range of interpretation of this language exists among health actuaries. We believe that any further interpretation as to what "incurred" means must be left to the Academy's standards of practice Board and its Health Committee, which now has under development a "Standard of Practice" with respect to health claim reserves.

   A great deal of debate and discussion transpired on this subject during the two exposure periods of 1986. In view of the wide range of actuarial

opinion expressed, we previously revised our original text to accommodate a wider spectrum of interpretation, while emphasizing that reserves must be adequate in the aggregate and that claim and contract reserves must be consistent in their treatment of incurred dating, to assure aggregate adequacy. We believe that further concession toward "one side" of the debate, at this time, would violate the whole exposure process and merely rekindle confusion and controversy without constructive result.

3. In the definition of "Type B" contracts on page 4, we have provided for additional kinds of scheduled benefits or benefits payable at stated time period rates (e.g., hospital intensive care; long term nursing care) which lack specified Appendix A tabular standards, provided morbidity tables acceptable to regulating authorities are used for valuation.

4. Under IVB on page 5, we have revised item 2 to cover all contracts, rather than Types A and B only.

5. In response to calculations and exhibits submitted by William Bugg, demonstrating the conservatism inherent in tables using mortality rates only as termination rates, we have included an alternate provision that, for Type B contracts only (not using guaranteed premiums), total decrement rates may be used, subject to the limitations stated.

6. The most widely raised objection to our previous proposal was the limited "preliminary term" type of provision for high first year expenses. In order to provide a more satisfactory, realistic and simpler basis of adjustment, we are now recommending use of the "Reserve Expense Deduction" as described. This is a modification of a concept suggested by Bradford Gile. We strongly recommend this method of recognizing high first year expenses under benefit ratio reserves. It is much simpler, it is more direct and logical; and it permits greater flexibility to recognize varying actual conditions faced by insurers. This method, in our opinion, provides an effective solution to the surplus drain problems previously raised and at the same time retains the conservatism and controls appropriate to a regulatory reserve basis.

   Attachment 1, at the end of this commentary report, provides a comparative illustration of the Reserve Expense Deduction. Exhibits 8A and 8B in Appendix D also provide illustration.

7. An important safeguard, to minimize abuse of the Reserve Expense Deduction and benefit reserves generally, is this paragraph dealing with "superseded contract forms," which we have inserted.

8. Another widely voiced concern with our December proposal addressed the optional "transfer" provision that was included in the Section on strengthening and release of benefit ratio reserves on page 8. Because of much opposition and little support for this, we have deleted the transfer provision, which was a minor element in the proposal.

There are other editorial changes in the text, consistent with these basic revisions.

With these various revisions, we believe the earlier problems and objections have been accommodated to the extent possible.

Attachment 2 is a very brief summary of the Key Changes in these proposed Standards as compared to the NAIC health valuation standards now in effect. We believe this will be helpful in presenting the recommended new Standards to the NAIC (B) Committee.

We recommend that the enclosed Minimum Reserve Standards document, together with its four Appendices, be recommended by your Task Force for adoption by the NAIC.

Respectfully submitted,

E. Paul Barnhart
William J. Bugg, Jr.
William A. J. Bremer
G. Scott Bucher
Michael Kazakoff
James Olsen
Frank Rubino
Peter M. Thexton
John P. Wagner

by: (signed)
Paul Barnhart, Chairperson
Subcommittee on Liaison with the NAIC
Accident and Health (B) Committee

ILLUSTRATION OF RESERVE VALUES UNDER SEVERAL METHODS

Here are illustrative values and comparisons, based on Exhibits 1 and 9 of Appendix C:

EXHIBIT 1 (One Year's Production)
(Figures in 000's; accumulation at 7.5%)

	Valuation Year									
	1	2	3	4	5	6	7	8	9	10
A. Accumulated Renewal Premium	0	333	604	845	1072	1295				
B. Accumulated Total Premium	487	856	1167	1450	1722	1994	2269	2548	2835	3132
C. Renewal Premium Ratio	0	.389	.518	.583	.623	.649				
1. Net Level Reserve, offset by Reserve Expense Deduction. Initial excess expense = 50% of first year premium.										
a. Net Level Reserve	152	217	247	256	253	245	235	223	209	193
b. Accum. RED (Initial 50%=235)	243	262	281	302	325	350	376	404	434	467
c. Cum. RED Amortization (at 15%)	73	128	175	218	258	299	340	382	425	470
d. Unamortized RED Ded. (b-c)	170	134	106	84	67	51	36	22	9	0
e. Net Offset Res. Held (a-d)	0	83	141	172	186	194	199	201	200	193
2. RPR Modified Reserve	0	84	128	149	158	159				
3. 100% to 50% Graded(12/86 proposal)	0	95	159	210	229	226				

EXHIBIT 9 (One Year's Production)
(Figures in 000's; accumulation at 0%)

	Valuation Year									
	1	2	3	4	5	6	7	8	9	10
A. Accumulated Renewal Premium	0	700	1225	1645	2002	2316				
B. Accumulated Total Premium	1000	1700	2225	2645	3002	3316	3599	3853	4082	4289
C. Renewal Premium Ratio	0	.412	.551	.622	.667	.698				
1. Net Level Reserve, offset by Reserve Expense Deduction. Initial excess expense = 50% of first year premium.										
a. Net Level Reserve	200	270	270	235	206	160	157	136	117	100
b. Accum. RED (Initial 50%=500)	500	500	500	500	500	500	500	500	500	500
c. Cum. RED Amortization (at 15%)	150	255	334	397	450	497	540	-	-	-
d. Unamortized RED Ded. (b-c)	350	245	166	103	50	3	0	-	-	-
e. Net Offset Res. Held (a-d)	0	25	104	132	156	177	157	136	117	100
2. RPR Modified Reserve	0	111	149	146	137	126				
3. 100% to 50% Graded(12/86 proposal)	0	120	170	168	156	136				

Note that here the initial 50% excess expense is fully amortized in slightly over 6 years. This shortened amortization period is unrealistic, since 0% interest is assumed in Exhibit 9 and the initial excess expense amount is not accumulated at interest.

STATEMENT 1987-12

ATTACHMENT 2

SUMMARY OF KEY CHANGES in the proposed MINIMUM RESERVE STANDARDS FOR INDIVIDUAL AND GROUP HEALTH INSURANCE CONTRACTS as compared to the existing NAIC Reserve Standards

1. The proposed Standards extend to group insurance, but only on a limited basis with respect to "contract" reserves (as distinct from claim and unearned premium reserves).

   The committee is of the opinion that some reserve standards need to be established with respect to group contracts.

2. Contract Reserves (called "Active Life" Reserves in existing Standards).

   a. A new classification of contract "types" is proposed with respect to contract reserve requirements. The exisiting Standards define "Type" in terms of contract renewal provisions. The proposed Standards define "Type" in terms of premium structure and benefits: whether or not premiums are guaranteed; whether or not premiums are level; and whether or not benefits are scheduled or payable at stated time period rates.
   The committee deemed this basis of classification to be much more meaningful, for reserve purposes, than the existing basis.

   b. A new type of contract reserve, called the "benefit ratio" reserve is recommended for "Type C" contracts, which in general are contracts subject to rapidly changing trends and claim costs and therefore to a high probability of frequent rate increases.
   The existing Standards provide only for "tabular" contract reserves. No specific tabular standards are provided for "Type C" contracts in the existing standards, because the changing benefit costs of such contracts do not lend themselves to the use of specified morbidity tables.

   The committee is of the opinion that "benefit ratio" reserves, based on expected loss ratios rather than on a table, provide a much more effective and meaningful basis of contract reserves for the "Type C" policies. The "benefit ratio" reserve basis can be readily adjusted, as conditions change, to keep the reserve basis meaningful and up to date. The proposed Standards require regular monitoring of the reserves to assure this.

   As a means of recognizing high first year expenses, the recommended benefit reserve basis directly recognized an amortizing "Reserve Expense Deduction" instead of the indirect "Two Year Preliminary Term" method used with the tabular reserve basis.

3. The proposed Standards include a "Glossary of Terms Used" to provide better definition and understanding of technical terms used throughout the Standard.

STATEMENT 1987-12

MINIMUM RESERVE STANDARDS FOR INDIVIDUAL AND GROUP HEALTH INSURANCE CONTRACTS
MARCH 24, 1987

I. INTRODUCTION

A. SCOPE.

These Standards apply to all individual and group health (accident and sickness) insurance coverages except credit insurance.

When an insurer determines that adequacy of its health insurance reserves requires reserves in excess of the minimum standards specified herein, such increased reserves shall be held and shall be considered the minimum reserves for that insurer.

B. CATEGORIES OF RESERVES.

The following Sections set forth minimum standards for three categories of the health insurance reserves:

Section II.	Claim Reserves
Section III.	Premium Reserves
Section IV.	Contract Reserves

The ultimate test of the adequacy of an insurer's health insurance reserves is to be made on the basis of all three categories combined. However, these Standards emphasize the importance of determining appropriate reserves for each of the three categories separately.

C. APPENDICES.

*1

These Standards contain two Appendices which are an integral part of the Standards, and two additional "Supplementary" Appendices which are not part of the Standards as such, but are included for explanatory and illustrative purposes.

Appendix A. Specific minimum standards with respect to morbidity, mortality and interest, which apply to claim reserves according to year of incurral and to contract reserves according to year of issue.

Appendix B. Glossary of Technical Terms used.

Appendix C. (Supplementary) Waiver of Premium Reserves.

*1

Appendix D. (Supplementary) Discussion of the actuarial management of the benefit ratio reserve and examples of determination of contract benefit ratio reserves.

---

*1 - Comment Number

*1 - Comment Number

II. CLAIM RESERVES.

A. GENERAL.

*2 1. Claim reserves as of a given valuation date shall be established for those payments that the insurer has become obligated to make, in accordance with its contracts, as a result of such contracts having been in effect on or before such valuation date.

In determining the incurred status of claims, insurers may use practical and convenient approximations to actual contractual dates of incurral, provided it can be demonstrated that aggregate claim reserves resulting from such approximate dating represent an adequate and reasonable estimation of aggregate claim liability. The actuary responsible should periodically review the incurred dating practices and approximations followed by the insurer to determine whether satisfactory estimation results.

2. Appropriate claim expense reserves are required with respect to the estimated expense of settlement of all incurred but unpaid claims.

B. MINIMUM STANDARDS FOR CLAIM RESERVES.

1. DISABILITY INCOME.

a. Interest. The maximum interest rate for claim reserves is specified in Appendix A.

b. Morbidity. Minimum standards with respect to morbidity are those specified in Appendix A, except that, at the option of the insurer, for claims with a duration from date of disablement of less than two years, reserves may be based on the individual insurer's experience or other assumptions designed to place a sound value on the liabilities.

c. For contracts with an elimination period, the DURATION of disablement should be measured as dating from the time that benefits would have begun to accrue had there been no elimination period.

2. ALL OTHER BENEFITS.

a. Interest. The maximum interest rate for claim reserves is specified in Appendix A.

b. Morbidity or other contingency. The reserve should be based on the insurer's experience or other assumptions designed to place a sound value on the liabilities.

---

*2 - Comment Number

C. AGGREGATE ESTIMATION OF LIABILITY.

It is permissible for insurers to estimate claim liabilities using methods that value the various reserve items in the aggregate, combining accrued and unaccrued, reported and unreported, in course of settlement, etc. Separate specific items as may be required for statutory reporting may then be determined using any reasonable method.

D. CLAIM RESERVE METHODS GENERALLY.

Any generally accepted or reasonable actuarial method or combination of methods may be used to estimate all claim liabilities. The methods used for estimating liabilities generally may be aggregate methods, or various reserve items may be separately valued. Approximations based on groupings and averages may also be employed. Adequacy of the claim reserves, however, is to be determined in the aggregate.

All such reserves for prior years are to be tested for adequacy and reasonableness. Such testing shall be based on the paid development of incurred claims, plus an estimate of any residual unpaid liability, over a sufficient period to provide reasonable demonstration of the aggregate amount of matured liability. Testing should include adjustment at the appropriate rate (or rates) of interest from the date of valuation. Record systems, coding and methods used to estimate the liabilities should also be assessed to determine their continuing adequacy and reliability.

III. PREMIUM RESERVES

A. GENERAL.

1. Unearned premium reserves are required for all contracts with respect to the period of coverage for which premiums have been paid beyond the date of valuation.

2. If premiums due and unpaid are carried as an asset, such premiums must be treated as premiums in force, subject to unearned premium reserve determinaton. The value of unpaid commissions and premium taxes in connection with such due and unpaid premiums must also be carried as an offsetting liability.

B. MINIMUM STANDARDS FOR UNEARNED PREMIUM RESERVES.

The minimum unearned premium reserve with respect to any contract is the pro rata unearned modal premium that applies to the premium period beyond the valuation date, with such premium determined on the basis of: (a) the valuation net modal premium on the contract reserve basis applying to the contract; or (b) the gross modal premium for the contract, if no contract reserve applies. However, in no event may the sum of the unearned premium and contract reserves for all contracts of the insurer subject to contract reserve requirements be less than the gross modal unearned premium reserve on all such contracts, as of the date of valuation.

C. PREMIUM RESERVE METHODS GENERALLY.

The insurer may employ suitable approximations and estimates, including but not limited to groupings, averages and aggregate estimation, in computing premium reserves. Such approximations or estimates should be tested periodically to determine their continuing adequacy and reliability.

IV. CONTRACT RESERVES

A. GENERAL.

1. Contract reserves are required, unless otherwise specified in this Section IV, for: (1) all individual health insurance contracts; (2) group health insurance contracts with which level premiums are used; and (3) group health insurance contracts for which premiums are substantially or entirely paid by the insured participants, except for those where an entity exists (such as an employer, board or committee) which is empowered to negotiate benefits, provisions and premium rates on behalf of the participants, which is wholly independent of the insurer, which includes no individuals selected by the insurer and none of whose members receive financial compensation either directly or indirectly from the insurer, other than reimbursement of expenses incidental to performance of their functions on behalf of the participants.

   The contract reserve is in addition to claim reserves and premium reserves.

2. The nature of the minimum contract reserve required depends (a) upon the "type" of contract involved and (b) upon whether "leveling" premiums are used in the rate structure of the contract. A "tabular" contract reserve or a "benefit ratio" contract reserve may be required, depending on the characteristics of the contract.

3. The assumptions comprising the basis of contract reserve should be consistent with the assumptions comprising the basis of claim reserves for any contract, or else appropriate adjustment must be made when necessary to assure that the aggregate liability is provided for.

TYPES OF HEALTH INSURANCE CONTRACTS.

Type A. Contracts which are guaranteed renewable at guaranteed premium rates (either level or changing), to a specified age or for life.

Type B. Contracts not meeting the Type A guaranteed premium requirements, which provide ONLY scheduled benefits or benefits payable at stated time period rates, other than incidental benefits, and only if tabular minimum morbidity standards are specified in Appendix A for valuation of such benefits or, if no such standards are specified, tables acceptable to the regulating authority will be used.

*3

*3 - Comment Number

Benefits qualifying under Type B include the following kinds, for which specific standards are provided in Appendix A, and other
*3 similar kinds which may be so accepted by the regulating authority:

- Disability Income
- Hospital Indemnity payable at stated time period rates or hospital daily room and board benefits payable on an expense incurred basis but subject to an explicit daily dollar limit
- Miscellaneous Hospital Expense benefits subject to a maximum benefit per confinement not exceeding the greater of:
  (a) 10 times the daily room benefit limit provided, or
  (b) $1000
- Surgical benefits provided on the basis of fixed scheduled limits by procedure
- Accidental Death or Accidental Death and Dismemberment
- Cancer benefits on a fixed scheduled basis and/or benefits payable at stated time period rates

Unless contracts not meeting Type A requirements are limited to these kinds of benefits only, except for incidental benefits not material to the total benefit value, they are to be considered Type C contracts.

Type C. All other contracts.

NOTE with respect to Type of contract:

A contract may contain provisions qualifying it as a particular type, until a specified age or duration after which its provisions qualify it as another type. In such case, the contract during each period should be considered for reserve purposes according to the type to which it then belongs.

B. CONTRACTS REQUIRING NO CONTRACT RESERVE.

1. Contracts of any Type which cannot be renewed beyond one year.

*4 2. Contracts with which leveling premiums are not used.

3. Contracts already in force on the effective date of these standards for which no contract reserve was required under the immediately preceding standards.

C. CONTRACTS REQUIRING TABULAR RESERVES.

1. All other Type A or Type B contracts with which leveling premiums are used.

Tabular reserves are required, with respect to all such contracts, equal to or greater than minimum reserves calculated by methods and assumptions as specified in Section IVC2 following.

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*3 - Comment Number
*4 - Comment Number

2. MINIMUM STANDARDS FOR TABULAR RESERVES.

a. Interest. The maximum interest rate for tabular reserves is specified in Appendix A.

b. Termination Rates. Termination rates used in the computation of tabular reserve shall be on the basis of a mortality table as specified in Appendix A.

*5 Alternatively, for Type B contracts only, total termination rates may be used at ages and durations where these exceed specified mortality table rates, but not in excess of the lesser of:

(a) 90% of the total termination rate used in the calculation of the Gross Premiums, or

(b) 9%.

c. Morbidity or other contingency. Minimum standards with respect to morbidity are those specified in Appendix A.

d. Reserve Method. The minimum reserve is the mid-terminal reserve, on the basis of the two-year full preliminary term reserve method; that is, under which the terminal reserve is zero at the first and also the second contract anniversary.

e. Negative Reserves. Negative reserves on any benefit may be offset against positive reserves for other benefits in the same contract, but the total tabular reserve for the contract may not be less than zero.

3. TESTS FOR ADEQUACY AND REASONABLENESS OF TABULAR RESERVES.

At intervals of not greater than 3 years, the actuary responsible shall make an appropriate valuation of the insurer's prospective contract liabilities on contracts valued by tabular reserves, to determine the continuing adequacy and reasonableness of the tabular reserves. The insurer shall make appropriate adjustments to such tabular reserve if such tests indicate that the basis of such reserves is no longer appropriate; subject, however, to the minimum standards of this Section IVC.

D. CONTRACTS REQUIRING BENEFIT RATIO RESERVES.

*4 1. All other Type C contracts with which leveling premiums are used. Benefit ratio reserves are required, with respect to all such contracts, equal to or greater than minimum reserves calculated by methods and assumptions as specified in Section IVD2, offset by an expense deduction as provided in Section IVD3.

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*5 - Comment Number
*4 - Comment Number

2. MINIMUM STANDARDS FOR BENEFIT RATIO RESERVES.

a. If, upon the effective date of these Standards, a tabular reserve basis applies to any contracts otherwise subject to these requirements and then in force, such reserve basis shall continue to apply to such contracts, and tabular reserves shall be valued in accordance with the standards previously applicable to such reserves.

b. For all such contracts issued on or after the effective date of these Standards, benefit ratio reserves are required. Such reserves apply on an aggregate basis to all such contracts included in any one "contract group." Such aggregate reserve is determined as follows, as of any subsequent valuation date:

Let C = the accumulated value with interest, as of the valuation date, of all past claims incurred (without considering contract reserves) under the contracts affected, up to the valuation date;

Let G = the accumulated value with interest, as of the valuation date, of all past premiums earned (without considering contract reserves) on the contracts affected, up to the valuation date;

Let R = the applicable anticipated loss ratio for the contract group. Originally, this shall be the filed loss ratio (or composite of such ratios), or if no such ratio or ratios have been filed, a loss ratio as otherwise determined to be appropriate. As of the effective date or dates of any revision of the gross premiums, if the anticipated loss ratio applicable to such premium revision has changed, such revised loss ratio shall be used for accumulation of reserves related to premiums subsequently earned on the revised basis, while original loss ratios applying to previously earned premiums are continued unchanged.

However, following any revision to a "probable" loss ratio for the purpose of strengthening or releasing reserves as provided for in Section IVD6, all original values of R shall be replaced by their corresponding adjusted values R'.

The rate (or rates) of interest used to compute C and G above for each rate period shall be the same as that used to compute the corresponding value of R.

The benefit ratio reserve required is the amount B in the following formula:

$$\frac{C + B}{G} = R, \text{ or } B = (G \times R) - C$$

However, if B is negative as of the valuation date, the benefit ratio reserve shall be zero for that date.

Claims incurred in any statement period are not adjusted in accordance with subsequent paid claim development; that is, claims incurred remain on an accounting period basis.

*6 3. Reserve Expense Deduction.

a. An offsetting deduction from the benefit ratio reserve, as determined in accordance with Section IVD2, is permitted in recognition of excess first year expense incurred in each statement period. The maximum amount of this deduction as of any valuation date is the aggregate amount, with respect to each contract group separately, determined by the insurer to be appropriate when based on an annual expense amortization premium, expressed as a uniform percentage of the aggregate gross premiums, sufficient to amortize the excess expense value incurred in each statement period within 10 contract years, including the first year, subject to the following limitation:

1) The initial amounts of excess expense established for each statement period shall not exceed 60% of first year premiums received during each such statement period.

2) The net amount of reserve held may not be less than zero.

In amortizing the deduction, interest accumulation shall be at the same rate (or rates) as provided for in Section IVD2b.

*7 4. Superseded Contract Forms.

When any contract form is superseded by a successor form, intended to serve the same general prupose and market, such that a material number of replacements or conversions are to be expected (whether underwritten or not), the successor form must be included in the same contract group as the superseded form. with respect to any contract issued as a replacement or conversion of a prior contract, no new initial excess expense amount may be established.

5. TESTS FOR ADEQUACY AND REASONABLENESS OF BENEFIT RATIO RESERVES.

At intervals of not greater than 1 year, the actuary responsible shall make an appropriate valuation of the insurer's prospective contract liabilities, by each contract group subject to benefit ratio reserves, to determine the continuing adequacy and reasonableness of the anticipated loss ratios and expense amortization percentages underlying the contract reserves. The insurer shall make appropriate adjustments to its contract reserves if such tests indicate that the basis of such reserves, including expense deduction offsets, is no longer appropriate, subject, however, to the minimum standards set forth in this Section IVD. The prospective liability must be estimated for the remainder of the expected lifetime of each contract group.

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*6 - Comment Number
*7 - Comment Number

*8 6. PROVISIONS FOR STRENGTHENING OR RELEASE OF BENEFIT RATIO RESERVES

As stated in paragraph IVD5 preceding, the continuing appropriateness of the net benefit ratio reserve carried on each contract group is to be reviewed each statement year by the actuary responsible. In the event any contract group holding benefit ratio reserves shall be deemed by the actuary responsible to have either:

1. No substantial probability of ultimately attaining the anticipated loss ratio or ratios on which the reserve is based; or

2. A substantial probability of ultimately exceeding the anticipated loss ratio or ratios on which the reserve is based, in spite of any prospective premium increases that may reasonably be anticipated; or a substantial probability that excess expense amounts will not be amortized within 10 years after their inception;

then the actuary responsible shall determine an appropriate revised "probable loss ratio," R', and/or appropriate revised expenses amortization premium percentages, on which the net reserve in each case is to be determined. If more than one existing value of R is in effect for the group affected, the same increase or decrease in absolute percentage points shall be applied to all such values to obtain a corresponding set of R' values, or else all such R' values may be composited. The existing level of reserve in each such case shall be adjusted to the revised level within a period not to exceed 5 years, with respect to reserve strengthening; and within a period of not less than the lesser of (a) 5 years, or (b) the period during which any contracts subject to such excess reserves remain in force, with respect to release of excess reserves.

E. ALTERNATIVE VALUATION METHODS AND ASSUMPTIONS GENERALLY.

Provided the contract reserve on all contracts to which an alternative method or basis is applied is not less in the aggregate than the amount determined according to the applicable standards specified above, an insurer may use any reasonable assumptions as to interest rates, termination and/or mortality rates, and rates of morbidity or other contingency. Also, subject to the preceding condition, the insurer may employ methods other than the methods stated above in determining a sound value of its liabilities under such contracts, including but not limited to the following:

1. Alternate tabular reserves bases and methods may be used in lieu of either the tabular or benefit ratio reserves prescribed in this Section IV, including any of the following: optional use of either the net level premium or the one-year full preliminiary term method; use of interpolated terminal reserves based on actual anniversary dates, in lieu of mid-terminal reserves; prospective valuation on the basis of

*8 - Comment Number

actual gross premiums with reasonable allowance for future expenses; the use of approximations such as those involving age groupings, groupings of several years of issue, average amounts of indemnity; the computation of the reserve for one contract benefit as a percentage of, or by other relation to, the aggregate contract reserves, exclusive of the benefit or benefits so valued; the use of a composite annual claim cost for all or any combination of the benefits included in the contracts valued.

2. For benefit ratio reserves: the combining of similar contract groups, or combining of successive time intervals subject to different R values, using approximate composite values of R; or other reasonable groupings and approximate methods.

V. REINSURANCE.

Increases to or credits against reserves carried, arising because of reinsurance assumed or reinsurance ceded, must be determined in a manner consistent with the rate structures and all applicable provisions of the reinsurance contracts which affect the insurer's liabilities.

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RESERVE STANDARDS FOR INDIVIDUAL AND GROUP HEALTH INSURANCE CONTRACTS
APPENDIX A
SPECIFIC STANDARDS FOR MORBIDITY, INTEREST AND MORTALITY

I. MORBIDITY

A. Minimum morbidity standards for valuation of individual health insurance contracts of Types A and B are as follows:

1. Disability due to accident or sickness.

Contract Reserves:

Contracts issued on or after January 1, 1965 and prior to January 1, 1986:

The 1964 Commissioners Disability Table (64 CDT)

Contracts issued on or after January 1, 1987:

The 1985 Commissioners Individual Disability Tables A (85CIDA), or

The 1985 Commissioners Individual Disability Tables B (85CIDB)

Contracts issued during 1986:

Optional use of either the 1964 Table or the 1985 Tables.

Each insurer shall elect, with respect to all individual contracts issued in any one statement year, whether it will use Tables A or Tables B as the minimum standard. The insurer may, however, elect to use the other Tables with respect to any subsequent statement year.

Claim Reserves:

The minimum morbidity standard in effect for contract reserves on currently issued contracts, as of the date the claim is incurred.

2. Hospital Benefits, Surgical Benefits and Maternity Benefits (Scheduled benefits or fixed time period benefits only).

Contract Reserves:

Contracts issued on or after January 1, 1955 and before January 1, 1982:

The 1956 Intercompany Hospital-Surgical Tables.

Contracts issued on or after January 1, 1982:

The 1974 Medical Expense Tables, Table A, Transactions of the Society of Actuaries, Volume XXX, pg. 63. Refer to the paper (in the same Volume, pg. 9) to which this Table is appended, including its discussions, for methods of adjustment for benefits not directly valued in Table A: "Development of the 1974 Medical Expense Benefits," Houghton and Wolf.

3. Cancer Expense Benefits (Scheduled benefits or fixed time period benefits only).

Contract Reserves:
Contracts issued on or after January 1, 1986:
The 1985 NAIC Cancer Claim Cost Tables.

4. Accidental Death Benefits.

Contract Reserves:
Contracts issued on or after January 1, 1965:
The 1959 Accidental Death Benefits Table.

5. For all other contracts or benefits, contract reserves are to be determined as provided in the Reserve Standards. For all benefits other than disability, claim reserves are to be determined as provided in the Standards.

B. For group insurance contracts, morbidity assumptions for contract and claim reserves should be based on the insurer's experience or other assumptions designed to place a sound value on the liabilities.

II. INTEREST

1. For contract reserves on contracts issued prior to January 1, 1987 and for claim reserves on claims incurred prior to January 1, 1987: The greater of (i) the maximum rate permitted by law in the valuation of currently issued life insurance or (ii) the maximum rate permitted by law in the valuation of life insurance issued on the same date as the health insurance contract or the claim incurral date.

2. For contract reserves on contracts issued on or after January 1, 1987 and for claim reserves on claims incurred on or after January 1, 1987: The maximum rate permitted by law in the valuation of whole life insurance issued on the same date as the health insurance (for contract reserves) or the same date as the claim incurral date (for claim reserves).

III. MORTALITY

The mortality basis used shall be according to an ultimate table permitted by law for the valuation of whole life insurance issued on the same date as the health insurance contract.

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RESERVE STANDARDS FOR INDIVIDUAL AND GROUP HEALTH INSURANCE CONTRACTS
APPENDIX B
GLOSSARY OF TECHNICAL TERMS USED

INTRODUCTION. Use of the terms "reserve" and "liability."

In the definitions used for this Valuation Standard the term "reserve" is used to include all items of benefit liability, whether in the nature of incurred claim liability or in the nature of contract liability relating to future period of coverage, and whether the liability is accrued or unaccured. The terms "liability" and "reserve" are directly related and quite often the two terms are used to mean the same thing. Strictly speaking, the "liability" is the actual present value of the benefits that will ultimately be paid out, and cannot be known precisely until all benefits have been paid. The "reserve," on the other hand, is the insurer's estimate of that liability and is the amount actually carried in the insurer's financial statement to represent the liability.

An insurer under its contracts promises benefits which result in:

(a). Claims which have been incurred, that is, for which the insurer has become obligated to make payment, on or prior to the valuation date. On these claims, payments expected to be made after the valuation date for accrued and unaccrued benefits are liabilities of the insurer which should be provided for by establishing claim reserves.

(b). Claims which are expected to be incurred after the valuation date. The liability of the insurer for these future claims should be provided for by the establishment of contract reserves and unearned premium reserves.

ANNUAL CLAIM COST. This is the net annual cost per unit of benefit before the addition of expenses, including claim settlement expenses, and a margin for profit or contingencies. For example, the annual claim cost for a $100 monthly disability benefit, for a maximum disability benefit period of one year, with an elimination period of 1 week, with respect to a male at age 35, in a certain occupation, might be $12, while the gross premium for this benefit might be $18. The additional $6 would cover expenses, and profit or contingencies.

ANTICIPATED LOSS RATIO. The anticipated loss ratio for a grouping of contracts comprising a "contract group" is the ratio of the present value at inception of all benefits expected to be paid under such contracts, to the present value at inception of all gross premiums expected to be received under such contracts.

The anticipated loss ratio may vary according to issue age, class and plan, within such a grouping, so an appropriate composite value may need to be derived for the contract group in determining R under Section IVD2 of the Standards. Usually this should be the same value as that used in the filing of premium rates. However, not all rates are filed, and even filed rates may not always be accompanied with an associated "anticipated loss ratio." In such cases, an appropriate actuarial value of such ratio must be determined for compliance with the Standards.

Also, upon filing of increased rates for a contract group, the loss ratio filed with respect to the increased rates, or appropriate to such rates, may differ from the loss ratio originally filed or applicable, so that a set of values of R becomes appropriate.

Upon review of the continuing appropriateness of the benefit ratio reserve, as required under Section IVF of the Standards, it may be found that the value or values of R must be redetermined, due to experience varying from that which was expected. When the value or values of R are so redetermined at later durations, they become values of the "probable loss ratio," R', to which reference is made in Section IVG of the Standards.

BENEFITS PAYABLE AT STATED TIME PERIOD RATES. An example of this is a Daily Income Hospital policy that pays $25 of benefit for each day of hospital confinement up to a maximum duration of 90 days. Another example is a Disability Income policy that pays $300 a month (prorated daily) for each period of total disability after an elimination period of 1 week, with a maximum benefit period of 2 years. Time period rates that change according to a defined indexing rate are also considered "stated" rates.

BENEFITS THAT ARE SCHEDULED. One example of this is a Surgical Schedule which provides for different specified amounts payable depending upon the surgical procedure. Another example is a schedule of specified amounts payable for various specific losses under an Accidental Death and Dismemberment policy.

CLAIMS ACCRUED. These are that portion of claims incurred on or prior to the valuation date which result in liability of the insurer for the payment of benefits for medical services which have been rendered on or prior to the valuation date, and for the payment of benefits for days of hospitalization and days of disability which have occurred on or prior to the valuation date, which the insurer has not paid as of the valuation date, but for which it is liable, and will have to pay after the valuation date. This liability is sometimes referred to as a liability for "accrued" benefits. A claim reserve, which represents an estimate of this accrued claim liability, must be established.

CLAIMS REPORTED. When an insurer has been informed that a claim has been incurred, if the date reported is on or prior to the valuation date the claim is considered as a reported claim for Annual Statement purposes.

CLAIMS UNACCRUED. These are that portion of claims incurred on or prior to the valuation date which result in liability of the insurer for the payment of benefits for medical services expected to be rendered after the valuation date, and for benefits expected to be payable for days of hospitalization and days of disability occurring after the valuation date. This liability is sometimes referred to as a liability for unaccrued benefits. A claim reserve, which represents an estimate of the unaccrued claim payments expected to be made (which may or may not be discounted with interest), must be established.

CLAIMS UNREPORTED. When an insurer has not been informed, on or before the valuation date, concerning a claim that has been incurred on or prior to

the valuation date, the claim is considered as an unreported claim for Annual Statement purposes.

CONTRACT GROUP. This means any block of contracts which are appropriately combined for purposes of valuing benefit ratio reserves. The block may include all contracts of the same form number, or all contracts included in a group of form numbers providing closely similar benefits; or it may be a subdivision of contracts within a form number or group of form numbers which are appropriately combined for reserve purposes. It may be all certificates issued under a single group policy.

The decision as to what properly constitutes one "contract group" will depend upon the degree of homogeneity as to benefits, underwriting, period of issue, anticipated loss ratio and other relevant factors. It will also depend upon the credibility and size of the tentative group, since actuarial reserves can only have meaning and reliability when applied to a sufficiently large number of individual risks. Insurers, accordingly, who have relatively small volumes of in force business subject to benefit ratio reserves will normally need to establish broader and more heterogenous "contract groups" than those with large volumes of such business.

Contracts included within one form number of combined group of form numbers should not be subdivided for benefit ratio reserve purposes unless a specific and important actuarial reason exists for such subdivision.

CONTRACT ISSUED WITH GUARANTEED PREMIUM RATES. A contract which the insured person has the right to continue in force for a specified period, such as for 5 years or to age 65, by the timely payment of specified premiums. During the specified period the insurer has no right to unilaterally make any change in the premium rate or in the scale of specified premiums.

CONTRACT NOT ISSUED AT GUARANTEED PREMIUM RATES. Any contract under which the insurer has reserved the right to make changes in the premium rates, or under which the insurer has such an implied right because the insurer can elect to terminate the contract.

DATE OF DISABLEMENT. This is the earliest date the insured is considered as being totally disabled based on a doctor's evaluation or other evidence. Normally this date will coincide with the start of any elimination period.

DATE OF INCURRAL. The date upon which an insurer becomes obligated, in accordance with its contract, to pay for all losses that may arise as the result of the dated event.

ELIMINATION PERIOD. A specified number of days, weeks, or months starting at the beginning of each period of loss, during which no benefits are payable.

GROSS PREMIUM. The amount of premium charged by the insurer. It includes the net premium (based on claim cost) for the risk, together with any loading for expenses, profit or contingencies.

LEVEL PREMIUM. This is a premium calculated to remain unchanged throughout either the lifetime of the policy, or for some shorter projected

period of years. The premium need not be guaranteed, in which case, although it is calculated to remain level, it may be changed if any of the assumptions on which it was based are revised at a later time.

Generally, the annual claim costs are expected to increase each year and the insurer, instead of charging premiums that correspondingly increase each year, charges a premium calculated to remain level for a period of years or for the lifetime of the contract. The premium is more than needed to provide for the cost of benefits during the earlier years of the policy and less than the actual cost in the latter years. The building of a prospective benefit liability is a natural result of level premiums.

Examples of "level premiums" are:

(1) Step-rates, under which a lower premium is paid for some initial period of years, followed by a higher level premium to be paid during the remaining life of the contract; or by a series of increasing level premiums each to be paid over a period of years.

(2) A level premium payable to a specified age or duration (e.g., to age 65), followed by premiums based on attained ages at subsequent renewal dates.

LEVELING PREMIUM. A premium calculated to make advance provision for some portion of those annual claim costs which are expected to be incurred beyond the policy year to which the premium applies. "Leveling" premiums need not be calculated to remain level. "Level" premiums, however, are included within the term "leveling premiums," unless their calculation involves no advance provision for claim costs beyond the year to which each premium applies.

In any case where leveling premiums are used, contract reserves should be determined, consistent with the premium characteristics, unless it can be shown that any resulting contract reserves would be of immaterial value.

Examples of "leveling premiums" are:

(1) Attained age annual renewable term premiums calculated using claim costs containing margins that anticipate renewal anti-selection or wear-off of initial underwriting selection, so that incurred loss ratios are expected to increase by contract duration.

(2) Uniform premiums calculated using claim costs that anticipate future aging or anti-selection, such as premiums calculated for medical coverage upon conversion as of age 65 to Medicare supplement benefits.

An example of premiums that are NOT "leveling" premiums is:

Premiums calculated under a method usually identified as "community rating." This is a method of determining premiums annually for the financing of a health care plan under which the premium rates are based on the anticipated average cost of providing health care services to health plan members in a specific service area, over the year to which the rates apply. Distinctions may be made among broad risk classes such as individual vs.

family coverage, but costs for the year are averaged out for all members within each broad class.

MODAL PREMIUM. This refers to the premium paid on a contract based on a premium term which could be annual, semi-annual, quarterly, monthly, or weekly. Thus if the annual premium is $100 and if instead monthly premiums of $9 are paid then the modal premium is $9.

MID-TERMINAL RESERVE. This reserve is the average of the terminal reserve for two adjacent contract years. The mid-terminal reserve at the end of calendar year n + t for policies issued in year n is the average of the terminal reserve for durations t - 1 and t.

NEGATIVE RESERVE. The terminal reserve at the end of a contract year is defined as the present value of future unincurred benefits minus the present value of future premiums. Normally this results in a positive number. However, if the value of the benefits are decreasing with advancing age this could result in a negative number which is called a negative reserve.

PRELIMINARY TERM RESERVE METHOD. Under this method of valuation the terminal reserve for a one year preliminary term method is determined by assuming that the policy is issued one year later at an age one year older. At the end of the first policy year the terminal reserve is zero and at the end of the second policy year it is the first year terminal reserve for an age one year higher than the true issue age, etc., for the third and subsequent policy years. Similarly for a two year preliminary term method, at the end of the first and second policy years the terminal reserves are zero and at the end of the third policy year it is the first year terminal reserve for an age two years higher than the true issue age, etc., for subsequent policy years.

PRESENT VALUE OF AMOUNTS NOT YET DUE ON CLAIMS. See definition of CLAIMS UNACCRUED.

TERMINAL RESERVE. This is the reserve at the end of a contract year, and is defined as the present value of future unincurred benefits minus the present value of future premiums.

UNEARNED PREMIUM RESERVE. This reserve values that portion of the premium paid or due to the insurer which is applicable to the period of coverage extending beyond the valuation date. Thus if an annual premium of $120 was paid on November 1, $20 would be earned as of December 31 and the remaining $100 would be unearned. The unearned premium reserve could be on a gross basis as in this example, or on a net valuation premium basis.

VALUATION NET MODAL PREMIUM. This is the modal fraction of the valuation net annual premium that corresponds to the gross modal premium in effect on any contract to which contract reserves apply. Thus if the mode of payment in effect is quarterly, the valuation net modal premium is 25% of the valuation net annual premium.

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APPENDIX C
(Supplementary explanatory material)

RESERVES FOR WAIVER OF PREMIUM

Waiver of premium reserves involve several special considerations. First, the disability valuation tables promulgated by the NAIC are based on exposures that include contracts on premium waiver as in force contracts. Hence, contract reserves based on these tables are NOT reserves on "active lives" but rather reserves on contracts "in force." This is true for the 1964 CDT and for both the 1985 CIDA and CIDB tables.

Accordingly, tabular reserves using any of these tables should value reserves on the following basis:

Claim reserves should include reserves for premiums expected to be waived, valuing as a minimum the valuation net premium being waived.

Premium reserves should include contracts on premium waiver as in force contracts, valuing as a minimum the unearned modal valuation net premium being waived.

Contract reserves should include recognition of the waiver of premium benefit in addition to other contract benefits provided for, valuing as a minimum the valuation net premium to be waived.

If an insurer is, instead, valuing reserves on what is truly an active life table, or if a specific valuation table is not being used (e.g., because benefit ratio reserves apply) but the insurer's gross premiums are calculated on a basis that includes in the projected exposure only those contracts for which premiums are being paid, then it may not be necessary to provide specifically for waiver of premium reserves. Any insurer using such a true "active life" basis should carefully consider, however, whether or not additional liability should be recognized on account of premiums waived during periods of disability or during claim continuation.

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APPENDIX D
(Supplementary explanatory material)

ACTUARIAL MANAGEMENT OF THE BENEFIT RATIO RESERVE

1. THE BASIC CONCEPT

The basic actuarial concept underlying the benefit ratio reserve is that aggregate benefit net premiums (or valuation net premiums) for a reasonably homogeneous group of contracts may be satisfactorily approximated as a "level" percentage of the corresponding aggregate gross premiums. This percentage is equivalent to the ratio of the value of all expected benefits under the group to the corresponding value of all expected gross premiums.

The ratio itself is thus an estimate of the cumulative lifetime loss ratio, as measured at any valuation point during the lifetime of the group of contracts. This ratio, although "level" or "tentatively" constant, need not be fixed, but can be adjusted in the aggregate from time to time based on actual retrospective experience. At each valuation date the cumulative lifetime ratio can be adjusted, based on the retrospective experience to date. This may be done, for example, by measuring actual to expected loss ratios and trends and adjusting the original anticipated loss ratio for the group accordingly. Once an adjusted cumulative ratio has been so determined, a reserve can then be determined retrospectively as the excess of the accumulated value of benefit premiums over the accumulated value of incurred claims. This excess will be equal, assuming the estimated cumulative loss ratio is reliable, to the prospective present value of the excess of future claims over future benefit premiums. This reserve is called, in this Appendix and in the Reserve Standards, the "Benefit Ratio" Reserve.

The concept is similar, at the outset, to the net benefit reserve used with GAAP accounting, under which reserves are accumulated on the basis of a benefit net premium, with values determined using realistic assumptions as to morbidity, persistency and interest. It is an adaptation of the method described by George L. Hogeman in his 1973 paper published in TSA XXV, Part 1 (See 6. "References").

The process is illustrated, using policy year terminal reserves, in Exhibit 1 of this Appendix. Here the "contract group" is assumed to be 1000 identical level premium contracts all issued on the same date, at age 45 and renewable to age 65. The values shown project terminal reserve values for the initially issued 1000 contracts over a 20 year contract lifetime, based on expected morbidity and persistency as shown and at 7.5% interest. The 3 right hand columns of Exhibit 1 show the coventional net premium development, under the heading "Natural Net Premium Reserve."

The 3 columns under the heading "Benefit Ratio Reserve" show the corresponding development on this basis, with gross premiums anticipating a 56.48% loss ratio over the expected 20 year lifetime. The net premium of $265.27 is also 56.48% of the gross premium of $469.69. The yearly reserve increments and the aggregate accumulated terminal reserves are identical (the final accumulated residue, a negative $24, is the result of rounding. This ending value should of course be zero).

The identity of the 2 reserve accumulations here is obvious, the calculations themselves being exactly equivalent.

What, then, is different about the benefit ratio reserve method? The first difference is that it can be applied on an aggregate basis, subject to one key criterion, to broader groups of contracts than that illustrated in Exhibit 1. Thus, the "group" can be extended to all contracts of every issue age issued in the same year. It can be further extended to contracts issued over several years, including more than one plan of coverage and rating classification. The process illustrated in Exhibit 1 can readily be extended to these more complex "contract groups," because the added complexity may be dealt with implicitly, working with gross premiums aggregate to the entire contract group. The one key criterion is that the aggregated group of contracts can reasonably be assumed to be subject to one composite anticipated contract lifetime loss ratio. The same identical loss ratio need not be separately applicable to every sub-cell, as long as a composite value can reasonably be determined to be applicable in the aggregate. Thus, gross premiums for different issue ages will often be subject to varying anticipated loss ratios, but if an expected distribution of issued business can reasonably be compiled, a composite aggregate anticipated loss ratio can also be estimated, as is commonly done in individual policy rate filings.

This, however, brings us to the second difference. Given these added dimensions of assumed distributions of contracts issued, as well as the fact that the type of contract proposed to be subject to benefit ratio reserves is vulnerable to many factors that may lead to actual experience differing substantially from expected, it obviously becomes unrealistic to assume that appropriate reserves can be accumulated over any period of time locked in on the original assumptions. Were the entire accumulation to be locked-in on originally specified or expected assumptions, the valuation could stray so far from reality as to become meaningless, as is frequently the case with present attempts to value liabilities on such contracts using tabular methods, including GAAP benefit reserve methods. Actuarial prudence demands that original assumptions be periodically reviewed and tested, to determine whether they remain appropriate. This can best be done, and done in the aggregate, by valuing the reserve accumulation on the basis of actual retrospective experience, while at the same time using this actual experience to continually correct the lifetime retrospective/prospective anticipated loss ratio. The periodically corrected values will thus tend to move from the original "anticipated" loss ratio more and more in the direction of a "probable" loss ratio. Ultimately, when the lifetime history of the block of contracts has been completed, the "probable" loss ratio obviously will have evolved into the actual retrospective, fully developed lifetime loss ratio of the particular contract group. As the lifetime of the contract group becomes more and more advanced, while periodic correction is systematically continued, the "probable" loss ratio necessarily will move closer and closer to its actual ending value when all experience has become retrospective. Thus, retrospectively calculated reserves, based on increasingly confident probable loss ratios systematically corrected toward the prospective lifetime loss ratio of the group, will produce an increasingly balanced aggregate benefit valuation.

Provided this monitoring and correcting process is carried out, and provided the establishment of appropriate "contract groups," each subject to one

composite loss ratio, is determined with reasonable care, the method can serve as an effective and understandable aggregate basis for generating contract reserves. Moreover, it can be seen that it is an extraordinarily powerful and economical method, that cuts right through all the multiple arrays of subcells according to issue years, issue ages, rating classes and plans of coverage that must all be recognized in order to operate a conventional system of tabular reserve valuation.

While, at any one point in time, the anticipated loss ratio is viewed as a constant ratio, the implied net premiums themselves need not be at all constant or level. They will reflect the structure of the gross premiums: level, if the gross premiums are level; increasing, if the gross premiums are increasing. If the gross premiums anticipate inflationary trends for a number of years, or aging, or cumulative antiselection, so will the implied net premiums and in the same pattern. They duplicate, on a net basis, the rating structure on which the gross premiums are based, somewhat like a reduced holographic image reproduces on a diminished scale every dimension of the object it copies.

2. MORE COMPLEX SCENARIOS

The calculations involved are relatively simple and straightforward as long as the ratio (as estimated at any valuation date) of each year's net to gross premium is assumed to be constant. If this is not a reasonable assumption, or ceases to be such, then the calculation becomes more complex. For example, suppose that a stream of gross premiums are calculated to anticipate a loss ratio of 55% over an initial 10 year term period, and then 65% over the remainder of the policy lifetime. The reason for this might be that after 10 years only renewal premiums and renewal expenses remain, because the contracts are no longer issued. In such a case, it would be reasonable, at the outset, to calculate the aggregate benefit net premiums as 55% of the corresponding gross premiums, but after 10 years as 65% of then renewing gross premiums.

Another special situation would arise if a preliminary term period were to be used with the reserving method. Thus, the anticipated lifetime loss ratio might be 55%, whereas the anticipated lifetime ratio following a 2 year preliminary term might be 70%. One year term net premiums during the first and second years might have the anticipated values, say, of 20% and 40% of gross, respectively.

Still another complexity that may arise is the case where more than one single, constant rate of interest accumulation is involved. For example, a common practice in both gross and net benefit premium computation is the assumption of a higher initial interest rate, followed either by graded reductions or a lower ultimate rate after several policy years. Varying interest rates may be used in one aggregate benefit reserve accumulation provided each change in interest rate may reasonably be assumed to occur all at one calendar point in time. If this is not a reasonable assumption, then the contract group must be subdivided, for example, by year of issue blocks, to assure that the single aggregate interest rate assumption being used at any one point in calendar time remains reasonable.

Or suppose that the first premium increase takes effect. This may very well be accompanied with a change in the expected loss ratio, arising directly from the various assumptions entering into the calculation of the increment in the premium or of the adjusted premium. Average premium size alone in relation to "per contract" expenses may alter the loss ratio; or associated acquisition or renewal costs may have an impact. Thus, the very fact of a change in premiums may necessitate some adjustment in the composite loss ratio used to generate the benefit ratio reserve. There are several ways in which such an adjustment may be accomplished.

Exhibits 2 and 3 of this Appendix illustrate one such scenario, assumed to apply to the same group of 1000 originally issued contracts illustrated in Exhibit 1.

The assumption here is that rate increases become necessary, the first taking effect at the outset of the 5th year the group of contracts continue in effect. This is illustrated in Exhibit 2. This increase is designed to cover an expected 10% increase in morbidity. All other assumptions remain the same, even as to "first year" expenses assumed on the incremental premium, except that a one-time increase in renewal lapsation occurs at the end of the 5th year. The result is that this "5th year increment" develops, on its own, an anticipated loss ratio of 58.49%, as compared to the original 56.48% ratio illustrated in Exhibit 1. Exhibit 2 shows the incremental reserve development for the 5th year incremental premium only.

A second rate increase takes effect at the outset of the 8th year, to cover a second expected incremental increase in morbidity of 15% of the original level. Here, the combination of assumptions yields an anticipated loss ratio, for this increment separately, of 57.82%. Exhibit 3 shows the reserve development for the 8th year incremental premium only.

Further rate increases would be expected, further complicating the scenario, but these 2 are sufficient for our illustrative purpose.

Next, let us look at the aggregate results here on an "expected" basis only, under which the reserves accumulated for each of the 3 premium components are not adjusted for any changes from expected to actual. Exhibit 4 shows the total reserves, where the values arrived at are simply the summation of the 3 component parts, each remaining on its own original "expected" basis, somewhat similar to a tabular reserving method that recognizes each additional increment as it arises.

The 20 year development zeros out (except for rounding) but only because reality has been ignored, both as to actual morbidity and actual persistency (actual persistency, incorporating each of the two one-time increases in lapsation occurring upon rate increase, is shown in the left hand column of Exhibit 4).

Exhibit 5 shows the benefit ratio reserve basis, using actual retrospective experience. Beyond the 8th year, actual experience is assumed to be such that no further rate increases are required, to facilitate illustrative simplicity.

The middle column of Exhibit 5 shows the way the R and R' (anticipated and probable loss ratios) values are assumed to be handled. The second column shows the actual incurred loss ratios experienced year by year, which is what gave rise to the evident need for the 2 rate increases in the first place. Since actual to expected loss ratios were consistently above 100% and reached about 110% for the 3rd and 4th years, not only has our hypothetical actuary put a 5th year rate increase into effect; he also has begun a reserve strengthening process at year 5, since the benefit ratio reserve has by then become inadequate in relation to an increased expected lifetime loss ratio. This strengthening process is continued as the 8th year rate increase takes effect. In this scenario, by the 12th year it no longer appears that further rate increases or adjustment of the reserve ratio will be needed, and the strengthened value of R' is then held at 57.24%, as compared to the original anticipated loss ratio of 56.48%. After 20 years, where all the remaining contracts terminate, the negative ending reserve value reveals that the strengthened reserve basis proves out to have been just slightly deficient.

In truth, this is due to rounding. With the benefit of illustrative clairvoyance we have endowed our hypothetical actuary with the ability to make a quite precise forecast of a cumulative actual lifetime loss ratio of 57.24%. In an actual situation, further R' corrections would undoubtedly have been needed after year 12, as well as further rate increases after year 8. Had the need of these occurred, however, attempts to reserve by tabular methods or on a purely expected basis would have become very complex and also would have had a high likelihood of leading to reserves far removed from reality.

Since Exhibit 4 is shown only on an "expected" basis with respect to both morbidity and persistency, the accumulated reserve values are not directly comparable with Exhibit 5 values. A comparison can be drawn if the accumulated values are converted to terminal reserves per contract in force at any duration.

As an example, take duration 15. In Exhibit 4, the 15th duration aggregate reserve of $122,430 assumes 88.88 contracts to remain in force, as shown in Exhibit 1. This value of $122,430 is the sum of the aggregate amounts shown for duration 15 in Exhibits 1, 2 and 3. Actually, only 67.18 contracts remain in force at duration 15, so the Exhibit 4 aggregate is equivalent to $1822 per contract in force. In Exhibit 5, the more realistic development, $89,524 is the aggregate 15th duration reserve on 67.18 contracts still in force, which converts to $1333 per contract. Thus, Exhibit 4, assuming both lower morbidity and higher persistency, gives a 15th duration reserve that is conservative by 37% over the realistic Exhibit 5 value.

In the scenario illustrated in Exhibits 1 through 5, the eventual actual loss ratio and final R' value of 57.24% changes only modestly from the original 56.48% In many actual cases, or even in a scenario assuming more drastic adjustments, the cumulative change could easily be much greater and the need (and importance) of adjustment from original assumptions would likewise be much greater.

In Exhibit 6, the same illustrative contract is assumed as in Exhibit 1, but this time using annual renewable term rates, instead of level premiums. Morbidity and persistency is assumed to be the same as in Exhibit 1 (in actual practice,

this would be unrealistic, since heavier lapsation and more antiselection should be anticipated under an ART premium scale).

Exhibit 6, however, shows that, because select morbidity is assumed in the early years, benefit ratio reserves may be needed even with ART premiums and that they can reach quite substantial levels.

Exhibit 7 used the same morbidity and persistency as Exhibit 6, but provides an illustration under which two levels of anticipated loss ratio are used, rather than the single lifetime anticipated loss ratio of 61.4% used to generate the Exhibit 6 reserves. In Exhibit 7, an original anticipated loss ratio of 60% is adopted, on the expectation that the plan will continue to be issued and that the same ART premiums will apply to new as to renewing business. After 5 years, continued sale of the plan is discontinued and premiums become renewal only, with only renewal expenses involved. Accordingly, the actuary provides that continuing reserve development be based on a new anticipated loss ratio level of 63.8%, while retrospective reserves of the first 5 years are allowed to remain on a 60% basis. Note that the reserve burden is considerably relieved on this basis, although reserves remain substantial. The Exhibit 7 scenario is justifiable, because on a renewal only basis a higher portion of the gross premium can reasonably be regarded as an implicit net benefit premium. The proposed reserve standards provide for this multiple level method as the minimum reserve.

Rate increases, adjusting the ART scale, are of course to be expected, just as much as under the level premium scenario illustrated in Exhibits 2 through 5. Such changes would be handled in a comparable manner, but applied to the ART premium structure. The benefit ratio reserve method would handle this in virtually the same way as was illustrated for the level premium case, because recognition of the increasing ART scale would be implicit to the method.

3. RETROSPECTIVE STRENGTHENING OF RESERVES

When benefit ratio reserves are strengthened, as a result of an increased value of R', it will be evident that the increase in reserves is calculated on the basis of past earned premiums. This may appear improper, from an accounting point of view, as a form of "restatement" of past earnings. However, the actual increase in reserves is charged to the current accounting period, the accounting being the same as for any other type of reserve strengthening. It must be kept in mind that the reserves have exactly the same prospective purpose as any other actuarial type of reserve.

4. ADJUSTMENT FOR EXCESS FIRST YEAR EXPENSE

Section D3 of the Reserve Standards permits adjustment for excess first year expense. Exhibit 8A shows the effect of the Reserve Expense Deduction, by duration, for the same hypothetical block of contracts as that illustrated in Exhibit 1. Here, the development is carried out for a single year's new business.

Exhibit 8B, using another hypothetical scenario, illustrates the mechanics of this adjustment for a contract group with continued issue of new business over a period of several years.

5. MEASURES OF CONSERVATISM

The minimum standards for benefit ratio reserves provide for the use, initially, of the anticipated loss ratio as the minimum benefit ratio. This may or may not be a conservative value. If the value of expected benefits is conservatively determined (e.g., using conservative morbidity assumptions), then the anticipated loss ratio will be similarly conservative. However, if the value of expected benefits is determined on a most probable "realistic" basis, for example, with contingency margins separately and explicitly included in the gross premiums, the resulting anticipated loss ratio will not be conservative. In this case, the actuary responsible for the valuation should consider whether a conservative initial adjustment is in order, such as the use of 105 or 110% of the anticipated loss ratio as determined without contingency margins or conservative morbidity assumptions.

It must also be kept in mind that monitoring includes more than review of actual claim experience alone. Actual lapse rates and other factors must also be weighed.

6. ADDITIONAL ILLUSTRATION OF BENEFIT RATIO RESERVES

Exhibits 9-13 provide additional illustrative projections of benefit ratio reserves for another hypothetical group of issued contracts using level but adjustable premiums. In each of these an interest rate of 0% is used for simplicity and to aid readers in tracking the development. The radix, in each exhibit, is $1,000,000 of annual premium issued, rather than 1000 contracts as in Exhibits 1-7. Each exhibit summarizes the key assumptions peculiar to the particular scenario projected. Exhibit 13 illustrates the effect of one rate increase on the development of loss ratios and reserves.

7. REFERENCES

The following papers and their discussions are cited as useful and important references. Each of these papers contains discussion regarding inter-relationships between loss ratios, benefit reserves, and the interpretation of experience.

Adjusted Benefit Reserves for Individual Hospital and Individual Major Medical. George L. Hogeman: TSA XXV, Part 1, pg. 681.

The Individual Accident and Health Loss Ratio Dilemma. Joe B. Pharr: TSA XXXI, pg. 373.

Cumulative Antiselection Theory. William F. Bluhm: TSA XXXIV, pg. 215.

Regulatory Monitoring of Individual Health Insurance Policy Experience. John B. Cumming: TSA XXXIV, pg. 617.

STATEMENT 1987-12

EXHIBIT 1
Illustrative Major Medical Plan

INTEREST AT: 7.50 1,000 POLICIES ORIGINALLY ISSUED

		BENEFIT RATIO RESERVE INIT. GROSS PREMIUM: 469.69			NATURAL NET PREMIUM RESERVE INIT. NET PREMIUM: 265.27		
	PERSIST. SCALE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE
1	1000.00	26.33	141620	152242	46.61	141620	152242
2	683.35	40.88	50069	217484	72.38	50069	217484
3	506.62	51.40	12093	246795	91.00	12093	246795
4	400.94	60.90	-8324	256357	107.83	-8324	256357
5	335.07	70.12	-21468	252506	124.15	-21468	252506
6	293.43	74.21	-24437	245174	131.39	-24437	245174
7	256.96	78.48	-26549	235022	138.95	-26549	235022
8	225.03	82.89	-27919	222635	146.77	-27919	222635
9	197.06	87.37	-28593	208595	154.70	-28593	208595
10	172.57	91.92	-28729	193355	162.76	-28729	193355
11	151.12	96.69	-28542	177174	171.20	-28542	177174
12	132.34	101.81	-28178	160171	180.27	-28178	160171
13	115.90	107.42	-27731	142373	190.20	-27731	142373
14	101.49	113.54	-27202	123808	201.04	-27202	123808
15	88.88	120.09	-26555	104547	212.63	-26555	104547
16	77.83	127.02	-25787	84667	224.90	-25787	84667
17	68.16	134.30	-24915	64233	237.80	-24915	64233
18	59.69	141.91	-23951	43304	251.26	-23951	43304
19	52.27	149.93	-22943	21888	265.47	-22943	21888
20	45.77	158.40	-21910	-24	280.46	-21910	-24
	ANTICIPATED LOSS RATIO:		56.48%			100.00%	

STATEMENT 1987-12

EXHIBIT 2
Illustrative Major Medical Plan

INTEREST AT: 7.50 5TH YEAR INCREMENTAL PROJECTION

		BENEFIT RATIO RESERVE GROSS PREMIUM: 86.64			NATURAL NET PREMIUM RESERVE NET PREMIUM: 50.68		
	PERSIST. SCALE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE
5	335.07	37.02	6236	6703	63.28	6236	6703
6	278.90	44.64	3347	10804	76.32	3347	10804
7	234.29	51.84	1352	13067	88.61	1352	13067
8	198.60	58.89	-68	13975	100.67	-68	13975
9	169.81	65.88	-1087	13855	112.63	-1087	13855
10	146.43	69.31	-1372	13419	118.49	-1372	13419
11	126.28	72.90	-1576	12731	124.63	-1576	12731
12	108.89	76.77	-1724	11833	131.24	-1724	11833
13	93.90	80.99	-1830	10753	138.46	-1830	10753
14	80.98	85.61	-1902	9515	146.35	-1902	9515
15	69.83	90.55	-1939	8144	154.79	-1939	8144
16	60.22	95.78	-1945	6663	163.73	-1945	6663
17	51.93	101.27	-1924	5094	173.13	-1924	5094
18	44.78	106.99	-1882	3454	182.91	-1882	3454
19	38.62	113.05	-1825	1750	193.27	-1825	1750
20	33.30	119.44	-1758	-8	204.18	-1758	-8
ANTICIPATED LOSS RATIO:		58.49%				100.00%	

STATEMENT 1987-12

EXHIBIT 3
Illustrative Major Medical Plan

INTEREST AT: 7.50 8TH YEAR INCREMENTAL PROJECTION

		BENEFIT RATIO RESERVE GROSS PREMIUM: 152.27			NATURAL NET PREMIUM RESERVE NET PREMIUM: 88.05		
	PERSIST. SCALE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE
8	198.60	37.60	6115	6574	65.03	6115	6574
9	166.28	45.17	3204	10511	78.11	3204	10511
10	140.50	52.18	1208	12598	90.23	1208	12598
11	119.78	59.02	-218	13309	102.07	-218	13309
12	103.00	65.96	-1276	12935	114.07	-1276	12935
13	89.32	69.59	-1601	12184	120.35	-1601	12184
14	77.46	73.56	-1856	11103	127.21	-1856	11103
15	67.18	77.80	-2044	9739	134.55	-2044	9739
16	58.26	82.29	-2171	8136	142.32	-2171	8136
17	50.53	87.01	-2245	6332	150.47	-2245	6332
18	43.82	91.94	-2276	4360	158.99	-2276	4360
19	38.00	97.14	-2275	2242	167.98	-2275	2242
20	32.95	102.62	-2248	-6	177.47	-2248	-6
ANTICIPATED LOSS RATIO:			57.82%			100.00%	

STATEMENT 1987-12

EXHIBIT 4
Illustrative Major Medical Plan

INTEREST AT: 7.50 1,000 POLICIES ORIGINALLY ISSUED

		BENEFIT RATIO RESERVE INIT. GROSS PREMIUM: 469.69			NATURAL NET PREMIUM RESERVE INIT. NET PREMIUM: 265.27		
	PERSIST. SCALE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE
1	1000.00	26.33	141620	152242	46.61	141620	152242
2	683.35	40.88	50069	217484	72.38	50069	217484
3	506.62	51.40	12093	246795	91.00	12093	246795
4	400.94	60.90	-8324	256357	107.83	-8324	256357
		INCR. GROSS PREMIUM: 86.64			INCR. NET PREMIUM: 50.68		
5	335.07	64.96	-15232	259209	114.39	-15232	259209
6	278.90	70.38	-21090	255978	123.93	-21090	255978
7	234.29	76.12	-25197	248089	134.04	-25197	248089
		INCR. GROSS PREMIUM: 152.27			INCR. NET PREMIUM: 88.05		
8	198.60	72.56	-21872	243183	127.26	-21872	243183
9	166.28	79.48	-26476	232961	139.41	-26476	232961
10	140.50	86.04	-28893	219372	150.90	-28893	219372
11	119.78	92.76	-30336	203214	162.69	-30336	203214
12	103.00	99.73	-31178	184939	174.93	-31178	184939
13	89.32	106.25	-31162	165310	186.35	-31162	165310
14	77.46	113.42	-30961	144426	198.93	-30961	144426
15	67.18	121.16	-30538	122430	212.51	-30538	122430
16	58.26	129.45	-29903	99466	227.05	-29903	99466
17	50.53	138.25	-29085	75660	242.49	-29085	75660
18	43.82	147.54	-28108	51118	258.78	-28108	51118
19	38.00	157.44	-27043	25880	276.15	-27043	25880
20	32.95	168.00	-25916	-38	294.66	-25916	-38
ANTICIPATED LOSS RATIO:		56.71%				100.00%	

STATEMENT 1987-12

EXHIBIT 5
Illustrative Major Medical Plan

INTEREST AT: 7.50
1,000 POLICIES ORIGINALLY ISSUED

BENEFIT RATIO RESERVE
INIT. GROSS PREMIUM: 469.69

	PERSIST. SCALE	ACTUAL CLAIM %	R TO R'	RESERVE INCREMENT	ACCUM. RESERVE
1	1000.00	26.90	56.48	138900	149318
2	683.35	44.26	56.48	39204	202660
3	506.62	56.19	56.48	689	218601
4	400.94	66.84	56.48	-19522	214010
		INCR. GROSS PREMIUM:		86.64	
5	335.07	65.57	56.57	-15329	213582
6	278.90	74.29	56.67	-25605	202076
7	234.29	81.22	56.76	-29853	185139
		INCR. GROSS PREMIUM:		152.27	
8	198.60	70.23	56.86	-16504	181282
9	166.28	75.67	56.95	-19433	173988
10	140.50	80.62	57.05	-20521	164977
11	119.78	85.69	57.15	-20959	154820
12	103.00	91.04	57.24	-24671	139909
13	89.32	96.06	57.24	-24571	123989
14	77.46	101.54	57.24	-24314	107151
15	67.18	107.39	57.24	-23873	89524
16	58.26	113.59	57.24	-23262	71231
17	50.53	120.10	57.24	-22506	52380
18	43.82	126.90	57.24	-21628	33058
19	38.00	134.08	57.24	-20689	13296
20	32.95	141.65	57.24	-19710	-6894

ACTUAL LOSS RATIO: 57.24%

EXHIBIT 6
Illustrative Major Medical Plan
Annual Renewable Term

INTEREST AT: 7.50

1,000 POLICIES ORIGINALLY ISSUED

		BENEFIT RATIO RESERVE				NATURAL NET PREMIUM RESERVE			
	PERSIST. SCALE	GROSS PREMIUM	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	NET PREMIUM	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE
1	1000.00	349.82	35.35	91139	97975	214.79	57.57	91139	97975
2	683.35	369.70	51.93	23914	131031	227.00	84.58	23914	131031
3	506.62	390.91	61.75	-700	140106	240.02	100.58	-700	140106
4	400.94	413.31	69.20	-12933	136711	253.77	112.71	-12933	136711
5	335.07	436.75	75.41	-20498	124929	268.16	122.81	-20498	124929
6	293.43	461.09	75.59	-19202	113656	283.11	123.12	-19202	113656
7	256.96	485.97	75.85	-18040	102787	298.39	123.53	-18040	102787
8	225.03	511.51	76.12	-16939	92287	314.07	123.97	-16939	92287
9	197.06	538.21	76.25	-15747	82281	330.46	124.18	-15747	82281
10	172.57	566.60	76.20	-14471	72895	347.89	124.10	-14471	72895
11	151.12	597.19	76.05	-13218	64153	366.67	123.85	-13218	64153
12	132.34	629.99	75.90	-12093	55965	386.81	123.62	-12093	55965
13	115.90	664.65	75.91	-11178	48146	408.10	123.63	-11178	48146
14	101.49	701.17	76.06	-10431	40543	430.52	123.87	-10431	40543
15	88.88	739.55	76.27	-9773	33078	454.08	124.21	-9773	33078
16	77.83	779.79	76.51	-9169	25702	478.79	124.61	-9169	25702
17	68.16	833.81	75.65	-8101	18922	511.96	123.21	-8101	18922
18	59.69	887.83	75.07	-7246	12552	545.13	122.27	-7246	12552
19	52.27	941.86	74.77	-6581	6419	578.30	121.77	-6581	6419
20	45.77	995.88	74.70	-6065	381	611.47	121.67	-6065	381
	ANTICIPATED LOSS RATIO:			61.40%				100.00%	

EXHIBIT 7
Illustrative Major Medical Plan
Annual Renewable Term

INTEREST AT: 7.50 1,000 POLICIES ORIGINALLY ISSUED

	PERSIST. SCALE	GROSS PREMIUM	BENEFIT RATIO RESERVE EXPECTED CLAIM %	BENEFIT RATIO RESERVE RESERVE INCREMENT	BENEFIT RATIO RESERVE ACCUM. RESERVE	NATURAL NET PREMIUM RESERVE NET PREMIUM	NATURAL NET PREMIUM RESERVE EXPECTED CLAIM %	NATURAL NET PREMIUM RESERVE RESERVE INCREMENT	NATURAL NET PREMIUM RESERVE ACCUM. RESERVE
ANTICIPATED LOSS RATIO:			60.00%				100.00%		
1	1000.00	349.82	35.35	86242	92710	209.89	58.91	86242	92710
2	683.35	369.70	51.93	20377	121569	221.82	86.56	20377	121569
3	506.62	390.91	61.75	-3472	126954	234.55	102.92	-3472	126954
4	400.94	413.31	69.20	-15253	120078	247.99	115.34	-15253	120078
5	335.07	436.75	75.41	-22547	104846	262.05	125.68	-22547	104846
ANTICIPATED LOSS RATIO:			63.80%				100.00%		
6	293.43	461.09	75.59	-15955	95558	294.18	118.48	-15955	95558
7	256.96	485.97	75.85	-15043	86554	310.05	118.88	-15043	86554
8	225.03	511.51	76.12	-14176	77806	326.34	119.30	-14176	77806
9	197.06	538.21	76.25	-13201	69450	343.38	119.51	-13201	69450
10	172.57	566.60	76.20	-12125	61625	361.49	119.44	-12125	61625
11	151.12	597.19	76.05	-11052	54366	381.01	119.19	-11052	54366
12	132.34	629.99	75.90	-10092	47595	401.93	118.97	-10092	47595
13	115.90	664.65	75.91	-9329	41135	424.05	118.98	-9329	41135
14	101.49	701.17	76.06	-8723	34843	447.35	119.21	-8723	34843
15	88.88	739.55	76.27	-8195	28646	471.83	119.54	-8195	28646
16	77.83	779.79	76.51	-7712	22504	497.51	119.92	-7712	22504
17	68.16	833.81	75.65	-6737	16949	531.97	118.58	-6737	16949
18	59.69	887.83	75.07	-5974	11798	566.44	117.67	-5974	11798
19	52.27	941.86	74.77	-5399	6879	600.91	117.19	-5399	6879
20	45.77	995.88	74.70	-4971	2052	635.37	117.09	-4971	2052

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EXHIBIT 8A

Effect of Reserve Expense Deduction. Refer to Exhibit 1.

Initial Excess Expense	=	50% of 1st year premium.
Expense Amortization Premium	=	15% of aggregate gross premiums for 10 year amortization.

Valuation Year	Accum. Total Premium	Net Level Reserve	Accum. Excess (Initial 50% = 235)	Cumulative RED Amortization (at 15%)	Unamortized RED Deduction	Net Offset Reserve Held
1	467	152	243	73	170	0
2	856	217	262	128	134	83
3	1167	247	281	175	106	141
4	1450	256	302	218	84	172
5	1722	253	325	258	67	186
6	1994	245	350	299	51	194
7	2269	235	376	340	36	199
8	2548	223	404	382	22	201
9	2835	209	434	425	9	200
10	3132	193	467	470	0	193

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EXHIBIT 8B
Illustration of Benefit Ratio Reserve and Reserve Expense Deduction

Maximum Initial Excess Expense of 60%: Expense Amortization Premium calculated at 20% for 10 year amortization

New contract form, with no adjustment of loss ratio indicated, following monitor review.

An insurer places a new contract on sale in Statement Year 1. The "anticipated loss ratio" is 55%. The cumulative experience is calculated at 7% interest. The following is the assumed experience by statement year, year 6 being the last year the plan is issued:

	(All $ amounts in 000's) Statement Year					
	1	2	3	4	5	6
First Year Earned Premiums:	1200	2000	2400	2500	2500	500
Renewal Year Earned Premiums:	0	800	2200	3600	5200	6600
Total Business:						
Incurred Claims:	240	840	1790	3100	4180	4310
Earned Premiums:	1200	2800	4600	6100	7700	7100
Actual Loss Ratio (%):	20.0	30.0	38.9	50.8	54.3	60.7
Expected Loss Ratio (%):	18.0	32.0	41.0	49.0	55.0	60.0
Cumulative Experience and Net Level Benefit Ratio Reserve (At end of year):						
Claims:	248	1135	3066	6487	11265	16512
Premiums:	1241	4225	9279	16238	25340	34458
Loss Ratio (%):	20.0	26.9	33.0	39.9	44.5	47.9
55% Net Level Benefit Ratio Reserve:	434	1189	2038	2444	2672	2440
Reserve Expense Deduction*:	497	1193	1814	2231	2346	1351
Net reserve:	0	0	224	213	326	1089

* Calculation of Reserve Expense Deduction, at 7% accumulation:

	1	2	3	4	5	6
a. Initial Expense:	$745	$2038	$3670	$5479	$7414	$8243
b. Amortization:	248	845	1856	3248	5068	6892
c. Reserve Expense Deduction:	497	1193	1814	2231	2346	1351

(Totals above are not adjusted for rounding.)

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EXHIBIT 9
Benefit Ratio Reserve Model
Level Premiums

Assumptions:

Only one year's issues
0% interest
Persistency: 1.00, .70, .75, .80, .85, .88, .90 thereafter

Actual lifetime loss ratio equals anticipated lifetime loss ratio of 60%
No rate increase
No reserve adjustments

POLICY YEAR	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	ACCUMULATED VALUES: EARNED PREMIUMS	ACCUMULATED VALUES: INCURRED CLAIMS	ACCUMULATED VALUES: LOSS RATIO	R or R' *	BENEFIT RATIO RESERVE
1	1,000,000	400,000	40.0%	1,000,000	400,000	40.0%	60%	200,000
2	700,000	350,000	50.0%	1,700,000	750,000	44.1%	60%	270,000
3	525,000	315,000	60.0%	2,225,000	1,065,000	47.9%	60%	270,000
4	420,000	286,650	68.3%	2,645,000	1,351,650	51.1%	60%	235,350
5	357,000	243,653	68.3%	3,002,000	1,595,303	53.1%	60%	205,897
6	314,160	214,414	68.3%	3,316,160	1,809,717	54.6%	60%	179,979
7	282,744	192,973	68.3%	3,598,904	2,002,689	55.6%	60%	156,653
8	254,470	173,674	68.3%	3,853,374	2,176,365	56.5%	60%	135,659
9	229,023	156,306	68.3%	4,082,396	2,332,673	57.1%	60%	116,765
10	206,120	140,677	68.3%	4,288,517	2,473,350	57.7%	60%	99,760
11	185,508	126,609	68.3%	4,474,025	2,599,960	58.1%	60%	84,455
12	166,958	113,948	68.3%	4,640,982	2,713,908	58.5%	60%	70,681
13	150,262	102,554	68.3%	4,791,244	2,816,462	58.8%	60%	58,285
14	135,236	92,298	68.3%	4,926,480	2,908,760	59.0%	60%	47,128
15	121,712	83,068	68.3%	5,048,192	2,991,828	59.3%	60%	37,087
16	109,541	74,762	68.3%	5,157,733	3,066,590	59.5%	60%	28,050
17	98,587	67,286	68.3%	5,256,319	3,133,875	59.6%	60%	19,914
18	88,728	60,557	68.3%	5,345,047	3,194,432	59.8%	60%	12,594
19	79,855	54,501	68.3%	5,424,903	3,248,934	59.9%	60%	6,008
20	71,870	49,051	68.3%	5,496,772	3,297,985	60.0%	60%	79

* Also represents loss ratio including Benefit Ratio Reserve.

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EXHIBIT 10
Benefit Ratio Reserve Model
Level Premiums

Assumptions:

Only one year's issues
0% interest
Persistency: 1.00, .70, .75, .80, .85, .88, .90 thereafter

Actual lifetime loss ratio equals 55% or 5% less anticipated lifetime loss ratio of 60%
No rate increase
No reserve adjustments

POLICY YEAR	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	ACCUMULATED EARNED PREMIUMS	ACCUMULATED INCURRED CLAIMS	VALUES LOSS RATIO	R or R' *	BENEFIT RATIO RESERVE
1	1,000,000	350,000	35.0%	1,000,000	350,000	35.0%	60%	250,000
2	700,000	315,000	45.0%	1,700,000	665,000	39.1%	60%	355,000
3	525,000	288,750	55.0%	2,225,000	953,750	42.9%	60%	381,250
4	420,000	265,650	63.3%	2,645,000	1,219,400	46.1%	60%	367,600
5	357,000	225,803	63.3%	3,002,000	1,445,203	48.1%	60%	355,998
6	314,160	198,764	63.3%	3,316,160	1,643,909	49.6%	60%	345,787
7	282,744	178,874	63.3%	3,598,904	1,822,744	50.6%	60%	336,598
8	254,470	160,952	63.3%	3,853,374	1,983,696	51.5%	60%	328,328
9	229,023	144,857	63.3%	4,082,396	2,128,553	52.1%	60%	320,885
10	206,120	130,371	63.3%	4,288,517	2,258,924	52.7%	60%	314,186
11	185,508	117,334	63.3%	4,474,025	2,376,258	53.1%	60%	308,157
12	166,958	105,601	63.3%	4,640,982	2,481,859	53.5%	60%	302,731
13	150,262	95,041	63.3%	4,791,244	2,576,899	53.8%	60%	297,847
14	135,236	85,537	63.3%	4,926,480	2,662,436	54.0%	60%	293,452
15	121,712	76,983	63.3%	5,048,192	2,739,419	54.3%	60%	289,496
16	109,541	69,285	63.3%	5,157,733	2,808,703	54.5%	60%	285,936
17	98,587	62,356	63.3%	5,256,319	2,871,060	54.6%	60%	282,732
18	88,728	56,120	63.3%	5,345,047	2,927,180	54.8%	60%	279,848
19	79,855	50,508	63.3%	5,424,901	2,977,688	54.9%	60%	277,253
20	71,870	45,458	63.3%	5,496,772	3,023,146	55.0%	60%	274,917

* Also represents loss ratio including Benefit Ratio Reserve.

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EXHIBIT 11
Benefit Ratio Reserve Model
Level Premiums

Assumptions:

Only one year's issues
0% interest
Persistency: 1.00, .70, .75, .80, .85, .88, .90 thereafter

Actual loss ratio equals 55% or 5% less than anticipated lifetime loss ratio of 60%
No rate increase
Anticipated lifetime loss ratio, R, of 60% adjusted to a probable loss ratio, R', of 55% over a five year period, beginning in the 6th year

POLICY YEAR	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	ACCUMULATED VALUES EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	R or R' *	BENEFIT RATIO RESERVE
1	1,000,000	350,000	35.0%	1,000,000	350,000	35.0%	60%	250,000
2	700,000	315,000	45.0%	1,700,000	665,000	39.1%	60%	353,000
3	525,000	288,750	55.0%	2,225,000	953,750	42.9%	60%	381,250
4	420,000	265,650	63.3%	2,645,000	1,219,400	46.1%	60%	367,600
5	357,000	225,803	63.3%	3,002,000	1,445,203	48.1%	60%	335,998
6	314,160	198,706	63.3%	3,316,160	1,643,909	49.6%	59%	312,626
7	282,744	178,836	63.3%	3,598,904	1,822,744	50.6%	58%	284,650
8	254,470	160,952	63.3%	3,853,374	1,983,696	51.5%	57%	252,727
9	229,023	144,857	63.3%	4,082,396	2,128,553	52.1%	56%	157,589
10	206,120	130,371	63.3%	4,288,517	2,258,924	52.7%	55%	99,760
11	185,508	117,334	63.3%	4,474,025	2,376,258	53.1%	55%	84,455
12	166,958	105,601	63.3%	4,640,982	2,481,859	53.5%	55%	70,681
13	150,262	95,041	63.3%	4,791,244	2,576,899	53.8%	55%	58,285
14	135,236	85,537	63.3%	4,926,480	2,662,436	54.0%	55%	47,138
15	121,712	76,983	63.3%	5,048,192	2,739,419	54.3%	55%	37,087
16	109,541	69,285	63.3%	5,157,733	2,808,703	54.5%	55%	28,056
17	98,587	62,356	63.3%	5,256,319	2,871,060	54.6%	55%	19,914
18	88,728	56,120	63.3%	5,345,047	2,927,180	54.8%	55%	12,594
19	79,855	50,508	63.3%	5,424,903	2,977,688	54.9%	55%	6,008
20	71,870	45,458	63.3%	5,496,772	3,023,146	55.0%	55%	79

* Also represents loss ratio including Benefit Ratio Reserve.

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EXHIBIT 12
Benefit Ratio Reserve Model
Level Premiums

Assumptions:

Only one year's issues
0% interest
Persistency: 1.00, .70, .75, .80, .85, .88, .90 thereafter

Actual loss ratio equals 65% or 5% more than anticipated lifetime loss ratio of 60%
No rate increase
No reserve adjustments

POLICY YEAR	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	ACCUMULATED VALUES: EARNED PREMIUMS	ACCUMULATED VALUES: INCURRED CLAIMS	ACCUMULATED VALUES: LOSS RATIO	R or R' *	BENEFIT RATIO RESERVE
1	1,000,000	450,000	45.0%	1,000,000	450,000	45.0%	60%	150,000
2	700,000	385,000	55.0%	1,700,000	835,000	49.1%	60%	185,000
3	525,000	341,250	65.0%	2,225,000	1,176,250	52.9%	60%	158,750
4	420,000	367,650	73.3%	2,645,000	1,483,900	56.1%	60%	103,100
5	357,000	261,693	73.3%	3,002,000	1,745,593	58.1%	60%	52,798
6	314,160	230,122	73.3%	3,316,160	1,975,525	59.6%	60%	14,171
7	282,744	207,110	73.3%	3,598,904	2,182,635	60.6%	60%	0
8	254,470	186,399	73.3%	3,853,374	2,369,034	61.5%	60%	0
9	229,023	167,759	73.3%	4,082,396	2,536,793	62.1%	60%	0
10	206,120	150,983	73.3%	4,288,517	2,687,776	62.7%	60%	0
11	185,508	135,885	73.3%	4,474,025	2,823,661	63.1%	60%	0
12	166,958	122,296	73.3%	4,640,982	2,945,957	63.5%	60%	0
13	150,262	110,067	73.3%	4,791,244	3,056,024	63.8%	60%	0
14	135,236	99,060	73.3%	4,926,480	3,155,084	64.0%	60%	0
15	121,712	89,154	73.3%	5,048,192	3,244,238	64.3%	60%	0
16	109,541	80,239	73.3%	5,157,733	3,324,477	64.5%	60%	0
17	98,587	72,215	73.3%	5,256,319	3,396,691	64.6%	60%	0
18	88,729	64,993	73.3%	5,345,047	3,461,685	64.8%	60%	0
19	79,855	58,494	73.3%	5,424,903	3,520,179	64.9%	60%	0
20	71,870	52,645	73.3%	5,496,772	3,572,822	65.0%	60%	0

* Also represents loss ratio including Benefit Ratio Reserve
except where loss ratio excluding reserve is higher than R or R'.

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EXHIBIT 13
Benefit Ratio Reserve Model
Level Premiums

Assumptions:

Only one year's issues
0% interest
Persistency: 1.00, .70, .75, .80, .85, .88, .90 thereafter

Actual loss ratios for first 5 years 5% more than anticipated loss ratios (lifetime anticipated loss ratio = 60%)
An 8 - 1/3% rate increase implemented in the 6th year
Anticipated lifetime loss ratio, R, of 60% adjusted to a probable loss ratio, R', of 63% over a five year period, beginning in the 6th year

POLICY YEAR	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	ACCUMULATED VALUES: EARNED PREMIUMS	ACCUMULATED VALUES: INCURRED CLAIMS	ACCUMULATED VALUES: LOSS RATIO	R or R' *	BENEFIT RATIO RESERVE
1	1,000,000	450,000	45.0%	1,000,000	450,000	45.0%	60%	150,000
2	700,000	385,000	55.0%	1,700,000	835,000	49.1%	60%	185,000
3	525,000	341,250	65.0%	2,225,000	1,176,250	52.9%	60%	158,750
4	420,000	307,650	73.3%	2,645,000	1,483,900	56.1%	60%	103,100
5	357,000	261,503	73.3%	3,002,000	1,745,403	58.1%	60%	55,798
6	340,340	230,121	67.6%	3,342,340	1,975,523	59.1%	61%	63,364
7	306,306	207,109	67.6%	3,648,646	2,182,632	59.8%	61%	45,042
8	275,675	186,398	67.6%	3,924,321	2,369,030	60.4%	62%	64,049
9	248,108	167,758	67.6%	4,172,429	2,536,788	60.8%	62%	50,118
10	223,297	150,982	67.6%	4,395,726	2,687,770	61.1%	63%	81,537
11	200,967	135,884	67.6%	4,596,693	2,823,654	61.4%	63%	72,262
12	180,871	122,296	67.6%	4,777,564	2,945,950	61.7%	63%	63,915
13	162,784	110,066	67.6%	4,940,347	3,056,016	61.9%	63%	54,403
14	146,505	99,059	67.6%	5,086,852	3,155,075	62.0%	63%	49,642
15	131,855	89,154	67.6%	5,218,707	3,244,229	62.2%	63%	43,556
16	118,669	80,238	67.6%	5,337,376	3,324,467	62.3%	63%	38,080
17	106,802	72,214	67.6%	5,444,179	3,396,682	62.4%	63%	33,151
18	96,122	64,993	67.6%	5,540,301	3,461,674	62.5%	63%	28,715
19	86,510	58,494	67.6%	5,626,810	3,520,168	62.6%	63%	24,722
20	77,859	52,644	67.6%	5,704,669	3,572,812	62.6%	63%	21,129

* Also represents loss ratio including Benefit Ratio Reserve.

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March 31, 1987

Mr. James Leisenring
Director of Research and Technical Activities
Financial Accounting Standards Board
High Ridge Park
P.O. Box 3821
Stamford, CT 06905-0821

File Reference No. 036

Dear Mr. Leisenring:

The American Academy of Actuaries' Committee on Life Insurance Financial Reporting Principles is pleased to have the opportunity to respond to the Exposure Draft of the proposed Statement of Financial Accounting Standards "Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Insurance Contracts and for Realized Gains and Losses from the Sale of Investments."

While we recognize the need for authoritative guidance in the accounting for certain long-duration insurance contracts, we take strong exception to the proposed accounting standards and firmly oppose the adoption of the Exposure Draft in its current form.

Our major concerns with the Exposure Draft are summarized as follows:

* Premise - The foundation of the Exposure Draft rests on the false premise that there has been a fundamental change in the life insurance business since FAS 60 was adopted. Universal life products do not "encompass different risks and benefits" than those of traditional life insurance products.

* Perspective - In certain areas, the Exposure Draft disregards the fundamental precept in life insurance; the pooling of risks. The Exposure Draft is inconsistent in its acceptance of the aggregate "book of business" concept for the amortization of deferred acquisition costs, while rejecting the aggregate perspective for the determination of benefit reserves.

* Results - The combined reporting of financial results developed from two inconsistent accounting models will result in financial statements that are less useful to investors, analysts, or management. Trends in reported revenues, for example, will be rendered meaningless. Reported net income will not correlate in any meaningful manner with the economic performance of the insurance enterprise for the reporting period. There will be no meaningful way to interpret and compare results among companies.

Our reasons and supporting arguments for these conclusions are elaborated upon in the following paragraphs. In addition, we have specific concerns regarding many aspects of the Exposure Draft. A detailed paragraph-by-paragraph commentary on the Exposure Draft which identifies these concerns is attached as Enclosure A.

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Premise

The Exposure Draft is founded on the false premise that universal life insurance contracts encompass different "risks and benefits" than do traditional life insurance contracts. We firmly maintain that universal life and traditional life have far more similarities than differences. The differences between universal life and traditional life are not economically significant to the company, while the similarities between the products call for comparable results to be reported for both products.

Enclosure B discusses the similarities and differences between universal life and traditional life. The fundamental long-term risks of mortality, interest, lapse, and expense are the same for universal life as for traditional life. The underlying risks, markets, and policyholders have not changed. Although the mechanics of operating a universal life contract may differ from traditional life, such differences are not financially significant to the insurer. There is no compelling reason why profits should emerge to the insurer differently for a universal life than a traditional product simply because the universal life product has a more easily identified account balance and flexible features.

In short, we strongly disagree with the premise of the Exposure Draft that a new, distinct accounting model is needed for universal life insurance.

Perspective

At the heart of a life insurance enterprise is the concept of aggregate pooling; an insurer necessarily prices and manages its insurance products in the aggregate. At the aggregate level, universal life and traditional life are economically and conceptually identical. This aggregate viewpoint is the foundation of current life insurance accounting. It is described in the AICPA Audit Guide (p. 68) as follows: "The Committee concluded that the risk undertaking of a life insurance company consists of the pooling of individual risks..." (emphasis supplied).

The actuarial perspective is also one of focusing on the comparable aggregate cash flows of blocks of universal life and traditional whole life policies. However, the Board's perspective is one of focusing on the form of universal life and traditional whole life policies and, seeing differences, developing an accounting model for universal life that ostensibly takes account of universal life's "special" features.

Given the comparable economic substance of the two products, we believe FASB has placed undue significance on these design differences. Universal life can accomplish in one policy what previously required several traditional policies to accomplish for the same policyholder. The flexibility to adjust the premium and the amount of death benefit protection (subject to underwriting, as before) are important features from a marketing perspective, but these features produce the same de minimus effect on the expected behavior of a book of business as that which resulted from selling multiple traditional policies to a single policyholder in pre-universal life days. A majority of universal life policyholders pay the planned, or stipulated premiums. Since the expected behavior of a book of business is stable, contract flexibility has no economic significance for GAAP financial reporting purposes. It is our position that an industry's finanical reporting should be driven by its economic

perspective, rather than by the economic perspective of the purchaser of its products. The Exposure Draft has placed undue significance on the presence of contract flexibility features in attempting to justify the proposed universal life accounting standards.

We believe that FASB has also placed undue significance on the role of the account balance. An analogy to a bank account is inappropriate. While a bank can "sell" one bank account and be in the banking business, a life insurance company cannot sell one universal life policy and be in the insurance business. Instead it would be in the gambling business. The account balance is unlike a savings account and does not "accrue to the benefit of the policyholder." For products with surrender charges, the account balance cannot be received in cash. For all product types, the account balance is not a measure of the present value of future benefits to be provided to a single policyholder or to a group of policyholders.

We strongly urge FASB to recognize the aggregate concept in a consistent manner. The Exposure Draft mixes the notions of individual "accounts" and the "book of such contracts." The perspective of the Exposure Draft that liabilities are individual-oriented is contrary to any insuring, pooling or risk-sharing concept. In contrast, the Exposure Draft accepts the concept that deferred acquisition costs should be amortized on a block-of-business basis. Adoption of a single perspective for both sides of the balance sheet is an essential element of the conceptual framework of a suitable life insurance accounting model.

Results

Financial statements should be meaningful and useful to their users. The underlying accounting principles should acknowledge and reflect the economics of the industry. The result of implementing the Exposure Draft will be financial statements which will be difficult, if not impossible, to interpret, compare, and explain in a meaningful manner.

We strongly disagree with the notion that there is a need for two accounting models for the life insurance industry. The two accounting models (FAS 60 and the Exposure Draft), when placed side by side, are paradoxical. One is income statement-oriented, the other is balance sheet-oriented. One follows the fundamentals of insurance economics, the other tends to ignore the unique nature of life insurance in favor of conformity with rules from other industries which have questionable application to the insurance industry. One reports life insurance premiums in revenue, the other excludes such premiums from revenue. One requires actuarial assumptions to contain elements of conservatism. One treats the deferred acquisition cost asset as a monetary profit recognition for similar products with the same expected profitability, the other can produce different reported profits for similar products with the same expected profitability.

The existence of two models would encourage companies to redesign insurance products to produce desired accounting results. The fact that such changes could be accomplished without any significant change in the economic substance of the products to the insurance company also calls into serious question the wisdom of having two models.

In summary, we strongly believe that the two models cannot and should not coexist.

Conclusion

Despite many proposed changes, FASB has not developed a useful accounting method. The proposal lacks uniformity and consistency of principles. The users of life insurance company financial statements will be poorly served if the proposal is adopted in its present form.

While this comment letter reaffirms our positions previously presented in the American Academy of Actuaries Discussion Memorandum, "Accounting for Universal Life" and the subsequent AICPA Issues Paper, we recognize that FASB has rejected the views presented in those papers. Yet, we believe that there remains the potential to jointly develop a single accounting model which is satisfactory to both FASB and the actuarial and accounting professions. We stand willing to assist FASB in the process of identifying, developing, and implementing an approach that will effectively serve the life insurance industry and the users of its financial statements.

We appreciate the opportunity to comment on the Exposure Draft and look forward to working with FASB in future deliberations on the subject of life insurance accounting.

Yours sincerely,

(signed)

Edward Silins, Chairman
Committee on Life Insurance Financial Reporting Principles

ENCLOSURE A

American Academy of Actuaries
Committee on Life Insurance Financial Reporting Principles

The following comments refer to the paragraph numbers as used in the body of the exposure draft.

4. This paragraph makes specific reference to settlement annuities and guaranteed investment contracts as examples of limited payment contracts. However, other contracts such as 20 Pay Life, Life Paid-Up at 65 and similar traditional limited payment contracts appear to be included in the scope of the Exposure Draft. These traditional life contracts have been effectively handled under FAS 60 without any evidence of abuse and there seems to be no need to roll them into the scope of this Exposure Draft. An acceptable alternative is to include in the definition of limited-payment contracts only contracts that are purchased with fewer than ten annual premiums.

   Many guaranteed investment contracts are not limited-pay, but require annual payments. What rules are intended to apply for such contracts?

6. Subparagraph a. inadvertently fails to exclude non-level premium traditional life policies from the scope of the proposed Statement (such as yearly renewable term and graded premium whole life) for which premiums are fixed and guaranteed for the benefit period, but not level. The word "level" should be eliminated from this subparagraph.

   Subparagraph c. excludes all indeterminate premium products. This leaves the accounting for these products unresolved. This is a surprising omission since accounting for non-guaranteed premium products was a major focus of the AICPA's Issues Paper.

   Subparagraph d. should eliminate the word "life" from the reference to participating insurance contracts.

8. What does the statement mean "...shall be...accounted for in a manner consistent with the accounting for other interest bearing obligations"? Specific guidance or reference to an authoritative accounting statement would be useful.

   It is not clear if acquisition costs can be deferred for limited pay contracts without life contingencies. Unlike other financial institutions, insurance companies do have acquisition costs for this type of contract, such as commissions, which should be capitalized.

   Life insurance companies have typically issued GIC's and certain annuities that either include or exclude mortality risk. The marketplace does not require one form of contract over the other and companies have often included or excluded coverage for such risks for reasons unrelated to customer needs (e.g., federal income tax treatment of reserves). To have two different sets of accounting rules in a situation in which a company can freely choose to market one form of contract over the other will be subject to abuse.

9. The last sentence of this paragraph is not clear. Is it to be interpreted to mean that profits should be deferred and recognized over the benefit period of the contract? In other words, for contracts with life contingencies, is there to be a "deferred profit" liability? How is the statement "...a constant relationship with insurance inforce" to be interpreted for annuities? What does insurance inforce mean for a deferred annuity with a policyholder option to elect to receive payments at a future date? What about a pay-out annuity that has the first payment deferred for a specified period, but the pay-out is not at the option of the policyholder once the contract is inforce?

   Contracts that fall under paragraph 8 would not have premiums reported as revenues, whereas contracts that fall under Paragraph 9 would have premiums recorded as revenues. This inconsistent treatment can be easily avoided by adding a small life contingent benefit to an otherwise certain contract (i.e., add one contingent payment in the event the insured survives one year beyond the certain period.)

11. It does not make sense to have two accounting models, one which would include premiums on traditional life policies in revenue, and another which would not include premiums on Universal Life-type contracts in revenue. Premiums should continue to be reported as revenues even if the retrospective deposit accounting model is used. Otherwise, the revenues reported in insurance company financial statements will be rendered meaningless to all users of the financial statements.

    Revenue under paragraph 11 includes cost of insurance charges and expense loads which are deducted from the account balance, unless "...evidence suggests that the charge is designed to compensate the insurer for services performed over more than one period." What is the nature of such "evidence?" Is this to be determined at issue only or will it be subject to question every year? Clearly, many early year mortality charges (being aggregate as opposed to select) contain substantial amounts which are unrelated to mortality risks in those same years. Such amounts may be intended to cover expenses in early years, for example, and should not be deferred merely because of what the charge is labeled. Moreover, this aspect of the proposal is also inconsistent with the "earnings as realized" concept which is fundamental to a retrospective deposit method.

12. Surrender charges are "assessed against account balances" and do not relate to services provided in the year charged. Should they be deferred under the requirement of paragraph 11 or handled as described in paragraph 12? Obviously, the issue of measuring service performed must be addressed more fully, as it underlies any conclusions concerning the recognition of revenues.

    In addition, this "service" question gets to the heart of the issue concerning the separability of charges and the assumption that a specific charge is for only a single, related type of risk. In practice, charge elements do not stand on their own, and relate to more than a single type of risk.

We do not see that there is any rationale for having some charges (such as front-end fees and surrender charges) considered to be cost-recovery items, while other charges (such as mortality and level expense charges) are considered revenue margins. By treating these items differently, the provisions of the Exposure Draft will be a driving force behind new product design considerations. Products that are designed with larger mortality charges and level expense charges with smaller front-end loads or surrender charges may be accorded more favorable accounting treatment.

The language is also ambiguous with respect to the treatment of first-year expense charges. We presume it is intended to mean that excess first-year charges are to be used to reduce acquisition costs, rather than total first year charges.

13. The financial statements that will result from implementing this Exposure Draft will be very difficult to interpret. Certain information currently available in insurance company financial statements will be eliminated. For example, period-to-period changes in balance sheet items such as DAC and reserves will not correspond to the change in DAC and reserves shown in the income statement. Existing analytical tools based upon revenues, such as expense and loss ratios, will be rendered meaningless.

14. Footnote 3 to paragraph 14 contains the statement that "...acquisition costs that are expected to recur periodically be identified separately and charged to operations as incurred." What are recurring periodic costs for Universal Life-type products? FASB 60 contemplated recurring periodic costs as those costs which could be expressed as a level percent of premiums (i.e., as a level percent of the revenue stream). However, determining periodic costs is a problem for Universal Life-type products because recurring periodic costs will not necessarily be level as a percent of the revenue stream. Percent of premium expenses (such as premium taxes and renewal commissions) should in fact be capitalized and amortized as part of DAC since the revenue stream can no longer be presumed to be level in all cases. Just because a 2% premium tax is charged doesn't mean that there is a level period cost of 2% of premium.

16. The method of amortization of deferred acquisition costs ignores present value concepts. Incorporating the concepts of time-value of money in the determination of deferred acquisition costs will produce a better matching of revenue and expense. Our concerns regarding this issue are discussed more fully in the discussion of paragraph 47.

We further believe that any regular evaluations of expected gross profits used to amortize capitalized acquisition costs should be performed on a prospective basis only. The second sentence of paragraph 16 should be revised to read as follows:

> "Estimates of expected gross profit used as a basis for amortization of capitalized acquisition costs shall be evaluated regularly and future amortization shall be adjusted if evidence suggests that estimates of future gross profits should be revised."

Adjustment of amounts amortized to date is inconsistent with prescribed accounting treatment for other changes in estimates (i.e., a change in estimated useful life only impacts depreciation prospectively). Also, determination of such adjustments would present the practical implementation problem for most companies of maintaining historical records on actual surrender charges and other elements of the account balance operations. This would be a substantial undertaking requiring major systems revisions which could not be accomplished by most companies within the proposed timeframe.

17. Most companies pay lower commissions on internal replacement contracts in recognition of the fact that some acquisition costs had not yet been fully amortized on the replaced contracts. Contrary to the position of the Exposure Draft, it is more reasonable to permit unamortized costs on replaced contracts to be treated as acquisition costs on the universal life-type contracts to the extent that total acquisition costs on internal replacement contracts do not exceed acquisition costs on new universal life-type contracts. Otherwise, the reported flow of earnings from the same policyholders would be interrupted, since a loss would be advanced in exchange for reporting of future profits.

18. Since premium is no longer synonymous with revenue, the "premium deficiency" provisions of FAS 60 cannot literally be applicable to the proposed Statement. The final statement should include the requirements for loss recognition for contracts not covered by FAS 60.

20. There are significant practical concerns with the requirement of retroactive application. For most companies, the historical data required to comply is not available in any form. Most systems were not designed to capture data related to specific charges or costs; i.e., mortality charges, expense charges, and realized surrender charges. Transaction activity for the required level of detail is simply not identified or retained. Also, full data is generally not retained on terminated cases. There are companies which have changed computer systems during the restatement period. In general, the restatement requirement will necessitate historical revenues to be crudely estimated, at best. The data will not be easily obtained going forward either. There is not sufficient time to develop the needed systems within the proposed timeframe.

23. This paragraph does not offer any reasons why the Board concluded that a general reconsideration of life insurance accounting is not necessary at this time. In terms of the economic results to the company, the differences between UL and traditional are not significant, while the similarities between the products call for similar accounting treatment. The Exposure Draft contends that UL and other new products "encompass different risks" than contracts considered by FAS 60. The FASB paper does not support this contention.

26. The Exposure Draft significantly overplays the role of an account balance in contract operation as a distinguishing feature between UL and other contracts. A traditional product operates in the same fashion as a Universal Life product, i.e., the interest, mortality, and expense components of a traditional product can be separated just as they are for

UL (only they are more prominently disclosed to the purchaser of a UL product). While the mechanics of operations of traditional and UL products may differ, these mechanical differences are not financially significant to the insurer. There is no compelling reason why profits should emerge to the insurer differently for a traditional or a UL product simply because the UL product has a more easily identified account balance.

28. The paper states that "Participating life insurance contracts...usually contemplate the sharing of only favorable experience with the policyholder..." This is false. Unfavorable interest, mortality and expense experience can each be recognized in the dividend formula of traditional participating products. The paper also states that "The operation of participating life insurance...contracts does not usually center on a policyholder account." This is also false. Generally, internal account balances are maintained (i.e., the policyholder reserve or cash value) to establish equitable treatment among policyholders. Traditional participating policies possess the same esential economic characteristics as universal life products and should be accorded the same accounting treatment. It is not clear why FASB chose to carve out participating policies from the scope of the exposure draft.

30. We clearly agree with the first sentence that "...the elements of individual contract relationships are an inappropriate basis for differentiation among different types of insurance contracts." It is inconsistent to dismiss the aggregate pooling concept for the liability-side when the Exposure Draft clearly accepts the "book of business" concept for determining DAC. There is not basis for distinguishing between the advance funding feature of universal life and the advance funding feature of traditional life. Paragraph 30 is a crucial paragraph upon which most of the theory of the Exposure Draft rests. FASB has not provided a convincing argument against the thesis of this paragraph.

32. We agreed with the statement that premium collection does not, by itself, complete the earnings process. Similarly, the collection of mortality, expense, or surrender charges may not complete the process, or, by themselves, be representative of the level of services produced. As noted in paragraph 11, "such charges may benefit future periods." A determination of which periods benefit from each policyholder charge is impossible and a single purpose for each charge cannot be established. The Exposure Draft ascribes more importance to the specific charges than is warranted.

37. The paper implies that FASB believes that investment management is a predominant function of UL contracts. However, this is not generally true of UL contracts, and, in fact, the example contained in the exposure draft is a case in point. For the example shown in paragraph 63, profit from the mortality element over the first 20 years is $148,000 compared with profit from the investment element of only $94,000. In this example, the mortality element is 50% greater than the investment element.

Also, while policyholder discretion "suggests" a lack of homogeneity, the pooling of risks as evidenced by experience shows otherwise. Reasonable

estimates of aggregate policyholder activity are routinely developed and used effectively in pricing universal life.

42. It is not logical to have two accounting models, one which incorporates provisions for adverse deviation for traditional life insurance products and another which precludes the use of provisions for adverse deviation in accounting for Universal Life-type contracts.

More importantly, the FASB treatment indicates a lack of appreciation of the risk-taking function in an uncertain environment. Nothing is known about future experience with certainty and provisions for adverse deviation simply reflect the justifiable tendency to be conservative when evaluating an unknowable future. The inclusion of a moderate level of conservatism in the evaluation of uncertain future events should not be prohibited in the insurance industry. Provisions for adverse deviation do not reflect a desire to use "a less likely outcome...simply because it is less favorable to the entity." It reflects a desire for liabilities to be adequate more often than not and for reported earnings to be understated more often than overstated.

45. The view which the Board rejects is the fundamental principle which underlies FAS 60. If the Board disagrees with such a view, it follows logically that the Board should re-examine FAS 60 and reconsider the accounting model for all life insurance products.

The Board seems to believe that recognizing earnings ratably over the life of the contract to reflect a level pattern of service would cause some "front-ending" or anticipation of profits before they are "realized." In fact, the proposals of the AAA and AICPA would have proscribed "front-ending" of profits on single premiums and lump sum contributions, so as to produce results consistent with those described in the last three sentences of this paragraph.

47. This paragraph states that "...this statement breaks the linkage that exists in FAS 60 between the measurement of capitalized acquisition costs and the liability for future policy benefits." There is no logical reason why this "linkage" should be broken for UL products and not for traditional products. There is no fundamental difference in the nature of unamortized costs on universal life-type contracts. Nothing has changed to necessitate the treatment of DAC as a non-monetary item. There is an explicit interest cost associated with incurring upfront expenses (i.e., investment in the policy) which cannot be ignored. Companies design and price products in the aggregate, and the time value of money is critical in determining the ultimate price.

51. Front-end charges and surrender charges are both integral elements of the aggregate pricing process and should be considered as revenue. They are a source of profit not significantly different from mortality, interest or expense margins and should not be treated as being cost recovery items.

54. As previously discussed in Paragraph 17, we do not agree with the recommended treatment of internal replacement transactions. We strongly agree with the continuing deferral of net amounts related to

replaced contracts for the reasons which are stated in paragraphs 52 and 53 of the Draft, but rejected by the Board. The key point is that the long-term contractual relationship between the policyholders and the insurance company continues unchanged; no event has taken place to trigger a charge to earnings.

60. We agree with the alternative view that concepts of present value and discounting should be incorporated in the method of amortizing DAC. The elimination of interest in the discounting process ignores a basic tenet of life insurance economics and pricing of life insurance products.

61. We agree with the alternative view that the amortization of DAC should recognize the time-value of money.

62. As stated for paragraph 51, we agree with the alternative view that the accounting for surrender charges should be the same as the accounting for other cash flows produced by the book of insurance contracts.

63. The results shown in this illustration are illogical. Due to worse persistency, the revised estimate of gross profits for years 1 to 20 is less than the original estimate. However, the example shows that more rather than less profit is reported in the second year as a result of the worse experience. In the absence of this experience adjustment, the amortization of the DAC in the second year would have been $1,254 ($6,828 x .1837). However, as the example shows, the experience adjustment reduces the amortization of DAC to $1,024. This anomalous result highlights the problem with FASB's treatment of surrender charges as a cost recovery item.

    Economic performance, as indicated by the ratio of income to revenue, is not properly reflected by the results. As gross revenues increase, income can be a decreasing percentage of revenue over time. The following table summarizes the results for the example presented in the Exposure Draft. This table highlights the erratic, but generally decreasing ratios of income to revenue. Thus, it appears that performance has been poor when, in fact, expectations have been met.

STATEMENT 1987-13

Year	Gross Revenues $	Net Income $	Ratio of Income to Revenue %
1	29,005	6,249	21.5
2	29,100	5,574	19.2
3	32,845	6,831	20.8
4	37,200	8,015	21.5
5	41,864	9,178	21.9
6	45,754	9,818	21.5
7	49,177	10,235	20.8
8	52,240	10,468	20.0
9	55,063	10,600	19.2
10	57,749	10,734	18.6
11	60,144	10,719	17.8
12	62,443	10,688	17.1
13	64,887	10,814	16.7
14	67,137	10,854	16.2
15	69,209	10,856	15.7
16	71,125	10,723	15.1
17	72,900	10,532	14.4
18	74,696	10,460	14.0
19	76,433	10,382	13.6
20	78,250	10,236	13.1

Explanation of columns:

Gross Revenues = Mortality charges plus expense charges plus investment income

Net Income = (1 - amortization rate) x (estimated gross profit, as displayed in the Exposure Draft)

= (.8163) x (estimated gross profit)

Similarly, performance as indicated by return on equity measures is inconsistent with the economic results. Assuming that account balances equal statutory reserves, GAAP equity will be a steadily declining balance. However, income rises rapidly, as would return on equity measures.

The message to owners will be that performance immediately after issue has been very poor, but that it improves dramatically. This, of course, is completely incorrect, as original expectations will have been realized in all periods. The financial information which the proposal will provide to investors is clearly a poor indicator of past or future performance.

64. The example fails to apply paragraph 11 of the Exposure Draft, which requires the deferral of policyholder charges "that represent compensation for services to be provided in future periods." The relative mortality charges and mortality costs might suggest that some of the early charges should be deferred. This concept, introduced in the Exposure Draft without prior discussion, is not well defined and is not ever likely to be described tightly enough to be controllable in practice.

STATEMENT 1987-13

ENCLOSURE B

UNIVERSAL LIFE AND TRADITIONAL LIFE: Similarities and Differences

Introduction

In discussing GAAP accounting for universal life, there is an inordinate amount of emphasis placed on the differences between universal life and traditional life insurance. We believe that, in fact, there are far greater similarities than differences.

There is no question that universal life is a life insurance product which is "packaged" differently than traditional life. However, most companies are selling the product in the same markets in which they sold traditional life, and the economics for both the company and the policyholder are similar to those for traditional insurance.

It is a common misconception (admittedly fueled by many companies' marketing strategies) that universal life is predominantly an investment product. In fact, we are unaware of any UL products on the market today that rely on investment margins as the only source of profits for the product. Most UL products rely heavily on mortality and expense charges to provide most of the expected profit margin.

It can be argued that a given individual may have more flexibility in how he/she utilizes a UL policy relative to a traditional life policy. However, insurance operates on an aggregate or pooling of risk basis. This is why financial statements for insurance companies are presented and analyzed on an aggregate basis, and why a block of universal life is expected to be just as predictable relative to actuarial pricing assumptions as a block of traditional par or nonpar life insurance. In fact, when sold in the same markets as traditional insurance, universal life is likely to have similar experience. Should the product be sold in a different manner and in different markets, then different aggregate experience may logically be expected, and this would be taken into consideration in choosing the GAAP assumptions.

Universal life is today's version of traditional whole life insurance.

Similarities

The following highlights some of the similarities between the two products:

- Pricing procedures (e.g., combining all elements) and objectives (e.g., targeted internal rates of return, or benchmarks as to the present value of profits related to the present value of premiums) are similar.

- Both contracts have cash values that are based on premiums which are accumulated with interest and reduced by mortality and expense charges.

- For annual premium contracts, the insurance protection element predominates over the investment element for most traditional life products and most universal life contracts.

- Policyholder benefits provided by both contracts, such as death claims, surrender benefits, and policy loans, are similar.

- If premium payments are stopped, the universal life contract may remain in force in much the same way that traditional insurance goes on extended term, or automatic premium loan.

- The consumer is billed an agreed-upon, or stipulated, periodic premium under either a UL or a traditional contract. He is reminded to remit his premiums when due. These premiums are not random contributions to a savings account as bank deposits frequently are.

- Universal life allows the policyholder to pay level premiums, vary the premium up or down, or dump in lump sums. Although it is more difficult to do this under a traditional contract, the same result can be achieved by structural policy changes to an in force contract. It is a difference in degree, not in substance.

- Policy changes, such as increased or decreased coverage, may be allowed under both contracts.

- Many universal life contracts have simply taken the place of traditional contracts, while premium collection procedures on the old policies, such as bank drafts, or payroll deduction, have remained in place.

- Federal income and estate taxation to the policyholder is identical for both products.

- Agents' compensation for universal life contracts is generally similar to that for traditional life contracts. Both types of contracts pay agents' compensating amounts which are higher than for investment oriented products, such as single premium deferred annuities.

Differences

Some of the differences between universal life and traditional life insurance are as follows:

- Interest rates and mortality charges are fully guaranteed for nonparticipating traditional insurance, whereas, a "current" rate of interest can be credited on the UL cash values without subjecting the insurance company to the risks which guaranteeing such a credited rate would involve. This feature is probably the most important distinction between universal life and traditional life. As to UL guarantees, virtually all UL products have interest and mortality guarantees that are comparable to their traditional counterparts.

- Universal life provides the policyholder with a detailed breakdown of the income (e.g., premiums, interest credits) and expense (e.g., mortality and expense charges) elements. This is referred to as unbundling the insurance and investment elements of the policy. Traditional insurance provides only an aggregate end result in the form of contractually guaranteed benefits. The form is different, but the substance is the same. The policyholder cannot elect to have one element of the policy and not the other.

  Some UL contracts have flexible payment features, unlike traditional contracts.

STATEMENT 1987-14

STATEMENT OF THE AMERICAN ACADEMY OF ACTUARIES PENSION COMMITTEE BEFORE THE SUBCOMMITTEE ON OVERSIGHT OF THE COMMITTEE ON WAYS AND MEANS ON THE ADMINISTRATION'S PENSION PLAN FUNDING AND PREMIUM RATE PROPOSALS

THURSDAY, APRIL 9, 1987

Larry Zimpleman
Chairman, Academy Pension Committee

We are pleased to have the opportunity to be here this morning and to present our views. The American Academy of Actuaries is a professional association of actuaries formed in 1965 to bring together into one organization all qualified actuaries in the United States and to seek accreditation and greater public recognition for the profession and more effective public service by the profession.

The Academy's primary activities include liaison with federal and state governments, relations with other professions, and the development of standards of professional conduct and practice.

Over 8,400 actuaries in all areas of specialization belong to the Academy. These members are employed by insurance companies, consulting actuarial firms, government, academic institutions, and a growing number of industries. Of special interest, because of these hearings, our membership includes over 85% of the enrolled actuaries certified under ERISA to perform actuarial valuations. Therefore, we have a strong interest in seeing the development of workable and realistic proposals that will continue to allow our private pension system to be successful.

As enrolled actuaries, we believe we have unique insights into aspects of the Administration's proposals that would not be commented on by others. We are happy to have the chance to share these thoughts with you today.

Introduction

We have testified in the past of our belief that we should have a vital, dynamic private pension system. Further, we have suggested that we should have a national retirement income policy in place as a standard against which to measure suggested changes to the private pension system. It is imperative that the Congress review all legislation on employee benefits from the standpoint of retirement security as well as the effect on tax receipts.

There are several key elements that should make up this policy:

1. Retirement income should be adequate. Adequacy should be measured in terms of pre-retirement spendable income. Retirement income from all sources (Social Security, private pension, savings, etc.) should be used to measure adequacy. The employee shares in this responsibility.

2. There should be incentives so that as many people as possible are covered under private pension plans. This is in part a way to ease the financial burden on government programs.

3. We need to recognize changing demographic and working patterns. People are living longer and retiring earlier. People rarely work for the same employer during their entire career. This has financial implications that are quite dramatic for industries that are in different stages of their growth cycle.

4. Not only should retirement income be adequate at retirement, but it should remain so during the retirement years. This issue is also important for those employees who change jobs during their career and may end up with pieces of income at retirement that are not are not as great as if they had been employed by a single employer.

5. Finally -- and most germane to the hearing today -- the private program must be appropriately funded, thereby spreading the cost ratably over the years to retirement. As enrolled actuaries, we believe we have expertise that will help to focus on this issue. Without adequate funding, all of the other elements of national retirement income policy are meaningless.

Administration Proposals

The executive summary to the Administration's proposals says that public policy should encourage optimal, rather than deficient or excessive, funding of pension obligations. We agree. The difficult task is to define what is meant by "optimal funding".

Over the last few years, a trend has developed that seems to define "optimal funding" in terms of plan termination liability. This has arisen partly because of publicity about the Pension Benefit Guaranty Corporation's (PBGC) losses on recent terminations and partly because of external factors such as standards developed by the Financial Accounting Standards Board (FASB).

While optimal funding should be based on plan termination liability in terms of the PBGC, optimal funding for an ongoing plan may be quite different. We believe that any proposal should consider optimal funding from the standpoint of an ongoing basis, rather than a plan shutdown basis. We will comment later on how some of the specific proposals for change in the minimum funding standard might be changed to operate more on an ongoing plan basis.

Another of the major policy concepts underlying the Administration's proposals is that plan termination rules should be modified so that participants will receive their full accrued benefit and the PBGC will be protected.

The Asset Reversion Implementation Guidelines prepared in May 1984 require that full accrued benefits be provided and that annuitization of benefits occur before plan assets can be recovered in a spinoff/termination or a termination/re-establishment. We believe these rules are an example of a workable, practical approach that provides employers with flexibility and still provides benefit security to employees. The challenge will now be to establish rules that will help borderline plans stay funded to minimize the PBGC's liability.

While it is true that the "cushion" in a defined benefit plan is removed under the Implementation Guidelines, this is really a temporary situation. Our experience indicates that in a typical economic scenario most plans would once again develop sufficient assets within five to ten years following a spinoff/termination or a termination/re-establishment to fund termination liabilities. Any funding problem in such cases tends to be minimal because past service is seldom granted in either instance.

We agree that there are examples where employers will receive excess assets from one plan while at the same time maintaining an underfunded plan that may need to shift liabilities to the PBGC. However, rather than use the controlled group approach, we would suggest that we assist the Administration and the Congress in developing minimum funding rules for all plans that would be more likely to avoid severe underfunding. Having controlled group rules would be a serious impediment to normal business activity and would add to the difficulty of trying to maintain defined benefit plans. We would be happy to expand on this for you.

Employer Access to Plan Assets

The Administration's proposal for withdrawal of assets from ongoing defined benefit plans are quite complicated. As we said earlier, we believe the Implementation Guidelines have worked well and have done a good job of striking a balance between employer flexibility and benefit security to employees. In some ways, the Administration proposal may actually reduce benefit security:

1. There is no requirement for 100% vesting of accrued benefits before any asset withdrawal. The Implementation Guidelines require 100% vesting of accrued benefits and purchase of annuities before any asset reversion.

2. If a plan termination causes an employer (and the controlled group) to exit the defined benefit system entirely, the employer could not establish a defined benefit plan for five years. We see no value in this. Further, once the five year period is up, the employer could establish a defined benefit plan and then grant past service back to the plan termination dates. The Implementation Guidelines do not have this five year rule.

The minimum benefit security is set at 125% of the plan termination liability (subject to a test on the unit credit funding method). First, there are few newer plans that would be funded at this level. Second, we would like to know the basis used to arrive at the 125% figure (and the 110% figure if annuitized).

An example of the way in which asset reversion on plan termination occurs may highlight why these rules are confusing at best. Assume an employer maintains two hourly plans and a salaried plan. Assume all are funded exactly at the minimum benefit security level at all times. By terminating first the hourly plans and then transferring the 25% (or 10%) cushion to the salaried plan, the employer could significantly increase the funding of the salaried plan. This would allow benefits to be increased for the salaried plan and thereby benefit only a select few employees. None of this would be done under present law because of the exclusive benefit rule. We see no justification or rationale for this kind of activity, although use of excess assets for retiree health benefits seems to be appropriate.

The proposed rules on sponsorship and asset transfers are also very confusing. The proposal is meant to deal with the underfunding issue, but in fact requires that some of excess assets be removed from the plans. The focus should be changed to deal with the transfer of underfunded plans from the controlled group. The Multiemployer Pension Plan Amendments Act dealt with an issue similar to this by creating the concept of withdrawal liability. While we are not necessarily endorsing that idea, we believe it is more appropriate to focus on underfunded plans rather than overfunded plans in controlled group situations.

One final point. Our reading of the rules for collectively bargained plans says that an employer will not be considered to have exited from the defined benefit system so long as participation is maintained in a multiemployer plan. As mentioned earlier, it may be necessary to continue in the multiemployer plan to avoid withdrawal liability. Assume the employer terminates all plans (which have excess assets) except for the multiemployer plan. Does all of the excess go to the multiemployer plan? Why?

Minimum Funding Standards

This explanation of the Administration proposal says it is primarily directed at improving the funded status of plans that are underfunded on a termination basis. Our analysis of the proposed changes indicates this will, indeed, occur. However, we would remind the Congress that the minimum funding standards in ERISA were not established with a plan termination concept in mind. We believe it is unfair to criticise these standards as not accomplishing their purpose, since we believe their focus was for proper funding on an ongoing plan basis.

If it is the intent of the Congress to shift the focus in such a way that the minimum funding standards are be geared towards a plan termination perspective, that is a separate tax policy decision. However, other results will occur:

1. Contribution requirements for many plans will be increased. This occurs because of the shorter amortization periods. Below is a table showing the increase in the amortization payment needed to move the period up from thirty years (the present minimum funding period).

If Period is Changed to:	The Amortization Payment Increases by:
20 years	12%
10	66%
5	196%
3	335%

These increases are based on a $7\frac{1}{2}\%$ interest assumption.

Since the minimum funding standard includes both normal cost and amortization payment, the minimum funding amount will not increase by this amount. But all contribution levels will be increased.

2. Plans which are sponsored by marginally profitable employers may need to be terminated. This will put further burden on the PBGC in the short run.

3. Benefit increases will be less likely to occur due to the additional financial strain caused by shorter amortization periods. As an alternative, benefit increases will be restricted to future service only.

Based on our experience with thousands of defined benefit plans, the vast majority of plans are adequately funded on both an ongoing and terminating plan basis. Experience from the PBGC shows that 95% of plans that terminate are sufficiently funded to meet liabilities upon termination. While that does nothing to remove the heavy financial burden currently placed on the PBGC, we believe it is important to remember that any changes in minimum funding standards should be geared towards the small minority of the universe that is underfunded.

Which plans are most likely to have funding problems? More often than not, it is a union-negotiated plan with a benefit formula that credits a certain benefit amount (e.g., $15 or $20) for each year of service. The common labor practice is then to review the multiple at the end of each collective bargaining agreement and re-establish (increase) the benefit multipler due to increased employer contributions. Most importantly, this increase in benefit multiplier applies to future service and to past service. In effect, the employer is granting benefit increases for past periods when no funding has yet taken place. The cycle then repeats itself at the end of the next collective bargaining agreement.

Current rules on deductible contributions under Section 404 say the shortest permissible time for amortizing past service liabilities is ten years. Remember that the increases in past service benefits often occur every two or three years. Required deposit levels must increase at a rate much faster than the benefits in order to keep up.

Another problem also limits the funding of these benefit increases. Although there is an established pattern of benefit increases (and sometimes even a schedule in the plan that lays out future benefit increases), current funding regulations require that only the benefit multiplier in effect in the current plan year can be recognized in calculating the minimum funding standard (Revenue Ruling 77-2). This is a short-sighted approach which contributes to the underfunding problem. Another approach would be to allow the minimum funding amount to be calculated by taking into account expected future benefit increases. This is similar to what is done on salary-related plans where the benefit is related to final average pay. By projecting pay to the years before retirement, the funding is based on expected future benefits.

This is one of the major reasons why hourly and salaried plans for the same employer have different levels of funding.

The funding problem can be exacerbated even further when a decline in contributions occurs to the union-negotiated plan. Contributions are often tied to some measure of production (hours worked, tons of steel produced, etc.). If production (and contributions) decreases, unfunded liabilities can increase in a short period of time.

STATEMENT 1987-14

We suggest that serious consideration be given to changing the regulations on minimum funding of non-salary related plans to allow for expected future benefit increases. This will allow funding to occur on a more orderly basis and will recognize the expected benefit in effect when each person retires.

The Administration's proposals for minimum funding are built around the concept of a "funded ratio". The ratio is the actuarial value of plan assets to 110% of the plan termination liabilities. We would like to know what basis was used to arrive at the 110% figure. As enrolled actuaries, we would like to offer our expertise to you and your staff to judge the method used to determine the adequacy of this ratio. The plan termination liability is also based on all fixed and contingent benefits as if the plan had sufficient assets. This is a much more stringent test than present law requires. We see no justification for this.

It is likely that once a plan reaches the 100% funded ratio, it will try to adopt an investment approach that will maintain that funding level. Another way of saying this is that the sponsor will invest in assets that correlate with the plan termination liability. This means fixed income investments and less use of ownership investments like common stock, real estate, etc. This more conservative investment policy may not be in the best long-run interest of plan participants. Plans with less than a 100% funded ratio may be encouraged towards higher-risk investments to achieve higher returns. This is also not in the interest of the plan participants.

The amortization period for the unfunded accrued liability is tied to the maturity of the plan's liabilities. Is this to be trued up every year? Or only when events such as benefit increases occur?

This shorter amortization period will be especially difficult for new plans. Changes to tax laws -- in particular the change in the Tax Reform Act to pro-rate the Section 415 limit over years of plan participantion -- limit the effect of counting past service. We would suggest that the amortization period for new plans be no shorter than ten years.

We believe the changes in handling for waived contributions are reasonable as drafted.

The cash flow rules are an example of a rule that will add confusion for some plan sponsors. Current funding methods allow the employer to have a reasonably level and budgetable cost each year. The cash flow rules will add volatility to the minimum contribution. New plans will need to be exempted from the rule to avoid very cyclical contributions. Further refinement will be needed to take into account things such as the use of insurance to cover lump sum death benefit payments, purchase of annuities at retirement, lump sum cash retirement benefits, etc. We suggest this rule be seriously reviewed and hopefully eliminated.

The proposal requires that the minimum funding contribution be made on a quarterly basis with a final payment within two and a half months after the close of the plan year. This is again not practical. Before the required contribution can be calculated, it is necessary to gather census data and perform the necessary actuarial calculations. Quite often this takes six months or more to complete. It may be necessary to estimate the quarterly

contribution for several quarters. Completion of the actuarial valuation may show that the amounts are in excess of the amount allowed. The Tax Reform Act imposes a 10% excise tax on any contributions that are not deductible.

Finally, the proposal increases the interest rate used to amortize any minimum funding amount which has been waived. Amortizing liabilities at two interest rates (part at the actuarial valuation rate; part at the S&P rate for B rate bonds) is a needless complication. It does not add significantly to benefit security. We hope this provision can be dropped.

Summary on Minimum Funding

The Administration proposal changes the concept of minimum funding to a terminating plan concept. This is a change in tax policy that needs to be recognized.

This will lead to higher contribution levels for many plans -- expecially in the early years when there are usually unfunded past service liabilities. This increase will be greatest for plan sponsors least able to afford the increase (such as auto and steel).

We have tried to estimate the cost impact of the new proposal on a handful of small plans (most of the plans have benefit formulas of the dollars times years of service variety). Increases in the minimum funding standard range from very little for mature, salary-related plans to 20-30% for newer plans that are moving towards a fully funded position, to as much as 140% increase for a plan that has frequent benefit increases. The cash flow rule has a significant impact on a couple of these plans because of retirements in the first few years. The cash flow rule causes increases of 240% and 563% on two of the plans in one particular year. This is due to the purchase of annuities by the plan at normal retirement.

We would make these suggestions:

1. Any changes in minimum funding standards should be aimed at the small percentage (2-5%) of plans that are underfunded on a plan termination basis and are likely to remain so. We would like to work with the Congress and the IRS to develop alternatives to current funding regulations to better take into account expected future benefit increases. This will help to put the funding on a sounder basis.

2. The cash flow rule is unworkable as currently written. Emerging liability and projected cash flow analysis done by many EAs provides a far better measure of the adequacy of funding and is less volitile. In any event, it should be modified to take account of insured and lump sum benefits, and the purchase of annuities at retirement.

3. The rules for quarterly contributions do not recognize the amount of time needed to gather data and perform the actuarial calculations. It will not add to benefit security, but will result in situations where the estimated contributions turn out to be in excess of the allowed maximum, triggering a penalty tax.

4. The rules on controlled group liability are complicated and will add to the difficulty of trying to maintain defined benefit plans. We would like to explore with the Congress other ideas (such as the maintenance of a single plan for the controlled group with varying benefit schedules) that we believe are more workable and will level out the funding among different employers in the controlled group.

Termination of Underfunded Plans

Strengthening of the minimum funding standards will have a favorable impact on the burden now felt by the PBGC. It may be premature to make changes to the definitions of plan termination liability until the new minimum funding rules have had a chance to address any underfunding problems.

We understand that the PBGC plans to unveil its proposal for a risk-related premium soon (at the April 7 hearing). Any analysis of the proposal will need to wait until we have further information. We would like to review the financial information that was used to develop the range of the risk-related premium (from $8.50 to $100 per person -- and even higher if a minimum funding waiver is in effect). Did this work take into account contemplated changes in the minimum funding standards? If so, would the risk-related premium be using current minium funding rules?

While we have no position on the appropriate level of the PBGC premium or the need for a risk-related premium, this is one of only several way to deal with the financial burden of the PBGC. Other approaches include:

1. Changing the five year phase-in rule for benefit increases. Having benefit increases phased in over five years, with the shortest period for funding those benefits being over ten years, will increase the PBGC's exposure.

2. Reduce the limit on the PBGC's maximum guaranteed benefit. The limit on guaranteed benefits has been indexed upward from $750 per month in 1974 to $1,857.75 per month today. The Section 415 limit (the limit on the maximum benefit payable under a qualified plan) has been changed from $75,000 in 1974 to $90,000 today. Thus, the PBGC is guaranteeing a much greater percentage of the total allowable benefit today than 1974.

3. Change the definition of distress termination. As an example, distress terminations might only be allowed for an employer who must liquidate a business under Chapter 7 of the Bankruptcy Code.

4. Improve the standing of the PBGC as a creditor in bankruptcy situations.

Conclusions

The stated goals of the proposal are to encourage optimal funding of defined benefit plans and improve benefit security to employees. We support these goals.

However, many aspects of the proposal do not add to benefit security. In fact, some provisions seem to reduce benefit security (no 100% vesting on asset withdrawal, no defined benefit plans for five years if you exit the

system, assets transferred from plans that are overfunded on a termination basis, etc.).

We believe the Implementation Guidelines issued in May 1984 are doing a good job of balancing employee benefit security with employer flexibility. We have seen no evidence that these Guidelines have resulted in the loss of benefits to employees covered by plans that use a spinoff/termination or termination/re-establishment.

The portions of the proposal dealing with the cash flow rule and the need for quarterly contributions should be dropped or, at a minimum, changed significantly.

Finally, any proposals to change the liability at plan termination should recognize the change in minimum funding standards. It will take several years for any new standards to have an effect. Other approaches for dealing with the PBGC's financial burden should be considered.

We appreciate the opportunity to share these thoughts with you. We believe our private pension system -- while there have been some problems -- is on balance a great success. We would like to work with the Congress, Treasury and IRS to develop sound and practical rules for fixing the problems without putting an additional burden on financially sound plans.

Thank you for considering our views.

STATEMENT 1987-15

April 14, 1987

The Honorable Leon E. Panetta
339 Cannon House Office Building
Washington, D.C. 20515

Dear Congressman Panetta:

We are writing in connection with your bill H.R. 1901, which was recently introduced. We commend your efforts to increase access to the U.S. Tax Court in disputes involving small amounts.

H.R. 1901 would permit certified public accountants and enrolled agents to practice before the U.S. Tax Court in cases involving $10,000 or less. Treasury Circular 230 (copy enclosed) governs the practice of attorneys, certified public accountants, and enrolled agents in representing clients before the Internal Revenue Service (IRS). Thus, H.R. 1901 would, in essence, establish a parallelism in practice before the U.S. Tax Court in small cases with practice before the IRS.

Treasury Circular 230 also grants "limited" practice status to enrolled actuaries under the Employee Retirement Income Security Act of 1974 (ERISA). Such practice status is "limited" in the sense that it applies only in connection with pension issues and not with other tax issues. This is accomplished by means of listing relevant sections of the Internal Revenue Code (see Section 10.3(d) of TC 230).

We recommend that your bill be extended slightly to allow similar practice before the U.S Tax Court by enrolled actuaries in small pension-related cases. Our rationale for this suggestion is as follows:

1. It is consistent with the provisions of Treasury Circular 230, which have worked well in practice, and extends the parallelism in H.R. 1901 one small additional step.

2. Enrolled actuaries would have full professional credentials in the eyes of the U.S. Tax Court. They are licensed and their practice regulated by the Federal Government through the Joint Board for the Enrollment of Actuaries.

3. Enrolled actuaries are uniquely qualified with a special expertise in the pension area. Since pension cases generally involve quite complex issues, an enrolled actuary would often be in the best position to represent a client in a dispute involving such issues.

We thank you for your attention to our suggested small extension of your bill and hope you will consider it favorably. If we can provide you with any additional information that would assist you in any way, please do not hesitate to contact me.

Yours truly,

(signed)

Stephen G. Kellison
Executive Director

STATEMENT 1987-16

WRITTEN STATEMENT FROM THE COMMITTEE ON HEALTH OF THE AMERICAN ACADEMY OF ACTUARIES SUBMITTED TO THE SUBCOMMITTEE ON HEALTH, COMMITTEE ON WAYS AND MEANS U.S. HOUSE OF REPRESENTATIVES APRIL 17, 1987

SUBJECT: Hearing on Expanding Medicare to Include Catastrophic Coverage (Held on March 30, 1987). The following statement is submitted for the printed record of the Hearing.

I. BACKGROUND ON THE AMERICAN ACADEMY OF ACTUARIES

The American Academy of Actuaries is a professional association of over 8,000 actuaries involved in all areas of specialization within the actuarial profession. Included within the Academy's membership are approximately 85% of the enrolled actuaries certified under the Employee Retirement Income Security Act of 1974 (ERISA), as well as comparable percentages of actuaries specializing in actuarial services for other individual and employee coverages such as life, health and disability programs. As a national organization of actuaries, the Academy is unique in that its members have expertise in all areas of actuarial specialization. Dealing with issues associated with health care financing and insurance is in part the responsibility of the Academy's Committee on Health.

The Academy does not advocate public policy positions which are not actuarial in nature. The Academy views its role in the government relations area as providing information and actuarial analysis to public policy decision-makers, so that policy decisions can be made with informed judgment. It is our belief that the training and experience of Academy members provide for a unique understanding of current practices in insured health care. Our intention is to communicate that understanding in ways that can be of maximum assistance.

It is with this objective that we submit the following comments for your consideration. These comments are confined to a summarization of facts (or estimates) concerning existing private catastrophic insurance supplemental to Medicare.

II. EXTENT OF EXISTING PRIVATE CATASTROPHIC INSURANCE SUPPLEMENTAL TO MEDICARE: How Widely Those Who Need Coverage are being Reached.

At least 70% of Americans presently covered by Medicare also have private insurance supplemental to Medicare. Nearly all of this private supplemental insurance includes coverage of a catastrophic nature, supplementing both Parts A and B of Medicare. A substantial fraction of this is provided through group policies (such as the coverage offered under programs of AARP, the American Association for Retired Persons, and similar programs) but the majority is probably provided under individual Medicare Supplement policies.

Virtually all of these Americans pay their own premiums for this insurance. Among the remainder who are not insured under either individual or group private Medicare Supplement policies, some choose not to pay for supplemental coverage, evidently regarding Medicare as sufficient. The remainder who cannot afford to pay for such coverage must rely on Medicaid for assistance.

III. EXISTING STATE AND FEDERAL MINIMUM BENEFIT STANDARDS FOR SUCH SUPPLEMENTARY INSURANCE: How Well the Need is Being Met for Those Covered.

Nearly all of the states (about 46 out of 50) today have regulations in effect which establish minimum benefit standards required to be met by all Medicare Supplement programs marketed in the state. These are generally similar to or identical with the existing federal minimum standards (the "Baucus Amendment") enacted by Congress: where such state minimum standards differ from the federal, they are usually more stringent.

1. Insurance Supplementary to Medicare Part A (Hospitalization).

With regard to Medicare Part A, the state and federal minimum benefit standards generally in effect require that private policies must cover:

a. 100% of that portion of Medicare approved hospital costs occurring after 60 days of confinement during any one spell of illness, but not paid by Medicare, up through 90 days and on through Medicare's 60 additional lifetime reserve days.

b. 90% of the necessary cost of additional hospital confinement after Medicare stops paying, up to 365 additional days.

This is coverage of catastrophic scope and it is minimum coverage. Less than one hundredth of 1% of Americans covered by Medicare Supplement insurance would still be hospitalized upon expiration of this 365 days of extended insurance after Medicare's hospital payments stopped.

2. Insurance Supplementary to Medicare Part B (Medical Care).

With regard to Medicare Part B, the state and federal minimum standards generally require that private policies must cover:

All part B Medicare approved expenses not paid by Medicare, in excess of a $200 yearly "out of pocket" deductible and up to a maximum yearly benefit of $5,000.

The part not paid by Medicare is the first $75 of approved expense each year, plus 20% of the excess over the $75. This means that, with respect to Medicare approved medical expenses, any one insured individual would have to have incurred a total of $24,925 in Medicare Part B approved expenses in a single year, before reaching the point where his Part B Supplemental insurance ran out. The next year, however, his Supplemental coverage would begin all over again.

This again is coverage of catastrophic scope and it is minimum coverage, under federal and most state minimum benefit standards.

Accordingly, representations that catastrophic coverage does not now exist or is unavailable to most senior Americans are not true. Such coverage exists and is widely available.

There is, however, another area of medical expense which would NOT be covered under these minimum requirements. This has to do with medical charges in excess of the amounts Medicare approves. It is estimated that, on the average, actual medical care charges exceed Medicare approved amounts by 25 to 40%, varying by locality and individual case. Many doctors accept Medicare approved charges as their entire charge, but many of course also do not.

However, as I will describe next, many existing private Medicare Supplement programs provide coverage that exceeds the existing Part A and Part B minimum standards, including some coverage for medical charges exceeding the amounts Medicare will approve. None of the legislation now proposed in the Congress is directed toward coverage of these excess costs, whereas many existing private plans provide such coverage.

3. Private Supplementary Insurance Exceeding the State and Federal Minimum Benefit Standards.

Many private Medicare Supplement programs being sold today exceed the minimum benefit standards described in the preceding 2 sections. This fact is the result of competition among the various private programs offered in the voluntary Medicare Supplement market.

a. First, the Part A minimum standards are frequently exceeded. The majority of private plans cover the initial Part A Medicare deductible ($520 per spell of illness in 1987). Many build this coveage right into the plan; others offer this as an added coverage option. In several states, it is required that this Part A coverage be offered as an option.

b. Second, a substantial minority of private plans provide hospital insurance after Medicare stops paying at 100% of charges rather than the minimum of 90% actually required.

c. Third, a number of plans provide this extended Part A coverage, after Medicare stops paying, without any limit as to the number of days, rather than limiting the days of extended coverage to 365, as provided under the minimum standards.

d. Fourth, under Part B Supplemental Coverage, the majority of plans cover Medicare approved expenses after only the $75 yearly Medicare deductible or sometimes even from the first dollar, rather than only after the $200 "out of pocket" deductible as provided under the minimum standards.

e. Fifth, many plans provide coverage for medical expenses in excess of Medicare approved Part B expenses. This is done in various ways. Some plans will cover actual charges up to 120, 140, 160%, or similar

percentages, of Medicare approved charges. Others will cover charges "not exceeding usual and customary charges," or the like, in the locality.

f. Sixth, many plans, possibly even a majority of those being sold, do not contain any maximum yearly limit on Part B supplementary benefits, rather than $5,000 as provided for in the minimum standards.

g. Lastly, many plans provide supplemental benefits for long term nursing facility care: coverage not required under most Medicare Supplement minimum standards. This coverage ranges from covering what Medicare does not pay during the first 100 days, up to long term extensions of coverage well beyond 100 days.

Thus, many senior Americans are covered by catastrophic supplemental insurance far exceeding what the minimum standards require, and even the minimum standards require coverage of catastrophic scope.

IV. STATE AND FEDERAL MINIMUM LOSS RATIO STANDARDS (Ratio of Benefit Value to Premiums): Appropriateness of Standards in relation to Marketing and Administrative Costs.

1. Summary of Standards Prescribed.

In general, the minimum standards now in effect require that the premiums charged by private insurers provide for an expected 60% loss ratio for individual policies, and in a number of states 75% for group policies. Several states (for example, New York, Michigan and Minnesota) require a 65% minimum loss ratio for individual policies.

What these "loss ratios" mean, in simplified terms, is that, over the entire period the coverage continues in effect for the population covered, insurers must expect to return, as benefits, at least the stated percentage of the premium received, with both benefits and premiums calculated on an actuarially equivalent "present value" basis. Thus, a "60% loss ratio" means returning 60 cents of the premium dollar in benefits, over the entire period of coverage.

2. The Appropriateness of these Standards: the Level of Marketing and Administrative Costs Necessary under Voluntary Private Insurance.

A common criticism made against voluntary or private insurance is that it simply does not return a sufficiently high percentage of the premiums paid or of the gross funds appropriated. It is sometimes argued, for example, that Medicare returns 97 cents on the dollar, while much of the private coverage is expected to return only 60 cents.

Substantial additional types of cost, which do not occur under Medicare, have to be recognized and provided for under any voluntary plan that is offered to the public. Among these costs are premium taxes, the cost of meeting state filing requirements, and the cost of billing and collecting the premiums. An even greater cost is the advertising and marketing cost. A voluntary private program that incurs no marketing costs is not going to be known to the public and is not going to be bought, especially when it is offered to individuals. It is not possible to have a successful voluntary, individually sold insurance plan

and still realize benefit return ratios as high as 97% or even 80%. Even most of the "group" Medicare Supplement programs are actually sold and bought individually, and therefore have substantial "non-benefit" costs that must be provided for in the premium.

I will make no attempt here to quantify what a "reasonable" percentage of the premium allocated for provision of all these necessary costs should be. But I do have to point out that successful voluntary insurance programs of necessity must incur significant marketing and advertising expense, in addition to substantial administrative cost. Any fair criticism of the "benefit return" on the dollar must take these several facts into account. Most of the criticism directed toward the benefit return under private Medicare Supplement insurance ignores the true administrative costs of Medicare, and ignores the substantial additional costs that must necessarily be incurred under private programs.

Respectfully submitted,
American Academy of Actuaries Committee on Health, by

(signed)

E. Paul Barnhart, Chairperson

STATEMENT 1987-17

WRITTEN STATEMENT FROM THE COMMITTEE ON HEALTH OF THE AMERICAN ACADEMY OF ACTUARIES

submitted to the

SUBCOMMITTEE ON HEALTH, COMMITTEE ON WAYS AND MEANS U.S. HOUSE OF REPRESENTATIVES

APRIL 21, 1987

SUBJECT: Hearing on Long Term Care (Held on March 31, 1987). The following statement is submitted for the printed record of the Hearing.

I. BACKGROUND ON THE AMERICAN ACADEMY OF ACTUARIES

The American Academy of Actuaries is a professional association of over 8,000 actuaries involved in all areas of specialization within the actuarial profession. Included within the Academy's membership are approximately 85% of the enrolled actuaries certified under the Employee Retirement Income Security Act of 1974 (ERISA), as well as comparable percentages of actuaries specializing in actuarial services for other individual and employee coverages such as life, health and disability programs. As a national organization of actuaries, the Academy is unique in that its members have expertise in all areas of actuarial specialization. Dealing with issues associated with health care financing and insurance is in part the responsibility of the Academy's Committee on Health.

The Academy does not advocate public policy positions which are not actuarial in nature. The Academy views its role in the government relations area as providing information and actuarial analysis to public policy decision-makers, so that policy decisions can be made with informed judgment. It is our belief that the training and experience of Academy members provide for a unique understanding of current practices in insured health care. Our intention is to communicate that understanding in ways that can be of maximum assistance.

It is with this objective that we submit the following comments for your consideration. These comments are confined to a summarization of facts (or estimates) concerning existing private long term care insurance.

II. EXISTING AVAILABILITY OF PRIVATE LONG TERM CARE INSURANCE TO SENIOR AMERICANS (Those Eligible for Medicare)

There is a general impression, reinforced by recent televised programs on the subject broadcast by national media, that private long term care insurance is virtually non-existent and generally unavailable to senior Americans.

Such is not the case. Private individual insurance for long term nursing care is widely available, and has been since about 1980. There are at least a dozen major insurers offering this insurance; most of them offering such coverage multi-state. Several of these insurers are currently selling such insurance to senior Americans in large volume and with few underwriting restrictions.

Long term care coverage under Group policies is also increasing rapidly.

The benefits are generally quite extensive, and most such plans provide coverage of truly catastrophic scope. Coverage extends to intermediate and custodial nursing care, as well as skilled care. A number of plans also provide home care coverage. Usually benefits are provided on a fixed dollar daily basis up to as high as $50 daily; under a few plans, to as high as $100 daily. For prolonged confinement, most such plans provide coverage up to at least a year; some for as long as five years or even longer.

Some of these plans are sold as optional benefits added to Medicare Supplement insurance policies. Many plans, however, are available as separate Long Term Nursing Care policies. They are all widely available to the public, not only to those of age 65 or higher, but usually to persons age 50 or higher and in a few cases at any age.

III. EXISTING STATE REQUIREMENTS RELATING TO LONG TERM CARE INSURANCE

A number of states have enacted laws or regulations requiring that Long Term Care policies or benefits must be offered by all insurers selling Medicare Supplement insurance in the state, or in some cases by all insurers selling any form of hospital/medical insurance in the state. Examples are Kentucky, Minnesota, South Dakota and Wisconsin. Where such requirements exist, minimum benefit standards are also prescribed.

The National Association of Insurance Commissioners has also been in the process of developing minimum benefit standards for Long Term Care insurance.

IV. RECOMMENDED PRINCIPLES WITH RESPECT TO POSSIBLE FEDERAL STANDARDS FOR LONG TERM CARE INSURANCE

In anticipation of the likelihood that Federal minimum standards for Long Term Care insurance will soon be developed and promulgated, we respectfully propose for your consideration four basic principles that we believe are important if such standards are to address the problems and peculiarities of this type of insurance successfully:

1. The first of the four principles that we urge your Subcommittee to consider carefully is that recommendations as to minimum benefit guidelines should not be too broad or too rigid. Long term care insurance is a relatively recent development. Little is known thus far as to its actuarial cost. Further, increasing availability of such coverage will inevitably have an upward impact on its cost, since it will increase utilization of the care that is being insured.

   Private insurers need opportunity to experiment with plan design, as to soundness and marketability, and to learn how to underwrite and price such coverage soundly, before being pushed too quickly into broad benefit provisions that could turn out to be underpriced; or too quickly into rigid standards that would limit experimentation and even have the result that the potentially most successful plan designs, from the perspective of

serving public need at reasonable cost, could be overlooked and excluded entirely.

One benefit design guideline that should not be too restricted is the use of front end deductible periods. Relatively long deductible periods, such as the first 100 days of nursing facility confinement, are already in use, and we would suggest that even longer periods, such as 180 or 365 days, can be appropriate. No other single plan design item is more effective in making valuable protection available at a reasonable cost than the use of substantial deductible periods. The public tends to WANT immediate first-dollar coverage. But what is usually the most NEEDED is protection against the cost of extended long-term care. Substantial deductibles can bring this coverage within the range of affordability of the average person.

On the other hand, guidelines should also not establish minimum coverage periods that are too ambitious, at least at the outset, because uncertainty of the cost of long coverage periods could get insurers into financial difficulty very quickly. Guidelines need to allow adequate flexibility for experimentation.

2. Secondly, we urge that underwriting standards not be too limited. Long term care insurance, more than almost any other kind of insurance, is potentially subject to enormous antiselection by buyers who expect to use the benefits. Private insurers must be allowed to apply sound underwriting selection, or buyer antiselection of this coverage could easily drive costs out of control. This has already been the result for some insurers.

   The ultimate goal, of course, is to render such coverage available to as broad a segment of the public as possible, but excessive limitation on underwriting freedom could drive the cost too high with self-defeating results and even failure of the entire concept.

3. Thirdly, we would urge that guidelines for measuring reasonableness of premiums should not be too demanding. Since the cost of this coverage is little known, insurers will need reasonable risk margins. Pricing guidelines, such as minimum loss ratio requirements, that are too demanding will serve to discourage insurers from entering this field of health insurance.

4. Lastly, we urge that price structures providing for advance funding of future costs be encouraged. An example of this is "level" premiums determined on the basis of entry or issue age. Recent state regulatory restrictions on the pricing of health insurance have tended to force premiums more and more toward very short term funding, such as one year term. The result of this shortsighted regulatory policy is that subsequent rate increases become maximized, encouraging antiselect lapsation among healthier insureds. This leads to steady deterioration of the average health of the continuing body of insured individuals and the cost spiral is further accelerated.

   Further, it would be desirable that persons in mid-life (between the ages of 50 and 64) have opportunity and encouragement to purchase this coverage on a basis where the costs of the elderly years can be at least partly prefunded. Americans in the 50-64 age bracket have, relatively, the

largest amount of discretionary income and are in the best position to prefund the costs of long-term care in the senior years. They should be given definite incentive to do this.

Our Committee would be pleased to answer questions or provide further input as your Subcommittee might desire.

Respectfully submitted,

American Academy of Actuaries Committee on Health, by

(signed)

E. Paul Barnhart, Chairperson

STATEMENT 1987-18

May 15, 1987

The Honorable David N. Levinson
Office of the Commissioner
Delaware Insurance Department
21 The Green
Dover, Delaware 19901

Dear Commissioner Levinson:

These comments are being submitted in response to Proposed Regulation No. 50, Audited Financial Statements, recently released by the Delaware Insurance Department. We did not become aware of this proposed regulation until after the May 4, 1987 public hearing. We greatly appreciate your willingness to accept these comments for consideration at this time.

The Academy does not take a position on whether or not the Delaware Insurance Department should promulgate a regulation dealing with audits of statutory financial statements. Any such action involves regulatory and accounting considerations which are not within our purview as a professional organization representing the actuarial profession.

However, we do have a problem with one provision of the proposed regulation; namely section 5(4) entitled "Certification of Loss Reserves and Loss Expense Reserves." We do not feel that this is an appropriate provision in this proposed regulation. A requirement for an audit of statutory financial statements and a requirement for an opinion on loss reserves are both valid regulatory tools that are available to a state insurance department. However, they are not the same regulatory tool. They are done for different reasons and serve different purposes.

In the interest of brevity, the differences between the two can be summarized as follows:

Audit

1. An audit is a general, overall assessment of the financial statements taken as a whole.

2. The primary focus is to ascertain that certain accounting principles were consistently followed throughout the financial statements.

3. By definition, an audit is the review of work done by others.

4. The appropriate qualification to perform an audit is by an accountant.

Loss Reserve Opinion

1. A loss reserve opinion is a specific, targeted opinion on one particularly difficult item to determine.

2. The primary focus is on the adequacy on reserves, based on actuarial projections.

3. The opinion is not a review, but rather a declaration about the quality of original work.

4. The appropriate qualification to provide a loss reserve opinion is by an actuary or qualified loss reserve specialist.

The NAIC has clearly recognized the distinction between these two. The NAIC has a model regulation dealing with audits of statutory financial statements. The NAIC also has a provision for casualty loss reserve opinions contained in the Instructions to the NAIC Fire and Casualty Annual Statement Blank. These two were developed on parallel tracks at the same time and the distinction was clearly recognized as both were being developed.

We feel that Delaware has taken two worthwhile, but quite distinct, regulatory tools and inadvertently scrambled them, to the possible detriment of both. Our recommendation is that Delaware consider each on its own merits.

1. If it is deemed appropriate to require an audit on statutory financial statements, then something along the lines of Proposed Regulation No. 50, with section 5(4) deleted, should be adopted.

2. If it is deemed appropriate to require an opinion on casualty loss and loss expense reserves, then the discretionary provisions contained in the Instructions to the NAIC Fire and Casualty Annual Statement Blank should be implemented. This would be consistent with the actions of 14 other states.

We thank you for your consideration of these comments. If you have any questions or would like any additional information, please do not hesitate to contact me.

Yours truly,

(signed)

Stephen G. Kellison
Executive Director

STATEMENT 1987-19

STANDARD CONFIRMATION LETTER FOR PENSION AUDITS JOINTLY DEVELOPED BY AMERICAN ACADEMY OF ACTUARIES AND AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

May 18, 1987

In connection with the examination of our financial statements for the period ending (fiscal year end) by our independent accountants, (name, address), please furnish them the information described below as it pertains to the XYZ Pension Plan, which is a defined benefit plan. For your convenience in response to those requests, you may supply pertinent sections, properly signed and dated, of your actuarial report, or pension expense report, if they are available and if they contain the requested information.

A. Please provide a brief description of the following:

1. The employee group covered.

2. The benefit provisions of the plan used in the calculation of the net periodic pension cost for the period and of the accumulated benefit obligation and the projected benefit obligation at the end of the period. Please identify any such benefit provisions that had not taken effect in the year. Please also provide the date of the most recent plan amendment included in your calculation. Please identify any participants or benefits excluded from the calculations, such as benefits guaranteed under an insurance or annuity contract.

3. The plan sponsor's funding policy for the plan.

4. Any significant liabilities other than for benefits such as for legal or accounting fees.

5. The method and the amortization period, if any, used for the following:

   a. Calculation of a market-related value of plan assets, if different from the fair value.

   b. Amortization of any transition asset or obligation.

   c. Amortization of unrecognized prior service cost.

   d. Amortization of unrecognized net gain or loss.

6. Any substantive commitment for benefits that exceed the benefits defined by the written plan and which is included in the calculations.

7. Determination of the value of any insurance or annuity contracts included in the assets.

8. Nature and effect of significant plan amendments and other significant matters affecting comparability of net periodic pension

cost, funded status, and other information for the current period with that for the prior period.

9. The following information relating to the employee census data used in calculating the benefit obligations and pension cost:

   a. The source and nature of the data is _____ and the date as of which the census data was collected is _____.

   b. The following information concerning participants:

Participants	Number of Persons	Compensation (if applicable)
Currently receiving payments	_____	_____
Active with vested benefits	_____	_____
Terminated with deferred vested benefits	_____	_____
Active without vested benefits	_____	_____
Other (describe)	_____	_____

Note: If information is not available for all the above categories, please indicate the categories that have been grouped and describe any group or groups of participants excluded from the above information.

   c. Information for the following individuals contained in the census:

Participant's Name or Number	Age or Birth Date	Sex	Salary	Date Hired or Years of Service

(Note to auditor: The auditor should select information from employer records to compare with the census data used by the actuary. In addition, the auditor may wish to have the actuary select certain census data from his files to compare with the employer's records.)

B. Please provide the following information on the net periodic pension cost for the period ending on _____.

1. Service cost
2. Interest cost
3. Actual return on assets
4. Other components

   a. Net asset gain or (loss) during the period deferred for later recognition

   b. Amortization of net loss or (gain) from earlier periods

c. Amortization of unrecognized prior service cost

d. Amortization of the remaining unrecognized net obligation or (asset) existing at the date of the initial application of FASB Statement No. 87-transition obligation or (asset) $_____

e. Net total of components (a+b+c+d) $_____

5. Net periodic pension cost: (1+@-3+4.e) $_____

6. The above measurement of the net periodic pension cost is based on the following assumptions:

Weighted-average discount rate _____%

Weighted-average rate of compensation increase _____%

Weighted-average expected long-term rate of return on plan assets _____%

Please describe the basis on which the above rates were selected and whether the basis is consistent with the prior period.

Please briefly describe the other assumptions used in the above measurement.

7. The calculations of the items shown in B1. to B5. are based on the following:

Asset information at _____

Census data at _____

Measurement date (must be not more than three months before the end of the last fiscal year) _____

Please describe any adjustments made to project the census data forward to the measurement date or to project the results calculated at an earlier date to those shown in B1. to B5.

C. Please provide the following information on the benefit obligations for disclosure in the financial statements for the period ending _____:

Estimated

1. Pension Benefit Obligation

a. Accumulated benefit obligation
- vested
- non vested
- total $_____

b. Additional benefits based on estimated future salary levels _____

c. Projected benefit obligation (a + b)

2. Fair Value of Plan Assets _____

3. Unfunded Projected Benefit Obligation: (1.c-2)

4. Unrecognized Prior Service Cost

5. Unrecognized Net Loss or (Gain)

6. Unrecognized Net Transition Liability or (Asset)

7. Additional Liability _____

8. Accrued or (prepaid) pension cost in the company financial statements (3-4-5-6+7) $_____

9. The above amount of the projected benefit obligation is measured based on the following assumptions:

Weighted-average discount rate _____%

Weighted-average rate of compensation increase _____%

Please provide a brief description of the other assumptions used in the measurement.

10. The calculation of the items shown in C1. to C8. is based on the following:

Asset information at _____

Census data at _____

Measurement date (must be not more than three months before the current fiscal year end) _____

Please describe any adjustments made to project the census data forward to the measurement date or to project the results calculated at an earlier date to those shown in C1. to C8.

11. Please describe any significant events noted subsequent to the current year's measurement date and as of the date of your reply to this request and the effects of those events, such as a large plant closing, which could materially affect the amounts shown in C1. to C8.

D. Please provide an anlysis for the period showing beginning amounts, additions, reductions, and ending amounts of the

   1. Projected benefit obligation,

   2. Unrecognized prior service cost,

   3. Unrecognized net loss (gain), and

   4. Net transition obligation (asset).

E. Please provide our independent accountants with descriptions and the amounts of gains or losses from settlements, curtailments or termination benefits during the year, such as:

   1. Purchases of annuity contracts;

   2. Lump-sum cash payments to plan participants;

   3. Other irrevocable actions that relieved the company or the plan of primary responsibility for a pension obligation, and eliminates significant risks related to the obligation and assets;

   4. Any events that significantly reduced the expected years of future service of employees;

   5. Any events that eliminated for a significant number of employees the accrual of defined benefits for some or all of their future service; or

   6. Any special or contractual termination benefits offered to employees.

F. Was all of the information above determined in accordance with FASB Statements No. 87 and No. 88 (including the FASB's Guides to Implementation of Statements 87 and 88 and the American Academy of Actuaries, "An Actuary's Guide to Compliance with Statement of Financial Accounting Standards No. 87") to the best of your knowledge? If not, please describe any differences.

G. Describe the nature of your relationship, if any, with the plan or the plan sponsor that may impair or appear to impair the objectivity of your work.

Very truly yours,

_____

STATEMENT 1987-20

COMMENTS TO THE SENATE COMMITTEE ON FINANCE SUBMITTED BY THE COMMITTEE ON HEALTH OF THE AMERICAN ACADEMY OF ACTUARIES ON PROPOSALS TO EXPAND MEDICARE TO INCLUDE CATASTROPHIC COVERAGE

May 26, 1987

(The remainder of this statement is duplicated in 1987-16 (I. - IV.))

STATEMENT 1987-21

May 28, 1987

The Honorable Henry A. Waxman, Chairman
Subcommittee on Health and the Environment
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20510

Re: Written Statement for the Record of May 27-28, 1987.
Hearing on Catastrophic Health Insurance.

Dear Mr. Waxman:

On behalf of the American Academy of Actuaries, I am pleased to submit copies of a statement on catastrophic health insurance. This material was prepared by the Committee on Health of the American Academy of Actuaries.

If you have any questions about this statement or if you would like any additional information, do not hesitate to contact me. Academy representatives would be happy to meet with members of the committee or with staff, if that would be useful to you.

Respectfully submitted,

(signed)

Stephen G. Kellison
Executive Director

STATEMENT 1987-21

WRITTEN STATEMENT FROM THE COMMITTEE ON HEALTH OF THE AMERICAN ACADEMY OF ACTUARIES submitted to HEALTH AND THE ENVIRONMENT SUBCOMMITTEE OF THE HOUSE ENERGY AND COMMERCE COMMITTEE

May 28, 1987

SUBJECT: Hearing on protection against catastrophic medical expenses for the aged under Medicare.

(The remainder of this statement is duplicated in 1987-16 (I. - IV.))

STATEMENT 1987-22

RISK CLASSIFICATION AND AIDS STATEMENT OF THE COMMITTEE ON RISK CLASSIFICATION OF THE AMERICAN ACADEMY OF ACTUARIES

MAY 1987

Introduction

The American Academy of Actuaries is a professional association of actuaries which was formed in 1965 to bring together into one organization all qualified actuaries in the United States and to seek accreditation and greater public recognition for the profession and more effective public service by the profession. The Academy includes members of three founding organizations - the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, and the Society of Actuaries.

The Academy serves the entire profession. Its main focus is in the social, economic, and public policy environment in which the actuarial profession functions. Its primary activities include liaison with federal and state governments, relations with other professions, the dissemination of public information about the actuarial profession and issues that affect it, and the development of standards of professional conduct and practice.

Over 8,400 actuaries in all areas of specialization belong to the Academy. These members are employed by insurance companies, consulting actuarial firms, government, academic institutions, and a growing number of industries. Actuarial science involves the evaluation of the probabilities and financial impact that uncertain future events - birth, marriage, sickness, accident, fire, liability, retirement and death - have on insurance and benefit plans.

General Purpose of Risk Classification

To establish a fair price for insuring an uncertain event, estimates must be made of the probabilities associated with the occurrence, timing and magnitude of such an event. These estimates are normally made through the use of past experience, coupled with projections of future trends, for groups with similar risk characteristics.

The grouping of risks with similar characteristics for the purpose of setting prices is a fundamental precept of a workable, private, voluntary insurance system. This process, called risk classification, is necessary to maintain a financially sound and equitable system.

To achieve and maintain viable insurance systems, the process of risk classification should serve three primary purposes. It should: (1) protect the insurance system's financial soundness, (2) be fair, and (3) permit economic incentives to operate and thus encourage wide-spread availability of coverage. Striking the appropriate balance among these objectives is not always easy, but they are clearly in the public interest and are not incompatible.

STATEMENT 1987-22

Equitable treatment is essential if each individual is to be charged a price that is perceived as fair and appropriate for the risk involved. Appropriate pricing of insurance requires that the expected costs for the individual risks in a price category be similar. This does not imply that the actual cost for any specific insured can be determined in advance. Average expected claim experience can be quite reliable, though, for a large group of insureds with similar risk expectations. The mathematical disciplines of probability, statistics, and forecasting are applied to all relevant data available. With this information, an appropriate premium to be paid by each member of the group is determined.

Improper risk classification can lead to "adverse selection." The opportunity for adverse selection exists when relevant information is not provided or is not permitted to be used in the risk classification process, resulting in the insured being placed in a group with a lower premium than is appropriate for the risk. The freedom of choice and the ability to compare price may create a movement of buyers to different sellers within an insurance market or even movements into or out of a group because relevant adverse information about those insureds is withheld, the premium (price) for the high risk insureds is too low. The group will probably have more claims than were anticipated when premiums were established. When permitted, the insurer will increase premiums to reflect revised claims expectations; this will motivate lower risk nsureds to buy from a different seller or move out of the market, leading to a further escalation of premiums and fewer buyers. This upward spiral results in the desired coverage being unavailable on any reasonable premium basis or in the insurer becoming financially unsound, a phenomenon called the "assessment spiral," which actually took place in some companies during the 1800s and the early 1900s.

A risk classification system must also be efficient. The additional expense of obtaining more refinement should not be greater than the reduction in expected claims for the less expensive, less refined risk classification. Thus, there is a practical limit to the incentive to add refinements to the classification system.

Laws, regulations, and public opinion all constrain risk classification systems within broad guidelines of social acceptability. Legislative and regulatory restrictions on these systems must balance a desire for increased public acceptability against the potential economic side effects of adverse selection or market dislocation.

Risk classification is not the only approach for minimizing adverse selection. When coverage is not available to large segments of society on a profitable basis, the government is often the only alternative. In certain types of government insurance where participation is mandatory and choices are restricted, adverse selection is controlled by restricting the buyer's freedom. Within this framework, pricing is based on the principle that low risks must subsidize higher risk individuals for the overall welfare of society.

A more detailed presentation of the Academy's view of risk classification is presented in the booklet "Risk Classification: Statement of Principles," American Academy of Actuaries, June 1980.

STATEMENT 1987-22

History of Underwriting Risks

Underwriting is the process of applying a risk classification system. It seeks to answer three questions: (1) Should the applicant be issued insurance? (2) How much insurance should be issued? (3) What is the appropriate premium rate classification for the proposed insured? Underwriting has developed over time and will continue to do so. A brief review of the history of underwriting may be helpful in understanding the application of these principles to new diseases. While the following comments show the historical development of life insurance underwriting, there has been a similar evolution of the underwriting of other forms of insurance.

Life insurance policies are first recorded to have been issued in England during the latter part of the sixteenth century. The following practices were widely used to underwrite insurance applicants:

- The prospective insured appeared before the directors of the company, who questioned him about his health and examined his physical appearance.

- Initially, insurance was limited to a relatively narrow range of issue ages, such as fifteen to forty-five.

- Early applications inquired about the general health of the prospective insured and raised questions about serious health hazards of the time, like smallpox. Although these applications were brief, they also inquired if he was in the armed services or intended to travel outside the country.

Even in early days, insurers found it necessary to determine the reason for the insurance. This need arose because some early contracts were purchased on the speculation that the insured was in ill health and that the purchaser could receive a windfall. Such speculation has long been viewed as contrary to public policy.

Additionally, early insurance policies were of a limited duration, generally no more than five years. Extra premiums were usually charged for females during the child-bearing period, for people who had not yet contracted smallpox, and for certain occupations. Also, many policies imposed travel restrictions and had limited face amounts to protect the solvency of the insurers.

Over time, many of the above restrictions were relaxed or eliminated. Benefit periods for the whole of life became common. By the 1800s, females were not charged an extra premium, since advances in medicine had significantly reduced the dangers of childbirth. Similarly, travel restrictions were eased.

During the 1800s, many current-day underwriting practices were developed, including:

- The recognition of family medical history as an important source of information.

- The employing of medical advisors by insurers, and the use of medical examinations and tests as routine requirements for insurance applicants.

- The use of more detailed questions on application forms about the prospective insured's health status and medical history.

- The introduction of a numerical rating system, which is a systematic method of evaluating the risk factors influencing mortality. These factors include such items as build (height and weight), medical information, and occupation..

- The use of additional information revealed through agents' reports, inspection reports, and attending physicians' statements.

The underwriting practices of the 1900s were a refinement of those initiated during the 1800s. These practices were updated to reflect occupational changes, inventions, new avocations, and medical advances: For example, policies issued in the early 1900s provided for extra premiums and benefit restrictions for passengers on commercial airline flights. As statistics demonstrated the increasing safety of commercial flights, these restrictions and extra premiums were eventually eliminated.

During the 1900s, the use of blood pressure readings, blood tests, urinalysis, chest x-rays and electrocardiograms further refined the underwriting process. Medical advances reduced the underwriting emphasis on certain diseases, such as tuberculosis and diabetes. Over time, the underwriting focus has shifted to other diseases, such as cancer and heart disease, which have become leading causes of death.

Underwriting has been an evolutionary and dynamic process, guided by the underlying premise of equitably classifying risks into their proper premium category and characterized by the adaption to changes in the incidence of disease, medical advances, technological developments and socio-ecomomic factors.

The Acquired Immunodeficiency Syndrome (AIDS) Risk

In recent years, a medical condition has been recognized that is referred to as Acquired Immunodeficiency Syndrome (AIDS). The high mortality rate and medical costs associated with AIDS have required insurers to consider this new condition in their underwriting practices.

As stated earlier, there are three primary purposes served by the risk classification process in a viable insurance system, all of which must be in appropriate balance: (1) protect the insurance system's financial soundness, (2) be fair, and (3) permit economic incentives to operate and thus encourage the widespread availability of coverage.

Prospective life or health insureds should be underwritten based on data and criteria relevant to their own mortality or morbidity risk. The underwriting should not be unfairly discriminatory, nor should it conflict with basic individual human or civil rights. Contractual provisions of some individual health insurance policies allow the policy to be cancelled only in specific situations. These represent a very small percentage of individuals covered by

health insurance. With this exception, individuals will not have their coverage changed because they contract AIDS after obtaining insurance.

The concentration of AIDS cases diagnosed to date in this country and the risk of this disease within several narrow segments of the population (homosexual or bisexual men, and intravenous drug users) give rise to significant problems involving its proper evaluation and underwriting. One significant problem is that the members of these population segments may realize that they are in a high risk group and choose to purchase large amounts of insurance. Additionally, insurers may be subject to charges of unfair discrimination against these population segments if they attempt to underwrite for this disease. In view of these problems, AIDS presents a most difficult challenge to insurers and regulators.

There is now no known cure or vaccine for those diagnosed as having AIDS.[1] The median age at death is thirty-five, which is significantly lower than the median age at death for the general population. The majority of individuals who contract AIDS die with 12-24 months.[2] According to studies published in December, 1986,[3] the lifetime hospital costs of AIDS patients are in the $45,000 - $75,000 range.

As of January, 1987, more than 29,000 AIDS cases had been reported to U.S. government authorities (with more than 16,000 deaths).[4] It is expected that by the end of 1991, an estimated 270,000 AIDS cases will have occurred with 179,000 deaths.[5] In 1991 alone, 54,000 people are expected to die from AIDS.[6] It is estimated that about 1.5 million people in the United States have already been infected by the AIDS virus.[7] Some recent studies indicate that about 8% - 34% of these persons will contract AIDS within three years.[8]

Other studies indicate that many more may contract one or more of the AIDS-related conditions that are less severe, but which progress to AIDS in some persons.[9] There is no known limit to the length of time in which an individual

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1 Charles Marwick, "Task Force Formed to Coordinate Study, Testing of AIDS Therapies," Journal of the American Medical Association, Vol. 255, No. 10 (March 14, 1986).

2 American Medical News, "CDC Official Calls for AIDS Prevention Plan" (April 12, 1985).

3 Anne A. Scitovsky et al., "Medical Care Costs of Patients with AIDS in San Francisco," Journal of the American Medical Association, Vol. 256, No. 22 (December 12, 1986): 3103. See also George R. Seage III et al., "Medical Care Costs of AIDS in Massachusetts, Journal of the American Medical Association, Vol. 256, No. 22 (December 12, 1986): 3107

4 "AIDS Weekly Surveillance Report - United States AIDS Program," Center for Infectious Diseases, Center for Disease Control, January 12, 1987.

5 "Surgeon General's Report on Acquired Immune Deficiency Syndrome," October, 1986: 6.

6 Ibid.: 28.

7 Ibid.: 12.

8 James J. Goeder, et al., "Three Year Incidence of AIDS in Five Cohorts of HTLV-III-infected Risk Group Members," Science 231, No. 4741 (February 28, 1986): 992.

with AIDS antibodies can contract the disease. If these estimates are correct, perhaps 120,000 - 510,000 Americans will contract AIDS in the next three years, with the majority of these cases dying within two years after contracting the disease.

It is crucial for life and health insurers to identify properly those risks who already have the AIDS antibodies. This includes those individuals who may not ultimately contract AIDS or its associated conditions, but who have a significant likelihood of doing so. Due to the recent identification of AIDS, experience is still developing. Much more study and analysis, available only over a long period of time, is needed. Yet the failure to identify these risks would reduce the effectiveness of the risk classification system.

Underwriting Individual Life and Health Insurance for AIDS

In general, private insurers can viably offer individual life insurance at an extra premium to people with an expected mortality up to 500% of the mortality of standard risks. Higher risks are, as a practical matter, uninsurable since most individuals are unwilling to pay the substantial extra premium necessary. Those who are willing to do so may have reason to believe that the added cost is acceptable because they expect to have a claim against the insurer in the near future.

For example, in a group of 1,000 recently underwritten standard life insurance risks, males age thirty-five, it is estimated (based on the Society of Actuaries' 1975-80 Select Basic Mortality Tables) that six deaths are expected to occur within the next five years. In a group of 1,000 males age thirty-five with expected mortality that 500% of the standard group (the highest percentage usually insurable), there would be thirty expected deaths. In contrast, among a group of 1,000 males ages thirty-five who have AIDS antibodies (assuming 8% - 34% of these contract AIDS in the next three years, and the majority of these dies within two years after contracting the disease), the number of expected deaths in the next five years could range between forty-six and 176.

Based on these mortality statistics, individuals who have AIDS antibodies cannot, as a group, be considered insurable because their mortality rate appears to greatly exceed the 500% of standard level, which has proved to be the practical limit of substandard mortality that can be insured.

For the individual risk classification process to be viable, insurers should be able to obtain all relevant information about an applicant's current health status. One method of obtaining this information is to ask appropriate medically-related questions of all individual life or health insurance applicants as to whether or not they have had or been treated for AIDS, ARC (AIDS-related complex) or the associated medical symptoms, or have had a test in which the results indicated the presence of antibodies to the AIDS virus. Such questions should be asked, not only to help properly identify uninsurable risks, but also to protect insurers and policyholders alike from the inequitable situation of providing insurance at an inadequate, unfair price. The responses

[9] Department of Health and Human Services, Food and Drug Administration, "Important AIDS Information," (HFW-40).

to such inquiries will permit the underwriting of AIDS on the same basis as other serious diseases.

The ELISA and Western Blot tests are currently the best available indicators of the presence of antibodies to the AIDS virus and, when applied together, are considered to be reliable for this purpose.[10] The ELISA test is being used as a protective screening device for the nation's blood supply. The use of these tests for insurance underwriting is currently being debated in some state legislatures. Regulators should carefully consider the consequences of prohibiting the use of these tests. Such legislation could seriously affect the financial soundness of the private insurance system, the overall fairness of the risk classification system, and availability of insurance coverage to the public.

Application questions and blood tests provide a means for AIDS to be underwritten in exactly the same way as other serious conditions such as cancer, heart disease, or alcohol and drug abuse. Because of the historical association of AIDS in the United States with particular segments of the population, and because of fears that release of information obtained through the insurance application may affect one's employment, it is crucial that the public be assured that information gathered in the risk classification process will remain strictly confidential. In the absence of such assurances, the veracity and reliability of data generated will be suspect. Therefore, confidentially is in the best interest of both applicants and insurers.

Underwriting Group Life and Health Insurance for AIDS

Group insurance is typically offered to employees through their employer. The impact of AIDS on group life insurance is relatively small. There is less opportunity for adverse selection than in the individual insurance market, because the amount of group coverage that can be elected is usually predetermined. Furthermore, since one characteristic of group insurance is that all members of the group are usually granted insurance coverage, an adequate spreading of the risk is obtained; there is usually little or no underwriting involved in the issuance of group life insurance coverage (with the exception of very small groups where individual underwriting generally applies).

AIDS may have a more significant impact on group health coverage. As mentioned above, hospital expenses for the average AIDS claim case is in the $45,000 - $75,000 range. The impact of AIDS claims on group health insurance may be stricter underwriting practices or more limitations on coverage, especially for small groups. Large groups are likely to be charged premium rates that directly reflect their own claim experience. Groups with AIDS cases may experience significantly higher health insurance claims and therefore will likely be charged higher premium rates.

In summary, individual underwriting is not frequently used for group coverage associated with employment. To the extent that individual underwriting practices are used for group insurance (e.g. with very small groups), the risk

10 "Blood banks give HTLV-III test positive appraisal at five months: ("Medical News," Journal of the American Medical Association, Vol. 254, No. 13 (October 4, 1985)): 1683.

In summary, individual underwriting is not frequently used for group coverage associated with employment. To the extent that individual underwriting practices are used for group insurance (e.g. with very small groups), the risk classification, underwriting standards, and privacy considerations that are used for other life-threatening diseases should also be applied to AIDS.

Conclusion

The underwriting for AIDS should be consistent with the underwriting for other diseases. It should be emphasized that contractual provision of existing policies must be honored and cannot be altered.

Proper underwriting results in equitable treatment, appropriate pricing, and widespread availability of coverage. It follows that the financial soundness of the private insurance system is best protected by minimizing adverse selection. Any consideration of restricting the process of underwriting for AIDS should properly take into account the effect on these underwriting objectives.

COMMITTEE ON RISK CLASSIFICATION

Patricia L. Scahill, Chairperson

STATEMENT 1987-23

AMERICAN ACADEMY OF ACTUARIES UNIVERSAL LIFE TASK FORCE PRELIMINARY REPORT CONCERNING VALUATION AND NONFORFEITURE PROVISIONS OF UNIVERSAL LIFE MODEL REGULATION

June 1987

June 12, 1987

Mr. John O. Montgomery
Chief Actuary & Deputy Insurance Commissioner
California Insurance Department
600 South Commonwealth Avenue
Los Angeles, California 90005

Dear John:

Re: American Academy of Actuaries Universal Life Task Force

The accompanying preliminary report is the one that we promised to send you prior to the June meeting of the Actuarial Task Force. The report includes a number of recommendations relative to possible changes to the valuation and nonforfeiture provisions of the Universal Life Model Regulation. We also are mailing copies to the other Actuarial Task Force Members.

The "preliminary" aspect of this report should be emphasized. In particular, we note that limited numerical examples have been prepared for some of the methods under consideration. Based upon the discussion at your June meeting, we might expect to expand certain sections of the report. In addition, we intend to make this report available to other Academy members for their comments.

We will be present at your June 20 meeting to describe our recommendations, to answer questions about this report, and to receive your comments. We look forward to discussing it with you.

Sincerely,

signed
Gary E. Dahlman
Chairperson, Committee on Life Insurance

signed
Douglas C. Doll
Chairperson, Universal Life Task Force

American Academy of Actuaries
Committee on Life Insurance
Universal Life Task Force

David N. Becker
Shane A. Chalke
Bruce E. Booker
Gary E. Dahlman
Douglas C. Doll
Gilbert V.I. Fitzhugh
Michael J. Hambro
William L. Hezzelwood
David J. Hippen
John J. Palmer
Forrest A. Richen
Stephen A.J. Sedlak

STATEMENT 1987-23

OUTLINE OF CONTENTS

APPENDICES

PLEASE NOTE THAT APPENDICES ARE NOT INCLUDED IN THIS COPY OF THE REPORT.

STATEMENT 1987-23

BACKGROUND AND SCOPE

The Life and Health Actuarial Task Force (ATF) asked the American Academy of Actuaries Life Committee to develop amendments to the valuation and nonforfeiture provisions of the NAIC's Universal Life Model Regulation. In a letter to John Montgomery, dated October 22, 1986, Gary Dahlman, chairperson of the Academy's Committee on Life Insurance, stated that a Universal Life Task Force (ULTF) would be created to work on this problem.

The work of the ULTF has proceeded in several phases. The first phase attempted to document the ATF's concerns relative to the current model regulation and to suggest standards and criteria for evaluating proposed revisions. A preliminary report covering this initial phase was presented for the December 1986 meeting of the ATF, with the objective being to achieve a consensus on the major issues before proceeding to the development of solutions. A copy of the report (without attachments) is included as Appendix A.

The second phase has been an analysis by the ULTF of the problems identified with the current model regulation and the development of our initial conclusions and recommendations regarding the concerns described in the December report. The target was a preliminary report that could be discussed at the June meeting of the ATF. This is that report. With input from the ATF, it is hoped that a more complete report from our Task Force could be ready in September.

SUMMARY OF RECOMMENDATIONS

NONFORFEITURE

1. A new test should be added to the existing model regulation requirements for flexible premium products. The Guaranteed Maturity Premium test (GMP test) would be applied to the guaranteed cash values of the guaranteed maturity plan. The test would require these cash values be at least as large as traditionally calculated minimum cash values for the guaranteed maturity plan.

2. Universal life policies should comply with Section 8 of the Standard Nonforfeiture Law - the "smooth cash value" test. Compliance should be based upon the guaranteed maturity plan. In Section 3, we describe a practical method of applying the test.

3. Arguments can be advanced both for and against allowing conditionally credited non-guaranteed elements. We recommend retention of the current model regulation restriction of excess interest surrender charges to 12 months' excess interest.

VALUATION

1. Under the current model regulation, calculated CRVM reserves may be less than the cash surrender value. In Section 4 of this report, we explain why this occurs. We believe that this situation, by itself, is not a matter for concern.

2. The current model regulation does not always require reserve pre-funding of future large cash value increases, because long-term reserve "sufficiencies" are allowed to offset short-term reserve "deficiencies." This result is consistent with the most commonly accepted interpretation of the Standard Valuation Law and current valuation practice for traditional life insurance products.

   We endorse the proposed amendment to Actuarial Guideline XIV that would clarify that declared guarantees should be taken into account in calculations underlying the actuarial report and the actuary's opinion regarding the adequacy of a particular company's reserves. We believe that the appropriate place to address the general issue of cash value prefunding is not in the Universal Life Model Regulation, but in a regulation, guideline, or law applying to all types of life policies. Whether and how this can be accomplished is beyond the scope of our report. A "quick-fix" for universal life, such as the proposal to require extra reserves for guarantees more favorable than the valuation basis, may allow regulators to feel more comfortable about certain situations but does not address the general issue. The issues surrounding such quick-fixes as a possible interim solution are primarily practical and political.

3. We analyzed a number of alternative valuation formulas, with varying degrees of simplicity as compared to the current model regulation. In general, the more simple the method, the less satisfactory the results, from the perspective of consistency with the traditional view of the Standard Valuation Law. Three possible alternatives are discussed in Section 4. For most products, all three methods produce approximately the same reserves because the reserve often defaults to the cash surrender value. We are not recommending at this time one of these methods as a substitute for the current model regulation method although we have some preference for a method we call the "GMP method." We intend to continue analyzing the three methods. We welcome comments and suggestions of the ATF and others regarding the relative merits of the three methods under consideration.

DISCUSSION OF NONFORFEITURE ISSUES

In this Section, we repeat the major nonforfeiture concerns summarized in our December, 1986, report, and describe our observations, conclusions and recommendations regarding the concerns. Additional detail regarding some of the recommendations is in the appendices.

NONFORFEITURE CONCERNS

Concern #1:

It is possible to manipulate charges and interest credits to end up with low or no cash values, even if premiums are level. In effect, there are no meaningful minimum cash surrender values produced by the model regulation.

a. No limits on mortality charges means that they can be manipulated to produce effectively higher front-end expense loads. Also, higher

than standard table mortality charges can be a way to "hide" expense loads.

b. Expense loads may be level on a guaranteed basis, but a different pattern on a current basis, thus allowing manipulation.

c. There is no minimum required interest guarantee.

This concern is directed at flexible premium universal life products. The intention of the model regulation is to limit the initial acquisition expense charged to a policy. We agree that it is possible to circumvent this limit. One way to circumvent the limit is to manipulate the pattern of guaranteed mortality and expense charges. We propose to address this by adding a new test to the existing model regulation requirements. We call the test the Guaranteed Maturity Premium test (GMP test). It would test the guaranteed cash surrender values generated for the guaranteed maturity plan. These cash values should be at least as large as traditional minimum cash values for the guaranteed maturity plan. For example, a universal life plan with maturity age 95 and a 6% 1980 CSO nonforfeiture basis would be required to produce cash values at least as large as traditionally calculated E95 values, using 6% interest and 1980 CSO mortality. Examples of a GMP test demonstration are included in Appendix B.

The GMP test would ensure an appropriate pattern of guaranteed mortality and expense charges and an appropriate level of initial acquisition expense charge. It would address guaranteed charges, no current charges. It would still be possible for companies to have products with high guaranteed maturity premiums by having high guaranteed mortality charges, high level guaranteed expense loads or low guaranteed interest rates. The companies then would have considerable flexibility as to how they structure current benefits. Of course, the guarantees must be disclosed to the policyholder. The concern that minimal guarantees allow a company too much flexibility to manipulate current charges is legitimate, but is something that the Standard Nonforfeiture Law does not address. Appropriate and adequate disclosure is one method of addressing this potential problem.

We note with interest that the current proposal to adopt a guideline (Guideline ZZZ) would require minimum nonforfeiture values for indeterminate premium policies be the larger of those calculated using guaranteed maximum premiums and those calculated using current premiums illustrated at issue. If the GMP test were applied to universal life illustrated current values, most products would fail the test. Likewise, most par whole life products would fail such a test if illustrated dividends were considered a reduction of premiums.

Concern #2:

There is no requirement for cash value increases to be smooth year-by-year, e.g., no restrictions on surrender charges that decrease abruptly or "bonuses" paid in specified years.

Section 8 of the Standard Nonforfeiture Law (SNFL) states that cash surrender values must be within $2 per thousand of those generated using nonforfeiture premiums that are level percentages of gross premiums for

periods of at least five years. We propose that the model regulation be clarified to make it clear that universal life policies are subject to this requirement. The test would be applicable to the guaranteed maturity plan. A description of the test and sample calculations are given in Appendix C.

The principle being addressed is smoothness. The SNFL prescribes one method to accomplish this. The method is relatively easy to apply to the guaranteed maturity plan for universal life. The guaranteed maturity funds define a set of guaranteed cash values. Using two cash values a number of years apart, and using the nonforfeiture mortality and interest basis, it is possible to solve to the level gross premium that is necessary to accumulate from the period. This level premium then can be used to solve for the intermediate smooth cash values. The final step is to compare the calculated smooth intermediate cash values to the actual intermediate cash values to see if they are within the $2 per thousand permitted corridor.

In the sample calculations we performed, we noted that the "non-smoothness" resulting from policy value guarantees different from the nonforfeiture basis does not appear to be significant. This is especially so in the first 20 durations, where cash value manipulation is most likely to occur. Therefore, we propose that such differences be ignored as long as the policy value interest guarantees are level, and as long as the cost of insurance guarantees are a level percentage of the nonforfeiture mortality table, in at least five-year intervals. For example, it would be acceptable to have a guarantee of 6% interest for 20 years, and 4% interest thereafter. It would not be acceptable to have an interest guarantee of 4% for 19 years, 20% in year 20, and 4% thereafter.

With regard to surrender charges and expense loads, it would seem reasonable to require only that they grade off within $2/1,000 of straight line over at least five-year intervals. Therefore, if the surrender charge is $10/1,000 at a given duration, and $0 five years later, the intermediate surrender charges should be within $2 per thousand of $8, $6, $4, and $2 for the intermediate four durations.

Concern #3:

Non-guaranteed elements may be credited to the policyholder's fund value, but not increase his cash surrender value. Excess interest surrender charges are an example. Another example is a type of fixed premium universal life, where the cash surrender value is the larger of two values -- a prospectively calculated value based on the guaranteed death benefits and a retrospective fund generated value might not increase the cash surrender value immediately.

There are two issues here. The first issue is whether a non-guaranteed benefit may be credited conditionally. Excess interest surrender charges are a good example. Arguments against allowing such surrender charges include the potential for misleading policyholders about the conditional nature of the excess interest credited and the fact that, for many policies, the excess interest credited and the fact that, for many policies, the excess interest does increase immediately the period that the policy will stay in force if no additional premiums are paid and, therefore, ought to increase immediately

the cash surrender value. Arguments in favor of allowing excess interest surrender charges include that any benefits above guaranteed minimum benefits ought to be at the sole discretion of the company, subject to adequate disclosure. An argument in favor of at least a 12-month excess interest charge is an analogy to par whole life policies where dividends may be payable only on policy anniversaries. Also, the current model regulation allows a 12-month period for the contingent crediting of excess interest.

Our Task Force has mixed opinions about excess interest surrender charges. The opinions include: (1) no such charges should be allowed unless they are smaller than the unused, unamortized, initial expense allowance; (2) up to a 12-month charge is acceptable; and (3) unlimited excess interest surrender charges should be acceptable. As a compromise, we recommend retention of the current model regulation restriction of excess interest surrender charges to 12 month's excess interest.

The second issue is whether it is appropriate to credit a benefit to the policy value that does not increase the cash value because the resulting policy value generated cash value is overridden by another, higher, cash value. This also can happen on a flexible premium product where the surrender charge is larger than the policy value-- the cash value may remain zero after amounts are credited to the policy value. The Task Force believes that this result is appropriate and that no change to the model regulation is needed.

NONFORFEITURE BASIS/PAID-UP BENEFITS

We discussed one issue that was not listed in our December, 1986, report. What is the nonforfeiture basis for a flexible premium universal life policy and what does it affect? What kinds of nonforfeiture benefits should be required on a flexible premium universal life policy?

The nonforfeiture basis for a flexible premium universal life policy is not necessarily equal to the policy value guarantees. We believe that the nonforfeiture basis is the basis used by the insurance company to demonstrate compliance with the nonforfeiture law. What is the nonforfeiture basis used for? It is used to determine the initial expense allowance and to determine the minimum cash values for the GMP cash value test. It is used, (technically), for the smooth cash value test. The nonforfeiture interest rate also is the maximum rate that may be used for valuation.

An issue is whether the nonforfeiture basis has any implications for policy paid-up benefits. Should a policyholder have the option to elect a paid-up insurance benefit, calculated using the cash surrender value and the nonforfeiture mortality and interest basis? The majority of our Task Force believes that such an option should not be required. An argument here is that no premium "default" occurs under flexible premium universal life. For most universal life products, a policyholder, by not paying future premiums, does not forfeit any benefit -- he continues to be treated the same as a persisting policyholder, e.g., gets the same mortality, expense, and interest charges/credits. The policyholder also has the option to later pay additional premiums to continue insurance, without having to provide evidence of insurability. In addition, going back to very basic principles (i.e., What is

equitable?), the cash value nonforfeiture benefit could be considered sufficiently equitable.

We note that some flexible premium universal life products may have elements of premium default. For example, a non-guaranteed element such as credited interest rate may depend upon a cumulative target premium being paid. In this situation, perhaps the policyholder should have the option to elect paid-up insurance. However, our Task Force has been unable so far to agree on just which situations, if any, should require a paid-up option. The problems are both theoretical (When does "default" occur?) and practical (How to handle simplified underwritten plans? How to handle fund values attributable to dump-in premiums? How to handle a single policy with different pieces assigned different substandard ratings?). We intend to consider this issue further, and we welcome comments and suggestions.

DISCUSSION OF VALUATION ISSUES

In this Section, we repeat the major concerns summarized in our December, 1986, report, and describe our observations, conclusions and recommendations regarding the concerns. In addition, we discuss some possible simplifications to the model regulation valuation method and address a couple of other issues that came to our attention.

VALUATION CONCERNS

Concern #1:

The calculated CRVM reserve frequently is less than the cash surrender value; therefore, the company holds the cash surrender value as the reserve.

a. There is concern that producing reserves less than the cash surrender value means that the method has shortcomings.

b. There is concern that the cash surrender value may be an inadequate reserve in some cases.

There are two situations where the calculated CRVM reserves may be less than the cash surrender value. First, the unamortized initial acquisition expense assessed against the cash surrender value may be smaller than the unamortized CRVM expense allowance. In effect, the cash values are higher than minimum, and may even be net level values. It is consistent with some traditional plans and not inappropriate for such cash values to be higher than CRVM reserves.

A second reason is that the valuation basis may be more liberal than the policy value guarantees. The Standard Valuation Law values future death benefits and endowments, not intermediate cash values. For example, consider the simple example of a policy with a 4% policy value guarantee and a 6% valuation basis. Ignoring mortality, a $1.00 policy value today produces a $1.04 endowment benefit one year from now, and the reserve for that benefit will be $.98. We believe this is an appropriate result. A concern is

that this result makes more common the situation where future cash value increases result in future large reserve increases -- this is discussed more fully under Concerns 2 and 3, below.

Concern #2:

> Initial guarantees beyond the minimum valuation basis of mortality charges and interest may not produce additional reserves, if the ultimate guarantees are low enough. A question related to this concern is whether it is appropriate to have a valuation basis more liberal than the policy guarantees.

Current Standard Valuation Law methodology values guaranteed death benefits and endowments, not intermediate cash values. Consider the simple example of a policy where the policy value and the cash surrender value both equal $1.00. If the guaranteed interest rate is 4% and the policy matures in 10 years, the guaranteed endowment is $1.48. The present value of this endowment, at a 6% valuation rate, is $.83. Let's now change the guaranteed interest rate to 10% for two years, and 4% thereafter. The guaranteed endowment becomes $1.66 and the present value at 6% becomes $.92.

Note that adding the 10% interest guarantee increased the calculated reserve from $.83 to $.92, but that the "final" reserve was unaffected, because it was equal to the $1.00 cash surrender value in both cases. What happened in the second case was that the interest "sufficiencies" in years 3 through 10 are more than enough to offset the "deficiencies" in years 1 and 2.

The Universal Life Model Regulation has the same effects. We note that when the valuation basis is the same as the ultimate policy value guarantees, the model regulation does increase reserves for initial guarantees on policy values in excess of the guaranteed maturity fund. An example of this is shown in Appendix D. In general, however, a valuation basis more liberal than the ultimate product guarantees produces future "sufficiencies" that can be used to offset short-term "deficiencies." If it is appropriate to have a valuation basis more liberal than the policy value guarantees, we believe that the above results are consistent with traditional interpretation of the Standard Valuation Law, existing actuarial guidelines, and current valuation practices.

The traditional reserve methodology in certain cases may cause short-term reserve inadequacy. We endorse the proposed amendment to Actuarial Guideline XIV that would clarify that declared guarantees should be used in calculations underlying the actuarial report and the actuary's opinion regarding the adequacy of a particular company's reserves. We believe that the appropriate place to address the general issue of cash value prefunding is not in the Universal Life Model Regulation, but in a regulation, guideline, or law applying to all types of life policies. Whether and how this can be accomplished is beyond the scope of our report. A "quick-fix" for universal life, such as the proposal to require extra reserves for guarantees more favorable than the valuation basis, may allow regulators to feel more comfortable about certain situations but will not address the general issue. The issues surrounding such quick-fixes as a possible interim solution are primarily practical and political, not actuarial.

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When all the valuation issues regarding the adequacy of universal life reserves are boiled down, two general issues remain:

1. May the valuation basis be different from the policy value guarantees?

2. Should reserves take into account future cash value increases or value only future death benefits and endowments?

Most, but not all, of the simplifications proposed for universal life valuation depend to varying degrees upon setting the valuation basis equal to the policy value guarantees for part or all of the reserve. This is implicit in any simplification that attempts to define the reserves as "policy value less something" or "cash value plus something." If the policy value guarantees equal the nonforfeiture basis, then there is an argument in favor of also equating the valuation basis, since historically there has been a link between the valuation and nonforfeiture basis. In fact, the Standard Valuation Law prohibits a valuation interest rate higher than the nonforfeiture interest rate. (We are concentrating here on the issue of a valuation basis more liberal than the policy value guarantees -- we see no problem accepting a valuation basis more conservative than the policy value guarantees.)

If the nonforfeiture basis is different from the account guarantees, then we see no theoretical actuarial basis to limit the valuation basis to the policy value guarantees. However, there are potential practical benefits in adopting a simplified standard that produces reasonable reserves.

Regarding the second general issue, it is our understanding that the issue of pre-funding cash value increases in reserves has been addressed by the NAIC on more than one occasion in the past several years. So far, an explicit requirement for such pre-funding has not been stated either in the Standard Valuation Law or in an Actuarial Guideline. We note that some actuaries believe the current Standard Valuation Law should be interpreted to require such pre-funding. Two arguments in favor of such pre-funding are as follows: (1) "Life insurance and endowment benefits" includes intermediate cash values as part of the benefits; and (2) the Standard Valuation Law prescribes reserves for indeterminate premium plans must be computed by a method "consistent with the principles of the Standard Valuation Law." The method prescribed for policies providing uniform premiums and benefits provides adequate reserves for short-term as well as long-term benefits. When benefits and/or premiums become non-uniform, additional methodology is required to assure short-term benefit reserve adequacy.

Arguments against such prefunding include: (1) "life insurance and endowment benefits" does not include intermediate cash values; (2) standard actuarial practice does not include such reserve consideration; and (3) the "good and sufficient" portion of the actuarial opinion is sufficient to require adequate overall reserves.

As stated earlier, we believe the appropriate place to address the general issue of cash value pre-funding is not in the Universal Life Model Regulation, but in a regulation, guideline or law, applying to all types of life policies.

Concern #3:

> Rapid cash surrender value increases caused by surrender charges that reduce rapidly, or caused by some sort of "bonus," are not prefunded in the reserves.

This is an extension of Concern 2, except that the rapid cash surrender value guarantees are being caused by factors other than policy value guarantees. Our comments are the same.

Concern #4:

> The method is complicated, difficult, and costly to apply and to check.

We analyzed a number of alternative valuation formulas, with varying degrees of simplicity. In general, the more simple the method, the less satisfactory the results, at least from the perspective of consistency with the traditional view of the Standard Valuation Law. The traditional view of the Standard Valuation Law is that it values future guaranteed death and endowment benefits. In order to determine accurately the future guaranteed benefits for a universal life policy, a projection is necessary since each policy will have a different current policy value and therefore have a different set of future guaranteed benefits. Performing a projection is more complicated than applying a pre-calculated set of factors. There are situations, however, where factors can be used to duplicate projection results. This is discussed below under the description of the "GMP method."

SIMPLIFIED VALUATION METHODS

In this subsection, we present three possible alternatives to the Universal Life Model Regulation reserve method that address the issue of simplicity.

The various kinds of simplifications proposed fall into one of three categories:

1. Factor approximations to model regulation reserves.

2. Reserves equal to "cash value plus something" of "fund value minus something."

3. Reserves equal to present value of paid-up benefits.

One method from each of these three categories is described briefly below. Appendix D to this report shows sample results from each of these methods.

Factor Approximations to Model Regulation Reserves (The GMP Method).
Although the model regulation requires benefit projections at each valuation date, it can be demonstrated that a set of factors will produce identical reserves for policies where the policy value does not exceed the guaranteed maturity fund and where no guarantees have been added after issue. When the policy value does exceed the guaranteed maturity fund, one possible approach is to hold the extra amount as an extra reserve. We call this the GMP method, because it requires calculation of the guaranteed maturity premium and guaranteed maturity fund values.

Definitions:

PV = policy value

GMF = guaranteed maturity fund

V^{NL}, V^{CRVM} = traditionally calculated net level reserve and CRVM reserve for guaranteed maturity plan

EA = CRVM expense allowance for guaranteed maturity plan = $V^{NL}-V^{CRVM}$

V^{CRVM} = universal life CRVM reserve

The GMP method would have reserves for flexible premium universal life as follows:

V^{CRVM} = $(V^{CRVM})(PV / GMF)$, if PV _ GMF or,

V^{CRVM} = $V^{CRVM} + (PV - GMF)$, if PV _ GMF

Like the model regulation method, the GMP method requires calculations of guaranteed maturity fund (GMF) values. Unlike the model regulation method, no projections are necessary of benefits at each valuation date. The method produces the same results as the model regulation when the policy value is less than or equal to the GMF. Policy values in excess of GMF effectively are reserved at a valuation basis equal to the policy value guarantees.

Unlike the model regulation, the GMP method does not handle guarantees added after issue; a supplemental calculation would have to be added for significant after-issue guarantees.

Interestingly, the Actuarial Task Force's reserve proposal made in December, 1985, looked a lot like the GMP method. The formula for net level reserves was:

$$(V^{NL})\ (PV / GMF)$$

One problem with the December, 1985, proposal was that it did not provide for special treatment when (PV/GMP) was larger than 1. Small values of GMF or large values of PB could make the reserves "blow up." The GMP method does not have this problem.

Reserves Equal to "Fund Value Minus Something" (Policy Value Method).
Several approaches have been suggested that would set universal life reserves equal to "cash value plus something" or "fund value minus something." The Actuarial Task Force proposed in Spring of 1986 a method that would set reserves equal to actual cash values plus the difference between cash value and CRVM expense allowances. The major criticism to this approach was that it only was appropriate for policies where the cash value equals the minimum cash value.

Other approaches have been suggested that key off of the policy value. One approach uses the following formula:

$$V^{CRVM} = PV - R\,(EA'), \text{ where } r = {}_{V}NL \quad 1$$

EA' is the CRVM expense allowance for the guaranteed maturity plan, reduced by any front-end loads.

For total front-loaded products, the reserve would merely equal the policy value. This is a total factor method. No projections are required. Effectively, this method sets the valuation basis equal to policy value guarantees. The expense allowance adjustment is approximate, being based on the ratio of policy value to a net level reserve instead of to the GMF. The formula as given does not adjust for guarantees above the maximum valuation basis; a supplemental calculation would be needed to handle this situation.

Present Value of Paid-Up Benefits (The Paid-Up Method). The Paid-Up method simply would set net level reserves equal to the present value of benefits projected from the policy value, assuming no future premiums. It requires a seratim projection of benefits on each valuation date. It does not require GMF calculations. Unlike the other methods, it automatically handles most favorable guarantees, although favorable guarantees in the later durations may be ignored in certain situations. It ignores future premiums. The expense allowance is not adjusted for policy values less than GMF, although this could be done in the same manner as is done for the Policy Value method.

Task Force Recommendation

We are not making a definite recommendation at this time for one of these methods as a substitute for the current Model Regulation method. We intend to continue analyzing the three methods, and to consider comments and suggestions we get from this preliminary report.

At this time, we lean toward recommending the GMP method as being a significant simplification to the Model Regulation method and producing reserves most consistent with the traditional methodology. The Paid-Up method is the most simple to understand, but is less simple mechanically; also, the Paid-Up method is inconsistent with the concept of universal life being a premium-paying, rather than paid-up product.

STATEMENT 1987-24

MEMORANDUM

TO: NAIC Technical Services (EX5) Subcommittee

FROM: Burton D. Jay, Chairperson
American Academy of Actuaries
Committee on Liaison with NAIC

DATE: June 25, 1987

The American Academy of Actuaries Committee on Liaison with NAIC was established to provide coordination and communication between the Academy's leadership and the NAIC Technical Services (EX5) Subcommittee on issues of actuarial significance to insurance regulators. Another purpose was to address the priorities of the many actuarial projects being considered within the NAIC. We are pleased with the progress that the NAIC Actuarial Task Forces have made in this area. For the past several years, we have made progress reports to this Subcommittee, describing in outline fashion the major liaison activities between the Academy and the NAIC. We are pleased to provide this report today.

I now chair the Academy's Committee, and also serve as Vice-President of the Academy. My service as chairperson continues a tradition initiated by my predecessor, Carl R. Ohman, of assuring direct access to the Academy's Executive Committee by appointing one of its members as chairperson of this committee. Mr. Ohman is continuing on as a member of the committee to provide for continuity in our deliberations and assistance to the NAIC.

Let me briefly outline the major components of Academy/NAIC liaison at this juncture.

(1) Actuarial Communications. As the public interface entity of the actuarial profession in the United States, one of our major functions is to assure a flow of communications within the profession on issues of concern to the profession and to the NAIC. In order to help accomplish this task, Academy staff, committees, and members of the Academy monitor the activities of the two NAIC Actuarial (EX5) Task Forces, as well as the activities of all other NAIC committees, subcommittees, and task forces when they address issues of actuarial significance. We report on these activities to our membership through a variety of communication vehicles, including a monthly newsletter, The Actuarial Update, a monthly government relations scorecard, the Government Relations Watch, and an annual summary publication, the Issues Digest. In addition, we have this year initiated a subscription-based vehicle called Academy Alert, which provides to subscribers immediate news and background information on developments of concern. This year, some of the Alerts have addressed NAIC-related issues such as loss reserve opinion requirements, universal life model regulation modifications, health insurance reserve standards, and changes proposed to the Annual Statement Blank.

In addition to these generalized publications, the Joint Committee on the Valuation Actuary, composed of representatives of all major actuarial

organizations, monitors developments in this key area and keeps actuaries and regulators apprised of activities in that arena. We consider continued dialogue between regulators and the actuarial profession to be of prime importance in the evolution of the valuation actuary concept.

(2) NAIC Projects. Several Academy committees are hard at work on a broad range of specific projects on the NAIC's agenda, providing both policy and technical commentary to various NAIC committees, subcommittees, and task forces.

- The Academy's Health Subcommittee on Liaison with the NAIC has been intimately involved with the development of health insurance valuation standards and health insurance rate guidelines.

- A task force of our committee on Life Insurance is working on an extensive review of the valuation and nonforfeiture provisions of the NAIC universal life insurance model regulation.

- The Academy Committee on Property and Liability Insurance Financial Reporting is assisting in the development of proposed changes to Schedules O and P, and conducting discussions concerning the discounting of loss reserves.

- Our Subcommittee on Dividends and Other Non-Guaranteed Elements has been hard at work on proposals before the Life Cost Disclosure (A) Task Force, a corollary advertising proposal now before the Market Conduct Surveillance (EX3) Task Force, and changes being adopted in March by the Blanks (EX4) Task Force.

- Our two committees on financial reporting are considering the area of reinsurance reserving.

- We are participating in the advisory committee to the NAIC Legal Liability Insurance (D) Task Force.

(3) Actuarial Standards. The Interim Actuarial Standards Board (IASB) with the support of many operating committees, is working on a variety of proposed standards of actuarial practice. One actuarial standard being promulgated this month which is of interest to insurance regulators relates to Continuing Care Retirement Communities. Proposed standards for which exposure is expected during 1987 cover such areas as casualty ratemaking (disclosure of assumptions/trending), discounting of loss reserves, health claim liabilities, health rate filings, a revision to our Recommendation 7 (a key component to the valuation actuary system), and reinsurance reserves.

The IASB, now nearing the completion of its experimental phase, will become the full-fledged Actuarial Standards Board within the next 12-18 months. Much effort and consideration remains to be done before the ASB is formally launched; however, the profession believes that the creation of the ASB will serve many important ends, both within and outside of the profession.

(4) Other. The Academy has been pleased to support the NAIC both through its committee work cited above, and through our communication of significant NAIC-related material to the profession. As we reported in December, we

have recently published in our 1986 Journal the currently in-force NAIC Actuarial Guidelines, and plan to continue publication of new guidelines as they are adopted. Further, our Academy Alert service provides a new, immediate communication linkage between the regulators and the actuarial community, one which we hope to expand as time passes. Finally, we have a monthly insert in our newsletter mailings entitled "In Search Of" in which governmental actuarial positions are listed. A number of state insurance departments have found this service useful in hiring for actuarial positions.

The Academy Committee on Liaison with NAIC welcomes the opportunity to report to the Technical Services (EX5) Subcommittee, and we look forward to continuing this interchange at future NAIC meetings.

Respectfully submitted,

(signed)

Burton D. Jay, Chairperson
Committee on Liaison with NAIC

STATEMENT 1987-25

July 7, 1987

Mr. Martin Ives
Vice Chairman/Director of Research
Governmental Accounting Standards Board
High Ridge Park
P.O. Box 3821
Stamford, Conn. 06905-0821

Dear Mr. Ives:

This is in reply to your letter of May 18th to Steve Kellison, with a copy to me, in which you requested the perspective of the Academy regarding certain issues related to pension accounting for state and local governments.

I was able to convene a meeting of the Pension Accounting Committee on fairly short notice, in order to discuss the issues which you had raised. You should view these as our preliminary thoughts, which we would be happy to discuss in more detail with you as you deem appropriate, but I did want to at least provide you with some input from our Committee prior to your meeting of July 14th.

Membership on the Committee preparing these comments has been drawn from a wide range of interests and perspectives so as to give a broad range of views on the matters in your letter. As with many other professional organizations, the structure of the Academy and the timing required in responding to various public issues places the responsibility of preparing comments on such issues on its committees, on the assumption that they are representative generally of the Academy's membership.

As you are no doubt well aware, our Committee has had considerable dialogue with the Financial Accounting Standards Board over the past several years during their deliberations, which ultimately produced FAS 87 and 88, dealing with private sector plans. Consequently, the first order of business at our meeting was to evaluate what we perceived to be the key differences between private plans and governmental plans. It seems to us that this fundamental distinction is important in all of our contemplations.

Governmental plans are properly viewed as being dedicated to the payment of benefits, whereas private plans can represent significant economic assets to their sponsors, above and beyond their use as a source of benefits. One need only look to the last few years in the private sector to see that employers have received asset reversions, have terminated their plans, and in general, may have made some observers wonder about the "going concern" accounting treatment which FASB accorded them. We feel that governmental plans are not subject to these same considerations and this belief underlies our thoughts as expressed later in this letter. We readily acknowledge that these differences between private plans and public plans are not strictly actuarial considerations; however I'm sure you understand that such differences do bear in a very real way on some of our decisions. For example, we feel that the longer term nature of public plans enables us to place less emphasis than we would otherwise on "termination type" considerations.

With that in mind, we were particularly interested in your statement:

> "....as accounting standards-setters, we would like to see less discretion in measuring expenditures like pensions, so as to provide greater comparability for users of financial reports. At the same time, as governmental accounting standards-setters, we recognize the role played by the budget in the governmental financial system."

We found ourselves very much in empathy with what we perceived to be your concern in establishing rules which could create confusion and misunderstanding in the governmental plan area e.g. the notion of a prepaid asset (or liability) representing the difference between the amounts funded and expensed . We then discussed the three basic choices which GASB seems to have, as you describe them, with the following comments on each:

1) Should the GASB adopt FASB Statement 87 for pension measurement (leading to less discretion)?

   I don't believe that any of us would agree with this approach for governmental plans. In fact, there were very few actuaries who agreed with this approach for private plans. Nevertheless, FASB did issue Statement 87. We are just beginning to see the fall-out of this in actual practice and my own feeling is that although Statement 87 has been responsible for generating increased administrative, accounting, and actuarial fees to plan sponsors, it has not really accomplished some of FASB's stated objectives (e.g. more comparability, more understandability, etc.). The year to year potential volatility in pension expense is but another example of the practical problems inherent in such an approach. I will not go on further about this, but if FAS 87 has caused so much confusion (and increase in compliance costs) in the private sector, one has only to wonder what would happen in the public sector with a similar set of requirements.

2) Should the GASB allow pension expenditures to be measured on whatever actuarial cost method is used for funding purposes (which might be closer to the budgeting practice)?

   There was some sympathy from our group for this solution, primarily because GASB has already issued Statement No. 5 dealing with disclosure. Statement No. 5 is intended to provide information to assess: the funding status on a going-concern basis, progress made in accumulating sufficient assets to pay benefits when due, and whether employers are making actuarialy determined contributions. Because of this, some sentiment was expressed that there was less need to restrict the accounting for pension expense, since the required disclosure would already provide sufficient information with which to assess the pension obligation.

3) Should the GASB permit measurement on the basis used for funding purposes provided the method and the assumptions fall within certain "parameters of reasonableness" for accounting purposes?

On balance, most of us felt that this approach represented the most pragmatic and useful approach for governmental accounting. Consequently, our comments which follow are predicated on the assumption that GASB will pursue this route.

You have asked for our thoughts on a number of specific matters in connection with accounting, and we have attempted to address those matters as part of our discussion in the remainder of this letter. As you know, the annual cost of a plan includes the normal cost, amortization of the unfunded liability (reflecting any gains or losses), and interest on any actuarial cost methods, actuarial assumptions, amortization techniques, and asset valuation methods as herein discussed. In this discussion, we've addressed only minimum cost considerations; we are not aware of problems with public entities overstating pension costs.

We feel that most any reasonable and rational actuarial cost method should be acceptable for accounting purposes. In line with this, we would specifically suggest the following acceptable actuarial cost methods.

Projected Unit Credit Actuarial Cost Method
Entry Age Actuarial Cost Method
Attained Age Actuarial Cost Method
Aggregate Actuarial Cost Method
Frozen Entry Age Actuarial Cost Method
Frozen Attained Age Actuarial Cost Method
Individual Level Actuarial Cost Method
Individual Spread Gain Actuarial Cost Method
Unprojected Unit Credit Actuarial Cost Method (if the plan is not final pay)

This is the full list from Appendix E, Section B, of GASB Statement No. 5, with the exception of the Projection Actuarial Cost Method or Forecast Actuarial Cost Method.

We feel that unfunded past service liabilities should be amortized by any reasonable and consistent method which is at least as rapid as the following method:

(a) Initial unfunded liabilities existing at date of application are amortized as a level percentage of payroll over a period not to exceed 40 years from such date.

(b) Supplemental past service liabilities due to benefit changes are similarly amortized as a level percentage of payroll over a period not to exceed 40 years from the date of establishment.

(c) The assumed rate of payroll growth used for purposes of (a) and (b) shall not exceed the assumed valuation inflation rate.

It should be noted that the 40 year maximum amortization period was selected to correspond to the maximum period allowed under APB-8. However, the committee also feels that level percentage of payroll amortization should be allowable, in addition to level dollar amortization. We feel that the goal of achieving intergenerational equity. Because public retirement systems bear

little risk of terminating, the less rapid amortization caused by level percentage of payroll expensing compared to level dollar expensing would not seem to present any problems.

It was also felt advisable to restrict the assumed rate of payroll growth to one no greater than the rate assumed for inflation in the valuation. This is equivalent to saying that expensing must reflect only the size of the current workforce, without projecting future growth in numbers of active participants. Such a projection would result in slower amortization, and it was felt that an assumption of this nature may turn out to be overly optimistic. Furthermore, spreading amortization expenses for current liabilities over anticipated future participants, other than replacements, does not seem justifiable from a theoretical perspective, or under generally accepted accounting standards.

With regard to amortization of experience or assumption change gains and losses, while a distinction can be made among different types of actuarial gains and losses, it is simpler to regard them all as adjustments to the original estimates of unfunded liabilities. We therefore suggest that they be allocated proportionately to those unfunded liabilities and amortized over the applicable remaining amortization periods.

Here is an example (dollars in millions):

	Before $3 Actuarial Loss		After $3 Actuarial Loss	
	Remaining Balance	Remaining Amortization Period	Remaining Balance	Remaining Amortization Period
Unfunded Transition Liability	$20	30 years	$22	30 years
Plan Amendment Liability	$10	35 years	$11	35 years
Total Unfunded Liability	$30		$33	

With regard to the asset valuation method, we feel that assets may be valued at fair value or an average of fair value over a period of up to five years. Alternatively, they may be valued on a rational and systematic basis that treats gains and losses equally and produces a result that is not less than 80% or more than 120% of fair value.

With regard to actuarial assumptions, we would favor an explicit approach, where each significant assumption should reasonably reflect the anticipated long-term experience of the plan with respect to that assumption; furthermore, the assumptions should be reasonable in aggregate.

As I indicated earlier, these are the thoughts that resulted from our initial discussion of the questions which you raised in your letter. We would welcome the opportunity to further discuss these thoughts with you. If you feel that it

would be useful, we would be happy to have representatives at your July 14th meeting.

In any event, I did want to get our initial thoughts to you in time for your July 14th meeting. I trust that they are of some use to you, other members of the board and the staff, and members of the task force.

Please let me know if you have any questions or would like to discuss this further by phone.

Sincerely,

(signed)

Harper L. Garrett, Jr.
Chairperson, Pension Accounting Committee

STATEMENT 1987-26

OVERVIEW - MANDATED SEX-NEUTRAL RATING

Statement of the
Committee on Risk Classification
of the
American Academy of Actuaries

July 1987

General Purpose of Risk Classification

To establish a fair price for insuring an uncertain event, estimates must be made of the probabilities associated with the occurrence, timing and magnitude of such an event. These estimates are normally made through the use of past experience, coupled with projections of future trends, for groups with similar risk characteristics.

The grouping of risks with similar characteristics for the purpose of setting prices is a fundamental precept of a workable, private, voluntary insurance system. This process, called risk classification, is necessary to maintain a financially sound and equitable system.

To achieve and maintain viable insurance systems, the process of risk classification should serve three primary purposes. It should: (1) protect the insurance system's financial soundness, (2) be fair, and (3) permit economic incentives to operate and thus encourage wide-spread availability of coverage. Striking the appropriate balance among these objectives is not always easy, but they are clearly in the public interest and are not incompatible.

Equitable treatment is essential if each individual is to be charged a price that is perceived as fair and appropriate for the risk involved. Appropriate pricing of insurance requires that the expected costs for the individual risks in a price category be similar. This does not imply that the actual cost for any specific insured can be determined in advance. Average expected claim experience can be quite reliable, though, for a large group of insureds with similar risk expectations. The mathematical disciplines of probability, statistics, and forecasting are applied to all relevant data available. With this information, an appropriate premium to be paid by each member of the group is determined.

A risk classification system must also be efficient. The additional expense of obtaining more refinement should not be greater than the reduction in expected claims for the less expensive, less refined risk classification system. Thus, there is a practical limit to the incentive to add refinements to the classification system.

Laws, regulations, and public opinion all constrain risk classification systems within broad guidelines of social acceptability. Legislative and regulatory restrictions on these systems must balance a desire to increased public acceptability against the potential economic side effects of adverse selection or market dislocation.

A more detailed presentation of the Academy's view of risk classification is presented in the booklet "Risk Classification: Statement of Principles," American Academy of Actuaries, June 1980.

Current Practice

The availability of insurance is usually the same for males and females. The greatest effect of mandated sex-neutral premiums and availability would be the prohibition of differences in the pricing of insurance based on the sex of the insured. We have confined our analysis to the probable financial effects of sex-neutral insurance pricing. We discuss the effect on two major categories of insurance - group and individual.

Much of the insurance coverage in this country is provided through group plans. For example, group insurance represents at least 85% of private hospital/medical insurance for those under age 65. The most common type of group coverage is insurance offered to employees through their employer. Most group insurance plans already utilize sex-neutral employee contributions. Therefore, the effect of requiring group insurance availability and the portion of the cost paid by individual participants to be on a sex-neutral basis would be negligible. Consequently, the remaining comments deal with insurance sold directly to individuals.

Probable Financial Effects of Changing to Sex-Neutral Insurance

For some types of insurance, a change to sex-neutral premiums would cause women to pay less and men more than they presently pay for the same coverage; for other types, men would pay less and women more. The impact of sex-neutral premiums on any particular individual or family would depend on the particular insurance coverages involved and the characteristics of the persons insured. Some of the expected financial effects are summarized below and are from an earilier paper of the committee on Risk Classification:

1. Life insurance premiums would increase for women and decrease for men.

2. Health insurance premiums would decrease for women and increase for men.

3. Automobile insurance premiums would increase for women and decrease for men, particularly at the younger ages.

4. Substantial administrative expense would be incurred by insurance companies in establishing sex-neutral premiums, recalculating benefits, amending policies and contracts, changing computer programs and modifying procedures. These additional expenses would tend to increase insurance costs for all insureds.

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TYPE OF INSURANCE	% Change in Price Increase (+) or Decrease (-) MALE AGE 20	MALE AGE 40	MALE AGE 65	FEMALE AGE 20	FEMALE AGE 40	FEMALE AGE 65
Life Insurance	- 2%	- 3%	N/A*	+ 6%	+ 11%	N/A*
Health Insurance						
-Medical Expense						
Unisex Rating	+ 18	+ 13	0	- 12	- 7	0
Full Maternity**	+ 38	+ 1	0	+ 26	+ 1	0
TOTAL	+ 56	+ 14	0	+ 14	- 6	0
-Disability						
Unisex Rating	+ 4	+ 2	0	- 26	- 21	0
Full Maternity**	+ 38	-	0	+ 20	-	0
TOTAL	+ 24	+ 2	0	- 6	- 21	0
Automobile Insurance****	- 20	0***	0	+ 37	0***	0
Individual Annuities*****	+ 6	+ 6	+ 6	- 6	- 6	- 6

* Relatively little life insurance is sold on an individual basis to people age 65.

** This is the impact of requiring full maternity coverage (i.e., coverage for normal pregnancies and deliveries, as well as coverage for complications of pregnancy).

*** Some insurers now charge women between the ages of 30 and 64 who are the sole operators of their cars approximately 10% less than similarly situated men. The price of auto insurance for these women would increase slightly but the impact is difficult to predict and would be small in any event.

**** Effects shown are for men and women who are principal drivers of the insured car.

***** Payments commencing at age 65, with refund features.

Additional Considerations

Mandated changes in pricing practices often have effects that may not be obvious, but are potentially significant and worthy of consideration. These include:

1. Insurers would have to assume the additional risk of inadequate premiums because the sex distribution of those who purchase the insurance might be different from what was assumed in the pricing. A general increase in the average price of insurance would result.

2. There could be increased emphasis on selling insurance to those whose coverage is thought to be overpriced.

3. Individuals for whom insurance has become overpriced may be reluctant to purchase coverage.

4. Additional costs would result from increased regulatory efforts to ensure equal availability of coverage.

5. If legislation requires application to policies already in force, significant problems would result. Contractual guarantees, with regard to such things as premiums, would have to be changed. These guarantees may be important to the operation of other agreements, such as wills, divorce agreements, business agreements, and employee benefit plans. There could be a negative impact on the solvency of insurance companies if they are unable to adjust premiums to compensate for any increase in benefits.

Conclusion

Passing a law to do away with sex-distinct mortality tables, for example, will not do away with the fact of sex-distinct mortality. It will simply spread the burden of costs inequitably.

If it turns out that the experience differential between men and women disappears, the insurance practice of charging a different rate for men and women will also disappear. It would happen as a result of normal competitive pressures without legislation.

Legislators, the courts, and the public must at some point decide what are socially acceptable practices in the context of insurance. In making this evaluation, it is important to understand that the primary way to assess an individual's insurance risk is to measure the insurance risk of a group with similar risk characteristics. Therefore, some aspects of fair practices applicable in other contexts may not be appropriate or possible in the insurance context.

American Academy of Actuaries

This statement was prepared by the Committee on Risk Classification of the American Academy of Actuaries.

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The American Academy of Actuaries is a professional association of actuaries which was formed in 1965 to bring together into one organization all qualified actuaries in the United States and to seek accreditation and greater public recognition for the professional and more effective public service by the profession. The Academy includes members of three founding organizations - the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, and the Society of Actuaries.

The Academy serves the entire profession. Its main focus is the social, economic, and public policy environment in which the actuarial profession functions. Its primary activities include liaison with federal and state governments, relations with other professions, the dissemination of public information about the actuarial profession and issues that affect it, and the development of standards of professional conduct and practice.

Over 8,400 actuaries in all areas of specialization belong to the Academy. These members are employed by insurance companies, consulting actuarial firms, government, academic institutions, and a growing number of industries. Actuarial science involves the evaluation of the probabilities and financial impact that uncertain future events - birth, marriage, sickness, accident, fire, liability, retirement, and death - have on insurance and benefit plans.

Committee on Risk Classification

Patricia L. Scahill, Chairperson

STATEMENT 1987-27

July 31, 1987

Dennis L. DeWitt, Executive Director
Task Force on Long-Term Health Care
Health Care Financing Administration
Room 4406 HHS Bldg.
330 Independence Avenue,SW
Washington, DC 20201

Dear Mr. DeWitt:

The American Academy of Actuaries appreciates having had the opportunity to meet with the Task Force on Long-Term Health Care Policies on June 11 to describe the Academy's new actuarial standards of practice relating to continuing care retirement communities (CCRCs). We are happy to know that the task force plans, in its final report, to recommend that states enact legislation to assure appropriate actuarial and financial planning to cover the long-term care costs of residents and will suggest the use of the actuarial standards of practice established by the Academy.

Enclosed is a copy of the final Actuarial Standards of Practice Relating to Continuing Care Retirement Communities as adopted by the Interim Actuarial Standards Board and ratified by the Academy's Board of Directors on June 18, 1987. (The standard was not available in final form at the time we met with the task force.) Please feel free to contact us should you or any of your staff have questions about this document or other issues relating to CCRCs.

Sincerely,

(signed)

Stephen G. Kellison
Executive Director

STATEMENT 1987-27

June 2, 1987

Mr. David L. Hewitt
Senior Vice President
Hay/Huggins Company, Inc.
229 South 18th Street
Philadelphia, PA 19103

Dear Mr. Hewitt:

The Task Force on Long-Term Health Care Policies is pleased to accept the offer of the American Academy of Actuaries to briefly explain the model you have constructed for evaluating Community Care Retirement Communities.

We have scheduled your presentation from 9:05 to 9:20 on Thursday, June 11, 1987. The Task Force will be meeting at the Twin Bridges Marriott Hotel, 333 Jefferson Davis Highway, Arlington, Virginia. I wish we were able to devote more time, however, the Task Force has been limited to a 1 day meeting and has a fully 2 days of ground to cover.

We would like to extend an invitation to you to remain for as much of the meeting as you wish. If you intend to stay through the evening, we would like to extend an invitation to join us for dinner.

I am looking forward to seeing you on June 11.

Sincerely,

(signed)

Dennis L. DeWitt
Executive Director

STATEMENT 1987-27

The following is an excerpt from the minutes of the June 11, 1987, meeting of the Task Force on Long-Term Health Care Policies:

Continuing Care Retirement Communities

Mr. David Hewitt, Senior Vice President, Hay/Huggins Company, Inc., representing the American Academy of Actuaries, discussed Continuing Care Retirement Communities (CCRCs). Mr. Hewitt stated that CCRCs offer a stimulating environment and currently most are non-profit. Ha also informed the Task Force that the American Academy of Actuaries is ready to publish its standards for CCRCs. The standards define CCRCs; point out the insurance nature of CCRCS; project future cash and population flows; describe actuarial techniques; determine surplus targets; determine assets and liabilities feasibility studies; differentiate between limited and prefunded prepaid health care; set criteria for pricing reserves; and differentiate between refundable and non-refundable fees. Mr. Hewitt explained that actuaries should work closely with the people in charge of CCRCs so that no construction would begin on a CCRC until presales ensure full occupancy. When CCRCs are constructed with full occupancy ensured, the costs can be spread over all residents and would help prevent the CCRC from going under because of lack of funds. The actuarial information would help the owners of CCRCs to decide whether to build all nursing home beds at the beginning or phase them in with adequate financing in the pricing structure of the CCRC. Mr. Hewitt also informed the Task Force that 17 states have adopted state regulations for CCRCs.

STATEMENT 1987-27

July 2, 1987

Mr. David L. Hewitt
Senior Vice President
Hay/Huggins Company, Inc.
229 South 18th Street
Philadelphia, PA 19103

Dear Mr. Hewitt:

As you know, I consider financing the costs of catastrophic illnesses, including the costs of long-term care, a critical issue. An increasing number of individuals have begun to understand the need for protection against the cost of long-term health care, and this Administration is committed to assist the development of private financing options.

Your presentation on Continuing Care Retirement Communities to the Task Force on Long-Term Health Care Policies provided valuable information to that group as they proceed with their vital deliberations. Your discussion provided a valuable framework as the Task Force begins its work to develop a private insurance solution to the problem.

I want you to know how much I personally appreciate your contribution toward our effort to develop a viable private long-term care insurance market.

Sincerely,

(signed)

Otis R. Bowen, M.D.
Secretary
Health and Human Services

STATEMENT 1987-28

September 10, 1987

To: Members of NAIC (EX5) Life and Health Actuarial Task Force

Subject: Report on Proposed NAIC Reserve Standards for Individual and Group Health Insurance Contracts: Follow up on Comments received on Third Exposure Draft of March, 1987

Twenty-three letters were received by our Academy of Actuaries subcommittee commenting on the third Exposure Draft of the proposed reserve standards, prior to the July 20 comment deadline. Five additional letters were received after the deadline; those were given attention to the extent time permitted.

The subcommittee carefully reviewed all comments and suggestions submitted in these 23 letters and then met for two days, on August 10 and 11, 1987 for discussion of all comments and to consider what further changes, if any, should be made in the proposed standards draft in response. A number of suggestions were editorial in nature, and various editorial corrections and improvements have been made in response. Other comments raised questions as to intent, or as to apparent ambiguity, in certain provisions and we have attempted to clarify intent and eliminate ambiguity wherever such need appeared.

A number of writers raised objections to one or more basic concepts and provisions contained in the exposure draft.

While revisions have been made in response to some of these objections, the subcommittee has concluded that no basic or fundamental change in the proposed standards would be appropriate.

Accordingly, our revised September 10, 1987 draft, submitted with this Report, retains all of the basic provisions of the March 24, 1987 draft (the Third Exposure Draft), even though numerous changes have been introduced as to editorial improvement, clarification or emphasis.

The comments received tended to concentrate on four provisions in the March 24 draft:

1. Section IVC2b. Permissive use of total termination rates (lapse and mortality) in the computation of tabular reserves for Type B contracts.

2. Section IVD2. Benefit Ratio Reserves. A number of writers remain opposed to this entire concept. Others would retain such a reserve but with some fundamental changes.

3. Section IVD2c. The Reserve Expense Deduction. A number of letters sought clarification as to exactly how this deduction is to be calculated. Others expressed some opposition to this provision as proposed.

4. Section IVD5. A number of writers argued for changes in the way testing for adequacy and reasonableness of benefit ratio reserves should be carried out.

Responding comments on each of these four provisions follow.

I. Permissive use of lapse rates in the computation of tabular reserves for Type B contracts.

The subcommittee believes that sufficient demonstration has been provided to show that limitation of decrement rates to mortality only can result in excessive redundancy in tabular reserves. Accordingly, we believe that use of lapse rates should be permitted, subject to definite limitations. However, since this is the first time that any recognition of lapse rates in statutory reserves has been proposed, we have responded to the call that we "proceed with caution" into this area by recommending lower maximum limits on total termination rates: 80%, rather than 90%, of pricing assumptions; and 8%, rather than 9%, as the absolute limit on the total annual decrement rate when it includes a lapse component.

Additional illustrative calculations and comparisons of tabular reserves incorporating lapse rates are attached to this Report as Attachment 3.

II. The benefit ratio reserve concept and the proposed method of calculation.

A number of writers have strongly urged that the benefit ratio reserve be discarded entirely: in effect, that contract reserves for Type C contracts should be zero (except, presumably, when level premiums are used with such contracts). Other writers express equally strong concern that benefit ratio reserves, calculated as proposed, may prove seriously inadequate, failing to place adequate value on prospective contract liability. So we have here two poles of opinion and obviously we cannot satisfy both.

The basic issue is one of recognition of liability and, ultimately, solvency. We believe that there really can be no doubt that situations of substantial prospective liability exist under Type C contracts: first whenever there is a leveling element in the premiums charged, and secondly whenever rate regulation must be expected to result in limitations on future rates increases. Accordingly, it is our opinion that those who argue for total abandonment of reserve requirements for Type C contracts not using level premiums are clearly wrong. They evidently want to remain free of any statutory obligation to recognize contract liabilities that in fact exist and are coming into existence all the time. If benefit ratio reserves are not a reasonable solution, therefore, some other reasonable solution must be found.

Among those who see a serious danger of reserve inadequacy resulting under the proposed benefit ratio reserve method, the most common thread of opinion is that the level of the reserve "always" moves in the wrong direction, in response to deviations of actual from expected experience. It is easy to demonstrate that this does not "always" occur, and such demonstration is included with this Report as Attachment 4, which is a copy of a letter sent in reply to one of the 23 letters received. The letter to which reply is made was included in the August, 1987 mailing distributed by your Task Force.

The issue raised here, however, takes on more substance when actual experience continues to deviate in the same direction from expected. In such cases, the proposed method requires that the anticipated loss ratio value (R)

used to calculate the reserve must be adjusted in response to the ongoing deviation. If adequate correction is made, the problem is resolved, but several writers see problems with the proposed means both of determining and also applying the necessary correction.

First, some propose that a full-scale prospective valuation should be made every year, thereby rendering any benefit ratio calculation superfluous. While this can be done in theory, our opinion is that such a requirement would be far too burdensome, even, as a practical matter, impossible, for an insurer with any substantial number of "contract groups" to deal with. We have, however, revised the attached standards draft to provide that when substantial probability exists that reserves may be inadequate, that a gross premium valuation must be made, as the ultimate test. As to yearly adjustments, it is our opinion that in most cases adequate correction can be made by incremental adjustment of R values without resorting to full-scale gross premium valuation.

One excellent and thought-provoking letter sees problems, nevertheless, with yearly adjustments arising from the retrospective calculation, regardless of appropriate adjustments in R. One of these problems has to do with gain or loss properly chargeable to each successive operating year. The retrospective R calculation can have the effect, for example, of smoothing out or else delaying recognition of loss due to excess morbidity to a year (or several years) later than the year in which such excess was actually incurred. While this can indeed occur, we do not believe that morbidity deviations can, as a matter of practical reality, be rigidly allocated to particular accounting years. The contract group involved will have a lifetime that extends over several years and its cumulative gains and/or losses can be determined only over several years. Corrections must often be made in health insurance reserves (including claim reserves) with timing that will not necessarily or rigorously allocate resulting effects of gain or loss to one "right" year.

Some have proposed that the whole scheme of benefit ratio reserves be replaced by some tabular reserving scheme, based on original pricing assumptions and either locked in on such assumptions or else periodically augmented or adjusted in some way that is not directly impacted by actual retrospective experience. The basic problem with this is that actual retrospective experience in fact alters the prospective liability, in cases where future rate increases must be considered. Attachment 4 illustrates this fact and it is a fact that we believe cannot be ignored.

With respect to tabular reserves, it is our opinion that many actuaries and insurers tend to be complacent as to the adequacy of tabular contract reserves, particularly whenever minimum statutory standards apply. Tabular contract reserves on any class of health business cannot automatically be presumed adequate. They can be just as much in need of testing as benefit ratio reserves. For this reason, our attached standards proposal has been revised to apply the same gross premium valuation requirement to ALL classes of health business, regardless of whether contract reserves are required and regardless of the type of reserve required, whenever substantial doubt exists as to whether total reserves are adequate. We believe concern as to adequacy must be applied to all reserves, not merely to benefit ratio reserves.

Several letters have charged that the benefit ratio reserve requirement discriminates against insurers of small or medium size and against insurers engaged in individual comprehensive or major medical business. We do not believe this is a fair criticism. Our concern is with liability and adequate valuation of such liability, and we believe that these classes of insurers need to be as much concerned with contract liability as any others. In fact, the small to medium sized insurer especially needs to exercise prudent concern that its surplus be protected.

This charge of discrimination arises in large measure, in our judgment, from exaggeration and misinterpretation of the impact of benefit ratio reserves on surplus drain arising from new business production. We believe that benefit ratio reserves incorporating offset for first year expenses, as provided, are an appropriate means of valuing contract liability in the aggregate, and that all classes of insurers need to apply equal care and vigilance in recognizing and valuing their contractual liabilities.

One underlying reason for some of the opposition to benefit ratio reserves is the fear that regulatory authorities will misuse them, intentionally or otherwise, as a rate control device. This concern is a matter of speculation, rather than of actuarial principle. While this could indeed occur, we believe there is more likelihood that the benefit ratio reserve concept will help to establish better regulatory understanding of anticipated loss ratios and lead to more rational regulatory practices.

For one thing, benefit ratio reserves should help in achieving better recognition that anticipated loss ratios must be applied over the lifetimes of contract groups, not to single statement years or to abbreviated periods of years. Rate regulation in a number of states is already unsoundly misdirected in this respect, because loss ratios are measured over too brief a time frame or else rate increases are subjected to wholly arbitrary limits. If insurers can be enabled better to demonstrate what the impact of inadequate rate relief actually has on future liabilities and therefore on surplus, the whole atmosphere of rate regulation has a chance of improving, to the benefit of both insurers and the public they serve.

III. The Reserve Expense Deduction.

This Section of the proposed standards has been rewritten to clarify the intended operation of this phase of benefit ratio reserve calculation, with the several values required given more explicit definition.

IV. Testing for Adequacy and Reasonableness of Reserves.

We have changed and broadened the emphasis of this basic requirement of the proposed standards. The requirement of gross premium valuation, in response to "substantial doubt as to reserve adequacy," has been moved up to Section A of the Introduction, and it is made clear that this applies to all classes of health business and to all categories of reserves in combination; not just to contracts subject to benefit ratio reserves. This requirement is in accordance with Recommendation 7 of the Academy of Actuaries Financial Reporting Recommendations. A copy of that Recommendation is attached as Attachment 5.

STATEMENT 1987-28

Sections IVC3 (testing of tabular reserves) and IVD3 (testing of benefit ratio reserves) have been made parallel in application. Both now deal with regular annual monitoring and fine-tuning in situations involving less concern as to ongoing reserve adequacy than situations of "substantial doubt" that may call for full-scale gross premium valuation.

V. Other Revisions in the Proposed Standards.

Here is a brief commentary on other revisions of significance:

1. Section IIB. Claim Reserves. An additional provision calling for "case reserves" has been added to deal with claim inventories too small for credibility.

2. Section IVA3. Consistency of Assumptions. A sentence has been added to emphasize specifically the need for consistency as to incurred claim dating between contract and claim reserves.

3. Section IVA. The definition of Type B contracts has been modestly extended to include larger miscellaneous hospital expense limits.

4. Section IVD2 (benefit ratio reserves) has been restructured to clarify that the "benefit ratio reserve" is the net reserve after applying the Reserve Expense Deduction. As mentioned earlier, the description of the latter has been rewritten for better clarification.

5. What was formerly Section IVD4 (Superseded Contract Forms) has been revised as to its applicability and converted to a paragraph (iii) on page 9, in the Section on the Reserve Expense Deduction.

6. In Appendix A, the effective year, applying with respect to each new standard, has been left open for consideration by the Task Force. There has been substantial concern that insufficient lead time is being given to insurers to implement new standards.

7. In Appendix B, a definition of "case reserves" has been added. Also, the definition of "leveling premium" has been clarified to indicate that some "explicit" provision for claims expected to be incurred beyond the current policy year is included in the premium structure.

There are other minor editorial changes in the text of the Standards also.

Attachment 1, at the end of this commentary report, provides a comparative illustration of the Reserve Expense Deduction. Exhibits 8A and 8B in Appendix D also provide illustration.

Attachment 2 is a very brief summary of the Key Changes in these proposed Standards as compared to the NAIC health valuation standards now in effect. We believe this will be helpful in presenting the recommended new Standards to the NAIC (B) Committee.

Attachments 3, 4 and 5 are as indicated in the preceding text.

STATEMENT 1987-28

We recommend that the enclosed Minimum Reserve Standards document, together with its four Appendices, all dated "September 10, 1987," be recommended by your Task Force for adoption by the NAIC.

Respectfully submitted,

E. Paul Barnhart
William J. Bugg, Jr.
William A.J. Bremer
G. Scott Bucher
Michael Kazakoff
James Olsen
Frank Rubino
Peter M. Thexton
John P. Wagner

by: (signed)

E. Paul Barnhart, Chairperson
Subcommittee on Liaison with the NAIC
Accident and Health (B) Committee

STATEMENT 1987-29

September 11, 1987

To: NAIC Medicare Supplement Working Group

From: AAA Subcommittee on Liaison with
NAIC Accident and Health (B) Committee

Subject: Medicare Supplement Insurance Minimum Models: Loss Ratio Standards (Your Draft attached to August 10, 1987 Memorandum)

We have had an opportunity to review your draft Model Regulation to Implement the NAIC Medicare Supplement Insurance Minimum Standards Model Act, and we need to comment on "Section 8. Loss Ratio Standards."

The following sentence appears at the end of Section 8:

> "For the purposes of this section, rates shall be calculated over no more than a two-year period."

For group policies, the proposed standard is 80% and for individual policies the proposed standard is 70%. Taking your individual policy 70% standard as an example for discussion, and with a two-year limit applying to the rate calculation period, we interpret this to mean that at the time of issue of a new Medicare Supplement policy, the initial rates charged must be calculated to anticipate a 70% cumulative incurred loss ratio by the end of only the second policy year.

In our opinion, this is an actuarially unsound requirement and will lead to serious problems. The results will be contrary to the public interest and will also place insurers in a position of great risk as to inadequacy of premiums and serious losses on such policies.

The underlying reason for our opinion is that very high renewal rate increases will inevitably become necessary under your proposed requirements. Extreme policyholder dissatisfaction will result, along with antiselect lapsation and deteriorating claim experience. Insurers will have great difficulty in filing and maintaining adequate renewal premium rates, which will have to be continually and steeply increased.

There are two basic reasons why this will inevitably be so:

1. Many Medicare Supplement policies, at the present time, are issued on the basis of level premiums calculated as of the insured's age at time of issue. If such rates are calculated to anticipate a 70% loss ratio, the level nature of the premiums means that 70% must be the cumulative loss ratio expected over the entire lifetime of the group of policies. If a cumulative 70% loss ratio is expected within only the first two policy years, a level premium cannot be used: it must instead be, at most, only a two year term premium.

   This would serve to maximize the necessary rate increase upon renewal for the next two year term. The use of level premiums, based on issue age, serves, on the other hand, to minimize the frequency and amount of later rate increases, even though the "level" premiums are subject to

change. Most existing level premium structures in use anticipate both aging and wearoff of initial selection, thereby minimizing the impact of both of these expected trends on future rate increases. Future changes in Medicare, which, up through 1987 at least, have created a need for rate increases under Medicare Supplement policies, have usually NOT been anticipated under level premium structures, and these Medicare changes have been the primary and quite often the only reason for renewal rate increases where level premiums are used. Thus, the increases actually needed have been far less than would have been the case had both aging and wearoff of selection also been inherent factors impacting upon and raising the renewal rate increases needed.

2. The present widespread use of six month pre-existing condition exclusions under Medicare Supplement policies have been a valuable underwriting device and also normally lead to low incurred loss ratios in the first policy year. Even attained age rate structures usually anticipate and rely on low first year loss ratios, due to the pre-existing exclusion, and as a result do not usually anticipate realization of the full loss ratio standard within only two years.

   Level premium structures also anticipate and rely on these low first year loss ratios in projecting the cumulative loss ratio. Because of the six month pre-existing condition exclusion, the expected first year loss ratio is especially low, and is an important factor in the "averaging" process that builds up to the eventual cumulative lifetime loss ratio.

   Thus, a requirement that a cumulative 70% loss ratio must be realized in only two years produces an abnormally low premium at time of issue. It can be no more than a two year term premium, under which the first year of the two year term is expected to produce low incurred claims. The renewal premium need for the second two year term will, in turn, necessarily involve a large rate increase, since ALL the trends as to aging, wearoff of selection, and inflation and possible Medicare changes combine together to maximize the increase.

   This combination of factors will surely create policyholder dissatisfaction and antiselect lapsation. Insurers will experience rapidly increasing difficulty in filing and maintaining adequate rates.

We strongly urge you not to promulgate model regulations that will have the effect of prohibiting level premium structures and which will lead to maximization of renewal rate increases. Level premiums are a sound device, much in the public interest, which serve to promote stability in premium rates and to minimize dissatisfaction and renewal antiselection and, consequently, to minimize deterioration of experience.

Respectfully submitted,

(signed)

Paul Barnhart
Subcommittee Chairperson

STATEMENT 1987-30

September 22, 1987

John O. Montgomery
Chairman
NAIC (EX5) Life & Health Actuarial Task Force
State of California
Department of Insurance
600 South Commonwealth
Los Angeles, CA 90005

Dear John:

Enclosed is a report prepared by the Academy's Committee on Life Insurance regarding the impact of AIDS on the solvency of life insurance companies. The purpose of this paper is to provide life insurance company regulators and other interested parties with a framework for evaluating the effect of the AIDS epidemic on the financial strength of life insurance companies, and to report on the current state of research and actuarial evaluation of these matters. As you know, the paper by Michael Cowell and Walter Hoskins has recently been published, and research is currently being conducted by the Society of Actuaries AIDS Task Force and the ACLI/HIAA Joint Ad Hoc Group on AIDS Data.

It is our hope that the enclosed paper will serve to bridge the gap until this important research has been completed. I will be attending the Life & Health Actuarial Task Force meeting on Friday, October 2, and would be happy to discuss the paper with your group. It is my understanding that Paul Barnhart will be attending the health portion of the meeting on Saturday, October 3, and will be available to answer questions regarding the Appendix to the report which addresses the financial impact of AIDS on health insurance.

Sincerely,

(signed)

Gary E. Dahlman, Chairperson
Committee on Life Insurance

STATEMENT 1987-30

AIDS AND LIFE INSURANCE COMPANY SOLVENCY

September 22, 1987

American Academy of Actuaries
Committee on Life Insurance

Gary E. Dahlman, Chairperson
David N. Becker
Kent H. Cannon
Douglas Doll
William L. Hezzelwood
William C. Koenig
J. Alan Lauer
Donald B. Maier
John J. Palmer
Forrest A. Richen
Anthony T. Spano
David M. Welsh

Outline of Contents

STATEMENT 1987-30

SECTION I
INTRODUCTION

A. American Academy of Actuaries

The American Academy of Actuaries is a professional association of actuaries which was formed in 1965 to bring together into one organization all qualified actuaries in the United States and to seek accreditation and greater public recognition for the profession. The Academy includes members of three founding organizations--the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, and the Society of Actuaries.

The Academy serves the entire profession. Its main focus is the social, economic, and public policy environment in which the actuarial professional functions. Its primary activities include liaison with federal and state governments, relations with other professions, the dissemination of public information about the actuarial profession and issues that affect it, and the development of standards of professional conduct and practice.

Over 8500 actuaries in all areas of specialization belong to the Academy. These members are employed by insurance companies, consulting actuarial firms, government, academic institutions, and a growing number of industries. Actuarial science involves the evaluation of the probabilities and financial impact that uncertain future events--birth, marriage, sickness, accident, fire, liability, retirement, and death--have on insurance and benefit plans.

B. Purpose and Limitations

The purpose of this paper is to provide life insurance company regulators and other interested parties with a framework for evaluating the effect of the AIDS epidemic on the financial strength of life insurance companies (including their health insurance business), and to report to these audiences the current state of research and actuarial evaluation of these matters. It should be viewed as an interim effort only, since both the Society of Actuaries and the American Council of Life Insurance and Health Insurance Association of America have groups continuing to evaluate the impact of AIDS on life insurance company solvency.

The paper focuses exclusively on the solvency of life insurance companies. The issues of public health, medical research, epidemiology, privacy, education and social impact are obviously very important but have been discussed widely in other forums.

The ideas in this discussion are not the result of original research by the Academy's Committee on Life Insurance. The main references, the Cowell-Hoskins paper and the Lincoln National study, are readily available to the insurance community and themselves rely on primary studies. Complete references to these papers are given below.

C. Background

AIDS is a major new disease. The first cases in the United States were discovered less than 10 years ago, but by mid-September 1987, more than 42,000 cases had been reported and more than 24,000 of these had resulted in death. The number of cases and deaths is expected to grow dramatically over the next several years. While news coverage has made us all aware of the tragedy of AIDS, life and health insurers have more specific concerns as they try to determine how to treat AIDS in the insurance underwriting process and to assess the possible impact of AIDS on company solvency.

An insurance contract is a promise to provide benefits when the event insured against occurs. A primary mission of an insurance company is to remain financially strong enough to deliver on these promises no matter how far into the future the event insured against may occur. Insurance companies manage their financial strength based on estimates of future benefits. These estimates are influenced in large part by considering the historic pattern of insurance company benefit payments.

AIDS has the potential of greatly disrupting this historic trend, and it is essential that insurance companies reexamine their financial strength and adapt their practices in light of this new epidemic. It is vital that state insurance departments, charged with the supervision of company practices and solvency, play a contributing, rather than an adversarial role, as companies adopt practices which enhance their ability to meet their contractual obligations.

SECTION II
CHARACTERISTICS OF AIDS

A. Spread of the Virus

AIDS (Acquired Immune Deficiency Syndrome) is caused by a virus called the Human Immunodeficiency Virus (HIV). Unlike viruses that cause common diseases such as colds and the flu, HIV is not easily spread. In fact, the only established routes for transmission are through the transfer of bodily fluids, primarily semen or blood, usually occurring through sexual contact with an HIV carrier or through needles shared with an HIV+ drug abuser. In addition, many cases of transmission through blood transfusions have been established, most prior to blood-bank action to test donated blood. There is no evidence that casual contact with persons infected with the virus causes infection.

The HIV infection has a long latency period, with the result that so far only 42,000 of the estimated 1.0 to 1.5 million carriers are known to have (or to have died from) the disease. In the model developed in the Cowell-Hoskins paper, it is estimated that five years after infection, 12.7% of HIV carriers will remain asymptomatic and another 53.9% will have symptoms less severe than AIDS. The potentially long period of latency makes this epidemic unique among severe historic epidemics. This extended period of latency facilitates the spread of HIV since an

uninfected person may have no way of knowing whether a sexual or IV-drug partner is infected.

The prevalence is expected to increase, but the spread is almost invisible. As explained before, the infection is spread mostly by very private behavior. Even if the population of HIV+ people were identified, tracking the sexual or IV-drug encounters linked to these people would be most difficult. The long latency period of the HIV infection and the absence of transmission through casual contact has led to a distribution of the disease and infection which is at present highly non-uniform in the population.

B. Distribution of the Virus

The disease has arisen largely in the male homosexual community and among IV-drug abusers. As a result, insurers must be prepared for AIDS deaths at male ages 20-50, where recent mortality has been very favorable. Lincoln National has published the following estimates of prevalence of HIV+ cases under "probable scenario" assumptions:

Prevalence of HIV+ Cases in General Population

Male Age Group	1987	1991
20 - 29	1.4%	3.5%
30 - 39	3.4	8.6
40 - 49	2.3	5.9

A major unknown is the extent to which the infection may spread in the heterosexual, non-IV-drug abuser population.

Data from various sources further emphasize that the infection is distributed in a highly non-uniform manner in the population. For example, it is estimated that in 1978 the HIV+ prevalence among male homosexuals in high-risk areas such as San Francisco was 4% while in 1987 it is estimated to be 50%. Among male homosexuals in other communities it is estimated to be as low as 20%.

It was recently reported that the prevalence among candidates for induction into the armed services was 0.15%.

The Home Office Reference Lab, one of the major laboratories used in insurance underwriting, reports a prevalence during 1986 of 0.3% of blood that they tested for the virus. Clearly, a single prevalence assumption will not serve all insurance companies.

C. Mortality of the HIV+ Population

The mortality expected on HIV+ lives is quite high compared to standard mortality for insured lives, and, unfortunately, is extremely grim for those HIV+ individuals progressing to AIDS. The Cowell-Hoskins paper suggests that the life expectancy of an HIV+ 35-year-old male is about the same as a non-infected 70-year-old, and the life expectancy from

the time that AIDS is diagnosed is about 2.1 years! Put another way, for each $1000 of life insurance issued unknowingly to an HIV carrier, the insurance *company* is assuming roughly a $515 unfunded and unanticipated liability. As a result, the expected mortality of a group of insured lives will vary considerably depending on the proportion of HIV+'s among them. This brings back the major imponderable, namely the level of HIV infection in a group of insured lives.

A table from the Cowell-Hoskins paper showing additional mortality data is reproduced at the end of this paper

D. Incidence Among Companies

Key to evaluating and managing the effect of AIDS claims is estimating the prevalence of HIV+'s among insured lives, present and future. This prevalence will vary from company to company depending on underwriting approach, location of markets, recent company growth, response to the epidemic, and to some extent random factors beyond company control. It is unlikely that a rule of thumb to estimate AIDS extra claims can be developed for use by all companies. Determining the financial strength of an insurance company must depend on actuarial analysis and judgment of particular company circumstances rather than formulas. Actuarial Guideline XIV of the NAIC Financial Condition Handbook may become an important tool for those cases where insurance regulators suspect that the AIDS risk is not being addressed adequately. Guideline XIV gives state insurance departments the authority to obtain a more detailed actuarial analysis of reserves than is normally available (a copy is attached as Appendix A).

SECTION III
MANAGEMENT OPTIONS - LIFE INSURANCE

A. Sound Underwriting and Market Selection - The Future

Proper selection of risks is essential to maintaining a financially sound insurance operation. The expected mortality of HIV+ carriers is so high that they cannot be considered insurable for life insurance. The American Academy of Actuaries Committee on Risk Classification has prepared an analysis of the risk classification issues and it is attached to this report as Appendix B. A company that does not take steps to minimize sales to HIV+ lives must be prepared for the anti-selection that will result. Companies should be able to demonstrate that high (or non-existent) testing limits, or other aggressive marketing approaches, are supported by a logical business plan with full awareness of the AIDS potential.

B. Current Estimate of HIV+ Prevalence Among Insureds

Since no company will be able to eliminate its exposure to HIV+ insureds, managing this risk will require estimating the level of AIDS claims and relating this estimate to the potential methods of funding these claims. Both the Cowell-Hoskins paper and Lincoln National paper provide techniques for making these estimates. Assumptions on the

prevalence of the HIV in the current and future insured population, the amount of coverage on infected individuals, the pattern of conversion from the infection to AIDS itself, and the mortality experience of that group will lead to an estimated level of future claims. Since these claims were probably not anticipated under current pricing (or will occur earlier than anticipated), at least for policies in force, sources of funds must be found for these claims. While profit margins (and margins for conservatism in current reserve standards) will help companies absorb AIDS claims, most companies will need to identify additional funds.

A company can estimate the prevalence of HIV+'s among its insured population by a review of its AIDS deaths, and the number of deaths expected given its share of the 20-60-year-old U.S. male population. (Care must be taken to identify all AIDS deaths since under-reporting could cause major underestimates in projections.) Once this estimate is prepared, a company should then demonstrate how it intends to fund the extra claims indicated, pursuant to Guideline XIV.

C. Inevitability of AIDS Deaths Among New Insureds

Even with perfect selection, companies will experience AIDS deaths among those new insureds who contract the virus after policy issue. (Since no company has perfect selection, they must also be prepared for deaths among HIV+'s not discovered in underwriting.) Companies should be prepared to project the AIDS claims they will experience in this way, using an estimate of future HIV+ prevalence, and be able to demonstrate how they intend to fund the extra deaths indicated.

D. Management of Dividends or Other Nonguaranteed Elements

Policyowner dividends and nonguaranteed elements in life insurance contracts may be a source of funds for excess AIDS claims. According to the 1986 Life Insurance Fact Book, policy dividends paid have amounted to about 50% of death benefits paid over the last several years. Thus companies with blocks of participating policies have capacity to absorb some excess claims. Many other companies have been writing policies with nonguaranteed pricing elements which can be adjusted to accommodate experience less favorable than anticipated in the original pricing. Group insurance generally has only limited rate guarantees so that changes to expected experience can be accommodated.

It is essential that companies understand the present distribution by age of AIDS deaths, and that they demonstrate that anticipated changes in the levels of dividends or other nonguaranteed elements can actually be implemented without further disruptions to company operations. (This could happen, for example, if dividends are reduced at ages not affected by AIDS, and those policies are dropped as a result.)

E. Accuracy of Testing

Regulators should be aware of the Wisconsin Epidemiologist's report which found that the ELISA/ELISA/Western Blot protocol is 99.9% accurate. The use of this very accurate test should be supported in

underwriting. The T-Cell test is not as accurate. As a result, companies that write a preponderance of business in California, where only the T-Cell test is permitted, or in the District of Columbia, where no testing is permitted, should be prepared to demonstrate how they intend to fund the extra deaths anticipated in these jurisdictions.

F. Need for a New Valuation Standard

It now seems possible that the mortality of insured lives at a wide range of important male ages will deteriorate because of AIDS to levels in excess of the 1980 CSO Table. This raises the question of the adequacy of the current valuation standard. It is our understanding that the Society of Actuaries Valuation Committee is researching the issue of appropriate valuation mortality rates, including underlying improvements in mortality since the development of the 1980 CSO Table, as well as the extra deaths expected from AIDS.

G. Contingency Reserve or Reserve Strengthening

Some companies may choose to fund the estimated excess AIDS claims with existing surplus by recognizing the present value of such claims as a type of contingency reserve. Their actions or inaction should be supported by the actuarial report backing the general reserve opinion. Further, these funds should be held in such a form that they are available when excess AIDS claims arise, unlike, for example, a mandated across-the-board increase in all reserves.

SECTION IV
MANAGEMENT OPTIONS - HEALTH INSURANCE

Many life insurance companies have substantial blocks of health insurance business in force for which AIDS may pose equal or greater problems than for life insurance. The American Academy of Actuaries Committee on Health has prepared an analysis to illustrate the potential excess claims on health insurance, which is attached as an appendix to this report (Appendix C).

SECTION V
CONCLUSION

The lack of data on insured HIV+ and the screening limits being imposed on insurers make estimates of the effect of AIDS on insurer solvency difficult to predict with accuracy. As more evidence becomes available over time, more specific actions can be identified. However, the threat posed by the AIDS epidemic to insurer solvency is sufficiently great at this time to begin to take action and prepare to avoid the worst-case scenarios. We encourage insurers and regulators alike to emphasize the need for:

- sound underwriting and market selection techniques,
- improved statistical analysis of both insured and non-insured HIV+ populations,

- an inventory of funding sources (dividends, nonguaranteed elements, etc.) that could be used to protect the promises made by insurers, and

- reserve strengthening or the establishment of contingency reserves to recognize the anticipated impact of the AIDS epidemic on insurance company financial statements.

SECTION VI
REFERENCES

The following works relate to the issue of AIDS and insurance company solvency and are readily accessible to the insurance community.

1. Michael J. Cowell and Walter H. Hoskins, AIDS, HIV Mortality and Life Insurance, Special Report of the Individual Life Insurance and Annuity Product Development, the Life Insurance Company Financial Reporting, and the Reinsurance Sections of the Society of Actuaries, August 1987.

2. Jess L. Mast, HIV Infection: Its Impact on Mortality and Underwriting, Lincoln National Reinsurance Reporter, Issue No. 113, July 1987.

3. ACLI/HIAA Joint Ad Hoc Group on AIDS Data. While this group has not yet published a report, its charge is "to review and analyze AIDS data and report on their implications for ACLI/HIAA policy...and develop AIDS-related claims data by means of a survey."

4. Society of Actuaries AIDS Task Force. The charge of this group is to "analyze the impact of AIDS on the solvency of life insurance companies in North America ... (with a goal to) prepare a report to the Society's Board of Governors in January 1988."

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TABLE 1
EXPECTED MORTALITY UNDER VARIOUS SCENARIOS

Attained Age	Years	20% than the Model HIV Mortality plus 100% Standard Mortality	Model HIV Mortality plus 100% Standard Mortality	One Half of the Model HIV Mortality plus 100% Standard Mortality	No HIV Mortality plus 500% Standard Mortality	No HIV Mortality plus 100% Standard Mortality
		Annual Mortality Rate (percent)				
35	0	.2	.1	.1	.4	.1
36	1	2.0	.6	.3	.4	.1
37	2	6.9	3.2	1.6	.4	.1
38	3	10.9	7.1	3.6	.5	.1
39	4	12.4	9.3	4.7	.5	.1
40	5	13.0	10.1	5.1	.6	.1
45	10	16.2	12.3	6.2	1.0	.2
50	15	18.1	14.0	7.2	1.6	.3
55	20	19.4	15.3	7.9	2.8	.6
60	25	20.5	16.4	8.7	4.9	1.0
		Cumulative Mortality (percent)				
36	1	.2	.1	.1	.4	.1
37	2	2.2	.7	.4	.8	.2
38	3	8.9	3.8	2.1	1.2	.2
39	4	18.9	10.7	5.6	1.7	.3
40	5	28.9	19.0	10.0	2.2	.4
45	10	67.3	54.6	32.3	5.8	1.2
50	15	87.1	77.4	52.0	11.3	2.4
55	20	95.4	89.7	67.4	19.9	4.3
60	25	98.5	95.6	78.8	33.2	7.7
		Expectation of Life at Age 35 (years)				
35	0	8.75	10.89	16.93	28.24	42.62
		Multiple of Standard Mortality for Same Expectation of LIfe at Age 35				
35	0	74.6	51.3	20.8	5.0	1.0

Note: Standard Mortality means 1980 CSO Basic Male Non-Smoker Age 35.

Date reproduced from the Cowell-Hoskins paper (Part 2, pages 29 and 32).

APPENDIX A
ACTUARIAL GUIDELINE XIV

Surveillance Procedure for Review of the Actuarial Opinion for Life and Health Insurers

To assist regulators in their responsibility for surveillance of life and health insurers, the NAIC adopts the following interim procedure for use of the Actuarial Opinion to be used until such time as model legislation and/or regulations are adopted and become effective.

1. The regulator should accept Actuarial Opinions only from qualified actuaries. The educational and experience standards established by the American Academy of Actuaries for this purpose offers evidence that an individual is so qualified.

2. The regulator should determine if an opinion is qualified in any respect, or omits items from the outline provided in the Instructions to the Blank. If so, a follow up with the actuary rendering the opinion as to the nature of the qualification or omission is appropriate if the opinion does not provide a satisfactory explanation.

3. The regulator should examine the circumstances where the actuary rendering the opinion differs from the prior actuary, and ascertain the reasons for the change. In some cases the regulator may wish to discuss the change with the current and prior actuaries.

4. The regulator should, if desired, obtain for reviews, documentation supporting the Actuarial Opinion. Except in matters of professional discipline, the regulator's use of these documents should be considered within the Department's guidelines for confidential information.

5. The regulator may require that the actuary furnish an Actuarial Report supporting the Actuarial Opinion. The report should conform to the standards of the American Academy of Actuaries with respect to Actuarial Reports (Opinion 3 to the Guides to Professional Conduct). It should document the methodology and approach to assumptions used in making the opinions and, additionally, provide specific details in reference to items in 6 through 10 below if such details are required by the regulator.

6. In the Actuarial Report, the actuary providing the opinion should refer to the NAIC Insurance Regulatory Information System (IRIS) ratios, point out ratio values outside the prior year's range of usual values, and provide explanations for those which are significant.

7. In the Actuarial Report, the actuary providing the opinion should make specific reference to the extent to which the good and sufficient analysis considered all the unmatured obligations of the company, in aggregate, guaranteed under the terms of its policies.

8. In the Actuarial Report, the actuary providing the opinion should make specific reference as to whether the good and sufficient analysis, with respect to annuities and other products with benefits (guaranteed or

nonguaranteed) sensitive to interest rates, considered future insurance and investment cash flows as they would emerge under a reasonable range of future interest rate scenarios, and if so, what those considerations were.

9. In the Actuarial Report, the actuary providing the opinion should make specific reference as to whether the good and sufficient analysis considered the inter-relationships of assumptions with respect to guaranteed benefit payments, future expenses, policyowner dividends, and post-issue premium or benefit adjustments, especially among persistency, mortality, morbidity, inflation, and interest rates, and, if so, what those considerations were.

10. In the Actuarial Report, the actuary providing the opinion should document the extent to which the opinion is influenced by a continuing business assumption, and, if the impact is material, comment on the company's plan of operations with regard to this assumption as it affects assumed expenses and interest rates, and future reserve requirements.

11. A review of the documentation obtained in (4) above, undertaken or sponsored by the regulator, should:

    a. Be done by a qualified reviewer.

    b. Emphasize an examination of the appropriateness of the actuary's work process, methodology, and approach to assumptions.

12. If at any time during the review, the regulator requires more information deemed to be material to the development of the opinion, the company would be expected to comply with requests for such information.

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APPENDIX B

RISK CLASSIFICATION AND AIDS STATEMENT OF THE COMMITTEE ON RISK CLASSIFICATION OF THE AMERICAN ACADEMY OF ACTUARIES

MAY 1987

(Appendix B is a duplicate of Statement 1987-22)

APPENDIX C
FINANCIAL IMPACT OF AIDS ON HEALTH INSURANCE*

The financial impact of AIDS and AIDS-related disease on health insurance financial results may be even more uncertain and more threatening to solvency than the potential impact on life insurance, for reasons which are discussed below.

A death claim under life insurance involves a single event, occurring at one point in time and normally involving a fixed sum payment. Under health insurance and depending on the particular plan of benefits, a very wide range of contingencies may be involved:

1. The insured "event" will be expected to occur continuously over an extended period of time: from two to five years or longer. This will be the case under both disability and medical expense insurance.

2. Under medical expense insurance, the amount of covered loss will vary over a wide range, depending on actual covered expenses incurred. This will be especially true under high-limit, non-scheduled comprehensive medical insurance.

3. The very presence of health insurance coverage has a major impact on the utilization of medical services. Even when the "average cost" of care and treatment for AIDS and AIDS-related disease may have been determined for some large general sample of cases, it will likely be found that a similar sampling, limited only to cases involving substantial insurance, will show considerably higher "average cost," since the presence of substantial insurance will greatly increase the insured's ability to pay the bills.

The phenomenon mentioned in item 3 may well be the reason behind the considerable present confusion with respect to reported average levels of medical cost for treatment of AIDS and AIDS-related conditions. Data reported in the Journal of the American Medical Association, which do not necessarily relate to insured cases, have indicated a range of "lifetime hospital costs" for AIDS patients of $45,000 to $75,000. But early reports from comprehensive health insurers with respect to AIDS claims indicate average costs well in excess of $100,000, with isolated cases reaching levels as high as $500,000. Ability to pay can affect utilization dramatically, and the presence of high-limit comprehensive insurance vastly enhances ability to pay.

Average claims reaching the high levels mentioned will have a magnified impact on an insurer's claims. In terms of the general range of expected claims, individual claims approaching or exceeding $100,000 may have an extremely low expected incidence rate; on the order of .00001 (one thousandth of one percent). If say, 1% of the insurer's policyholders are high risk HIV+ individuals, representing a 10% probability of active disease, this 1% group alone represents an expected incidence rate of 0.1% with respect to the total

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* Prepared by the American Academy of Actuaries Committee on Health, September 1987.

insured exposure, thus multiplying the incidence rate otherwise expected for the total insured group by a factor of 100.

The following model, derived from the Cowell-Hoskins mortality model, shows the relative impact on total claim experience resulting from such a greatly multiplied probability of very large claims, assuming AIDS claims themselves approaching $100,000 over a maximum contractual benefit period of five years.

The mortality model death rates would appear to be usable for purposes of illustrative estimation of minimum health claim rates to be expected. The basic assumption used in the following health model is that the mortality model death rates, applying to "years since HIV infection," if set back by increasing durations, will apply as approximate inception rates for health claims (see Part 2, page 28 of the Cowell-Hoskins paper). Actual rates will in all probability, exceed these rates, since some health claims may not terminate in death.

The model also uses "standard morbidity" annual incidence rates and claim costs for a typical $1000 deductible comprehensive medical expense plan with a five-year per-cause benefit period. Any analysis made in relation to an actual block of business should of course use the actual rates and costs deemed appropriate for that block.

The model illustrates the potential annual impact on a block of comprehensive medical business issued at age 35.

Standard Morbidity

Attained Age	Annual Morbidity Rate	Average Claim	Annual Claim Cost
35	.07	$4000	$280
40	.08	4375	350
45	.09	5000	450
50	.09	6556	590
55	.10	7650	765
60	.12	8167	980

Additional HIV+ Morbidity
(lives = 1% of exposure)

Attained Age	Duration Since Infection	Mortality Rate Age Setback	Derived HIV+ Morbidity Rate	Average Claim	1% of Claim Cost	% Excess Over Standard Cost
35	0	0	0	--	--	0
40	5	3	.031	$75,000	$ 23	6.6%
45	10	5	.100	80,000	80	17.8
50	15	5	.121	85,000	103	17.5
55	20	5	.137	90,000	123	16.1
60	25	5	.147	90,000	132	13.5

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If it could reasonably to assumed that HIV+ high-risk lives would not exceed a level on the order of 1% of the total insured group, a resulting 17% relative increase in annual benefit cost per insured should be a tolerable burden. But as the proportion of the population with HIV+ risk increases, and if laws or regulations increasingly limit the ability of private insurers to underwrite this risk effectively, the increasing prevalence of the insured risk, compounded by steeply rising anti-selection by HIV+ buyers could have a significant effect on some private health insurers.

STATEMENT 1987-31

September 28, 1987

Mr. John O. Montgomery
Chief Actuary and Deputy Insurance Commissioner
California Insurance Department
600 Fourth Commonwealth Avenue
Los Angeles, California 90005

Re: American Academy of Actuaries Universal Life Task Force

Dear John:

At the June 20 meeting of the Actuarial Task Force, we presented our preliminary report on possible changes to the valuation and nonforfeiture provisions of the Universal Life Model Regulation. The report indicated that we would receive comments, give our recommendations further thought, and make another report to you at your October 2 meeting.

Comments to Our June Report

We now have 15 comment letters from various insurance company and consulting firm actuaries. Until very recently, only one regulatory actuary, John Gilchrist, had submitted comments. A copy of all comments is available as a separate handout. In addition, we very recently received letters from Storm Johnsen and Ted Becker, but have not had time to analyze their contents.

GMP Nonforfeiture Test

Our preliminary report recommended that the Guaranteed Maturity Premium test (GMP test) be applied to the guaranteed cash values of the guaranteed maturity plan. The test would require these cash values to be at least as large as traditionally calculated minimum cash values for the guaranteed maturity plan. The GMP test is specifically targeted at flexible premium products, not fixed premium products. The test is designed to ensure an appropriate pattern of guaranteed mortality and expense charges and an appropriate level of initial acquisition expense charge.

Most of the comments received were favorable regarding the GMP test. One criticism, however, is that the GMP test is inadequate for ensuring appropriate values for universal life policies where less than the guaranteed maturity premium is paid. It is tempting to consider using either the actual first year premium or the planned periodic premium to project future guaranteed benefits, but the fact remains that future premiums are not determinable. We suggest that most policies which satisfy the GMP test for the guaranteed maturity plan will also satisfy the test for any lesser benefit plan (e.g., term to age 75), provided that the guaranteed maturity plan initial expense allowance be acceptable in all cases. However, regulators might want to reserve the right to request additional GMP-type calculations for universal life plans with unusual plan structures and/or guarantees. We have not performed sample calculations of how the GMP test would work if it were extended to lesser benefit plans, but we could pursue this idea if you think it is worthwhile.

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Nonforfeiture - Smooth Cash Values

In our report, we stated what we believed to be obvious: universal life should comply with Section 8 of the Standard Nonforfeiture Law regarding smooth cash values. It should not be necessary to add this requirement to the model regulation; the requirement already exists. Our report described how the test might be applied to universal life and described a couple of safe harbors that might be used to simplify demonstration of compliance. You may choose to incorporate these descriptions into the model regulation, or merely to use them as an aid for individual insurance department review of policy form filings.

Conditionally Credited Excess Interest

Our task force has no additional comments on this topic. We still have mixed opinions, and we still recommend retention of the current model regulation restriction of excess interest surrender charge to 12 month's excess interest. One criticism is that surrender charges may effectively take away more than 12 month's excess interest. John Gilchrist's December 22, 1986, letter describes an example of this. In our report (bottom of page 8) we indicated that we believe this result is appropriate.

Reserves - Future Sufficiencies Offsetting Current Deficiencies

Let it be on record that we have not endorsed "future sufficiencies offsetting current deficiencies." We merely said that our narrowly defined scope (i.e., consistency with the Standard Valuation law and consistency with treatment of other plans) gave us no clear authority to recommend an extra statutory minimum reserve requirement which would apply only to universal life plans.

We suggested that the appropriate place to address the general issue is in a regulation, guideline, or law applying to all types of life policies. A few comment letters criticized us for not making specific recommendations in this regard. It was the feeling of our task force that such recommendations would be beyond the scope of our charge.

Reserves - Simplified Method

In our June report, we said that, among the three methods that we analyzed, we leaned toward recommending the GMP method. The comment letters generally were favorable towards the GMP method, subject to calculations being performed for additional examples. At this time, we still prefer the GMP method, although the task force is not unanimous on this conclusion.

Several persons expressed the comment that a simplified method should be adopted only if it is clear that it would be acceptable for all years' issues, for both statutory and tax purposes. In other words, a simplified method that applies only to new issues would not be considered a simplification overall. Obviously, it is beyond the scope of our task force to determine the tax reserve implications of a reserve method simplification.

If it is felt that a simplified method is desirable, more exposure of the proposed methods is needed. The GMP and paid-up methods, while simpler than the current model regulation, are still complicated to implement.

Companies currently using the model regulation method may not wish to absorb the expense of another change.

The current model regulation reserve methodology has been criticized because reserves often default to the cash surrender value. We believe that this is not a problem, because, although the calculated reserve is less than the cash value, the basis of the reserve is the same as for traditional plans. The situation occurs more often with universal life than with other plans because universal life plans typically have cash values greater than minimum cash values.

Since we have received so little input from regulatory actuaries so far, we have not performed calculations yet for additional numerical examples. We are looking forward to a further discussion of the proposed simplifications at your October 2 meeting and would be willing to perform additional calculations if the Actuarial Task Force is inclined to pursue seriously one or more of the methods we have offered for consideration.

Sincerely,

(signed)

Douglas C. Doll
Chairperson, Universal Life Task Force

(signed)

Gary E. Dahlman
Chairperson, Committee on Life Insurance

STATEMENT 1987-32

STATEMENT BY THE COMMITTEE ON PROPERTY AND LIABILITY ISSUES OF THE AMERICAN ACADEMY OF ACTUARIES REGARDING THE PROPERTY/LIABILITY INSURANCE INDUSTRY UNDERWRITING CYCLE

October 1, 1987

This statement represents the consensus of the Committee on Property and Liability Issues of the American Academy of Actuaries (Academy) regarding the property/liability insurance industry underwriting cycle.

The Committee's diverse membership represents a wide range of interests and perspectives, providing a comprehensive look at the property/liability insurance industry underwriting cycle. The structure of the Academy, and the importance of expeditious responses to public issues, places the responsibility of preparing comments on such issues with its committees, on the assumption that they are generally representative of the Academy's entire membership.

INTEREST OF THE ACADEMY

The American Academy of Actuaries is a professional association formed in 1965 to bring together into one organization all qualified actuaries in the United States and to seek accreditation and greater public recognition for the actuarial profession. The Academy includes members from three founding organizations - the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, and the Society of Actuaries.

The Academy serves the entire actuarial profession, focusing on the social, economic, and public policy environment in which the profession functions. Its primary activities include acting as liaison with federal and state governments, cultivating relations with other professionals, disseminating public information about the profession and issues that affect it, and developing standards of professional conduct and practice.

Over 8,000 actuaries in all areas of specialization and types of practice belong to the Academy. These members are employed by insurance companies, consulting actuarial firms, government, academic institutions, and a growing number of industries. In particular, members of the Academy are active in the pricing and reserving activities of property and liability insurance coverages sold by private insurers.

Membership requirements can be summarized under two broad headings: education and experience. At present, the educational requirement can be satisfied either by passing certain professional examinations sponsored by the Casualty Actuarial Society or the Society of Actuaries, or by becoming an enrolled actuary under the Employee Retirement Income Security Act of 1974 (ERISA). The experience requirement is three years of responsible actuarial work.

The Academy does not advocate major public policy positions. The Academy does provide information and actuarial analysis to public policy decision-makers so that policy decisions can be made with informed judgment. It is the

Committee's belief that the training and experience of Academy members provides for a unique understanding of current and potential practices regarding property and liability insurance issues.

BACKGROUND

During the past thirty years, the profitability of the United States property/liability insurance industry has been cyclical. An understanding of the property/liability insurance industry requires basic knowledge of the nature of this cyclicality, the unique factors contributing to the reaction of the insurers to the cycle, and alternate measures of the cycle.

THE NATURE OF THE UNDERWRITING CYCLE

An insurance company derives its revenue from two primary sources: (1) the premium contributed directly by its policyholders, and (2) the investment return generated from accumulated assets. Underwriting gain/loss is defined as the premiums earned during a specific calendar period minus the losses and expenses incurred during that period.

By the very nature of the insurance contract, there is a lag between the time at which premiums are collected and the time at which claims and expenses related to the underlying coverage are ultimately paid. In some lines of insurance where litigation is common, such as medical professional liability, payment may not occur for as many as ten to twenty years after the policy has expired.

Historically, the property/liability insurance industry has performed in a manner consistent with economic theory involving supply and demand. Unlike other industries, however, cyclicality in this industry is often driven by sharp changes in supply (called capacity) rather than in demand. During periods when profitability is perceived to be high, new capacity is drawn into the marketplace. This results in more competitive pricing and, eventually, deteriorating underwriting profitability.

This process continues until underwriting losses approach or, at times, grow beyond the level of investment income. Eventually, profitability reaches a level low enough to cause a reduction in capacity. This market constriction might consist of reduced writings by insurers refusing to compete for business at unprofitable prices, or of actual withdrawal from the market. This reduction in supply, along with the unprofitable results, encourages an increase in prices. As prices begin to rise, profitability improves, and the cycle repeats itself.

UNIQUE FACTORS CONTRIBUTING TO THE INSURANCE INDUSTRY REACTION: 1978-1986

The Cycle: 1978-1983

While this cyclical pattern has manifested itself repeatedly in the past, a series of unusual factors, both external and internal to the insurance industry, contributed to the most severe decline in profitability and the most violent market constriction in the history of the property/liability insurance industry.

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The most important factor influencing the precipitous decline in pricing during the period 1979 to 1984 was the unprecedented level reached by interest rates. As investment yields peaked during the early 1980's, insurers entered an intense price war to maintain market share and take advantage of these exceptionally high investment yields. Under the premise that $100 collected today would create $115 available to pay losses a year from now, many underwriters charged $100 or less for those $115 risks as the downward spiral continued.

As competition became more keen, insurers turned to third-party liability lines as a source of premiums because the losses for these lines are payable many years into the future. Since the assets invested with this premium income are presumed to generate significant investment return in the interim, the price competition was most severe in commercial liability coverages where claims are often paid long after premiums are collected.

Exhibit I illustrates this point by showing the vastly different results between commercial lines, which are dominated by liability coverages, and personal lines, which are heavily composed of shorter-tail lines. The measure of profitability is the combined ratio, defined as the sum of the ratio of incurred losses and loss adjustment expenses to earned premiums (loss ratio) plus the ratio of incurred underwriting expenses to written premium (expense ratio).

A combined ratio of 100% implies that the ultimate loss and expense arising from one dollar of premium was exactly one dollar; a combined ratio below 100% indicates that an underwriting profit was achieved; if it is greater than 100%, there was an underwriting loss. Since investment income is not included in the combined ratio, an insurer may earn an overall profit even when the combined ratio exceeds 100%. However, as a relative measure of underwriting performance, the combined ratio is a reasonable indicator of the ability of the industry to maintain a stable relationship between income and expenses. Alternate measures of the underwriting cycle are presented in the attached Appendix.

During the past twenty years, the property/liability insurance industry's cyclicality appears in historical combined ratio results. Prior to 1980, the combined ratios for personal lines and commercial lines were relatively the same. As a result of significantly more price competition in commercial lines during the early 1980's, the commercial lines combined ratios far exceeded those of personal lines. During this period it was not uncommon to see the premium for a commercial risk reduced 10% to 30% per year, in anticipation of investment earnings generated from these risks' premiums.

Property/liability insurance companies, expecting continuation of high investment earnings, imprudently encouraged underwriters to continue to cut premiums which were already insufficient to cover losses and expenses. Then, investment yields decreased quickly, falling from the 15% range to about 8% by 1982. Since the assets underlying the reserves were now earning far less investment return than originally contemplated, the combination of the falling investment income and the even sharper decline in underwriting income resulted in the worst net operating performance in the industry's history.

The rampant price competition that existed from 1978-1983 was not confined to the primary insurance industry. In fact, the profitability of the reinsurance

industry was worse than that of the primary markets. The reinsurer generally deals with claims some time after the primary insurer has been notified, and also often deals with the larger claims which take longer to settle. Therefore, the time between premium receipt and loss settlement is even more protracted for the reinsurer. As with primary underwriters, the perception of high interest rates continuing into the future also caused reinsurers to reduce prices. Prior to 1980, there was a reasonably consistent relationship between the results of reinsurers and primary insurers. During the early 1980's, the primary insurers were indirectly encouraged to continue cutting prices longer than they otherwise might have since it was easy to reinsure a portion of their risk at inexpensive prices. This chaotic environment was abetted by new and inexperienced insurers entering a variety of commercial markets at reduced prices. In general, the price competition that followed was not based upon sound underwriting or the particularly favorable loss experience of those industries purchasing the coverages. The subsequent adverse experience of reinsurers had a serious effect on the current cost and availability of reinsurance which, in turn, increased the cost of the primary insurance.

Another factor contributing to the decline in profitability was state and federal legislative actions (such as the Comprehensive Environmental Response, Compensation and Liability Act of 1980, and the Motor Carrier Act of 1980) that significantly expanded the scope of coverage offered under existing insurance contracts. Financial responsibility requirements mandated by these laws prompted insureds to increase their limits to multi-million dollar levels at a time when premiums were being reduced and high risk exposures were being accepted without adequate underwriting.

Recent judicial interpretations of these statutes may have also played a role in curtailing insurers' appetites to write pollution and environmental impairment coverage. Insurers discovered that exposures which they intended to exclude in their policies were interpreted as being retrospectively covered. Invocation of the doctrine of joint and several liability has also resulted in a number of cases where any one of the involved parties may be declared liable for all damages regardless of the degree of negligence. Also, it is possible that increased litigation and levels of awards growing out of the entire tort liability system aggravated already poor underwriting results.

The Cycle Turns: 1984-1986

In mid-1984, the combination of the above factors caused the profitability of the property/casualty industry to reach its nadir. Of the 1,755 companies rated by A.M. Best in 1985 (based on 1984 results), only twenty-five (1.4%) had their ratings increased, while 331 (18.9%) had their ratings reduced. In addition, more than twenty were declared insolvent. As a result, investor support was very weak, and major corporate entities were suffering from a serious loss of earnings, largely due to the poor performance of their insurance subsidiaries. At this time, insurers began to seek price increases in an attempt to achieve a more appropriate level for rates and profitability.

The most common measure of the capacity of property/liability insurers is the premium-to-surplus ratio. It is generally suggested that there be one dollar of surplus to every two dollars of premium written. Regulatory constraints generally limit this ratio to about three to one. Consequently, the surplus of many insurers increased only slightly, and some insurers lost surplus through

1984. As a result of the regulatory constraints, insurers looked to sources other than premium to add capital.

During 1985, the industry's surplus was supplemented by over $5 billion of contributed capital. Despite this infusion, there was insufficient surplus for many insurers to support increased premiums over all lines and still remain safely within regulatory premium-to-surplus guidelines. Therefore, insurers chose to withdraw or restrict coverage for a number of market segments.

In many market segments, however, property/liability insurance prices did eventually rise, and profitability subsequently improved in 1986. Substantial premium increases over the 1985 level caused financial results in 1986 to gain significantly from the depressed levels of 1984 and 1985. Statutory net income after taxes rose from $0.8 billion in 1984 and $1.9 billion in 1985 to more than $12 billion in 1986. Of the 1,780 companies rated by A.M. Best in 1987 (based on 1986 results), 199 (11.2%) had their ratings increased, while 138 (7.8%) had their ratings reduced.

Reaction of Insurance Buyers, Legislators and Regulators

Industries such as transportation, manufacturing and hazardous waste management have historically depended upon liability insurance to provide stable risk financing and comply with statutory financial responsibility requirements. During the early 1980's, most of these industries had very little, if any, difficulty obtaining desired coverages at prices which even many insureds will admit appeared less than adequate.

During this period, insurers discovered that legislative and judicial actions were broadening the scope of already thinly priced coverage. In addition to the unexpectedly high level of losses related to coverage they had apparently under-priced, insurers were also being forced to pay claims which they thought were specifically excluded. The perceived severity of the problems caused many insurers to take such dramatic actions as large price increases, restriction of coverage terms, mid-term cancellations, and outright withdrawal from certain markets.

It is not surprising that insurance buyers reacted with anger and frustration. In their minds, the purchase of insurance was intended to stabilize their financial performance. In the mid 80's, the premium increases were often more volatile than the corresponding actual loss experience. Availability became an even more critical issue where large segments of certain industries could not find sufficient limits of coverage or, in some instances, any coverage at all. For this reason, buyers, legislators and regulators became concerned that the current substantial rate increases and coverage restrictions were being indiscriminately applied without the benefit of industry-specific experience.

In response to the restrictive insurance environment, legislators tried to give insurance buyers relief from the rising rates and shortage of capacity. On a national level, the 1986 Risk Retention Act, passed by Congress and signed by President Reagan, allowed special, multi-owner captive insurance companies to sell all liability insurance except workers' compensation. This law gave a risk retention group the opportunity to operate nationwide without obtaining prior approval from every state where it planned on transacting business.

State legislatures also responded to the needs of insurance buyers. In 1985, market assistance plans (MAP's) were set up which acted as clearing-houses to help insurance buyers locate suppliers of insurance. During 1986, civil justice reforms ("tort reform") legislation was enacted in 35 states, with the hope of curtailing the rising cost of liability insurance. The types and effectiveness of the reforms varied from state to state.

Also, the laws regulating the prices of property/liability insurance in some states were changed during 1986. A law passed by the Florida legislature, which froze commercial property and liability prices and mandated premium refunds, was opposed by many insurers and later modified. In New York, a flex rating law, requiring prior regulatory approval for price changes in excess of a certain level, was enacted to avoid future excessive rate changes.

These legislative and regulatory actions show that during the tail end of the underwriting cycle, price controls and governmental intervention are often implemented to provide relief, depending on the level of economic dislocation. This response is not unlike other areas of economic sectors, in which a branch of government intervenes to modify the effects of traditional economic behavior. Examples of such governmental intervention in the general economy are the Phase I and Phase II wage and price controls of the early 1970's.

CONCLUSION

The underwriting cycle is the result of traditional economic behavior. When profitability is perceived to be high, the capacity (supply) of insurance increases. As a result, prices and profitability decrease. When the level of profitability is low enough, the supply of insurance falls, and the price rises, increasing profitability.

APPENDIX

MEASURES OF PROPERTY/LIABILITY INDUSTRY UNDERWRITING CYCLE

One benchmark the property/liability insurance industry has used to measure the underwriting cycle is the combined ratio (also called a trade ratio). The combined ratio is a calendar year ratio that focuses on paid losses and expenses during a calendar year, adjusted for changes in reserves for unpaid losses and expenses. As a so-called pure insurance result, the calendar year combined ratio glosses over the effect of reserve strengthening and ignores investment results. The purpose of this Appendix is to suggest alternate measures of industry profitability, and to demonstrate how calendar year results can serve to dampen the peaks and valleys of the underwriting cycle.

ACCIDENT YEAR VS. CALENDAR YEAR

Accident year results assign claim payments and expenses to the year in which the loss occurred. Thus, changes in the reserves for prior accident years' claims do not affect the current accident year's results. When accident year losses are compared to premiums earned during the accident year, the result is an accident year loss ratio. This ratio provides a better matching of claims and premiums than the calendar year loss ratio.

While accident year statistics are published by insurers only once a year (the primary source being Schedules O and P of the statutory annual statements), their greater usefulness, especially for liability lines, outweighs the more frequent availability of calendar year statistics.

THE OPERATING RATIO

The combined ratio does not recognize investment income. It may include or exclude policyholders' dividends (the combined ratios of Exhibit I include these dividends). The operating ratio adjusts the combined ratio for investment income from insurance operations (excluding capital gains and losses) and for policyholders' dividends and, thus, is a more encompassing measure of profitability than the combined ratio. Consequently, the operating ratio measures total return from insurance operations, including investment income on capital and surplus funds. Capital and surplus funds are necessary to support underwriting, but the income generated by their investment would exist whether or not they were used to support underwriting.

Compared to the combined ratio calculations, the operating ratio computations are more involved. Detailed allocation of investment income by line of insurance, and separate allocation for the surplus accounts, often call for judgmental decisions. Either type of loss ratio can be used in an operating ratio - calendar year or accident year. Exhibit II summarizes the different terms defined above.

CALENDAR YEAR VS. ACCIDENT YEAR OPERATING RATIO

The graph at the top of Exhibit III compares calendar year and accident year operating ratios for all lines of insurance, using industry data published by A.M. Best. Accident year operating ratios from 1981 to 1984 are significantly higher than published calendar year results, since reserve adequacy was deteriorating during that period. Since insurers began actively strengthening reserves in 1985, accident year results should begin to be significantly better than calendar year results.

The bar graph at the bottom of Exhibit III highlights the excess of the calendar year operating ratios over accident year operating ratios from the top of Exhibit III. This distortion reflects the aggregate amount of reserve strengthening or weakening that is estimated to have occurred each year. It shows, for example, that accident year results in 1983 were more than six percentage points worse than published calendar year results. In 1986, accident year results were likely to be almost six points better than calendar year results.

A similar analysis was done for general liability on Exhibit IV. The general liability graphs in Exhibit IV show much wider swings in profitability and much larger calendar year distortions. Due to the slow claim reporting for this line, pricing and reserving contain much more uncertainty than for most other lines. This uncertainty causes the wider variation in results. The general liability data includes medical malpractice in 1973 and 1974. Loss ratios for these years are therefore inflated by three to five points compared to the subsequent loss ratios.

The bar graphs of Exhibits III and IV demonstrate the inverse relationship between the calendar year and accident year loss ratios. Calendar year loss ratios generally exceed accident year loss ratios when results are good. Conversely, calendar year loss ratios tend to be less than accident year loss ratios when results are poor. These graphs support the contention that insurers tend to strengthen reserves in profitable times and weaken reserves during unprofitable years.

Thus, both the peaks and valleys in the underwriting cycle are more severe than would be indicated based on calendar year data. When results are adverse, as measured by high accident year loss ratios, reserve weakening occurs and calendar year loss ratios are dampened. When results improve, as measured by low accident year loss ratios, calendar year loss ratios are increased through reserve strengthening.

CONCLUSION

The swing in the cycle is wider than the published calendar year results indicate. With the distorting effect of changes in loss reserve adequacy, calendar year data masks the true results as measured by accident year data.

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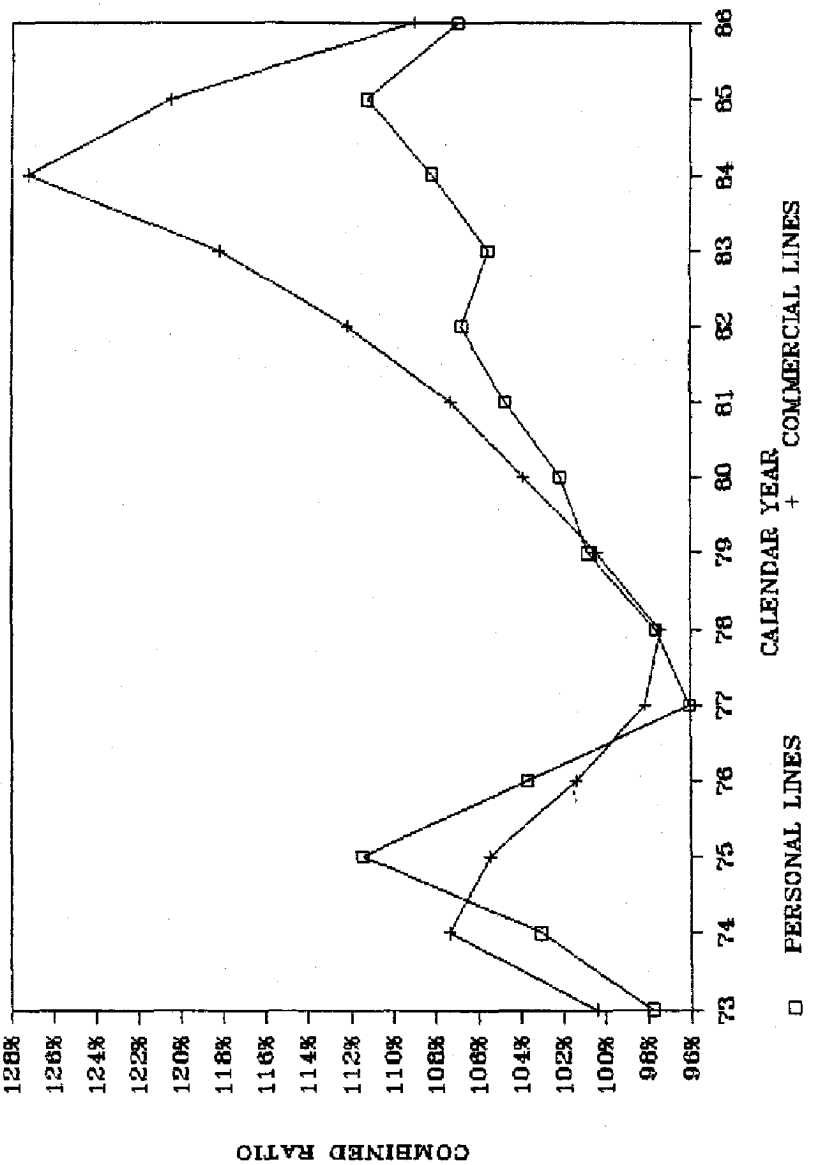
EXHIBIT I

COMBINED RATIO COMPARISON
Commercial vs. Personal Lines



SUMMARY OF UNDERWRITING CYCLE MEASURES

Timing of Losses	Type of Ratio: Combined Ratio	Type of Ratio: Operating Ratio
Calendar Year	Paid Losses & Loss Expenses Adjusted for Changes in Reserves for Unpaid Losses & Loss Expenses / Earned Premium + Incurred Underwriting Expenses / Written Premium + Policyholders' Dividends* / Earned Premium *Sometimes Excluded	Paid Losses & Loss Expenses Adjusted for Changes in Reserves for Unpaid Losses & Loss Expenses / Earned Premium − Investment Income from Insurance Operations / Earned Premium + Incurred Underwriting Expenses / Written Premium + Policyholders' Dividends / Earned Premium
Accident Year	Paid Losses & Loss Expenses Plus Reserves for Unpaid Losses & Loss Expenses Assigned to Year in Which Loss Occurred / Earned Premium + Incurred Underwriting Expenses / Written Premium + Policyholders' Dividends* / Earned Premium *Sometimes Excluded	Paid Losses & Loss Expenses Plus Reserves for Unpaid Losses & Loss Expenses Assigned to Year in Which Loss Occurred / Earned Premium − Investment Income from Insurance Operations / Earned Premium + Incurred Underwriting Expenses / Written Premium + Policyholders' Dividends / Earned Premium

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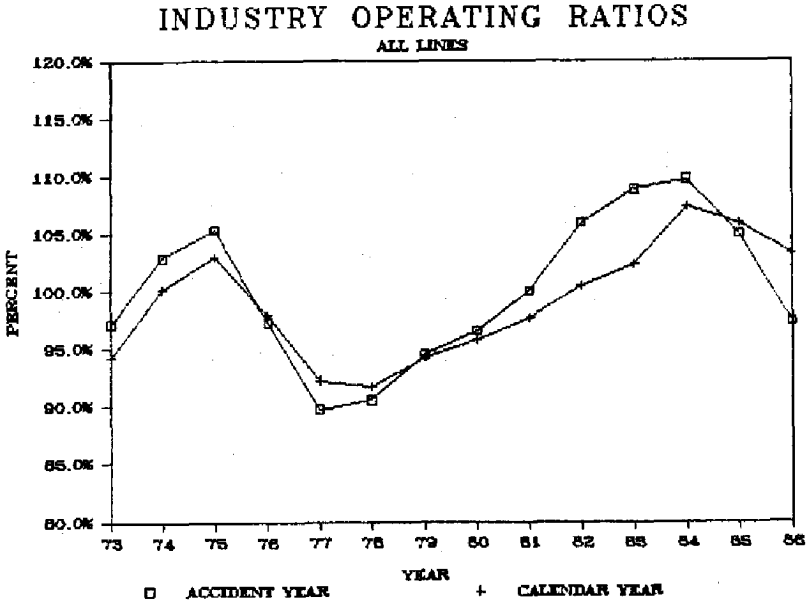
EXHIBIT III



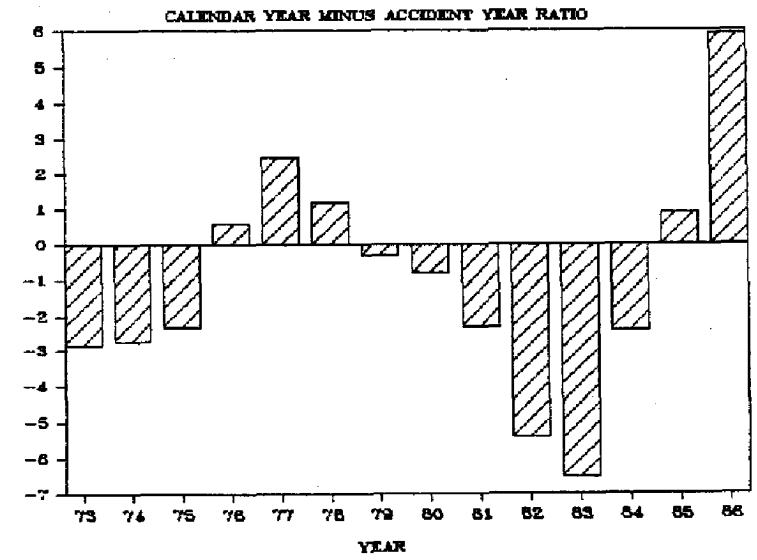


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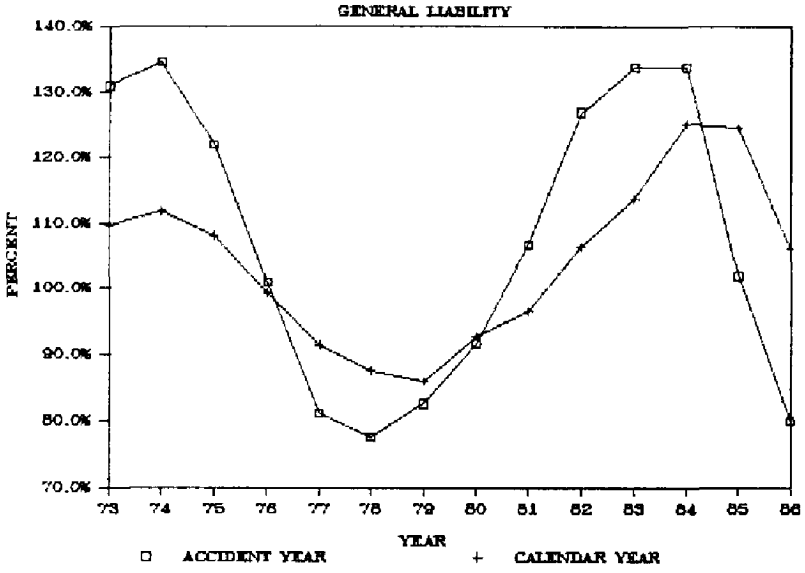
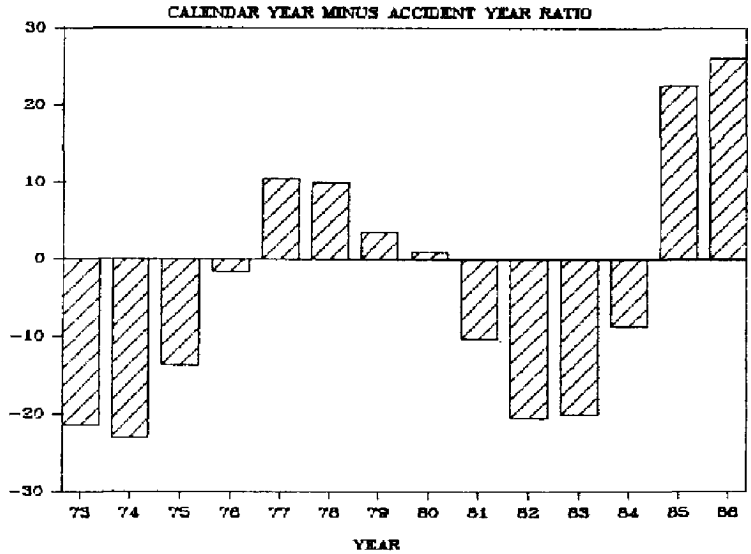
EXHIBIT IV

INDUSTRY OPERATING RATIOS



CALENDAR YEAR DISTORTION--GENL. LIAB.



STATEMENT 1987-33

October 21, 1987

The Honorable David Pryor
United States Senate
Washington, D.C. 20510

Re: Small Business Retirement and Benefit Extention Act

Dear Senator Pryor:

On behalf of the Pension Committee of the American Academy of Actuaries, we would like to offer some comments on the Small Business Retirement and Benefit Extension Act and related pension issues.

The Academy includes within its membership over 85% of the enrolled actuaries authorized to practice under ERISA. This makes us vitally interested in all pension issues. Our goal is to be an objective provider of information to the Congress, their staff and the government agencies responsible for carrying out the law, so issues can be clearly understood.

In general, we believe the private pension system has worked very well over the years and, while changes may be necessary from time to time to reflect our changing environment, the private pension system should be allowed to continue to provide significant retirement benefits to a broad cross section of American workers and their beneficiaries. We hope you will consider our comments carefully; we would be happy to meet with you, your staff or anyone else who has an interest in pension issues, to expand or clarify our comments.

Before making specific comments on the bill, we would like to suggest that consideration be given to including in the bill an overall statement on a national retirement income policy. A national retirement income policy statement was contained in the Retirement Income Policy Act of 1985, but the bill was not passed. We have discussed, in comments on that bill, what we believe to be the important components of a national retirement income policy and would be happy to make those comments available to you and your staff. Briefly, we believe a national retirement income policy needs to include:

- Provision for adequate retirement income for American workers and their beneficiaries. This should recognize potential retirement income from all sources - private pension plans, Social Security and personal savings.

- Maintenance of adequate income for retired workers and those who change jobs during their career and end up with several pieces of benefit at retirement. While inflation is not as serious a concern as it once was, it will likely become a problem again. The increasing life span of the retired population makes the effect of inflation even more important. Vehicles such as rollover IRAs help to provide some measure of portability for those who change jobs during their career.

- Reasonable vesting rules to balance the benefit and administrative cost with an increased likelihood that those who change jobs during their career may still end up at retirement with an adequate retirement income.

- Reasonable funding standards that balance a plan sponsor's ability to finance a retirement plan with adequate benefit protection to plan participants and the Pension Benefit Guaranty Corporation.

Having a national retirement income policy will be helpful because it will provide an objective standard against which to measure proposed changes in pension law. It will help avoid the "piecemeal" approach to pension changes that has occurred over the last ten years and has caused great distress among plan sponsors and plan participants.

Comments on the bill

Overall, we are supporters of the bill. We especially hope the bill represents a change in the thinking of the members of Congress. A more positive environment for private plans, in general, and smaller plans in particular is needed. The specific provisions of the bill are well thought-out and seem to be based on an overall view of pension law rather than a narrow focus on one or two areas.

Section 2 of the bill terminates the top-heavy rules as of December 31, 1987. We support this position. The top heavy rules were presumably established to cure perceived abuses in Social Security integration, particularly for plans sponsored by professional corporations. Changes made by the Tax Reform Act in the Social Security integration rules and in the Section 415 limits on maximum benefits make top-heavy rules obsolete. The elimination of the rules would also ease much of the administrative burden of plan sponsors (especially smaller plans). While we would support repeal of the top-heavy rules as of December 31, 1987, it may be that December 31, 1988, is a more logical date since that will be when the new Social Security integration rules begin.

Section 3 of the bill allows an administrative cost credit for plan sponsors with essentially fewer than 100 employees on average during a plan year. We believe an administrative credit for sponsoring a pension plan is a unique and creative approach. While we do not have any data to support whether $3,000 (or $4,500) is reasonable in relation to the expense of maintaining a plan, the most important thing is that some positive encouragement be given, rather than worrying about matching up the amount of the credit with the cost of maintaining a plan. We like the simplified approach the bill takes. There are a couple of specific comments we have on the calculation of the credit:

1. Do plan sponsors get a double credit ($7,500) if they sponsor both a defined benefit and a defined contribution plan?

2. The phase-out of the credit above fifty employees is based on the average number of employees. It would be administratively easier to take a snapshot on a given date (say the start of the plan year) rather than an average. This information could be taken from the Form 5500 of the plan sponsor.

3. Part of the tradeoff for receiving the administration credit is that a 25% per year vesting schedule be used. Is this the only schedule allowed? Can an employer adopt a quicker schedule (i.e., 100% immediate vesting) and still claim the credit?

STATEMENT 1987-33

Section 4(d) of the bill repeals the tax on excess distributions that was contained in the Tax Reform Act of 1986. So long as the current Section 415 combined plan limits remain in place, we would support repealing the excess distribution tax. Our understanding of the discussions during the time before the passage of TRA '86 were that these rules would replace the Section 415 combined plan limits. However, when TRA '86 was passed, it made no change to Section 415, and it installed the new excess distribution tax. This is another good example of where there has been overlap in the law that results in a very significant administrative burden for plan sponsors. Eliminating the excess distribution tax would also ease the burden on the IRS in the difficult task of trying to write implementing regulations.

In the longer term, we suggest a more complete review of the combined plan Section 415 limits. Some form of tax policy based on annual distribution may be a much more manageable approach. This is an area where a clear delineation of national retirement income policy would be helpful.

Our final comments are on Section 5. While the simplification of reporting requirements is not an actuarial issue, per se, many of our members help plan sponsors (especially smaller plan sponsors) with the annual filings. We would certainly like to see some simplifications in the forms (and believe it can be done) but recognize that there are some events that require some knowledge in the pension area. Perhaps the sponsor could complete a simplified form for two years and then complete a longer form in the third year after seeking help from his actuary, attorney, CPA, etc.

Summary

We are pleased to offer these comments and hope you will find them helpful. Overall, we are supporters of the bill. We especially hope it represents a new and more positive approach towards maintaining and enhancing our private pension system. We believe this bill is a very appropriate place to consider codifying a national retirement income policy. We would welcome the chance to work with you or your staff on this. Our comments on specific parts of the bill are fairly minor and are really refinements rather than major changes. We applaud your efforts and are hopeful the bill will receive positive reaction during this legislative session.

Respectfully submitted,

American Academy of Actuaries
Pension Committee

Larry Zimpleman, Chairperson

Darrel J. Croot
Paul L. Engstrom
Jeff Furnish
Harper L. Garrett, Jr.
Thomas D. Levy
F. Jay Lingo
Joseph A. LoCicero
Donald M. Overholser
Neela Ranade
Eugene Schloss
John B. Thompson
Michael J. Tierney

STATEMENT 1987-34

November 9, 1987

Mr. Patrick Finnegan
Technical Manager
Accounting Standards Division
AICPA
1211 Avenue of the Americas
New York, NY 10036

Re: File No. 3162.PR

Dear Mr. Finnegan:

We are pleased to have this opportunity to submit comments on the exposure draft of the proposed audit and accounting guide, Audits of Property and Liability Insurance Companies (the Guide).

These comments are submitted on behalf of the American Academy of Actuaries' Committee on Property and Liability Insurance Financial Reporting. The Academy is a professional association of actuaries, formed in 1965 to bring together all qualified actuaries in the United States. The Academy serves the entire profession, including in its membership over 8,000 actuaries working in all areas of specialization: life, health, pension and property and liability. Members are employed by insurance companies, consulting firms, government, academic institutions and a growing number of industries.

These comments represent the consensus of views of the Committee on Property and Liability Financial Reporting of the American Academy of Actuaries. Membership on the Committee preparing these comments has been drawn from a wide range of interests and perspectives, so as to give the broadest possible range of views on this subject. As with many other professional organizations, the structure of the Academy, and the timing required in responding to various public issues, places the responsibility of preparing comments on such issues with its Committees, on the assumption that they are representative of the Academy's entire membership.

Our comments on the Guide are confined to those items in the financial statements that require actuarial expertise to properly evaluate: loss reserves, loss adjustment expense reserves, anticipated subrogation and salvage recoveries, unearned premium reserves, premium deficiency reserves, unpaid policyholder dividend reserves, and contingent commission reserves.

In our view, the draft of the Guide does not adequately articulate the need for an actuary in evaluating the above mentioned items. Material should be added to the Guide that describes the role of the actuary in establishing these items, and the need for the audit to extend to the actuarial data, methods and assumptions used to establish them. Without these materials, the Guide does not give sufficient guidance to the practicing auditor on the steps necessary to test the above items.

The Guide should describe, in general terms, qualifications of the actuary. Reference could be made to the American Academy of Actuaries' Qualification Standards.

Each of the actuarial items on the balance sheet are established by the actuary using a historical data base of past experience. For example, accident year loss development data is customarily used to establish loss reserves. The draft of the Guide does not include procedures for testing the accuracy and completeness of the data bases used by the actuary. This is imperative to any meaningful audit.

The following comments relate to pages 36 to 39 of the draft that discuss loss and loss adjustment expense reserve estimation.

First, the draft separates loss reserves into two categories: reported claims and incurred but not reported (IBNR) claims. A more refined view separates the total loss reserve into five elements: 1) case or reported claim reserves; 2) a provision for future development of known claims; 3) a reserve provision for reopened claims; 4) a provision for incurred but not reported claims; and, 5) a provision for claims in transit (incurred and reported but not recorded). These elements are discussed in detail in the Statement of Principles Regarding Property and Casualty Loss and Loss Adjustment Expense Reserves (Statement), adopted by the Casualty Actuarial Society (CAS). This Statement, a copy of which is attached, should be added to the Guide's bibliography. In addition to providing the definitions of the various reserve elements, the Statement discusses various considerations including data availability and organization, homogeneity, credibility, aggregate limits, collateral sources, reinsurance, operational changes, external influences and reasonableness.

The section in the Guide on testing reserve estimates discusses only a simplistic retrospective test. There are less simplistic retrospective tests available, plus many prospective tests. Prospective tests include: determining the implied loss ratios and comparing to the expected levels based on pricing and underwriting actions and industry results available from various souces; comparing the trends in implied severities and frequencies to various internal and external indices; and comparing implied emergence and settlement patterns to previous company patterns and industry. These examples are just a few of the many reasonableness tests that can be applied. The best approach to test reasonableness of a reserve estimate is to apply several reserving techniques that rely upon different data sources, e.g., paid losses, incurred losses, reported claims, average severity. The Actuarial Science Bibliographies (Bibliography) published by the CAS contains a list of various articles describing loss reserving methods. A copy of the section pertaining to Reserves is attached. This Bibliography should also be added to the Guide's bibliography.

An important part of the reserving process and the testing of the reserve estimates is the investigation as to whether or not the underlying data base has been affected by internal or external changes. This investigation is performed, in part, by interviewing various personnel in the areas of claims, accounting, data processing, reinsurance, and underwriting in order to determine if there has been any significant changes in methods and procedures, as well as any other factors that could affect the data base.

The examples of models for evaluating reserve estimates contained in Appendix G of the Guide should be noted as being simplistic examples, not the state-of-the-art in reserve analysis. On page 135 it is stated that variations

to the example approach are using different averaging weights and number of averaged values. These are not variations. Various averages should always be considered in the selection of the period-to-period factors in order to determine trends and minimize the effects of random variation. An example of a variation would be the separate application of the approach to reported claims and average claim severity. It may be helpful for the Guide to include bench mark reporting and payment patterns for various lines of business, in order to provide guidance as to the typically expected amount of development.

The CAS Statement provides definitions and comments on the two types of loss adjustment expenses. For allocated loss adjustment expense reserves, any reserving method that can be applied to losses can also be used in determining these reserves. Although the same statistical procedures are not applicable to unallocated loss adjustment expenses, the actuarial literature cited in the CAS Bibliography contains discussions of approaches that can be used to determine reserves for these expenses.

Section 4.28 on pages 38 and 39 of the Guide contains inaccuracies. The calendar year paid-to-paid method is not commonly used for allocated loss adjustment expense, as this method has been shown to consistently understate the reserve need for longtailed lines. The reduction of the factor for known claims, although a common practice in determining unallocated loss adjustment expense reserves, is especially inappropriate for determining allocated loss adjustment expense reserves.

The Guide is silent on the procedures that can be used in determining the anticipated recoverable for salvage and subrogation. The easiest approach would be to estimate loss reserves using loss data that is net of salvage and subrogation recoveries. This approach, however, would not allow one to make a SAP to GAAP reconciliation. Many of the reserving methods appropriate for losses and allocated loss adjustment expenses cited in the CAS Bibliography can also be used to estimate salvage and subrogation recoveries.

The areas of actuarial concern included in the Guide's section on the Premium Cycle include the unearned premium reserve, premium deficiency reserve, contingent commissions and unpaid policyholder dividends. The education and experience requirements for the person evaluating these items should be the same as those cited above for the loss reserve specialist.

The two items of the unearned premium reserve requiring actuarial consideration are the provision of retrospective premium adjustments and the unearned premium reserve for lines of business where the loss exposure is not uniform over the term of the policy.

The provision for retrospective premium adjustments requires actuarial expertise because the amount is dependent on the loss experience of the underlying book of business, and, therefore, the loss and loss adjustment expense reserves, as well as the adjustment formulae which are usually based upon various actuarial concepts such as credibility and loss distributions. The Guide addresses only premium adjustments for the insurance company's direct policyholders. Another important area of retrospective premium adjustment is in the insurance company's own ceded reinsurance premium, since many reinsurance treaties are written on an adjustable basis where only a

provisional premium is charged initially and premium adjustments are calculated at subsequent scheduled times.

The fact that loss exposure is not uniform over the term of the policy is not generally important for property and casualty policies since the term is usually one year or less. However, there are some types of coverage, such as automobile warranty coverage, that have a policy term of three or four years and a loss exposure that varies significantly over the term of the policy. For these types of coverage it is necessary to have an actuarial evaluation of the true loss occurrence pattern, rather than use a pro rata pattern.

In order to determine if a premium deficiency reserve is required, it is necessary to evaluate the loss and loss adjustment expense levels of the company. These items make up the vast majority of the costs related to the unearned premium reserve. The evaluation of future loss levels clearly requires actuarial expertise.

The provision for contingent commissions affects not only the commissions paid to the insurance company's agents, but may also affect the ceding commission the insurance company receives from a reinsurer, since many adjustable reinsurance treaties use commissions as the basis for adjustment rather than premium. It appears that actuarial assistance is needed in determining the reinsurance contingent commissions, as this is just a slight variation on the retrospective premium adjustment calculation. The contingent commission amount to be paid the insurance company's agents needs actuarial evaluation since it is dependent upon the company's loss experience, and consequently the loss and loss adjustment expense reserve, as well as a contingent commission formula that is usually based on actuarial criteria.

The Guide includes the provision for unpaid policyholder dividends in the premium cycle. Since the calculation of the provision for these unpaid dividends is similar to the calculation of the retrospective premium adjustment provision, actuarial input is needed.

In summary, the Guide needs expansion to address the actuarial reserve audit issues in a meaningful manner. We would be happy to assist the Insurance Companies' Committee in the revising of those sections of the Guide affected by our comments. If you should desire our assistance, or have any questions regarding our comments, please do not hesitate to call.

Sincerely,

(signed)

Stephen P. Lowe, Chairman
AAA Committee on Property and Liability Financial Reporting

STATEMENT 1987-35

November 10, 1987

Ms. Diana Scott
Financial Accounting Standards Board
High Ridge Park
P.O. Box 3821
Stamford, CT 06905-0821

Dear Diana:

Actuarial Comments on Measurement of OPEB

Enclosed are ten copies of the edited version of the Comments on Measurement made by the actuarial panel on July 22. The editing has involved reordering and rewording certain of the sections which were sent to you earlier for a smoother transition from topic to topic and speaker to speaker. We hope this will prove useful as you continue your deliberations.

If I can be of any assistance on the OPEB project, either in my capacity as a practicing group benefits actuary or as a member of the American Academy of Actuaries and the Task Force of the Interim Actuarial Standards Board, please give me a call. I plan on calling you in a few weeks to let you know of recent developments.

Sincerely,

Jeffrey P. Petertil

STATEMENT 1987-35

AMERICAN ACADEMY OF ACTUARIES COMMENTS ON THE MEASUREMENT OF POSTEMPLOYMENT HEALTH BENEFITS Made to an Open Meeting of the FINANCIAL ACCOUNTING STANDARDS BOARD

July 22, 1987

Introduction

On July 22, 1987 a panel of three actuaries representing the American Academy of Actuaries (AAA) made an informational presentation to the Financial Accounting Standards Board (FASB) in Stamford, Connecticut on the subject of measurement of other postemployment benefits (OPEB). The Academy is a professional association of over 8,400 actuaries involved in all areas of specialization within the actuarial profession, including that of postemployment benefits other than pensions.

The presentation was an outgrowth of continuing discussions between the AAA's Committee on Health and Welfare Plans and the FASB staff on OPEB issues. Jeff Petertil, a member of the AAA Committee, was joined in the presentation by Ken Porter and Bernie Villa. All three actuaries are members of the Task Force on Retiree Life and Health Benefits established by the Interim Actuarial Standards Board (IASB).

Mr. Petertil is a Consulting Principal and Group Actuary with the Chicago office of Mercer-Meidinger-Hansen, Inc. with over fifteen years of experience in the actuarial aspects of group life and health benefits.

Mr. Porter is Chief Actuary and Manager of Actuarial Operations for E.I. Du Pont de Nemours & Company. He is an Enrolled Actuary and the Chairperson of the IASB Task Force on Retiree Life and Health Benefits.

Mr. Villa is a Fellow of the Society of Actuaries and Actuary for Metropolitan Life Insurance Company. His thirty years of experience include serving as group actuary in a consultant role to Metropolitan's largest group policyholders.

The comments of the participants are grouped by the following topics:

- Introductory Comments on Measurement
- History of Actuarial Involvement in Health Benefits
- Claims Cost Analysis in the Short Term
- Claims Cost Trends in the Long Term
- Actuarial Standards
- Plan Design Complications

Mr. Petertil: We are pleased to be here today to discuss with you one set of concerns shared by actuaries and accountants, as well as many others, in regards to other postemployment benefits. Those concerns are "Can the benefit obligation be measured and, if so, how can it be measured?"

STATEMENT 1987-35

The point we wish to make immediately is that the measurement of retiree medical benefit obligations is a young art striving to be a mature science. We will return to this point later, but it should be kept in mind that study and research in this area has just begun.

Most actuaries experienced in the measurement of welfare obligations agree that conceptually the three key elements of measurment are the quantification of current costs, the mathematical model of future costs and, thirdly, the reconciliation of the first two elements. This agreement leads us to answer affirmatively the question of whether the benefit obligation can be measured.

That affirmative answer is qualified, however, in the following way. The benefit obligation can be measured with enough accuracy for management decisions about whether to implement or curtail retiree medical and life plans. As to whether the obligation can be measured with enough accuracy to determine optimal plan design, the answer is "yes" or "no," depending on the needs of the plan's sponsor. Another question is, "Are two actuaries valuing the same plan, independent of each other but in agreement on the future course of plan design, plan population eligibility, interest rates and Medicare, likely to agree in their results?" The answer is most likely to be "No."

That is in contrast to pension valuations. Asking a similar question, "Would two actuaries valuing the same pension plan, independent but in agreement on future plan design, population, interest rates and Social Security, agree in their results?", the answer is likely to be "Yes." But the pension people have had thirty or forty years of discussion and have not had to deal with health care benefits and data.

Thus while group actuaries might agree on the general magnitude of the answers and the comparative value of different plan designs, there is not yet general agreement about the way claim costs should be measured and how the trend of claim costs in the future will proceed.

There are exceptions to this last negative answer on measurement. The primary example is that the future costs would be measured consistently by all practitioners if the plan was a defined contribution or a defined dollar benefit plan. The plans could then be measured in much the same way as a pension plan. But this radically changes the nature of the benefit and many would no longer consider it health insurance. We will return to this point later.

The primary emphasis here is medical benefits, but life insurance is also an important concern. Along with health insurance, life insurance is the other postemeployment benefit most often offered by plan sponsors. For a good number of plan sponsors, the obligation to provide life insurance will be more costly than the obligation to provide health insurance. This will be because the health insurance is minimal or non-existent. If there is less attention directed here to the question of life insurance, it is not because it is not a significant benefit but rather because the question of the measurement of life insurance benefits is not one requiring a large amount of discussion. Almost all retiree life insurance benefits are similar to pension benefits in that the dollar amount has been defined or will be defined at the point of retirement.

This makes the measurement question much simpler. Measuring the cost of retiree medical benefits is much more complex.

The focus of our discussion here is the measurement of a lifetime obligation to provide health care insurance, an obligation which will be steadfast in covering a substantial portion of medical care expense. Such an obligation may commit a plan sponsor to reimburse hundreds of thousands of dollars of medical care expense to one individual while reimbursing virtually nothing to another individual who may have worked the same number of years for that plan sponsor. At its extreme, it may mean that a plan sponsor might be obliging itself today for a financial commitment which would not be executed for another hundred years.

Consider a 25-year-old employee today who, 30 years from now, at age 55, would marry a spouse age 25. If that spouse, unborn today, were to live to be age 95 a promise made today to the employee would not be fully discharged until the last payment was made to a spouse 100 years from now.

Because these questions are relatively new to actuaries and accountants, it is informative to briefly relate the history of the involvement of actuaries with health care costs. We will then discuss how actuaries deal with the projection of medical costs for the short term, which would mean 6 months to 2 or 3 years, and how claim costs are measured for a group of employees or retirees where dependent coverage is offered. Then, attention will be directed to the components of long-term trend.

The Interim Actuarial Standards Board is addressing the question of retiree medical benefits; we will discuss the approach that it is taking. Finally, some of the plan design changes being implemented by plan sponsors in response to the retiree medical financing dilemma will be highlighted. Some of these changes make measurement more difficult; other changes make the measurement easier but the accounting more difficult.

History of Actuarial Involvement in Health Benefits

Mr. Porter: Within the actuarial profession there has been growing recognition that a rapidly increasing number of actuaries are being asked to provide long-term projections in the area of postemployment life and health care benefits. Two separate groups of actuaries -- group health actuaries and pension actuaries -- have been in the forefront of this emerging area of practice. There is not, however, a broad base of research or actuarial practice from which these actuaries can draw. As a result, a diversity of practice exists.

Health care actuaries generally know a lot about health care trends over the short term -- one to five years -- but less about cost attribution methods and the sensitivities of assumptions when projecting cash flows over many decades. Pension actuaries, on the other hand, generally have substantial experience with long-term projections but may not be sufficiently aware of significant aspects of health care which should be reflected.

Mr. Petertil: The furnishing of medical benefits to retirees has been around for several decades but the awareness of the financial meaning of a lifetime promise of an open-ended benefit was somewhat limited until the 1980s.

There were isolated instances during the 1970s when actuaries were asked to quantify the liabilities involved in retiree medical program but when one looks back and realizes how many of these programs were in existence a dozen years ago, one sees that the plan with an actuarial valuation was a rare exception.

It has only been in the last five years that the subject of retiree medical programs has received a lot of attention from the actuarial community. The main reasons for this delay can be found in the nature of plan design and in the nature of actuarial work.

Most retiree medical plans were not designed, they just evolved from plans for active employees. The plans usually began in the 1960s as a supplement to Medicare. When the plans were extended to retirees, no financial analysis was performed. Often, no financial executives were involved, much less actuaries. If financial analysis was performed, it was usually only a projectional cost for one or two years by an insurance underwriter or financial accountant. There was little understanding of the changing nature of health care costs and the changeable nature of the benefits.

The role of the actuary was limited because actuaries did not play a major role, as a profession, in group insurance programs for active employees, much less retirees. While few insurance companies or plan sponsors would have thought of putting together an individual life insurance program or group pension program or even an individual health program, without an actuary, it was commonplace for insurers of sponsors to run a group health or life plan for active employees with little, if any, help from actuaries. The time commitment of most programs was only one year; the product was term insurance. If financial experience was bad, rates would be raised as much as competition would allow. Group actuaries for an insurance company might set reserves and putter around with formulas that would adjust rates for changes in plan design, but group work was generally regarded as more art than science.

Consulting group actuaries were virtually unheard of. A dozen years ago, when consulting actuaries in the pension field probably exceeded 1,500, group actuaries who spent the majority of their time consulting on actuarial matters with plan sponsors could be counted on your fingers, possibly of one hand. Studies of claim experience, which the Society of Actuaries regularly maintains for life insurance, disability and pension matters, were disregarded in the group health field because of the lack of consistency of data, the vast variations in plan design and the outdated nature of much information. The profession provided the group actuary with little in the way of tools and the market did not demand them. All of this was true for work involving active employees. Even less attention was paid to retiree medical plans (that is, none).

The position of the group actuary changed over the last 10 years as medical care costs continued to escalate. Insurers and plan sponsors sought more precise explanation of the reasons for their financial set-backs in the group field. They wanted more accurate predictions in the future. More often than not, it was the group actuary who had the most understanding of the many variables affecting the upward trend of medical costs. The term used is

"trend" rather than "inflation" because it is an important distinction to be covered shortly.

Claims Cost Analysis in the Short Term

Mr. Villa: There are several important items that impact claim costs in quantifying retiree medical obligations. First is the determination of past retiree claim cost. Consideration must be given to the volume of experience available, its credibility and quality. Data on small groups will not be credible and the initial cost must be compared against a tabular expected cost. The actuary must make a subjective judgment as to the proper initial claims cost. Even if the volume of data is theoretically credible, the quality of data must be considered carefully.

The accounting profession may well be distressed with the lack of meaningful retiree cost disclosure in annual reports since FAS 81 in 1984. While the situation is distressing, it is not surprising since claim payment functions have generally not stressed retiree data splits. Most purchasers of insurance have focused their attention first on accuracy and timeliness of payment, then on splits by business unit and union/non-union and lastly on active/retired-under-65/retired-over-65.

A recent actual project involved reviewing figures for a jumbo customer's retiree Major Medical plan. The first need was to get employee and dependent demographics. There was a problem since the salaried group had a lump-sum pension option and spouse age data was not normally captured. The split of employee cost between under 65 and over 65 were consistent with expectations. The dependents' figures were quite different from the employees' cost, however, and the relationships expected between under 65 and over 65 were far from expected. Further investigation revealed that dependent claims were coded based on the retired employees' age since the employer wanted to isolate the payment for early retirees. For example, the claim of a 63 year old spouse of a 66 year old retiree would have been coded as an over-65 claim payment.

Therefore, it is very important that the basic data be reviewed most carefully. After a thorough quality check, the claims cost must be refined to reflect the increasing claim cost by age and the impact of benefits provided by Medicare to retirees and their spouses commencing at age 65. This snapshot of past retiree experience will exhibit a slowly increasing cost by age with a sharp cliff to one-third or so of age 64 cost when Medicare kicks in. This claim cost has been impacted by past secular trend and will continue to be impacted by future secular trend.

Let us examine secular trend. Trend is the increasing cost of a medical plan that is caused by the price of services, intensity of utilization, change in patterns of medical services and leveraging created by deductibles.

There are four components:

(a) Leveraging. Assume a plan with a $100 deductible and 100% coinsurance. If a bill comes in for $200, the benefit is $100. If the price for the service goes up 10% to $220, the benefit becomes

$120. The 10% price increase generates a 20% benefit increase. This is referred to as leveraging.

(b) Change in Patterns of Medical Services. This is a two-edged sword. Sometimes better is simpler and cheaper; more often, it is more complicated techniques that improve the quality of health. Of course, more complicated is more expensive. An example of this is organ transplants.

(c) Intensity of Utilization. This is increasing; as we try to directly manage care we will have reductions or shifts in intensity but the overall picture is up.

(d) Price of Services. This is the most important component of trend and in most years represents over half the increasing cost. Government measures it by the Consumer Price Index (CPI). The CPI has a medical component. This component is a fixed market-basket and includes items that are NOT part of a typical insurance plan. Most major insurance companies have developed their own measure of price. The following chart shows how various price measures have increased over the last eight years.

ANNUAL PERCENTAGE CHANGE

Period	Consumer Price Index	Medical CPI	Metropolitan Medical Index
1979	12.9	10.0	10.4
1980	12.8	10.0	13.3
1981	8.8	12.1	13.7
1982	3.9	10.6	11.1
1983	3.3	6.6	9.6
1984	4.6	6.6	7.3
1985	2.5	6.2	5.7
1986	2.4	8.3	7.4

The aggregate CPI shows very high rates of increase for the first three years of the period declining to a modest 2 1/2% recently. The Medical CPI showed high rates of increase for a longer period and the decline in Medical CPI was not as steep later in the period. Note that the Medical CPI has jumped to almost double-digit inflation in 1986. Metropolitan's Medical Price Index is somewhat consistent with the Medical CPI. It exhibits wider variations, which are probably a refinement in the price area.

Price is a component of secular trend that can be crudely quantified from published data. The other components, utilization, intensity and leveraging, are determined implicitly by reviewing experience on a large block of business. From a total book of business the carrier determines aggregate trend and then makes theoretical refinements for expected differences in cost due to plan provisions. Incidentally, it appears current secular trend is running 13% to 15% with some indications that it could even be higher.

Mr. Porter: There is concern that existing data which is being used as the basis of extrapolating health care trends may or may not be appropriate for

the longer term. Existing statistical data has almost never been produced with the long-term future in mind -- most frequently the data would be used for the short-term pricing of one-year term health care coverage. This is not to say that the statistical data would look any different if the longer-term view had been taken when morbidity tables were constructed. The data may ignore or minimize developing trends because of short-term insignificance.

Claim Cost Trends in the Long Term

Mr. Porter: Going forward, more data will be produced with the long-term perspectives in mind. Ten to twenty years from now our concerns will be reduced, but for now we must do the best job we can with the available data.

Actuaries must look at available data for trends and apply a substantial amount of subjective judgment to produce a cohesive set of assumptions about the very long-term.

This is illustrated graphically by the attached Chart 2 which compares the annual rate of change in four measures related to cost of health care benefits -- total CPI, Medical CPI, Medicare deductibles, and per capita Medicare expense. As can be seen, total CPI and medical CPI are reasonably correlated, with medical CPI typically higher than general CPI. For long-term projections of retiree health care, however, the medical CPI may not be an appropriate basis for trends. This is because medical CPI reflects most phases of medical cost using a "market-basket" weighting. This weighting may differ substantially from benefits covered post-retirement under an employer-sponsored plan.

Further, the typical employer-sponsored program will carve out Medicare coverage. Thus the projections must reflect not only post-retirement CPI, but also trends in Medicare coverage. The chart shows that the rate of change in the Medicare deductible -- which measures some of the cost shift between the government and employer -- bears no correlation with Medical CPI changes. In addition, even with substantial changes in the Medicare deductible, the rate of change in per capita Medicare cost is not predictable.

It seems unlikely that any two actuaries, economists, or accountants would draw exactly the same conclusions regarding the future trend in employer-provided retiree health care costs by looking at this data. I have seen situations where two actuaries working independently came up with costs that differed by seven times for the same plan and set of employee data -- that is, actuary "A" produced results seven times greater than the results of actuary "B". I do not personally believe that kind of spread is credible, but a spread of four or five times does seem reasonable, depending on the demographics of the covered group of employees.

Mr. Villa: Also of interest is per capita expenditures for personal health care. The attached Chart 3 shows that every year since 1975 per capita costs have increased. All components of personal health expenditures have also increased every year. The annual increase since 1975 has been almost 11%! Chart 4 overlays the percentage change in the Medical CPI and per capita medical expenditures. Note that although the Medical CPI has zigged and zagged, it has generally stayed in the 5% to 10% annual increase rate for the last 20 years. The per capita increases have not gone below the Medical CPI

and have generally been above 10%, except in the last few years when government and employers have put extreme pressure on managing and controlling utilization of medical care.

Chart 5 compares the GNP with Health Expenditures since 1940. In 1940, Health Expenditures amounted to 4% of the GNP; this proportion has increased almost every year; in 1986 Health Expenditures were 11% of the GNP. There is obviously a limit on how much of the GNP can be devoted to Health Expenditures but we have not yet reached it.

Let us step back from this data. Actuaries must project liabilities for medical obligations many years into the future: maybe 30 years for present retirees; up to 70 years for active employees. If the past is an accurate guide to the future, we can expect a substantial increase in prospective costs where medical services are provided. The determination of these cost factors are very complicated and, at present, subjective. Different people will make different judgments that will produce liabilities that differ vastly. Different results can be equally valid. Therefore it is important to recognize that retiree medical valuations can encompass a wide range of valid estimates.

The full analysis of the example case mentioned earlier quantified the impact of changes in trend on future medical costs. Currently retiree medical claims for this employer were running at $25 million per year. Twenty years from now, assuming no plan changes and constant valuation assumptions, paid claims are estimated at $40 million if trend is 5%, $99 million if trend is 10% and $237 million if trend is 15%. Funding was determined as follows:

	Method	
Trend	Aggregate Cost	Frozen Initial Liability with 30-Year Amortization
5%	5% Payroll	3.9% Payroll
10%	13% Payroll	10.9% Payroll
15%	49.5% Payroll	44.1% Payroll

The above illustrates that ranges of costs can be quite broad.

Mr. Petertil: My interpretation of the national figures (which show continued growth in the percentage of GNP devoted to health care and which show a medical care price index increasing faster than the general index is to assume a continuation of the upward trend in the future. In this view, the short term downturns give way to long-term increases. Further analysis has led me to use as my assumptions for the long term, a medical care inflation factor which is 1-1/2% points above general inflation. Increases in health care utilization are assumed to push the annual trend up another two or three points. The utilization is expected to increase because of medical and technological advances and increased consumer demand for services. I prefer to use a 3% utilization increase but may use a lower figure if the spread between the discount rate and the assumed general inflation rate is small, say less than 3% points. The discount and inflation rates are usually taken from pension assumptions.

These utilization increases are independent of the aging of the population. For that purpose an annual increase based on the age of the individuals each

year is applied. This ranges from 4% to near 1%, decreasing with age. The 4% is based on published information, which is more difficult to find at the higher ages.

It has only been in recent years that actuaries have given much attention to insured costs by age above 55. When the main interest was experience-rated, one-year term insurance, aging of the population was not a major concern. This is only gradually changing.

Although most actuaries agree plan costs increase with age (ignoring the Medicare change), the rate of increase is still a matter of some controversy. It is not helped any by the fact that if aging is modeled simply as another aspect of the trend rate, a lower percentage should be used than when aging the individuals.

When all these trend factors are put together, the result is an overall trend factor which is from 3 to 5 percentage points above the discount rate. So even on a discounted basis, payments per capita are going to grow. And they will grow in aggregate for a closed block of retirees eligible for Medicare unless offset by mortality.

The previous discussion does not include increasing the trend for cost-shifting from Medicare or the effect of leveraging. Many actuaries would add another 2 or 3 points to the annual trend for cost-shifting and leveraging, with the amount dependent on plan design.

Most forecasts are projecting huge annual increases. It is easy to see why this is referred to as a "time bomb" or "the tip of the iceberg."

What are the mitigating circumstances? There are several. For one thing, many people believe the cost containment efforts of government and plan sponsors will drive medical costs down, or at least contain them, for everyone, including the elderly. Others say that there are natural limits to what our society will pay for health care. These circumstances have a positive, albeit uncertain, probability and should not be dismissed out of hand.

There are, however, other more pessimistic scenarios and they must also play a part in management decisions.

One important factor that must always be considered is the fragile nature of the initial claims cost figure. Per capita claims costs for a group will change from year to year in a way that defies prediction. Retrospective analysis will always have to be performed. There are also the problems of inaccurate or inadequate coding referred to earlier. And the possibility of misinterpretation exists and is much higher at this stage of the game than it will be when plan sponsors, insurers and actuaries have had several years of experience valuing a plan's costs and analyzing data. All of this leads actuaries to be reluctant to give management a single answer as to the present value of future payments. It has also complicated the task of setting actuarial standards.

Actuarial Standards

Mr. Porter: Concerns such as the foregoing, led the actuarial profession to conclude that standards of actuarial practice should be promulgated in the emerging area of measuring retiree life and health care benefit costs. A task force was formed under the auspices of the Interim Actuarial Standards Board to undertake this task. Eleven actuaries representing both health and pension disciplines have met on an aggressive schedule to produce a standard. Our purpose has not been to specify how things should be done or to duplicate or subrogate any actions which may be taken by the FASB, Congress or others. Rather, our purpose has been to identify certain unacceptable practices -- particularly by requiring disclosures in key areas -- and to make strong suggestions regarding certain factors which should be considered.

We found, for example, that most of the members of the Task Force typically do not represent a single number as the "best estimate" in this area. Rather, we present broad ranges of results which reflect the substantial uncertainty about how published history may translate into 100-year trends. It is our strong view that presentation of a single number could be grossly misleading. Accordingly, we are considering a requirement that all results be presented in ranges, with disclosure regarding how small changes in key trends might impact results.

The Task Force members started with the view that we all had a lot to learn from each other. I believe each of us has learned more than we imagined. We have also become acutely aware of an urgent need for education of all actuaries, economists and accountants who will practice in this area. The Task Force is not likely to be the source of such education but we will encourage research and discussion. We believe that the actuarial "art" that is being practiced in this area will give way to actuarial "science" over the long period of time necessary to build a substantial historical record and dialogue similar to that which currently exists in the pension field. Accordingly, any standard we promulgate needs to be sufficiently flexible to allow for the inevitable advances in understanding and techniques.

Two examples of areas where education seems necessary are: (1) differentiating between long-term care and acute care; and (2) the significance of administrative procedures in determining plan design. Long-term care, regarding which there is substantial activity in Congress and elsewhere, is typically not covered by employer-sponsored plans. Those who have not worked in the health care areas may not be aware of the lack of coverage or of the implication if coverage for long-term care costs is made mandatory or otherwise provided by employers.

Unlike pensions where the plan document clearly defines the nature of the commitment, health care plan documents may only provide a shell within which claims administration operates. Costs under a health care plan can be affected materially by changing claims administration without changing the plan document. For example, if a plan uses a payment schedule, the schedule can be altered or allowed to go unchanged and affect projected cost. Similarly, eligibility for coverage under certain procedures can be modified adminstratively. Accordingly, the plan sponsor's commitment to health care costs is significantly less well-defined than the commitment under a pension plan.

Plan Design Complications

Mr. Petertil: The practical issues discussed above -- claims administration, benefit coverage, initial claim cost determination -- complicate what was already a theoretically complex measurement. A few additional complications which are beginning to be seen in relation to the long term trend should also be mentioned.

Most observers feel that health care will continue to be a growth sector of the economy; nevertheless, the long term implications of such growth are unsettling to many. The only theoretical limit appears to be that health care cannot consume 100% of GNP. Nevertheless, we have found the credibility of our valuations is enhanced if we state limits to health care growth. Two years ago we constructed models with economic assumptions such that health care did not exceed 15% of GNP beyond the year 2000. (More recently, HCFA released an estimate that the 15% level would be reached in the year 2000, but it did not speculate on the growth beyond that date.) When considering trend rates for the future, limitations on the long term also need to be weighed.

Additional complications in the measurement process are introduced by benefit changes which plan sponsors have initiated, or are contemplating initiating, to limit payments ten or twenty years in the future. Examples of this are the establishment of dollar limits on benefits paid. Typical limits are unlikely to be met or exceeded in the near future but, given the upward trend of medical care costs, are very likely to be tested in the longer term.

From a measurement standpoint, the challenge is to estimate when those payment limits will be reached. Once the limit is reached, the benefit either ceases or can be handled like a defined contribution annuity. In a sense, the measurement issue is simplified.

An accounting problem is raised, however, when one realizes that these limits are being put in place now not so much to restrict future payment but rather to allow the plan sponsor flexibility. Most benefit managers who are setting these limits fully expect the limits to be increased in the future, probably before they are ever reached. What they gain, at a low current price, are bargaining chips for the future and the comfort of knowing there is another escape clause.

Let us hypothesize then that we have two companies which have identical benefit plans and payment histories. The only difference is that Company A has a plan provision which limits future payments in a manner unlikely to have practical effect for another ten or fifteen years. Company A has also expressed an intention to raise those limits before they are met if financial conditions allow. From a practical standpoint, Company A's philosophy is similar to Company B's policy of reserving the right to make benefit changes if financial or other conditions demand.

An actuary seeking to provide the management of the two companies with adequate information about possible liabilities could give both companies valuations under a variety of scenarios. Those valuations would include measuring future payments with limits and without limits. After reviewing the philosophies of the two companies, agreement might be reached that the

probability of limited payments was equal for the two companies. The question then becomes: "Should an accounting standard call for both companies to have the same annual expense or should Company A, with a limit written but likely to be ignored, have an expense which is a fraction of Company B's?"

Problems of a practical nature such as these are inevitable and will present major challenges in the future. The actuarial profession looks forward to working with the accounting profession in meeting these challenges and taking the measurement of postemployment benefits beyond pay-as-you-go accounting.

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CHART 2

COMPARISON OF CHANGES IN CPI - MEDICAL CPI
MEDICARE DEDUCTIBLE - MEDICARE PER CAPITA

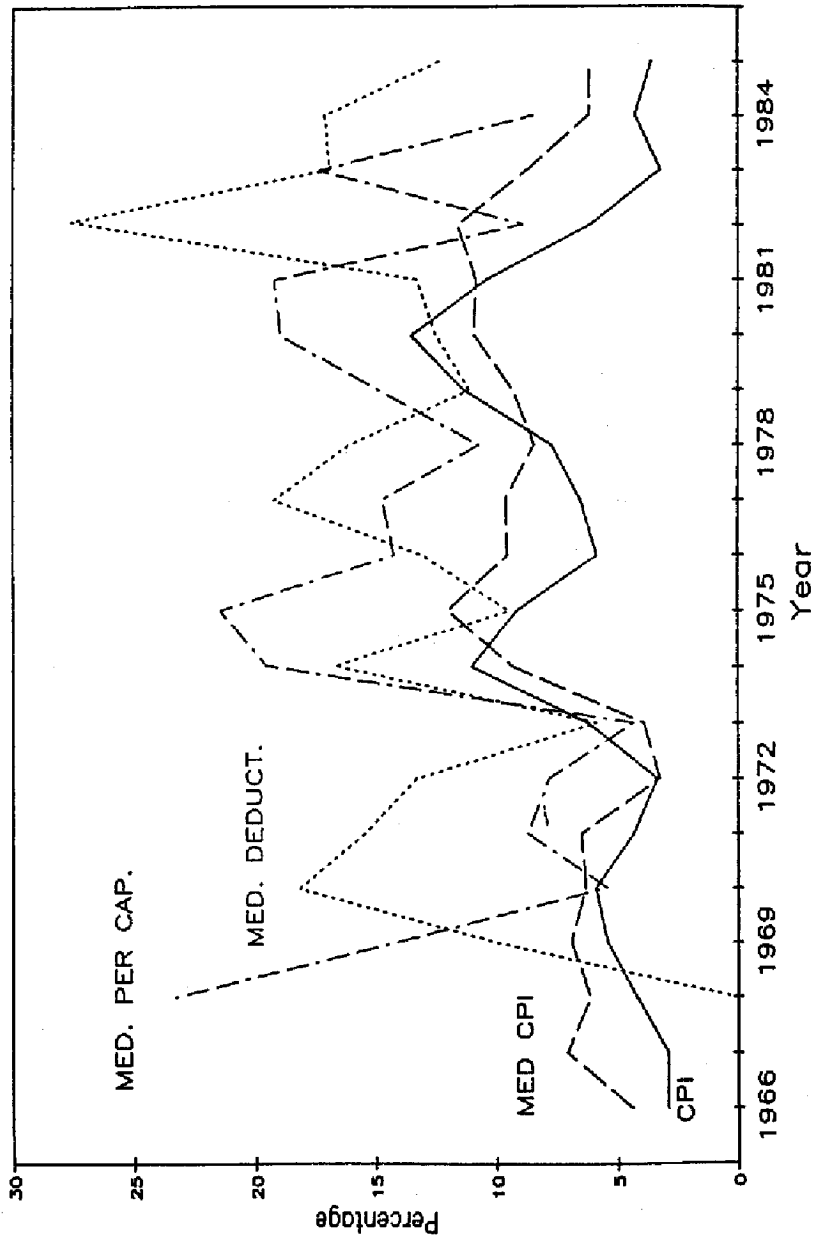

CHART 3

PER CAPITA EXPENDITURES ON PERSONAL HEALTH CARE*

	Hospital Care	Physicians' Services	Dentists' Services	Other Prof'l Services	Drugs & Medical Sundries	Eye-glasses & Appli-ances	Nursing Home Care	Other Health Services	Total Personal Health Care
1975	$232.98	$110.71	$36.46	$11.56	$52.91	$14.23	$44.91	$16.90	$520.64
1976	268.56	121.71	41.45	14.11	57.33	14.99	49.83	17.64	585.62
1977	297.81	139.50	45.92	15.74	61.66	16.18	56.85	18.37	652.04
1978	330.19	155.13	51.13	17.77	66.73	18.20	65.43	20.80	725.37
1979	373.20	172.45	57.05	20.16	73.35	20.16	74.64	21.88	813.76
1980	431.63	198.82	65.42	24.22	79.87	21.67	86.67	25.06	933.35
1981	500.88	230.47	72.76	28.60	87.06	22.29	100.51	28.60	1,071.16
1982	563.19	257.44	81.23	33.33	92.06	24.16	111.22	30.83	1,193.45
1983	605.37	282.06	89.49	38.35	101.03	25.57	121.24	34.23	1,297.74
1984	634.81	308.21	100.56	44.56	108.32	28.61	130.40	38.42	1,394.30
1985	675.04	335.29	109.74	51.02	115.41	30.37	142.54	44.54	1,503.95
1986 est.	720.60	366.10	118.00	57.00	121.60	32.90	155.80	50.60	1,622.60

* Does not include outlays for research and construction, expenses for prepayment and administration, and government public health activities.

Note: Due to rounding, components may not add exactly to totals.

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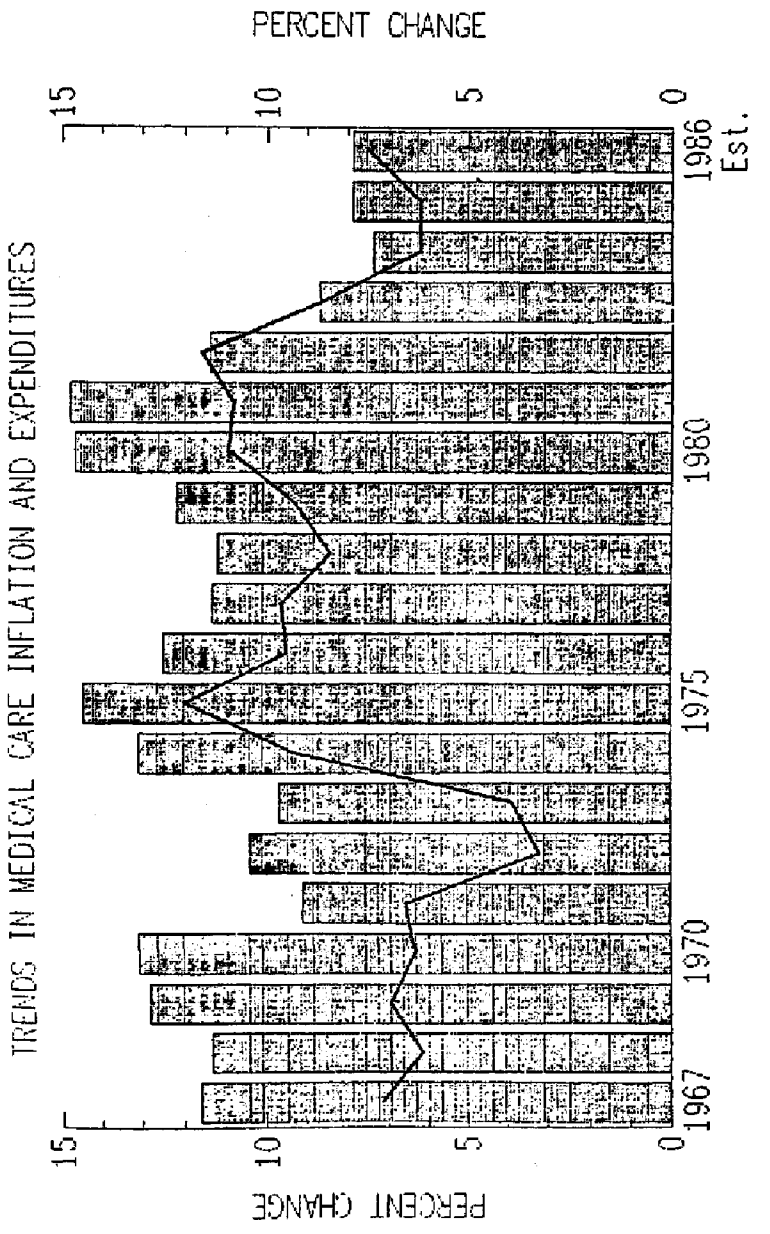
CHART 4



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COMMENTS ON MINIMUM FUNDING RULES FOR PRIVATE PENSION PLANS AND ON THE PENSION BENEFIT GUARANTY CORPORATION PREMIUM

November 11, 1987

Special Task Force
Pension Committee
American Academy of Actuaries

INTRODUCTION

This paper was prepared by a task force of the Pension Committee of the American Academy of Actuaries; it addresses the problems of minimum funding and the Pension Benefit Guaranty Corporation (PBGC) premiums in the private pension system. Our intent is not to analyze any of the specific proposals that have been suggested for dealing with these two significant problems. We agree that these problems demand appropriate and thoughtful solutions. We believe that our role as providers of actuarial services to private pension plans puts us in a unique position to comment on this subject.

We would remind the reader that ours is a voluntary private pension system. Any changes in minimum funding requirements or the PBGC premiums should not force healthy employers out of the system due to administrative burdens, higher long-run pension costs, excessive PBGC premiums, etc. The change in corporate tax rates contained in the Tax Reform Act of 1986 has caused many plan sponsors to question whether it is financially prudent to continue to initiate or maintain defined benefit plans. A significant increase in the minimum funding requirements or the PBGC premiums would add to the unfortunate belief that defined benefit plans may not be worth the time and trouble.

We acknowledge that the argument about a possible demise of defined benefit plans has been made before. In fact, many of our comments on various legislative proposals over the last few years have stressed this point. However, based on review of statistics from the Internal Revenue Service (IRS) of new plan approvals and terminations, the argument has validity. The following illustrates new plan approvals and plan terminations for each of the last five full calendar years.

(IN THOUSANDS)

Year	Plan Approvals	Plan Terminations
1981	23.8	4.5
1982	28.2	5.0
1983	22.1	7.2
1984	12.8	9.1
1985	17.3	12.2
1986--6 Months	9.8	4.6

This chart demonstrates that over the last five years, the number of new defined benefit plan approvals has been steadily dropping, while the number of defined benefit plan terminations has roughly doubled. While no definitive reasons for this trend can be proven, we suggest that the constant legislative and regulatory changes over the last ten years have undoubtedly contributed to the trend. We hope that the Congress and its staff will keep these trends in mind as they contemplate additional changes to the defined benefit pension plan system.

Current proposals focus on some kind of a "fix" to what ails the PBGC. The predominate view appears to be that higher minimum funding requirements will do this. While such a step might help, it is not necessarily an "ultimate fix." Recent court decisions (Mead vs. Tilley and Dixie Engine vs. Blessitt) may fundamentally change the definition of "accrued benefits." These court decisions expand the concept of accrued benefits above and beyond the amount that has been earned based on salary and/or service at the point of plan termination. A recent General Counsel Memorandum from the IRS concludes that benefit expectations are not plan liabilities under Section 401(a)(2). We agree with this interpretation and believe that the accrued benefit amount should be independent of the plan funding. In the long run, court decisions such as these tend to lead to consistent underfunding of defined benefit plans because of plan sponsors' fear of accumulating excess pension assets, as they may lose their opportunity for recapture and plan termination.

Some change in minimum funding requirements under Section 412 is needed. The current rules have not worked well for a small percentage of defined benefit plans. Problems with the current rules include amortization periods that do not reflect a proper relationship of active to retired workers, inability to recognize expected future benefit increases in negotiated plans, excessive number of minimum funding waivers, etc. We believe any solution to this overall problem must involve cost sharing among all three relevant groups:

1. Plan participants - through possible adjustments of their accrued benefits and guaranteed benefits at plan termination.

2. Plan sponsors - through new minimum funding requirements and PBGC premiums and liabilities.

3. The PBGC - through some different premium structure.

In effect, we view this as a three-legged stool. Any proposal that leans too heavily on one or two of the legs will cause the stool to tip and the solution will fail. Our ideas involve a reasonable allocation of cost and financial responsibilities among all three of these groups. We would be happy to elaborate on any of our points or to meet with any parties interested in discussing this further.

MINIMUM FUNDING STANDARDS

Before discussing possible changes in the minimum funding standards, we need to review some basic principles about pension plan funding:

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1. Pension plan funding is a long-term process. Retirement plan liabilities are long-term liabilities; therefore, funding for such benefits merits long-term consideration.

   Tied in with the long-term nature of plan funding is the concept of plan "maturity." Some plans are more "mature" than others -- that is to say their benefit obligations will be paid sooner, so benefits need to be more fully funded. Some industries (such as steel) have plans that are in very mature situations. Other plans may be "immature" -- the population in the plan is many years from retirement, so there is much less need to have all benefit obligations fully funded. New plans are quite often established for groups that are immature. Thus, there can be a longer time allowed for funding benefit obligations without creating a funding problem (assuming that future contributions can be made).

2. Funding levels are naturally subject to volatility. This volatility occurs for many different reasons -- changes in employee group, changes in asset value, changes in benefit structure, etc. In 1985, the Committee on Pension Actuarial Principals and Practices of the American Academy of Actuaries produced a fourteen-volume study of cost method analysis for different employee groups under different actuarial cost methods. A major finding of the study is that the wide range in pension funding levels is due to the combined effects of the factors mentioned above. Volatility in funding levels and in funded ratios is to be expected and is not necessarily unusual or indicative of any specific underlying problem.

A plan sponsor's decision as to asset allocation is also a very significant factor in determining the funded ratio. Proposals for changes in minimum funding that are tied too closely to a plan termination concept or a yearly funding target will cause plan sponsors to adopt more conservative funding policies. For example, sponsors would most likely shift portfolios to fixed income investments, so that movements in plan assets and liabilities from year to year would be more coordinated with each other. Not only is a more conservative investment policy not necessarily in the best long-term interest of plan sponsors, but these types of changes in investment policy will have a significant affect on our capital markets because of the enormous size of private pension assets (over $2 trillion).

We believe it is important to remember that the minimum funding standards created by ERISA have worked well for the vast majority of defined benefit plans. PBGC data shows that over 95% of the plans that terminate have assets sufficient to meet their PBGC liabilities. Any changes to the current minimum funding rules should be targeted to those plans most in need of help. Solutions to the underfunding problem should focus on the 5%, without significantly effecting the other 95%.

We oppose in concept ideas such as the cash flow rule, funded ratio maintenance rule, anti-deterioration rule, etc., because they are based on an annual look at plan funding. As we stated earlier, funding will be volatile. Funding rules that are based on yearly targets will lead to more conservative investing. We are already starting to see a trend towards more conservative investing due to factors such as the new financial reporting requirements issued by the Financial Accounting Standards Board (FASB). Funding standards based only on annual results will exacerbate this trend.

In general, we believe the current rules on minimum funding provide a workable set of requirements. Several of the proposals have suggested a shortening of the amortization period for past service liabilities. We could support some shortening of the amortization period for future benefit increases (hopefully no shorter than twenty years, but certainly no less than fifteen years). While shortening amortization periods strengthens plan funding in the short term, it may have several negative effects over the long term:

1. It may cause existing plans to hold back on increasing benefits because of the increased cost of the shorter amortization period.

2. The burden of shorter amortization periods will be felt most by new plans. This will slow the overall growth of the number of defined benefit plans which will then hurt the PBGC.

3. There will be a loss of the revenue associated with the higher minimum funding requirements. This higher requirement is imposed on all plans, even though only about 5-10% of plans may be in financial difficulty.

We would also support the idea of reducing the number of waivers of minimum funding requirements available to a plan sponsor over a set time-period. For example, the number of waivers of minimum funding over a fifteen-year period might be reduced from five to three.

The one area of the current rules on minimum funding requirements where we would strongly suggest that a change be made involves primarily union negotiated plans where the benefit amount is a multiplier for each year of service. The normal pattern for benefit increases is to change this multiplier at each bargaining session. Quite often, the benefit multiplier applies to both past and future service.

Under current Section 404 rules on deductible contributions, the shortest permissible time for amortizing any past-service liabilities is ten years. In these negotiated plans, increases in benefits often occur every two or three years. Thus, required deposit levels must increase at a rate much faster than the benefit increase in order to maintain appropriate funding levels.

Although there is an established pattern of benefit increases (and sometimes even a schedule in the plan that outlines future benefit increases), current funding regulations require that only the benefit multiplier in effect for the current plan year can be recognized in calculating the minimum funding standard (Revenue Ruling 77-2). This is a short-sighted approach that contributes to the underfunding problem. We suggest a more reasonable approach would be to require calculation of the minimum funding amount after taking into account expected future benefit increases. This is similar to what is done on salary-related plans where the benefit is related to final average pay. Many of the underfunded terminated plans that are taken over by the PBGC are in declining industries where this type of benefit increase pattern has occurred.

If in the view of the Congress recognition of expected future benefit increases in negotiated plans involves the loss of too much tax revenue, we believe that at least those benefit increases already negotiated and scheduled to take place should be recognized.

The 1985 Academy study vividly points out this problem. Of the ten employee groups that were profiled in the study, three of the groups had a benefit formula of the type mentioned above. The other seven groups had a benefit formula related to salary and/or service. The underlying assumption in this study is that the plan benefit amount for the three plans increases each year, based on the CPI plus 1%. The funded ratios of these three plans lag considerably behind the funded ratio of the other seven plans because of this constant benefit increase and the inability to recognize it for minimum funding purposes until it has occured

OTHER FUNDING ISSUES

We would also like to comment on several other issues related to minimum funding:

1. We have already suggested reduction in the number of funding waivers. Current rules require the amount of the waived minimum funding requirement to be amortized over a period of fifteen years. We suggest this be shortened to ten years. Further, we might suggest that underfunded plans that terminate with an outstanding waiver of minimum funding have the minimum funding requirement recognize the entire unamortized amount during the year in which the plan terminates.

2. All of the legislative proposals seem to touch on the withdrawal of excess assets from an ongoing plan. The proposals seem to offer withdrawal of excess assets as the "carrot" while imposing significantly tougher funding requirements for all plans. This seems contradictory to us. The Academy study referred to earlier demonstrates that there is no level of plan assets that could truly be considered "excess" unless, and until, the plan terminates. There are examples in the Academy study where plan funding ratios on a termination basis are reduced from 130% to 90% in only a two-year period because of decline of asset value

   Setting a threshold level of 125% of the value of accrued benefits or the full funding limitation above which excess assets could be withdrawn is inherently arbitrary. Our training and experience tells us that funded ratios will rise and fall over time. The actuarial cost methods and assumptions used in funding a pension plan adjust for this and bring asset levels in line with liabilities over the long term.

   If it is the sense of the Congress that our tax policy should allow withdrawal of assets during times of temporary excess, then we believe there should be a corresponding requirement to repay those amounts if the plan funding ratios sink below the level of the accrued benefits and the plan terminates. In effect, we believe that funding waivers and withdrawal of "excess" assets should be treated in the same manner for plans with assets of less than the present value of accrued benefits at plan termination.

3. Another area of commonality in the proposals is some type of controlled group rules. A typical requirement is that all plans within a controlled group must be funded to the level of the termination liability before excess assets could be withdrawn from any plan. Another way of thinking

about this rule would be to say that all plans within a controlled group should be funded at the same level at the same time.

We cannot stress strongly enough that it is entirely reasonable and expected that different plans will have different funding levels for reasons other than different employer philosophies about funding. It may be an older, mature group; it may be a group of new employees. The asset makeup may be different. Benefit formulas may differ -- for example, one may be career average while another is based on final pay. Differences in funding ratios should be expected and are not necessarily indicative of any underlying problem. Rules such as these controlled group rules will prove to be extremely difficult to handle in practice and will adversely affect business activity.

Congress is currently considering many different proposals dealing with pension portability. Controlled group rules, such as the ones in the current proposals will virtually eliminate plan portability when companies or divisions are bought and sold. Other controlled group rules such as requiring the transfer of excess assets within a controlled group to underfunded plans before any plan can terminate will lead to a consistent undefunding of plans by the plan sponsors to avoid the transfers. Over the long term, these rules work against the interests of both plan participants and the PBGC. We hope a much more reasonable set of rules can be adopted.

4. While not a major item, many of the legislative proposals impose some additional timing requirements on when the plan contributions are due. Each of these rules adds to the administrative burden of maintaining a defined benefit plan without having a significant financial affect on most plans. The funding standard account already adjusts contributions and contribution requirements to reflect the time of payment. Requiring quarterly contributions is an administrative burden, since the actuarial valuation is not often done until six to nine months into the plan year. This delay is usually the result of the plan sponsor's need to gather employee data. We strongly urge that all of these rules be dropped and that the present rules be retained.

5. There is one new and significant addition to the ideas being considered for changes in qualified plan finding rules. On October 15, 1987, the House Ways and Means Committee passed a package of tax increase measures totaling $12 billion. One of the provisions of the package was to limit the maximum deductible contribution to a defined benefit plan to the lesser of the current full funding limitation or 150% of the plan termination liability. This proposed change is directly at odds with the changes to the minimum funding standards since it will reduce plan funding. It will have the greatest impact for those defined benefit plans that base benefits on a final average salary. If this change in the full funding limitation is adopted, we expect that two things may occur:

   a. The overall funding rates for defined benefit plans will start to decrease. In effect, this proposed change shifts more of the cost for funding plan benefits to the future rather than being able to anticipate the need for increased funding and being able to spread that cost evenly over a longer period.

b. As plan sponsors become concerned about the funding levels of their defined benefit plans and the potential for cost increases in the future, they may amend the plan's benefit formula to be based on a career average salary rather than a final average salary. The end result is a lower benefit for plan participants.

We would like to repeat our call for a consistent tax policy for qualified plans. This could best be done by codifying a statement on a national retirement income policy.

PBGC PREMIUMS AND GUARANTEED BENEFITS

This is the most complicated issue and perhaps the most emotional one, since it directly affects the amount of benefits that some participants will receive. It is the most complicated because all three parties are directly involved -- the plan sponsor, who is responsible for funding benefits; the participants, who have an expectation of receiving all of their benefits; and the PBGC, which must try to maintain benefits at a reasonable level while maintaining its own solvency. It is appropriate to repeat our earlier statement that any long-term solution to this problem must involve a reasonable sharing of cost and responsibilities among all three parties.

First, we would point out that the PBGC is not an "insurance company" as many claim. Insurance companies learned long ago that it is impossible to insure for a voluntary event like a plan termination. The PBGC is simply a guarantor of benefits, and its function is to shift costs from ongoing plans to terminated plans in a way that hopefully will not disrupt ongoing plans.

Since the PBGC is not an insurance company, normal insurance principles do not necessarily work. While the PBGC's exposure (degree of underfunding) is measurable, the probability of loss is not equally measurable. The PBGC's exposure is simply the value of guaranteed benefits. Our studies prove that plan funding levels can (and do) change dramatically. The Academy's 1985 study demonstrates that a reduction in the funded ratios of approximately 35% over a two-year period can occur primarily because of asset value decline. This asset value decline is representative of stock market performance during the early 1970s. Thus, a risk-related premium tied to a funding snapshot may not be sufficient since funding levels can change dramatically during that year.

However, we believe that a PBGC premium tied to some measure of risk is appropriate because is creates a positive incentive for reaching and maintaining a well-funded position.

Under the current PBGC premium structure, all plans pay the same per head premium regardless of the plan's benefit formula. This level PBGC premium results in a subsidy from plans with lower average benefits to plans with higher average benefits. It also results in a subsidy from well funded plans to poorly funded plans. This cost transfer between plans is not equitable. In the long run, it is hurting the PBGC's financial health because each time the premium is increased, plan sponsors reevaluate whether it is financially prudent to maintain their defined benefit plan. Those plans "at the margin" (generally with lower average benefits and/or those that are better funded) may choose to drop out of the defined benefit system.

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We propose a three-part approach towards determining the PBGC premium for any plan:

1. A base premium (likely a head tax as in current law) related to the average accured benefit. As we said earlier, the PBGC's exposure is based on the plan's benefit formula up to the current PBGC maximums. The higher the average plan benefit, the higher the base premium. We do not have the financial data to prepare an actual schedule of premiums, but it might look something like the table below:

Average Accrued Benefit	Base Premium
Less than $250 per month	$7.50
$250 to $500 per month	8.50
$500 to $750 per month	9.50
Over $750 per month	10.50

This average accrued benefit amount could be calculated as part of the actuarial valuation process and used in calculating the PBGC premium for the succeeding year.

2. A second premium component that is related to the plan's funding status. Again, we do not have the financial data to be able to construct the proper schedule. However, we suggest the definition for plan funding be readily available, since full plan termination calculations are not typically done as part of the actuarial valuation process.

3. A third component that is in effect a surtax for special benefits such as plant closing benefits, early retirement benefits, supplements, special survivor benefits, etc. The amount of the surtax could be based on PBGC experience -- the percentage of their total liability that is attributable to these types of benefits. Obviously, plans without these special benefits would not pay the surtax.

Applying these three components in combination produces a broader range of PBGC premiums -- from plans with lower average benefits that are well funded at one end of the spectrum and plans with higher average benefit amounts that are not well funded and that have special supplementary benefits at the other end of the spectrum. We believe that creating a broader range of PBGC premiums is the most feasible way for the PBGC to continue as a viable entity and at the same time to maintain the voluntary pension system. Maintaining flat per-head premiums simply forces more plans out each time the PBGC premium is raised.

Many of the proposals tie the PBGC head tax to future increases in the CPI index; we see no logical theoretical link for this. It is an obvious way to increase PBGC premiums without having to endure the legislative process. We believe this is dangerous and has the problem we mentioned before: forcing out additional defined benefit plans each time the premium is increased. We believe one advantage of our suggested approach is that it self-adjusts by virtue of the component related to the average accrued benefit. The average accrued benefit is an indexing mechanism that is tied more closely to actual experience and the PBGC's exposure.

There are several other areas where we suggest consideration be given to changing the current PBGC rules:

1. Change the five-year phase-in rule for benefit increases to a ten-year phase-in rule. Having benefit increases phased in over five years while the shortest period available for funding these benefits is ten years only increases the PBGC's exposure.

2. Consider eliminating the $20 minimum phase-in per year. In actual practice, this $20 minimum often comes into play with the end result being that the PBGC phase-in period for guaranteed benefits is much shorter than the five-year period.

3. Reduce the limit on the PBGC maximum guaranteed benefit. The limit on guaranteed benefits has been indexed upwards from $750 per month in 1974 to $1,858 per month today. Over that same time, the Section 415 limit (the limit on the maximum benefit payable under qualified plan) has only increased from $75,000 in 1974 to $90,000 today. Thus, the PBGC is now guaranteeing a much greater percentage of the total allowable benefit than in 1974.

   We recognize it is not politically feasible to reduce the PBGC limits on guaranteed benefits that are currently in effect. However, the limits could be frozen at their current levels until the Section 415 limits increase so that the original (1974) percentage of the 415 limit is once again guaranteed by the PBGC. The prior relationship between the 415 limit and the PBGC limit was established by the Congress, and we are not aware of any reason for change.

4. Assuming there is some provision for withdrawal of excess assets from ongoing plans, we suggest that the excise tax that is paid upon withdrawal of these assets be earmarked and made available to the PBGC. Since this withdrawal of excess assets from an ongoing plan has the effect of increasing the PBGC's exposure, it seems appropriate that they should receive most or all of this amount.

SUMMARY

The intent of this paper is to use our experience in plan funding and our actuarial expertise to suggest ideas that will result in reasonable cost sharing between plan sponsors, plan participants, and the PBGC. Issues are complicated; solutions must be carefully thought out. Our main points are:

1. Current minimum funding standards work well over the long term for the vast majority of plans. They do not work satisfactorally for a small percentage of plans. Necessary changes should focus on those particular plans for which current rules are inadequate. Considering the volume of changes in recent years, Congress should think carefully before changing the system again.

2. We are opposed to new minimum funding requirements such as the funded ratio rule, anti-deterioration rule, etc. Plan funding is, by its nature, volatile. Rules such as these are short-sighted and do not necessarily improve long-term plan funding. They will affect nearly <u>all</u> plans instead

of the 2-5% of plans that are underfunded. This may also lead to significant change in the investment allocation of plans nearing a funded position; this, of course, has other economic implications.

3. We propose changes in the minimum funding rules for negotiated plans. We suggest that the minimum funding requirement must include some element to reflect the actual or expected increase in the benefit multiplier. This alone will help relieve the funding problems of many of the underfunded plans in the defined benefit universe. At a minimum, future benefit increases already negotiated should be taken into account for funding purposes.

4. We support a cutback in the number of times a waiver of minimum funding may be obtained. We suggest the unamortized amount of a minimum funding waiver be included in the minimum funding requirement in any year in which the plan terminates and the assets are less than the PBGC guaranteed benefits.

5. While we have no specific position on withdrawal of excess assets from ongoing plans, the rules that have been suggested to this point are likely not of interest to most plan sponsors. If the decision is made to allow withdrawal of these excess assets, then the requirement should also be made to require repayment of the unamortized portion of the asset withdrawal if the plan terminates in an underfunded position.

6. Proposals for quarterly contribution requirements, or that all contributions must be made within two and one-half months, and so on, should be removed.

7. The PBGC is not an insurance company. There must be a PBGC premium reasonably related to its exposure. We suggest a PBGC premium made up of three parts:
   a. A head tax based on the average accrued benefit.
   b. A funding charge based on the amount of the plan underfunding in the current year.
   c. A surtax applied to the premium calculated from above, based on the existence of special benefits in the plan such as plant closing benefits, early retirement ridge benefits, etc.

8. We suggest, that over time, the relationship between the Section 415 limit and the level of PBGC benefit guarantees be restored to the original 1974 ratio.

9. We suggest other minor changes to the PBGC definition of guaranteed benefits, such as a ten-year phase-in, and elimination of the $20 minimum. We also suggest that any excise tax generated from the withdrawal of excess assets from an ongoing plan be given to the PBGC because of the increase in their exposure.

We would welcome the opportunity to discuss our thoughts and ideas with all interested parties. We would be happy to share any of the results from the 1985 Academy study. While this study has some limitations and is not necessarily representative of the entire defined benefit plan universe, it does

allow some general conclusions to be made that could be helpful in focusing on where the greatest problems may occur.

American Academy of Actuaries
Task Force Members

Darrel J. Croot
Eugene Schloss
John B. Thompson
Larry D. Zimpleman

STATEMENT 1987-37

November 12, 1987

Mr. Wayne Upton
Financial Accounting Standards Board
High Ridge Park, P.O. Box 3821
Stamford, CT 06905-0821

Dear Wayne:

This letter comes in behalf of the Academy Committee on Life Insurance Financial Reporting Principles. As you know, Ed Silins is serving as the chairman of the committee, and I am serving as chairman of the committee's task force on U.L. accounting.

Several months ago Ed talked with both Dennis Beresford and you to offer the Academy's continuing assistance in the insurance accounting project. His summary of those conversations is enclosed.

Wayne, we understand that the FASB is meeting with staff almost weekly on the U.L. accounting project. We understand that the Board has established an agenda and is following it rigorously. We understand that tentative decisions are being made, several of which the industry would unanimously applaud as being responsive to concerns expressed at the public hearing. Yet other tentative decisions are apparently being made, particularly with respect to scope, which may have far-reaching implications for old business.

As a task force, this situation leaves us with mixed emotions. We are appreciative of the hard work and progress on the project, and for the tentative decisions which show an open mind toward industry ideas. But we are disappointed at not being utilized during this process. Surely there are ways in which we can help, such as in drafting some specific scope language in a way which cannot possibly be misunderstood.

We reaffirm our desire and willingness to work with you on this project. We would like to be involved as you proceed. We think it would be mutually beneficial for the Board to utilize us for an informal review of the new standard in draft form. We look forward to hearing from you in this regard.

Our sense of things is that the new standard will be significantly different than the exposure draft. For this reason, and also because industry involvement in your aggressive timetable has apparently been quite limited since July, we strongly urge the Board to formally re-expose the proposed new standard. This will provide an opportunity for the Board to exercise due process, and thereby input with respect to the changes proposed. Scope, usefulness, cost, and materiality are on everyone's mind.

We hope these thoughts are helpful and that our task force may be of some assistance in your project.

Sincerely,

(signed)

John T. Glass

STATEMENT 1987-38

COMMENTS ON SECTION 10148 OF H.R. 3545, DEALING WITH THE COMPUTATION OF LIFE INSURANCE RESERVES FOR TAX PURPOSES

November 19, 1987

The American Academy of Actuaries' Committee on Life Insurance wishes to furnish comments on actuarial aspects of Section 10148 of H.R. 3545, dealing with the computation of life insurance reserves for tax purposes.

The American Academy of Actuaries is a professional association of actuaries involved in all aspects of actuarial work. It is not an industry association. Its purpose in making these comments is to address solely the actuarial aspects of the life insurance company tax reserve interest rate provision, and the premises on which it is based. It does not intend to deal with questions of tax policy, leaving those instead for debate among the Congress, the industry, and other interested parties.

THE BILL

Section 10148 of H.R. 3545 provides that the interest rate to be used in computing life insurance reserves is the greater of (1) the prevailing state assumed rate (PSAR), and (2) the applicable federal rate of interest (AFR). Under current law, the rate used is the PSAR, which is the highest rate permitted to be used for valuation by twenty-six states.

THE RATIONALE

It appears from the commentary on this provision which appeared in the committee report that the primary arguments underlying this proposed change in current law are (1) that the AFR is used for measurement of liabilities for tax purposes for property and casualty companies, hence is equally appropriate for measuring liabilities of life companies, and (2) that maximum state assumed rates are established primarily with a view toward determining solvency and therefore produce excessively conservative reserves. We believe that both arguments are incorrect and would like to point out to the conference committee that this portion of the bill rests on a fallacious view of the nature of life insurance reserves.

COMMENTARY

Our observations are set out briefly in outline form below.

A. The AFR is Not an Appropriate Rate to Use for Discounting Reserve Liabilities for a Life Insurance Company

1. An insurance reserve is the measure of an insurance company's financial liability with respect to a specific insurance obligation. The purpose of using an interest rate in computing an insurance reserve is to reflect the time value of money during the period before the obligation is fully discharged. This is accomplished by discounting projected cash flows -- positive or negative -- at an assumed interest rate or rates. These cash flows are calculated for the entire coverage period of the contract, typically sixty to seventy years (and as long as 100 years) in the case of a life insurance contract.

2. The appropriate interest rate to use for discounting the cash flows will depend on the time the insurer receives funds to support the obligation, the time the funds are to be paid out, and the interest rate at which money can be invested under those timing conditions. Timing is a critical consideration in the selection of the discounting rate because the rates of return on investments available to fund an insurer's obligation will normally vary considerably according to the term of the investment.

3. The 1980 amendments to the Standard Valuation Law (SVL) for life insurance (a model law drafted by the National Association of Insurance Commissioners (NAIC) and adopted in essentially identical form by all states) provides for substantial variation in the maximum interest rate permitted to be used by life insurance companies for reserve computations. (See Attachment I which shows the latest SVL interest rates) Thus higher rates may be used (a) where there are no future premiums (hence no uncertainty as to the interest rate at which premium income is initially invested), (b) where the duration of the liability can be correlated to the duration of available assets, and reinvestment at a future (uncertain) rate would not present a serious problem, and (c) where contractual provisions limit the insurer's exposure to disintermediation. (Disintermediation refers to the withdrawal of funds from life insurance contracts in order to invest in open-market instruments offering higher yields.)

4. As indicated in Attachment I, the SVL interest rates (which are generally the rates used for tax reserve calculations) are subject to change annually to reflect current interest rate changes; rates are rounded to the nearest 1/4 of 1%, and (for life insurance) only changes of 1/2 of 1% or more are reflected to avoid causing insurers to incur unnecessary administrative expense. In this connection it is worth noting that the PSAR will be more responsive to changes in the economic climate than the AFR since the former is based on a twelve-month (or in some cases a thirty-six-month) moving average whereas the AFR as used in the proposal is based on a sixty-month average.

5. Loss reserves of property and casualty P/C companies differ significantly from most reserves of life insurance companies in three major respects: (a) P/C loss reserves generally relate to claims events which have already occurred, whereas life reserves generally relate to future claims; (b) P/C loss reserves are held with respect to liabilities that are generally of short duration (compared to life insurace liabilities); and (c) P/C loss reserves involve no future premium inflows to be invested. Because of these differences the actuarially appropriate interest rates for life reserves are in general quite different from thos for P/C loss reserves, and the assumption that these reserves are similar (which underlies the proposed legislation) is therefore invlaid.

   In fact, the states generally do not permit discounting of loss reserves by P/C companies in recognition of these differences. The use of the AFR to discount P/C loss reserves was only recently added to the Internal Revenue Code, and was probably chosen as an existing and convenient rate to use in the absence of any other existing rate specifically tailored for the purpose. It therefore does not seem reasonable to take a rate determined under different conditions and substitute it for rates resulting

from a sophisticated process which suits those rates carefully to the situations in which they are applied.

B. Minimum State Reserves Are Not Excessively Conservative

1. A second assumption, not stated specifically but clearly implied, is that current tax law life insurance reserves, related as they are to state minimum reserve standards used for solvency testing purposes, are excessively conservative and are thus not appropriate for measuring the "true" liability of a life insurance company for its future benefit obligations. As shown in Attachment I, the prevailing state assumed rate will change regularly in reflection of changes in economic conditions. As noted above, the PSAR may well respond better than the AFR as used in the proposal.

2. The result of calculating a life insurance reserve according to a prescribed method using the maximum permissible valuation interest rate and the prescribed valuation mortality table is an absolute minimum statutory reserve (MSR) under state law. (There is an additional minimum requirement as described in (3) below.) It is clear to most actuaries that, rather than being overly conservative, these MSRs are not sufficient to assure adequate provision for the future obligations in many situations. For example, the MSR may not be adequate where a company can expect higher than average mortality because of its exposure to AIDS risks or because its underwriting practices differ from those of insurers on whose experience the valuation tables were based. Nor does the MSR explicitly consider the potential losses resulting from investments whose maturity dates and income schedules are not well matched with benefit cash flows required by the liabilities which they support. Finally, in spite of the indexation of valuation interest rates to current economic climate, there may be instances where PSARs are too high in periods of rapidly declining interest rates, especially for single pay contracts.

3. Conditions such as those described above (and other potentially adverse deviations) are dealt with by state requirements that a life insurer's actuary render an opinion that the actuarial reserves not only are at least equal to MSRs, but also that they make "good and sufficient provision" for all future obligations of the company. The present tax law generally allows companies a deduction only for the MSR (or the net cash surrender value if greater) , and a further reduction of deductions below even "minimum" requirements (as the proposal would do) would exacerbate an already troublesome situation.

4. Life insurance companies generally hold reserve amounts well in excess of the MSRs. Furthermore, life insurers, like other companies, require capital to operate. Because of the substantial cost of writing new business, there is a continual need for additional capital to finance growth. For that reason, and because no tax deductions are allowed, the establishment of reserves in excess of the minimum statutory requirements represents a meaningful recognition that more, not less, than the minimum is often required.

5. State insurance regulators are concerned that, in some instances, insurers adhering fully to legal requirements may still not be providing adequately

for their benefit obligations in the reserves they establish. At its March 1985 meeting, the NAIC authorized the establishment of a special task force to suggest an approach that can be used by regulators of individual states to address these concerns. This task force is working on developing techniques for assuring reserve adequacy above and beyond the current requirements of the Standard Valuation Law. Some states have already developed their own versions of this approach. Most notable is New York's Regulation 126, which requires for certain lines of business that each company analyze its asset and liability cash flows under a variety of assumptions as to future interest rates and, if indicated, set aside additional reserve funds to assure that obligations can be met. These additional reserves would not be tax reserves under current law.

Thus, while the current definition of tax reserves is closely related to the definition of reserves used for solvency purposes, such reserves are not therefore overly conservative. In any case, the cost of establishing such reserves is an inescapable cost of conducting a life insurance business, while the proposed tax reserve basis bears no logical relationship to the true cost of conducting the business.

C. Other Comments

1. As noted above, the AFR is based on a sixty-month moving average, and will respond more slowly to changes in economic climate than will the PSARs. On the other hand the proposal as drafted includes no tolerance level to ignore small changes. Thus the result may well be the worst of both worlds: sluggish responsiveness to significant changes in the economic climate, and insignificant (but administratively expensive) changes under stable economic conditions.

2. Current law tax reserves are the same as the reserves held for state purposes for a significant number of cases. In such cases, the IRS audit burden is greatly reduced since state auditors will often have audited the same reserves. With the AFR proposal, however, IRS will have to audit afresh most of the time.

3. A practical result of the proposal may well be that tax reserves default to net cash surrender values (for contracts which provide such values) in a large number of cases. The American Academy of Actuaries submitted testimony to the Senate Finance Committee in 1985 commenting on a proposal that would have achieved this result directly. Those comments apply to H.R.3545, to the extent that it produces the same results. (See Academy Statement 1985-39.)

CONCLUSION

The proposed legislation erroneously assumes that life insurance reserves are very similar to P/C loss reserves, hence should use the same interest rate in their calculation. In fact, the nature of the reserves is quite different because life insurance obligations are very different from the P/C obligations to which they are being compared, and the NAIC's complex rules for determining reserve interest rates for life insurance appropriately reflect the nature and diversity of life insurance obligations. Furthermore, reserves calculated using PSARs are not excessively conservative: they are not the

minimum reserves which may be held since the company's actuary must opine that, regardless of the reserve levels determined by prescribed minimum standards (the MSRs), the company has set aside funds to make sufficient provision for its obligations. In fact many companies do hold reserves in excess of prescribed minimum standards in spite of significant cost of so doing. Section 10148 of H.R. 3545 should not be adopted. Current law more appropriately reflects the actuarial aspects of a life insurer's liabilities, and any changes to it should take into account legitimate reserve requirements currently ignored.

Respectfully submitted,

John J. Palmer, Chairperson
Committee on Life Insurance
American Academy of Actuaries

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ATTACHMENT I

Statutory Calendar Year Interest Rates Based on the 1980 Amendments to the NAIC Standard Valuation and Nonforfeiture Laws

A. Life Insurance Valuation and Nonforfeiture Interest Rates:

Guarantee Duration (years)	Valuation Interest Rate For Issues of: 1985	1986	1987
10 or less	7.25%	7.25%	6.50%
More than 10, but not more than 20	6.75	6.75	6.00
More than 20	6.00	6.00	5.50

Source: (1) Rates for 1988 calculated from the monthly averages, ending June 30, 1987, of Moody's Corporate Bond Yield Average - Monthly Average Corporates.

(2) Rates for earlier years from ACLI General Bulletin No. 3709, July 28, 1986.

(3) See NOTES for description of guarantee duration.

Statutory Calendar Year Interest Rates Based on the 1980 Amendments to the NAIC Standard Valuation and Nonforfeiture Laws

A. Life Insurance Valuation and Nonforfeiture Interest Rates:

Guarantee Duration (years)	Valuation Interest Rate For Issues of: 1982	1983	1984
10 or less	6.75%	7.25%	7.25%
More than 10, but not more than 20	6.25	6.75	6.75
More than 20	5.50	6.00	6.00

Source: (1) Rates for 1984 calculated from the monthly averages, ending June 30, 1983, of Moody's Corporate Bond Yield Average - Monthly Average Corporates.

(2) Rates for earlier years from ACLI General Bulletin No. 3378, July 29, 1983.

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STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW

NOTES

Issue Year Basis. An issue year basis of valuation refers to a valuation basis under which the interest rate used to determine the minimum valuation standard for the entire duration of the annuity or guaranteed interest contract is the calendar year valuation interest rate for the year of issue or year of purchase of the annuity or guaranteed interest contract.

Change in Fund Basis. The change in fund basis of valuation refers to a valuation basis under which the interest rate used to determine the minimum valuation standard applicable to each change in the fund held under the annuity or guaranteed interest contract is the calendar year valuation interst rate for the year of the change in the fund.

Cash Settlement Options? The question refers to whether or not an annuity or guaranteed interest contract provides a cash settlement option. For example, a deferred annuity which provides a lump sum option at the end of the deferred period does provide a cash settlement option. A deferred annuity with no options other than the annuity payments does not provide a cash settlement option.

Future Interest Guarantee. In the case of annuities or guaranteed interest contracts valued on an issue year basis, the question refers to whether or not the annuity or guaranteed interest contract guarantees interest on considerations received more than one year after issue or purchase. In the case of contracts valued on a change in fund basis, the question refers to whether or not the contracts guarantee interest rates on considerations received more than 12 months beyond the valuation date.

Guarantee Duration.

Life Insurance. For life insurance the guarantee duration is the maximum number of years the life insurance can remain in force on a basis guaranteed in the policy or under options to convert to plans of life insurance with premium rates or nonforfeiture values or both which are guaranteed in the original policy.

Annuities and Guaranteed Interest Contracts with Cash Settlement Options. For annuities and guaranteed interest contracts with cash settlement options, the guarantee duration is the number of years for which the contract guarantees interest rates in excess of the calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty years.

Annuities and Guaranteed Interest Contracts with No Cash Settlement Optio For annuities and guaranteed interest contracts with no cash settlement options, the guarantee duration is the number of years from the date of issue or date of purchase to the date annuity benefits are scheduled to commence.

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Plan Type.

Plan Type A: At any time policyholder may withdraw funds only (1) with the adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more or (3) as an immediate life annuity, or (4) no withdrawal permitted.

Plan Type B: Before expiration of the interest rate guarantee, policyholder may withdraw funds only (1) with adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more, or (3) no withdrawal permitted. At end of interest rate guarantee, funds may be withdra ithout such adjustment in a single sum or installments ove ss than five years.

Plan Type C: Policyholder may withdraw funds before expiration of interest rate guarantee in a single sum or installments over less than five years either (1) without adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) subject only to a fixed surrender charge stipulated in the contract as a percentage of the fund.

STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1987 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

B. Single premium immediate annuities, and annuity benefits involving life contingencies arising from other annuities with cash settlement options and from guaranteed interest contracts with cash settlement options:

Valuation interest rate --- 8.00

C. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Issue Year Basis *

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type A	B	C
Yes	Yes	5 or less	8.00	6.75	6.25
		More than 5, but not more than 10	7.75	6.75	6.25
		More than 10, but not more than 20	7.00	6.00	5.75
		More than 20	5.75	5.25	5.25
Yes	No	5 or less	8.50	7.25	6.50
		More than 5, but not more than 10	8.00	7.25	6.50
		More than 10, but not more than 20	7.25	6.50	6.00
		More than 20	6.00	5.50	5.50
No	Yes or No	5 or less	8.00		
		More than 5, but not more than 10	7.75		not applicable
		More than 10, but not more than 20	7.25		
		More than 20	6.00		

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STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1987 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

D. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Change in Fund Basis *
(Only contracts with cash settlement options may be valued on change in fund basis)

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type A	B	C
Yes	Yes	5 or less	9.00	8.50	6.50
		More than 5, but not more than 10	8.75	8.50	6.50
		More than 10, but not more than 20	8.00	7.75	6.25
		More than 20	6.75	6.75	5.50
Yes	No	5 or less	9.50	8.75	6.75
		More than 5, but not more than 10	9.00	8.75	6.75
		More than 10, but not more than 20	8.50	8.00	6.50
		More than 20	7.25	7.25	6.00

Source: Rates for 1987 calculated from the monthly averages, ending 6/30/87, of Moody's Corporate Bond Yield Average -- Monthly Average Corporates.

* See NOTES for description of issue year basis, change in fund basis, cash settlement options, future interest guarantee, guarantee duration and plan type.

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STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1986 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

B. Single premium immediate annuities, and annuity benefits involving life contingencies arising from other annuities with cash settlement options and from guaranteed interest contracts with cash settlement options:

Valuation interest rate --- 9.25

C. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Issue Year Basis

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type * A	B	C
Yes	Yes	5 or less	9.25	7.75	6.75
		More than 5, but not more than 10	8.75	7.75	6.75
		More than 10, but not more than 20	7.50	6.50	6.00
		More than 20	6.00	5.50	5.50
Yes	No	5 or less	9.50	8.00	7.25
		More than 5, but not more than 10	9.25	8.00	7.25
		More than 10, but not more than 20	7.75	6.75	6.50
		More than 20	6.50	5.75	5.75
No	Yes or No	5 or less	9.25		
		More than 5, but not more than 10	8.75		not applicable
		More than 10, but not more than 20	8.00		
		More than 20	6.50		

* See next page for description of plan types.

Source: Rates for 1986 calculated from the monthly averages, ending 6/30/86, of Moody's Corporate Bond Yield Average--Monthly Average Corporates.

STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1986 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

D. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Change in Fund Basis
(Only contracts with cash settlement options may be valued on change in fund basis)

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type * A	B	C
Yes	Yes	5 or less	10.25	9.50	7.25
		More than 5, but not more than 10	10.00	9.50	7.25
		More than 10, but not more than 20	9.25	8.75	6.75
		More than 20	7.75	7.75	6.00
Yes	No	5 or less	10.75	10.00	7.75
		More than 5, but not more than 10	10.25	10.00	7.75
		More than 10, but not more than 20	9.50	9.25	7.25
		More than 20	8.00	8.00	6.50

* Plan Type A: At any time policyholder may withdraw funds only (1) with the adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more or (3) as an immediate life annuity, or (4) no withdrawal permitted.

* Plan Type B: Before expiration of the interest rate guarantee, policyholder may withdraw funds only (1) with adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more, or (3) no withdrawal permitted. At the end of interest rate guarantee, funds may be withdrawn without such adjustment in a single sum or installments over less than five years.

* Plan Type C: Policyholder may withdraw funds before expiration of interest rate guarantee in a single sum or installments over less than five years either (1) without adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) subject only to a fixed surrender charge stipulated in the contract as a percentage of the fund.

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STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1985 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

B. Single premium immediate annuities, and annuity benefits involving life contingencies arising from other annuities with cash settlement options and from guaranteed interest contracts with cash settlement options:

Valuation interest rate --- 11.00

C. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Issue Year Basis

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type * A	B	C
Yes	Yes	5 or less	11.00	9.00	8.00
		More than 5, but not more than 10	10.50	9.00	8.00
		More than 10, but not more than 20	8.25	7.00	6.50
		More than 20	6.50	5.75	5.75
Yes	No	5 or less	11.50	9.50	8.50
		More than 5, but not more than 10	11.00	9.50	8.50
		More than 10, but not more than 20	8.50	7.50	7.00
		More than 20	7.00	6.25	6.25
No	Yes or No	5 or less	11.00		
		More than 5, but not more than 10	10.50		not applicable
		More than 10, but not more than 20	9.50		
		More than 20	7.50		

* See next page for description of plan types.

Source: Rates for 1985 calculated from the monthly averages, ending 6/30/85, of Moody's Corporate Bond Yield Averages--Monthly Average Corporates.

STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1985 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

D. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Change in Fund Basis
(Only contracts with cash settlement options may be valued on change in fund basis)

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type * A	B	C
Yes	Yes	5 or less	12.50	11.50	8.50
		More than 5, but not more than 10	12.00	11.50	8.50
		More than 10, but not more than 20	11.00	10.50	8.00
		More than 20	9.00	9.00	7.00
Yes	No	5 or less	13.00	12.00	9.00
		More than 5, but not more than 10	12.50	12.00	9.00
		More than 10, but not more than 20	11.50	11.00	8.50
		More than 20	9.50	9.50	7.50

* Plan Type A: At any time policyholder may withdraw funds only (1) with the adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more or (3) as an immediate life annuity, or (4) no withdrawal permitted.

* Plan Type B: Before expiration of the interest rate guarantee, policyholder may withdraw funds only (1) with adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more, or (3) no withdrawal permitted. At the end of interest rate guarantee, funds may be withdrawn without such adjustment in a single sum or installments over less than five years.

* Plan Type C: Policyholder may withdraw funds before expiration of interest rate guarantee in a single sum or installments over less than five years either (1) without adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) subject only to a fixed surrender charge stipulated in the contract as a percentage of the fund.

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STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1984 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

B. Single premium immediate annuities, and annuity benefits involving life contingencies arising from other annuities with cash settlement options and from guaranteed interest contracts with cash settlement options:

Valuation interest rate --- 11.25

C. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Issue Year Basis

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type * A	B	C
Yes	Yes	5 or less	11.25	9.25	8.00
		More than 5, but not more than 10	10.75	9.25	8.00
		More than 10, but not more than 20	8.25	7.00	6.75
		More than 20	6.75	5.75	5.75
Yes	No	5 or less	11.75	9.75	8.50
		More than 5, but not more than 10	11.25	9.75	8.50
		More than 10, but not more than 20	8.75	7.50	7.00
		More than 20	7.00	6.25	6.25
No	Yes or No	5 or less	11.25		
		More than 5, but not more than 10	10.75		not applicable
		More than 10, but not more than 20	9.75		
		More than 20	7.50		

* See next page for description of plan types.

Source: Rates for 1984 calculated from the monthly averages, ending 6/30/84, of Moody's Corporate Bond Yield Average--Monthly Average Corporates.

STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1984 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

D. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Change in Fund Basis
(Only contracts with cash settlement options may be valued on change in fund basis)

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type * A	B	C
Yes	Yes	5 or less	12.75	11.75	8.50
		More than 5, but not more than 10	12.25	11.75	8.50
		More than 10, but not more than 20	11.25	10.75	8.00
		More than 20	9.25	9.25	7.00
Yes	No	5 or less	13.25	12.25	9.25
		More than 5, but not more than 10	12.75	12.25	9.25
		More than 10, but not more than 20	11.75	11.25	8.50
		More than 20	9.75	9.75	7.50

* Plan Type A: At any time policyholder may withdraw funds only (1) with the adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more or (3) as an immediate life annuity, or (4) no withdrawal permitted.

* Plan Type B: Before expiration of the interest rate guarantee, policyholder may withdraw funds only (1) with adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more, or (3) no withdrawal permitted. At the end of interest rate guarantee, funds may be withdrawn without such adjustment in a single sum or installments over less than five years.

* Plan Type C: Policyholder may withdraw funds before expiration of interest rate guarantee in a single sum or installments over less than five years either (1) without adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) subject only to a fixed surrender charge stipulated in the contract as a percentage of the fund.

STATEMENT 1987-38

STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1983 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

B. Single premium immediate annuities, and annuity benefits involving life contingencies arising from other annuities with cash settlement options and from guaranteed interest contracts with cash settlement options:

Valuation interest rate --- 11.25

C. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Issue Year Basis

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type * A	B	C
Yes	Yes	5 or less	11.25	9.25	8.25
		More than 5, but not more than 10	10.75	9.25	8.25
		More than 10, but not more than 20	8.25	7.00	6.75
		More than 20	6.75	5.75	5.75
Yes	No	5 or less	11.75	9.75	8.75
		More than 5, but not more than 10	11.25	9.75	8.75
		More than 10, but not more than 20	8.75	7.50	7.00
		More than 20	7.00	6.25	6.25
No	Yes or No	5 or less	11.25		
		More than 5, but not more than 10	10.75		not applicable
		More than 10, but not more than 20	9.75		
		More than 20	7.75		

* See next page for description of plan types.

Source: Rates for 1983 calculated from the monthly averages, ending 6/30/83, of Moody's Corporate Bond Yield Average--Monthly Average Corporates.

STATEMENT 1987-38

STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1983 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

D. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Change in Fund Basis
(Only contracts with cash settlement options may be valued on change in fund basis)

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type * A	B	C
Yes	Yes	5 or less	12.75	11.75	8.75
		More than 5, but not more than 10	12.25	11.75	8.75
		More than 10, but not more than 20	11.25	10.75	8.25
		More than 20	9.25	9.25	7.25
Yes	No	5 or less	13.50	12.25	9.25
		More than 5, but not more than 10	12.75	12.25	9.25
		More than 10, but not more than 20	11.75	11.25	8.75
		More than 20	9.75	9.75	7.75

* Plan Type A: At any time policyholder may withdraw funds only (1) with the adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more or (3) as an immediate life annuity, or (4) no withdrawal permitted.

* Plan Type B: Before expiration of the interest rate guarantee, policyholder may withdraw funds only (1) with adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more, or (3) no withdrawal permitted. At the end of interest rate guarantee, funds may be withdrawn without such adjustment in a single sum or installments over less than five years.

* Plan Type C: Policyholder may withdraw funds before expiration of interest rate guarantee in a single sum or installments over less than five years either (1) without adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) subject only to a fixed surrender charge stipulated in the contract as a percentage of the fund.

STATEMENT 1987-38

STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1982 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

B. Single premium immediate annuities, and annuity benefits involving life contingencies arising from other annuities with cash settlement options and from guaranteed interest contracts with cash settlement options:

Valuation interest rate --- 13.25

C. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Issue Year Basis

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type * A	B	C
Yes	Yes	5 or less	13.25	10.50	9.25
		More than 5, but not more than 10	12.50	10.50	9.25
		More than 10, but not more than 20	8.50	7.25	6.75
		More than 20	6.75	6.00	6.00
Yes	No	5 or less	13.75	11.25	10.00
		More than 5, but not more than 10	13.25	11.25	10.00
		More than 10, but not more than 20	8.75	7.50	7.25
		More than 20	7.25	6.25	6.25
No	Yes or No	5 or less	13.25		
		More than 5, but not more than 10	12.50		not applicable
		More than 10, but not more than 20	11.25		
		More than 20	8.75		

* See next page for description of plan types.

Source: Rates for 1982 calculated from the monthly averages, ending 6/30/82, of Moody's Corporate Bond Yield Average--Monthly Average Corporates.

STATEMENT 1987-38

STATUTORY CALENDAR YEAR INTEREST RATES BASED ON NAIC STANDARD VALUATION LAW FOR 1982 BUSINESS GOVERNED BY THE 1980 AMENDMENTS

D. Valuation Interest Rates for Other Annuities and Guaranteed Interest Contracts:

Contracts Valued on Change in Fund Basis
(Only contracts with cash settlement options may be valued on change in fund basis)

Cash Settlement Options?	Future Interest Guarantee?	Guarantee Duration (years)	Valuation Interest Rate For Plan Type * A	B	C
Yes	Yes	5 or less	15.00	13.75	10.00
		More than 5, but not more than 10	14.50	13.75	10.00
		More than 10, but not more than 20	13.25	12.50	9.25
		More than 20	10.50	10.50	8.00
Yes	No	5 or less	15.75	14.50	10.50
		More than 5, but not more than 10	15.00	14.50	10.50
		More than 10, but not more than 20	13.75	13.25	10.00
		More than 20	11.25	11.25	8.75

* Plan Type A: At any time policyholder may withdraw funds only (1) with the adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more or (3) as an immediate life annuity, or (4) no withdrawal permitted.

* Plan Type B: Before expiration of the interest rate guarantee, policyholder may withdraw funds only (1) with adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more, or (3) no withdrawal permitted. At the end of interest rate guarantee, funds may be withdrawn without such adjustment in a single sum or installments over less than five years.

* Plan Type C: Policyholder may withdraw funds before expiration of interest rate guarantee in a single sum or installments over less than five years either (1) without adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) subject only to a fixed surrender charge stipulated in the contract as a percentage of the fund.

STATEMENT 1987-39

December 2, 1987

Mr. Gary Pullen
Assistant Bureau Chief
Division of Rating, Room 335
Florida Department of Insurance
Larson Building
Tallahasee, FL 32399

Dear Mr. Pullen:

These are the comments of the Committee on Risk Classification of the American Academy of Actuaries in response to the Florida Department of Insurance proposed rules dealing with medical testing and related matters. Because of the very short period available for consideration and comment, our remarks may be very incomplete.

First, we would like to comment generally on the concept of risk classification. To establish a fair price for insuring an uncertain event, estimates must be made of the probabilities associated with the occurrence, timing and magnitude of such an event. These estimates are normally made through the use of past experience, coupled with projections of future trends, for groups with similiar risk characteristics.

The grouping of risks with similiar risk characteristics for the purpose of setting prices is a fundamental precept of any workable private, voluntary insurance system. This process, called risk classification, is necessary to maintain a financially sound and equitable system. It enables the development of equitable insurance prices, which in turn assures the availability of needed coverage to the public. This is achieved through the grouping of risks to determine averages and the application of these averages to individuals.

Risk classification is only one factor in an entire set of factors that bear on private, voluntary insurance programs. Other factors--such as marketing, underwriting, and administration--combine with risk classification to provide an entire system of insurance. Changing one factor has possible implications on other factors. Changes must be considered in the context of the entire system.

The following comments are in response to specific sections as shown. Since we are aware that AIDS and insurance is causing much concern to regulators and legislators, we will direct some of our comments to that issue.

4-73.003. UTILIZATION OF MEDICAL TESTS FOR UNDERWRITING

(1) It appears this subsection would prohibit an insurer's use of tests that have not received FDA approval. There are, however, a number of long-established tests which would be outlawed because their validity predated the FDA or because they are simply not subject to approval. Examples are height, weight, blood pressure, electrocardiograms, etc. and conventional urinalysis.

(2) This requirement is standard procedure. Because of the unfortunate connotations of positive tests for AIDS, the requirements of subsection

(5) infra have also become standard procedure for that one syndrome. We also note that to enumerate every specific condition that a test might reveal would be very difficult, if not impossible.

(3) This provision ignores the purpose of testing, which is to establish the risk class to which the proposed insured belongs. If such class is known in advance, no test is needed. (All testing is expensive.)

(4) The prohibition of asking what tests a person has had performed would be valid if every physician had to disclose all details of every diagnosis to each patient. Then, a question as to diagnosis is sufficient. If the proposed insured does not know, he or she cannot always give an accurate answer.

(5) This provision appears to prohibit use of the Medical Information Bureau (MIB) by insurance companies. The prohibition of the use of the MIB would make it more difficult for insurance companies to obtain needed medical information on applicants for purposes of risk classification. In our opinion, the result would be higher issue expenses, as each company pays for the needed test anew and thus higher premium rates for policyholders, or the foregoing of certain tests, thereby increasing the risk of anti-selection against a company and forcing the company to increase premium rates for all policyholders to protect itself against this risk.

In our opinion, this provision will not impact current underwriting procedures for AIDS since MIB does not accept such codes.

4-73.004 RESTRICTIONS ON COVERAGE EXCLUSIONS AND LIMITATIONS

(1) We would call your attention to the fact that there are certain small groups currently being underwritten on an individual basis and this should be continued to avoid anti-selection on the part of the proposed insured. We would also note that this provision does not address new additions to a small group.

(2) This appears contrary to FS 627.607 (2)(b). Some conditions require the use of a specific exclusion rider to permit coverage at rates that are equitable with respect to other policyholders.

(3) This appears to be conflict with FS 627.454 and 627.455.

We appreciate your state's concern with fair and equitable treatment of individuals in the area of insurance. We offer our services to your department to assist in developing fair rules.

Sincerely,

(signed)

Chester Lewandowski, Chairperson
Risk Classification Committee
American Academy of Actuaries

STATEMENT 1987-40

December 3, 1987

The Honorable James J. Florio, Chairman
Subcommittee Commerce, Consumer Protection, and Competitiveness
H2 - 151 House Office Building, Annex II
Washington, DC 20515

Dear Mr. Florio:

We have noted with keen interest reports of your recent speech before the General Counsels' Symposium, sponsored by the American Insurance Association. We were particularly interested in your proposals for resolving the lack of uniformity in insurance regulation. As we understand your views, three alternatives are possible:

(1) federal preemption (which would entail federal regulation and does not seem feasible at the current juncture);
(2) uniform state insurance codes; and
(3) minimum federal standards for state regulation.

As you know, the Academy has for some time been concerned about the lack of uniformity in regulation of the property/casualty insurance industry, and we have provided you and your staff with considerable background information on various issues relating to that industry.

Of particular concern to us is the fact that, unlike the life insurance industry, many states do not require an annual statement of actuarial opinion on the financial status of property/casualty insurers. While the NAIC model for the life industry annual report does contain such a requirement, the NAIC model for the property/casualty industry leaves the use of an actuarial opinion discretionary with each state regulatory authority.

This serious impediment to adequate financial reporting in the property/casualty industry has not been adequately addressed by the NAIC. For many years, consideration of changing the property/casualty requirement to parallel the annual requirement on the life reporting form has been under discussion within the NAIC. However, progress has been repeatedly stymied by a variety of forces resistant to change.

We believe that if you submit legislation to remedy the current lack of regulatory consistency, one requirement worthy of consideration and inclusion would be to mandate an annual statement of actuarial opinion for property/casualty companies. Such a requirement would be of major assistance in preventing insolvencies and dislocations by making certain that regulatory authorities have a firm fix on the financial status of insurers.

We would be pleased to meet with your staff to discuss this matter more fully. Thank you for your consideration.

Sincerely yours,

(signed)

Albert J. Beer, Chairperson
Committee on Property and Liability Issues

STATEMENT 1987-41

December 4, 1987

Honorable Margurite C. Stokes, Chairperson
NAIC Life Cost Disclosure (A) Task Force
District of Columbia Insurance Department
614 H Street N.W. North Potomac Building
Suite 512
Washington, DC 20001

RE: specifications for comparisons of product rankings under interest adjusted and yield index calculations

Dear Chairperson Stokes:

In his September 25, 1987 letter to you, Gary Dahlman indicated that the American Academy of Actuaries Committee on Life Insurance was willing to assist your task force by performing interest-adjusted index (IAC) and yield index calculations for certain interest-sensitive products (primarily universal life), and to compare the rankings of the various products under the two indices, subject to the development of specifications which were acceptable to both committees. This letter will outline how the Committee on Life Insurance would propose to proceed to comply with your request.

It is suggested that the project be divided into two phases, with the second phase being completed only if the results of phase one are inconclusive. The two phase approach will permit optimum use of available resources. The initial phase will involve a limited number of companies (15 - 30) examined under a variety of premium payment pattern, product structure, issue age, death benefit option and face amount scenarios. If necessary, the second phase will refine the scenarios to be tested and expand the number of companies involved.

SPECIFICATIONS FOR INITIAL DATA COLLECTION

1. Sample Size: Data will be requested from 30 companies. We will continue to request data until complete information has been received from at least 15 companies.

2. Data Collection: It is anticipated that each participating company will receive a Lotus or other program which can be used to gather selected premiums, death benefits and cash values. Projected policy values for the first twenty durations will be collected for both current and guaranteed assumptions. Once the data is entered, the diskettes will be returned to a central location for analysis.

3. Common Assumptions: All values will be calculated using the following common assumptions:

policy loans	none
withdrawals	none
premium mode	payable annually at the beginning of each policy year
sex	male
underwriting class	nonsmoker

For companies with multiple nonsmoker classes eg. standard, preferred, they should prepare illustrations using the class which is predominantly used for new issues.

4. Premium Payment Patterns: The initial phase will examine the following four premium payment scenarios for flexible premium products:

   A. A whole life equivalent premium calculated using the respective company's current interest and mortality assumptions. The premium is assumed to be paid in all years.

   B. A 5 pay whole life equivalent premium calculated using the respective company's current interest and mortality assumptions. The premium is assumed to be paid only for the first ten years.

   C. A guideline level annual premium calculated using the respective company's guaranteed interest and mortality assumptions. The premium is assumed to be paid in all years.

   D. A fixed dollar annual premium which is identical for all companies and assumed to be paid in all years. This dollar amount will be set at a level which approximates the highest minimum premium of the sample group.

   Data will also be collected on fixed premium interest sensitive products using these specifications. Such fixed premium products will be associated with either premium payment scenario A or B depending on which group most closely fits the respective products premium per $1,000 of initial face amount.

5. Issue Ages: Issue ages 30 and 50 will be tested. There is some concern that age nearest and age last birthday companies will need to be independently compared. Limited testing of the data from one company should permit determination of whether or not such differentiation is necessary.

6. Face Amounts: Data will be collected for both $25,000 and $100,000 policies.

7. Product Structure: Each company will be requested to supply the above data for both a front-end and a back-end loaded product. Companies with multiple front-end or back-end loaded products should prepare illustrations using the plan predominantly used for new issues.

8. Death Benefit Option: The above illustrations will all be prepared using a level death benefit option, (generally Option A or Option 1), except, for age 30 and the $100,000 face amount where the increasing death benefit option (Option B or Option 2) will also be calculated for all four premium scenarios.

ANALYSIS OF DATA

In order to assure conformity of calculation, all IAC's and yield indexes will be centrally calculated for each illustration. Ranking will then be performed and

correlation coefficients calculated for each premium payment pattern, product structure, issue age, death benfit option and face amount grouping. Preliminary indications are that it is inappropriate to compare yield indexes of products with dissimilar product structures, death benefit options and premium payment patterns. One section of the report will examine the problems of using the yield index for ranking dissimilar premium patterns and product structures while the other section will show the correlation coefficients for each grouping of similar plans. A list of participating companies will be included; however, no company names will be shown for calculated indexes.

SCHEDULE

We would propose to complete the data collection and preliminary analysis by the end of the first calendar quarter of 1988 with a final report, including phase two of the study, if necessary, being completed for the June 1988 NAIC meeting.

If the above approach is acceptable to your task force, we will proceed as outlined.

Respectfully submitted,

(signed)

John J. Palmer, Chairperson
Committee on Life Insurance
American Academy of Actuaries

STATEMENT 1987-42

December 6, 1987

The Honorable Margurite C. Stokes
Chairman, NAIC Life Cost Disclosure Task Force
Department of Insurance
North Potomac Building
614 H Street, N.W., Room 512
Washington, D.C. 20001

RE: NAIC Model Life Cost Disclosure Regulation

Dear Superintendent Stokes:

On October 30, 1986, we recommended a series of changes to the NAIC Model Life Insurance Disclosure Regulation. At the NAIC Winter Meeting in Orlando, Florida, the Task Force agreed to expose these changes for comment. At the Summer Meeting of the NAIC in Chicago, Illinois, the Task Force asked us to separate our recommended changes into three sets of changes for your consideration at the Winter Meeting of the NAIC in Phoenix. Enclosed are our recommendations divided into three separate recommendations as your Task Force requested.

Yours Truly,

(signed)

William T. Tozer, Chairperson
Task Force on Nonguaranteed Elements

STATEMENT 1987-42

PROPOSAL 1

At the time the latest revisions were made in the Model Life Insurance Cost Disclosure Regulation, Generally Accepted Actuarial Standards had not been established for dividends paid by stock life insurance companies. Generally Accepted Actuarial Practices have now been developed for dividends paid by stock life insurance companies. As a result, we recommend that any reference in the Model Regulation to dividends limiting its application to mutual life insurance companies be eliminated. As a result, we recommend that the following changes be made.

Section 4(C) be changed to read as follows:

"Contribution Principle - The Contribution Principle is a basic principle of dividend determination adopted by the American Academy of Actuaries with respect to individual life insurance policies. The Academy report, Dividend Recommendations and Interpretations (November 1985), describes this principle as the distribution of the aggregate divisible surplus among policies in the same proportion as the policies are considered to have contributed to divisible surplus. In a broad sense, the Contribution Principle underlies the essential equity implied by participating business."

Section 5(B) should be revised to read as follows:

"Requirements Applicable to Participating Policies - If a life insurance company illustrates policyholder dividends that are calculated in a manner or on a basis that;"

Section 5(B)(1), (2), (3) and (4) remain unchanged.

Section 5(C)(2) should be changed to read:

"If a life insurance company:"

The rest of Section 5(C)(2) remains unchanged.

STATEMENT 1987-42

PROPOSAL 2

Products that contain nonguaranteed charges, benefits or premiums have become a very significant portion of today's life insurance market. As a result, we are recommending that the following paragraph be added between (D) and (E) of Section 4:

"Current Rate Policy - The Current Rate Policy describes when and under what conditions the company intends to change any Current Rate Schedule."

Section 4(M) (9) should be revised to read:

"If the policy has a Nonguaranteed Factor, a statement indicating which cost factors are not guaranteed and that such factors are based upon the company's Current Dividend Scale or Current Rate Schedule and the Current Rate Policy for changing any Current Rate Schedule."

PROPOSAL 3

To support Proposal 2, we recommend that a new paragraph be added to Section 5(C) that reads as follows:

"3. If the life insurance company materially changes its Current Rate Policy on existing contracts, it shall, no later than the first contract anniversary following the change, advise each affected contractowner residing in the state of such change."

STATEMENT 1987-43

MEMORANDUM

TO: NAIC Technical Services (EX5) Subcommittee

FROM: Burton D. Jay, Chairperson
American Academy of Actuaries
Committee on Liaison with NAIC

DATE: December 10, 1987

The American Academy of Actuaries Committee on Liaison with NAIC was established to provide communication and coordination between the Academy's leadership and the NAIC Technical Services (EX5) Subcommittee on issues of actuarial significance to insurance regulators, and to help the Subcommittee address the priorities of many actuarial projects under active consideration within the NAIC. The Academy Committee on Liaison regularly submits reports to the Subcommittee, describing in summary fashion the many activities carried on under Academy auspices related to the NAIC.

As chairman of the Academy Committee, and as a Vice President of the Academy, I am in a position to serve as a direct link between the NAIC and the actuarial profession. I sincerely offer the services of the Academy Committee in general, and myself in particular, to help insurance regulators obtain the best input possible from our profession.

Let me briefly highlight the major elements of the Academy's liaison efforts.

(1) Actuarial Communications An essential element of our liaison function is to bring to the attention of the members of the actuarial profession matters of significance within the NAIC. From a professional actuarial perspective, the general circulation and trade press coverage of NAIC activities is insufficient, and the Academy attempts to fill this gap with technical actuarial communications. To that end, Academy committees, and staff monitor closely the work of the NAIC actuarial task forces, as well as all other NAIC committees, task forces, and working groups engaged in matters of actuarial importance. We then communicate news on developments in these areas to our members through several vehicles, including our monthly newsletter, The Actuarial Update, a monthly government relations scorecard, The Government Relations Watch, and an annual compendium of policy concerns, The Issues Digest. In 1987, we initiated a new subscription service, The Academy Alert, which provides readers with late-breaking and in-depth coverage of significant developments. More than 20% of the Academy's membership now subscribes to this service, which frequently includes coverage of NAIC developments, and which often provides notice of exposure drafts or proposed model laws or regulations.

Finally, we published the entire set of NAIC Actuarial Guidelines in the 1986 Academy Journal, and we intend to publish these guidelines again, as modified, in the 1987 edition, offering easy access to most actuaries for the guidance provided by the NAIC.

(2) NAIC Projects Many Academy committees are actively engaged in the consideration of matters now before the NAIC. They have offered and will

continue to offer both technical and policy commentary on a broad range of issues.

(1) The Academy Committees on Health, on Life Insurance and on Risk Classification have each issued reports on AIDS and insurance. The Life Insurance Committee paper focused on the impact of AIDS on insurer solvency, while the Risk Classification paper's focus was on the need to utilize proper classification techniques for insurance applicant screening and underwriting. The report of the Committee on Health was issued as an addendum to the Committee on Life Insurance report.

(2) The Academy Task Force on Universal Life Insurance presented a statement to the NAIC on the valuation and nonforfeiture provisions of the NAIC universal life model regulation, and continues to work in this area.

(3) The Academy Committee on Property and Liability Issues presented a paper on the cyclicality of the property and liability insurance industry. That committee is also participating in the advisory committee to the NAIC Legal Liability Insurance (D) Task Force.

(4) The Academy Committee on Property and Liability Financial Reporting is assisting the advisory committee to the Casualty Actuarial Task Force in the consideration of possible changes to Schedules O and P, and is continuing to discuss issues related to the discounting of loss reserves.

(5) The Academy Subcommittee on Dividends and Other Non-Guaranteed Elements is completing work on a set of proposals before the Life Cost Disclosure (A) Task Force and a corollary proposal before the Market Conduct Surveillance (EX3) Task Force.

(6) Our committees on financial reporting are beginning work in the areas of reinsurance reserving.

(7) The Academy Health Subcommittee on Liaison with the NAIC has continued its close involvement in the development of health insurance valuation standards and health insurance rate filing guidelines.

(8) A special Academy task force is now at work on the yield index project, and plans to provide input in both the procedural and substantive areas of this effort.

(9) The Academy Committee on Liaison with the NAIC has reviewed the priorities assigned to the actuarial projects by the NAIC Actuarial task forces and are in general agreement with the task forces' assignments.

(3) Actuarial Standards The Interim Actuarial Standards Board (IASB) is working on a broad range of actuarial standards issues. One recent promulgation concerned Continuing Care Retirement Communities. Of particular interest to the NAIC are a series of proposed standards expected to be acted upon in 1988. These include standards in the areas of incurred health claim liabilities, ratemaking standards (disclosure of assumptions/trending), discounting loss reserves, property and liability valuation, health rate filings,

reinsurance reserves, contents of actuarial reports, and retiree life and health benefits.

The IASB is now approaching the end of the experimental phase, and it is anticipated that the Actuarial Standards Board (ASB) will be inaugurated in mid-1988. We believe that the creation of the ASB will do much for the profession, and for the users of actuarial services.

(4) Other The Academy has been assisting the Joint Committee on the Valuation Actuary, composed of representatives of all major actuarial organizations, in its efforts to help define the scope of the valuation actuary's role, to provide appropriate principles and standards, and to help secure the assistance of the insurance industry and the NAIC in the eventual development of the valuation actuary concept. We would be pleased to share with you developments in this area.

The Academy Committee on Liaison with NAIC welcomes the opportunity to report to the Technical Services (EX5) Subcommittee, and we look forward to continuing this interchange at future NAIC meetings.

Respectfully submitted,

(signed)

Burton D. Jay, Chairperson
Committee on Liaison with NAIC

STATEMENT 1987-43

ACTUARIAL GUIDELINES

The NAIC Life and Health Actuarial (EX5) Task Force has been asked on many occasions to assist a particular state insurance department in interpreting a statute dealing with an actuarial topic relative to an unusual policy form or situation not contemplated at the time of original drafting of a particular statute. The Actuarial Task Force, in developing its interpretation or guideline, must often consider the intent of the statute, the reasons for initially adopting the statute and the current situation. The Actuarial Task Force feels that for those situations which are sufficiently common to all states, that the publishing of actuarial guidelines on these topics would be beneficial to the regulatory officials in each state and would promote uniformity in regulation which is beneficial to everyone. To this end, the Actuarial Task Force has developed certain actuarial guidelines and will continue to do so as the need arises. The guidelines are not intended to be viewed as statutory revisions but merely a guide to be used in applying a statute to a specific circumstance.

ACTUARIAL GUIDELINE I

INTERPRETATION OF THE STANDARD VALUATION LAW WITH RESPECT TO THE VALUATION OF POLICIES WHOSE VALUATION NET PREMIUMS EXCEED THE ACTUAL GROSS PREMIUM COLLECTED

1. The purpose of this guideline (items 2 and 3 below) is to clarify the intent of the Standard Valuation Law.

2. The method of valuation promulgated by the model legislation adopted by the NAIC in December 1976 for the valuation of life insurance policies whose valuation net premiums exceed the actual gross premiums collected is a change in method of reserve calculation and not a change in reserve standards.

3. For policies so valued the maximum permissible valuation interest rate and the applicable mortality basis specified is that in effect at the date of issue of such policies.

ACTUARIAL GUIDELINE II

RESERVE REQUIREMENTS WITH RESPECT TO INTEREST RATE GUIDELINES ON ACTIVE LIFE FUNDS HELD RELATIVE TO GROUP ANNUITY CONTRACTS

As part of the determination of the aggregate minimum group annuity reserves, a computation must be made of minimum reserves for deposit administration group annuity funds with interest rate guarantees including all such funds pertaining to possible purchase of group annuities whether such funds are held in a separate account or in a general account, whether shown as premiums, advance premiums, auxiliary funds, etc. and whether the liability is shown as Exhibit 8 or elsewhere. In making such computations, the procedure and minimum standards described below shall be applicable for the December 31 calendar year "y" valuation giving recognition to the dates deposits were made. Where appropriate and with the approval of the commissioner, recognition may be given to the extent and time of application of active life

funds to purchase annuities, expense assessments against the funds, and excess of purchase price over minimum reserves. In no event shall the reserve be less than the transfer value, if any, of the fund. Approximate methods and averages may be employed with the approval of the commissioner.

To the extent that the application of these valuation procedures and standards would require a company to establish aggregate minimum reserves for group annuities and related funds in excess of reserves which it would not otherwise hold if these valuation procedures and standards did not apply, such company shall set up additional reserve liability as shown in its general account or in a separate account, whether shown in Exhibit 8 or elsewhere.

The valuation procedures and standards specified in this guideline shall not be applicable to the extent that the valuation procedures and standards relating to reserves for deposit administration group annuity funds with interest rate guarantees (i.e., group annuity and guaranteed interest contracts) in the amendments to the Standard Valuation Law adopted by the National Association of Insurance Commissioners in December 1980, or in later NAIC amendments, have become applicable in a jurisdiction.

For funds received:

(1) Prior to calendar year 1976, follow the procedure used at that time.

(2) In calendar year 1976 or later, follow the minimum standards described below:

(a) Contracts having no guaranteed interest rates in excess of 6% on future contributions to be received more than one year subsequent to the valuation date.

The minimum reserve shall be equal to the sum of the minimum reserves for funds attributable to contributions received in each calendar year.

Where V_y=Minimum reserve for funds attributable to contributions received in calendar year y

$$V_y = \left[C_y x (1 + i_{gy})^n\right] / (1 + i_{py})^n$$

C_y=Portion of guaranteed fund attributable to contributions received in calendar year y

i_{gy} = Interest rate guaranteed under the contract with respect to funds attributable to contributions received in calendar year y

i_{py} = Lowest of:

(1) The net new money rate credited by the company on group annuity funds attributable to contributions received in calendar year y less .005; or

(2) i_{gy}; or

(3) i_{my}; where

i_{my} = (i) for calendar years y + 1 through y + 10, the values shown in the table of values of i_{my} distributed each year by the Central Office of the National Association of Insurance Commissioners;

(ii) for calendar years y + 11 and later, .060.

n = Number of guarantee years, and fractions thereof, remaining as of the December 31 valuation.

(b) Contracts having guaranteed interest rates in excess of 6% on future contributions to be received more than one year subsequent to the valuation date.

The same procedures as set forth under (a) above shall be used except that the deduction under (1) of i_{py} shall be .01 instead of .005 and i_{my} for calendar years y + 1 through y + 10 shall be reduced by .005.

Table of Values of i_{my}
(Effective for the December 31, 1977 Valuation)

Calendar Year y in Which Contributions Were Received	Value of i_{my} for Calendar Years y + 1 Through y + 10
1976	.089
1977	.087
1978	.081
1979	.084
1980	.100
1981	.124
1982	.145

ACTUARIAL GUIDELINE III

INTERPRETATION OF MINIMUM CASH SURRENDER BENEFIT UNDER STANDARD NONFORFEITURE LAW FOR INDIVIDUAL DEFERRED ANNUITIES

Section 6 of the model bill as written does not require that cash surrender benefits be paid; but where they are paid, it requires that such cash surrender benefits grade into maturity value using an interest rate not more than one percent higher than the rate specified in the contract for accumulating net considerations. While this method will be suited for contracts having a sales load at issue, it may create a problem for contracts having surrender charges for cash surrender.

For contracts providing cash surrender values, the cash surrender value at maturity shall be at least equal to the minimum nonforfeiture amount at maturity as defined in section 4. For purposes of calculating cash surrender values prior to maturity, the term "maturity value" in the Standard Nonforfeiture Law for Individual Deferred Annuities shall mean the cash surrender value at maturity.

ACTUARIAL GUIDELINE IV

ACTUARIAL INTERPRETATION REGARDING MINIMUM RESERVES FOR CERTAIN FORMS OF TERM LIFE INSURANCE

Scope

This interpretation recommended by the NAIC Technical Task Force to Review Valuation and Nonforfeiture Value Regulation deals only with term life insurance without cash values which the owner has the unilateral right to maintain in force until its stated expiry date, subject only to the payment of required premiums which vary (generally increasing on a per $1000 basis) during the term of the policy and under which premium rates are guaranteed to the stated final expiry. This interpretation applies only to such term plans valued on the 1958 CSO Mortality Table for the current term period.

Ten-year renewable term, five-year renewable term and one-year renewable term to a stated age with generally increasing premiums are titles commonly given to such policies, but this interpretation concerns itself with the actual coverage provided and is not controlled by the name given the coverage.

Background Information

Historically, reserves on one-year renewable term policies have consisted of a basic reserve for the current term period of one-half the cost of insurance for the current term period, plus a deficiency reserve, if any. The application of the commissioners reserve valuation methods to determine basic reserves and efficiency reserves for such policies is subject to varying interpretations as noted in Walter O. Menge's paper, "Commissioners Reserve Valuation Method" written at the time of construction of the Standard Valuation Law.

> . . . the adaptation of the commissioners reserve valuation method to fit policies for which the gross premium varies from year to year becomes a problem of generalization which, from a purely theoretical viewpoint, has an infinite number of possible solutions, some of which are practical and others of which are impractical.[1]

and

> For these reasons, it seems desirable not to formulate at this time any fixed rules for the valuation of these unusual types of policies and riders. The second paragraph of section 4 of the Standard Valuation Law does not define the method of valuation of such contracts but requires that the method used, whatever it may be, must be consistent with that employed for uniform

> premium policies providing uniform insurance benefits, thus leaving open the possibility of a choice of several consistent methods.[2]

Acceptable Approaches

Two approaches to "consistent" reserves are suggested. The unitary policy approach considers such policies as variable premium policies up to the mandatory expiry date. Under this approach the valuation net premiums are a uniform percentage of gross premiums with the percentage fixed at issue date. If appropriate deficiency reserves are held, this approach has great appeal. However, it is susceptible to manipulation and illogical results. Reserves according to this approach should be acceptable only if the company can demonstrate that actual reserves, including deficiency reserves, for all renewable term business valued using this approach are of the same general magnitude as would occur using an approved method as defined below.

The other approach is to hold policy reserves for only the current period of years (not necessarily equal to the renewal period) during which the required premium per $1000 remains level, including deficiency reserves if appropriate. Additional reserves are established where net premiums, calculated on a basis which reflects current mortality, exceed gross premiums for future periods of level premiums. Although not speaking directly to valuation problems in this instance, the Hooker Committee report said:

> The question was raised whether a policy providing term insurance for several years, automatically followed by permanent insurance, should be considered as two separate policies for the purpose of the Act. In the Committee's opinion, the respective portions may be treated separately if the portion providing permanent insurance takes the Company's regular rate at the then attained age. The rated age provision in the law appears to cover this point. However, the Committee draws a distinction between policies providing purely term insurance followed by permanent insurance at the company's published rate at the attained age of conversion, the policies providing for an initial premium such that the increased premium at the subsequent duration differs from that for a new policy at the attained age. The latter case obviously constitutes a single policy to which the formula should be applied at the outset.[3]

The second sentence of the above quotation lends support to the approach of separating successive periods of level premiums.

Under this interpretation, an approved method is any method which produces reserves greater than or equal to the sum of policy reserves, including deficiency reserves, for the current period of level premiums calculated on the basis of the applicable mortality and interest standards and reserve method specified in the Standard Valuation Law plus additional reserves calculated according to the following basis applied uniformly to all such policies.

> The present value of the excess of test premiums for future periods of level premiums for which gross premiums are guaranteed over the respective gross premiums, such test premiums and present values being calculated on the Commissioners 1980 Standard Ordinary Mortality Table with Ten-Year Select Mortality Factors and 4 1/2 percent interest. For each plan of insurance with separate rates for smokers and nonsmokers an insurer may substitute the 1980 CSO Smoker and Nonsmoker Mortality Tables with Ten-Year Select Mortality Factors for the Commissioners 1980 Standard Ordinary Mortality Table with Ten-Year Select Mortality Factors.

In case a future gross premium exceeds the test premium, the excess shall be considered zero and not a negative amount. This is in accordance with the principle of anticipating no future profits but providing for all future losses.

Reinsured Business

If reinsurance is assumed under an agreement in which the reinsurer reserves the right to raise premiums to a level at least as great as the net valuation premiums, the reinsurer is not required to establish deficiency reserves or additional reserves, and the ceding company is not permitted to take credit for such reserves on the portion of the business which is reinsured.

If a reinsurance agreement guarantees future reinsurance premiums, reinsurer should establish deficiency reserves and additional reserves as required by this interpretation for the period for which reinsurance premiums are guaranteed, and the ceding company may take credit for such reserves against its deficiency and additional reserves on the portion of the business which is reinsured to the extent permitted by law.

Adequacy of Reserves

Although the above alternative is acceptable as meeting the intent of the Standard Valuation Law, this does not in any way relieve the certifying actuary of the insurance company from exercising his own best judgment with respect to the appropriate reserves. In particular, the actuary should consider term contracts of this nature when he states his opinion that aggregate reserves "make a good and sufficient provision for all unmaturity obligations of the company guaranteed under the terms of its policies" and "include provision for all actuarial reserves and related statement items which ought to be established."[4]

References

1 The Record, American Institute of Actuaries. Vol. XXXV, 1946, p. 270.

2 Ibid., p. 300.

3 1947 NAIC Proceedings, 257.

4 Instructions for Completing NAIC Life and Health Annual Statement Blank, 1976, p.1.

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ACTUARIAL GUIDELINE V

INTERPRETATION REGARDING ACCEPTABLE APPROXIMATIONS FOR CONTINUOUS FUNCTIONS

Text:

For reserves and values using continuous functions:

(a) $$\bar{D}_x = \int_0^1 D_{x+t}\, dt$$

By assuming that D_{x+t} is linear for $0 \le t \le 1$

$$\bar{D}_x \doteq \frac{1}{2}\left(D_x + D_{x+1}\right)$$

By assuming that the deaths in the year of age x to x+1 are uniformly distributed over that year of age,

$$\bar{D}_x \doteq \left[(\delta - d)/\delta^2\right] D_x + \left[(i - \delta)/\delta^2\right] D_{x+1}$$

where:

$d = iv = i/(1+i)$
δ = force of interest
i = interest rate

(b) $$\bar{C}_x = \int_0^1 D_{x+t}\, \mu_{x+t}\, dt$$

By assuming that deaths in the year of age x to x+1 are uniformly distributed over that year of age,

$$\bar{C}_x \doteq \left(i/\delta\right) C_x$$

By assuming that the total deaths are concentrated at the middle of the year of age,

$$\bar{C}_x \doteq (1+i)^{1/2} C_x \quad \text{or} \quad \left(1 + i/2\right) C_x$$

Background Material

The actuarial mathematics used in calculating net premiums, reserves and nonforfeiture values for life insurance policies was first developed using two basic assumptions. These basic assumptions are: (1) that all death benefits are payable at the end of the policy year of death and (2) that all gross premiums due under the policy are payable annually at the beginning of the policy year. Actuarial values which are calculated under these two basic assumptions are described as being calculated using curtate functions. For any specific mortality table and interest rate, all the necessary actuarial values are uniquely defined for a policy using curtate functions.

The Standard Valuation Law and the Standard Nonforfeiture Law define minimum reserves and minimum nonforfeiture values, respectively, for life insurance policies using curtate functions. These two model laws originated in the early 1940's when almost all insurance companies were using the two basic

assumptions inherent in the curtate functions. However, the wording of the model laws does not prohibit insurance companies from using other assumptions if the resulting reserves and nonforfeiture values will always be at least as large as the minimum amounts defined in these laws.

Nowadays, many insurance companies do prefer to use alternative assumptions in computing the reserves and nonforfeiture values for their life insurance policies. These companies consider the alternative assumptions more appropriate for their policies. These alternative assumptions are: (1) that all death benefits are payable immediately upon death and (2) that all gross premiums due under the policy are payable continuously throughout the policy year.

Actuarial values which are calculated under both of the alternative assumptions, pertaining to death benefits and gross premiums, are described as being calculated using continuous functions. However, the underlying mathematics for continuous functions involves two integrals, representing the actuarial functions C_x and D_x, which must be approximated. In the past, there has been some disagreement among actuaries as to which approximations for the two integrals are the most suitable. Because of the use of different approximations for these two integrals, actuaries have obtained different numerical amounts for the necessary actuarial values using continuous functions even though these actuaries were working with the same mortality table and interest rate.

Some insurance companies prefer to calculate their reserves and nonforfeiture values assuming: (1) that death benefits are payable immediately upon death and (2) that all gross premiums due under the policy are payable annually at the beginning of the policy year. Thus, these companies are using the alternative assumption pertaining to death benefits and the basic assumption pertaining to gross premiums. The underlying mathematics for the combination of these two assumptions involves the integral C_x, which must be approximated. Thus, the use of these two assumptions together gives rise to essentially the same problem as using continuous functions.

ACTUARIAL GUIDELINE VI

INTERPRETATION REGARDING USE OF SINGLE LIFE OR JOINT LIFE MORTALITY TABLES

The Standard Valuation Law and the Standard Nonforfeiture Law for Life Insurance apply to policies which provide joint life insurance benefits as well as to policies which provide single life insurance benefits. References in these laws to plans such as "nineteen year premium whole life" or "a whole life policy . . . with uniform premiums for the whole of life" are to be interpreted as references to such plans based on the same life status(es) as the policy for which minimum reserves or nonforfeiture benefits are being determined. For example, if the net level annual premium on the nineteen year premium whole life plan is needed to calculate the minimum reserve for a policy which insures two lives and pays a benefit at the first death, the premium is to be that for a policy which insurers two lives and pays a death benefit at the first death. The same principle would apply to a policy which insures only one life, or a policy which pays a benefit at the first death of

more than two lives. The principle also applies to a policy that pays a benefit on the death of t-th life of n lives (t is greater than 1 but less than or equal to n).

Background Material

The great majority of life insurance policies provide single life insurance benefits. These policies identify one specific individual as the named insured. A death benefit under the basic policy is payable if this named insured dies while the policy is in force. Usually, there are no further gross premiums due on and after the death of this named insured. The basic policy may provide endowment benefits which are conditional on the survival of this named insured. The policy does not contain any provisions whereby the amount of the death benefits, endowment benefits or gross premiums are affected by the survival or nonsurvival of any other persons besides the insured, except possibly in the settlement option provisions or in the provisions of an attached term insurance rider which requires an extra premium.

In contrast to policies which provide single life insurance benefits, policies which provide joint life insurance benefits depend on the survival or nonsurvival of two or more named insureds. Until quite recently, virtually all policies which provided joint life insurance benefits were written on the whole life insurance plan. Such policies paid the face amount as a death benefit on the death of the first of the named insureds to die, provided that the policy was then in full force. No further gross premiums were due after the first death, and the policy terminated upon payment of the death benefit.

Recently there has been increasing interest in plans providing joint life insurance benefits, and insurance companies have developed a variety of new life insurance plans. For example, some policies provide for payment of a death benefit only on the death of the last to die of the named insureds.

The Standard Valuation Law and the Standard Nonforfeiture Law clearly apply to policies which provide joint life insurance benefits as well as to policies which provide single life insurance benefits. Both of these model laws define an "expense allowance" which is added to the present value of the future guaranteed insurance benefits under the policy, and which affects the modified premiums used for computing minimum reserves and the adjusted premiums used for computing minimum nonforfeiture values. A different amount of "expense allowance" is defined for nonforfeiture values than that defined for reserves, but the principle is much the same.

Insurance companies are allowed to select "expense allowances" for use in computing their reserves and nonforfeiture values up to the level of the "expense allowances" defined in these model laws. A higher "expense allowance" would produce reserves or nonforfeiture values which are less than the minimum defined in the model laws, and therefore state insurance departments can not permit companies to use a higher amount as an "expense allowance."

The wording of these model laws is generally clear and precise in defining the "expense allowances" which are permitted for policies which provide single life benefits. However, the proper level of the "expense allowances" for

policies providing joint life insurance benefits is not so clear. The "expense allowance" defined in the Standard Valuation Law depends on the modified net premium for a policy on the 20 payment whole life insurance plan, and the "expense allowance" defined in the Standard Nonforfeiture Law depends on the adjusted premium for a policy on the ordinary life plan.

Actuaries have had different opinions as to how to apply the joint life insurance mortality tables in order to obtain the modified net premium and the adjusted premium required by model laws, so as to calculate the "expense allowances" which are appropriate under those laws. The question has become increasingly important with the development of the new plans providing joint life insurance benefits.

ACTUARIAL GUIDELINE VII

INTERPRETATION REGARDING CALCULATION OF EQUIVALENT LEVEL AMOUNTS

Text:

Pure endowments will not be considered in the determination of equivalent level amounts for valuation and nonforfeiture purposes.

Background Material

The "Background Material" section relating to the previous actuarial guideline went into some detail concerning the "expense allowances" defined in the Standard Valuation Law and the Standard Nonforfeiture Law. See Actuarial Guideline 6. "Interpretation Regarding Use of Joint Life Insurance Tables."

This Actuarial Guideline 7 is also concerned with the level of these "expense allowances" defined in these model laws. The most common plans of life insurance provide a level face amount as the death benefit, during the period the policy is in full force. These plans do not provide for any benefit which is payable as a pure endowment. (A pure endowment benefit pays a specified amount of pure endowment to the policyholder if the insured is still alive on the specified maturity date and if the policy is still in full force on this maturity date.) However, policies which provide for a death benefit which varies with the duration and policies which provide one or more pure endowment benefits can be legally written in most states.

The Standard Valuation Law and the Standard Nonforfeiture Law do apply to such policies with varying death benefits or pure endowment benefits. In fact, the wording of the model laws shows that considerable thought was given to the treatment of these kinds of policies. In the case of both model laws, the present value of future guaranteed benefits under the policy clearly includes both the death benefits and the pure endowment benefits provided. A more difficult question is involved in the calculation of the "expense allowances" defined under these model laws.

The Standard Nonforfeiture Law includes a paragraph which reads as follows:

> In the case of a policy providing an amount of insurance varying with duration of the policy, the equivalent uniform amount

> thereof for the purpose of this Section shall be deemed to be the uniform amount of insurance provided by an otherwise similar policy, containing the same endowment benefit or benefits, if any, issued at the same age and for the same term, the amount of which does not vary with duration and the benefits under which have the same present value at the date of issue as the benefits under the policy; provided, however that in the case of a policy providing a varying amount of insurance issued on the life of a child under age ten, the equivalent uniform amount may be computed as though the amount of insurance provided by the policy prior to the attainment of age ten were the amount provided by such policy at age ten.

While the wording of the above paragraph is rather complex, the meaning seems to be actuarially precise. The paragraph defines an "equivalent uniform amount" which affects the "expense allowance" defined in the law. The phrase "containing the same endowment benefit or benefits, if any" effectively means that pure endowment benefits are to be ignored in computing this "equivalent uniform amount." This "equivalant uniform amount" or "equivalent level amount" becomes a sort of weighted average of the death benefits provided by the policy, an average which is not affected in any way by the pure endowment benefits which may be provided by the policy.

The Standard Valuation Law is not nearly so clear on this point. It contains wording as follows:

> Reserves according to the commissioners reserve valuation method for (1) life insurance policies providing for a varying amount of insurance...shall be calculated by a method consistent with the principles of the preceding paragraph....

(Note that the quoted wording refers back to the preceding paragraph in the Standard Valuation Law. It does not intend to refer to the paragraph quoted from the Standard Nonforfeiture Law.)

Most actuaries have interpreted the Standard Valuation Law so as to use an "equivalent level amount" which is not affected by any pure endowments included in the policy. They would then use this "equivalent level amount" to calculate the "expense allowance" defined in the model law. This "equivalent level amount" is also a weighted average of the death benefits provided by the policy, in the same fashion as the "equivalent uniform amount" used in applying the Standard Nonforfeiture Law. Some insurance companies use the same "equivalent level amount," for the purpose of the Standard Valuation Law, as the "equivalent uniform amount" defined in the Standard Nonforfeiture Law. Other companies use a very similar calculation to obtain a special "equivalent level amount," for the purpose of the Standard Valuation Law, based only on the death benefits provided on and after the first policy anniversary.

Some actuaries have felt that the wording of the Standard Valuation Law permits an alternate calculation of the "equivalent level amount" which would be affected by pure endowment benefits. Such an "equivalent level amount" would be used to calculate an "expense allowance" under the Standard

Valuation Law, even though the "equivalent level amount" no longer has the character of a weighted average of the death benefits provided by the policy.

The inclusion of the pure endowment benefits in the calculation of the "equivalent level amount" would affect the level of the "expense allowance" defined in the Standard Valuation Law, and therefore it would affect the level of the minimum reserves required by the policy. Typically, the denominator of the fraction used in calculating the "equivalent level amount" would remain the same, but the numerator of this fraction would be increased because of this inclusion. Thus, the "equivalent level amount" itself and the resulting "expense allowance" defined in the Standard Valuation Law would also be increased with the inclusion. The end result of the inclusion would be lower minimum reserves at every duration.

If the amounts and maturity dates of the new pure endowment benefits were carefully selected, a considerable degree of reduction in the reserve factors would probably be possible.

This actuarial guideline would expressly prohibit including the pure endowment benefits in determining the "equivalent level amount" for either valuation or nonforfeiture purposes. As explained under "Background," the need for this actuarial guideline arises primarily for valuation purposes under the Standard Valuation Law. The wording of the Standard Nonforfeiture Law is sufficiently precise that this actuarial guideline is virtually a truism for the purpose of calculating nonforfeiture values.

The purpose of this actuarial guideline is to assist state insurance departments and insurance company actuaries by identifying a method of calculating "equivalent uniform amounts" and "expense allowances" which is not considered proper and which will not be accepted.

ACTUARIAL GUIDELINE VIII

THE VALUATION OF INDIVIDUAL SINGLE PREMIUM DEFERRED ANNUITIES

Text:

With respect to those states which have enacted the 1976 amendments to the Standard Valuation Law, individual single premium deferred annuity reserves shall at least equal the greatest of any of the discounted values of all guaranteed future benefits including cash surrender values available after the date of valuation, such benefits discounted to the valuation date at the maximum permissible statutory interest rate. This method applies to all individual single premium deferred annuities which are subject to the provisions of the Standard Valuation Law in those states which have enacted the 1976 amendments. For those states which have not yet enacted the 1976 amendments this interpretation is a method of valuing individual single premium deferred annuities.

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ACTUARIAL GUIDELINE IX

FORM CLASSIFICATION OF INDIVIDUAL SINGLE PREMIUM IMMEDIATE ANNUITIES FOR APPLICATION OF THE VALUATION AND NONFORFEITURE LAWS

Text:

Solely for the purposes of the applicable Valuation and Nonforfeiture Laws, an individual single premium annuity shall be considered to be immediate, as opposed to deferred, provided:

(1) the first annuity payment is due not more than thirteen months from the annuity issue date;

(2) succeeding payments under the annuity, after the initial payment, are due at regular intervals no less frequently than annually;

(3) in the case of a fixed benefit annuity, the total guaranteed payments due in any contract year are not greater than 115% of the total guaranteed payments due in the immediately preceding contract year. In the case of variable annuities and indexed annuities, the same characteristic would be required for the underlying pattern of payments, before adjustments which are made solely because of the performance of the separate account associated with a variable annuity or the changes in the associated index. (This characteristic is not intended to prevent or reduce any lawful nonguaranteed payments under the annuity which are in the nature of dividends or excess interest credits.)

ACTUARIAL GUIDELINE X

GUIDELINE FOR INTERPRETATION OF NAIC STANDARD NONFORFEITURE LAW FOR INDIVIDUAL DEFERRED ANNUITIES

Text:

For contracts which provide cash surrender benefits, the NAIC Model Law prescribes a basis for determination of minimum cash surrender benefits. That law does not require that a company grant additional amounts in excess of the amounts guaranteed in the contract, either in the form of excess interest credits or otherwise. When such additional amounts have been credited to the contract, the question of how the Model Law applies to such amounts must be considered.

Under one interpretation the portion of the maturity values which would arise from such amounts may be discounted to the date of surrender at an interest rate 1% higher than the rate specified in the contract for accumulating such amounts. This interpretation would permit a surrender charge against such amounts on the same basis as the surrender charge which may be applied to the contractually guaranteed portion of the interest credited to the contract.

Under another interpretation such amounts could not be treated as providing a portion of the maturity value and, therefore, would be included in the phrase

"any additional amounts credited by the company to the contract". This interpretation would require that the cash surrender value be increased by 100% of the accrued value of such amounts.

By providing for a surrender charge to be made in determining the minimum cash surrender value, the Model Law enables a company to provide for recovery of all or part of any (1) excess first year expenses not yet recovered, and (2) potential investment losses at surrender. The reason for permitting surrender charges to be made against accumulated amounts of contractually guaranteed interest are equally valid reasons for permitting surrender charges against any non-guaranteed interest credited. If such surrender charges were not permitted, companies offering such contracts may be discouraged from crediting as much additional interest as they might if the additional interest were to contribute to the minimum cash surrender value in the same manner as do the interest amounts derived from the rates guaranteed in the contract.

In view of the above considerations, the following guidelines are recommended:

I. Treatment of Amounts of Excess Interest Credited to Deferred Annuity Contracts

The NAIC Standard Nonforfeiture Law for Individual Deferred Annuities shall be interpreted to permit the portion of the maturity value which would arise from the amounts of interest credited in excess of the minimum rates guaranteed in the contract to be discounted to the date of surrender at an interest rate 1% higher than the rate specified in the contract for accumulating such amounts, provided such excess interest is declared prior to the period for which it is to be effective, and provided such excess interest accrues over the effective period. Amounts of excess interest treated in accordance with the above interpretation shall not be included by the phrase "additional amounts credited by the company to the contract" in Section 6 of the Model Law.

II. Treatment of Dividends Credited to Deferred Annuity Contracts

No single rule can be given for the treatment of dividends credited to deferred annuity contracts. The contractual wording of the applicable dividend option must be taken into account together with the appropriate provisions of the NAIC Standard Nonforfeiture Law for Individual Deferred Annuities.

If the dividend option in effect provides that dividends be left on deposit at interest, without any further qualification, then the cash surrender value should be increased by the full accumulated amount. In this case, the phrase "increased by any additional amounts credited by the company to the contract" applies and no surrender charge may be made.

In other cases, the dividends may be added, directly or indirectly, to the contractual value and made subject to the surrender charge provision. This would be the case when dividends are applied to purchase additional paid-up benefits or applied as premiums.

Contracts may contain other provisions or variations of these provisions. In such cases, the terms of the contract and the provision of the NAIC Standard Nonforfeiture Law for Individual Deferred Annuities should be taken into account.

ACTUARIAL GUIDELINE XI

EFFECT OF AN EARLY ELECTION BY AN INSURANCE COMPANY OF AN OPERATIVE DATE UNDER SECTION 5-C OF THE STANDARD NONFORFEITURE LAW FOR LIFE INSURANCE

Section 5-C of the Standard Nonforfeiture Law for Life Insurance may be made operational for one or more plans at a time provided that:

A. Sales are discontinued in this state on all like plans using rates and values generated by past requirements.

B. Sales are discontinued in all other states which have enacted the new legislation on all like plans using rates and values generated by past standards, provided the state of sale has allowed changes to 1980 requirements on a plan-by-plan basis.

C. Once the new law has been made operational for one plan, the new law shall be operational for all subsequent new plans of the same generic form to be marketed in this state unless the insurer can demonstrate to the Commissioner's satisfaction the need to continue to prior set of requirements.

D. "Life plans," as mentioned in Sections A and B, refers to plans with the same benefits, including cash values, and with the same premium paying period and pattern of premiums.

E. "Generic form," as mentioned in Section C, refers to generic groups, such as ordinary vs. group, term vs. permanent, flexible cash value vs. fixed cash value, separate account vs. fixed account.

ACTUARIAL GUIDELINE XII

INTERPRETATION REGARDING VALUATION AND NONFORFEITURE INTEREST RATES

Preamble:

When the Standard Valuation and Nonforfeiture Laws were amended in 1976, the minimum standards for most life insurance policies were based on interest rates of 4 1/2 percent for reserves and 5 1/2 percent for nonforfeiture values. Prior to this, no differential had existed between these two standard rates and companies had almost always based reserves and nonforfeiture values on the same interest rates. This new aspect of the Standard Laws raised questions concerning the appliciation of these laws to policies with reserves and nonforfeiture values based on different interest rates.

The sections in this guideline cover the manner in which the Standard Valuation Law and the Standard Nonforfeiture Law for Life Insurance, as

amended in December 1980, govern the choice of the interest rate or rates used in the various applications covered by these laws. These sections shall be applicable to policies issued after the effective date of this guideline and pursuant to the Standard Laws as amended in December 1980.

In the development of these sections, consideration was given to the application of the Standard Laws to traditional products, Products, such as universal life, that may be of such a nature that minimum values cannot be determined by the methods described in the Standard Laws were not considered.

Text:

1. Basic Policy Cash Surrender Value. Any cash surrender value provided for by a life insurance policy, regardless of the interest rate or rates used to calculate it, shall be an amount not less than the minimum cash surrender value calculated by the method described in the Standard Nonforfeiture Law for Life Insurance using the maximum interest rate permitted for the policy by that law.

2. Amount of Paid-Up Nonforfeiture Benefit. Any paid-up nonforfeiture benefit provided for by a life insurance policy shall be such that its present value shall be at least equal to the then current cash surrender value. The present value referred to should be calculated using the same interest rate or rates as were used in the prospective calculation of the cash surrender value or as is stated in the polciy as the minimum interest rate that will be used in the accumulation of successive policy year cash values.

3. Cash Surrender Value of Paid-Up Nonforfeiture Benefits. Any cash surrender value of a life insurance policy continued under any paid-up nonforfeiture benefit shall be an amount not less than the present value of the then future benefits. The present value referred to should be calculated using the same interest rate or rates as were used in determining the amount of the paid-up nonforfeiture benefit.

4. Valuation of Paid-Up Nonforfeiture Benefits. The interest rate used in determining the minimum standard for the valuation of a life insurance policy continued under any paid-up nonforfeiture benefit shall be the interest rate specified in the Standard Valuation Law for that life insurance policy had it continued in a premium paying status.

5. Paid-Up Dividend Additions. The following conditions relate to additional paid-up life insurance purchased by dividends:

   (a) Any cash surrender value of paid-up additions shall be an amount not less than the persent value of the future benefits calculated using the interest rate used in determining the amount of such additions.

   (b) The interest rate used in determining the minimum standard for the valuation of any dividend additions shall be the interest rate used in determining the minimum standard for the valuation of the basic life insurance policy.

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Background Material:

The sections in this guideline are intended to represent a straightforward interpretation of the current Standard Laws. Most of the Background Material consist of direct quotations from the sections of the Standard Laws on which these sections are based. Unless otherwise indicated, references are to the NAIC Standard Nonforfeiture Law for Life Insurance, as amended December 1980. To facilitate cross reference, the section numbers used here correspond to those in the text of the guideline.

1. Basic Policy Cash Surrender Value. The first section in this guideline deals generally with minimum standard cash surrender values-a prerequisite to a discussion of nonforfeiture benefits and their values -- and specifically with the interest rates which may be used in calculating these minimum values. The method is described in section 3 of the Standard Nonforfeiture Law: "Any cash surrender value...shall be an amount not less than...the present value...of the future guaranteed benefits...including any existing paid-up additions... over...the then present value of the adjusted premiums..." Adjusted premiums are then defined in section 5-c. Finally, section 5-c(8) states that: "all adjusted premiums and present values...shall...be calculated on the basis of a rate of interest not exceeding the nonforfeiture interest rate..."

   It is important to compare this language to that used in older sections of the law that apply to policies sold prior to the operative date of 5-c. Section 5-a, for example, provides that values "be calculated on the basis of...the rate of interest specified on the policy for calculating cash surrender values... provided that such rate of interest shall not exceed..." Note that the rate of interest used to calculate the minimum standard is no longer defined by reference to the rate specified in the policy for calculating actual cash surrender values. The removal of this linkage is double-edged. The minimum standards are defined in the law without regard to the rates used to calculate actual values of the policy and the rates used to calculate actual values are no longer restricted by the indirect requirement that they be acceptable for use in calculating minimum standard values. The result is that actual policy values may be calculated using any interest rate or rates as long as the resulting values exceed the minimum values defined by the law.

2. Amount of Paid-Up Nonforfeiture Benefit. Section 2(a) requires that a policy provide "a paid-up nonforfeiture benefit...of such amount as may be hereinafter specified," That amount is specified in section 4: "...shall be such that its present value...shall be at least equal to the cash surrender value..." Note that it is stated in the form of a minimum requirement. Policies may provide for paid-up nonforfeiture benefits in amounts greater than the minimum. One obvious way to do so is to use a higher interest rate. New language added in 1980 makes this more clear:

   > A company may calculate the amount of any guaranteed paid-up nonforfeiture benefits including any paid-up additions under the policy on the basis of an interest rate no lower than that specified in the policy for calculating cash surrender values. (5-c(8)(c)).

At the time a paid-up nonforfeiture benefit is actually provided, the company is given a further option to provide a more valuable benefit than that guaranteed under the policy by language added to section 2(a) in 1980:

> In lieu of such stipulated paid-up nonforfeiture benefit, the company may substitute, upon proper request not later than sixty days after the due date of the premium in default, an actuarially equivalent alternative paid-up nonforfeiture benefit which provides a greater amount or longer period of death benefits or, if applicable, a greater amount or earlier payment of endowment benefits.

The fact that the amount of the paid-up benefit actually provided may have been determined using a higher interest rate than the rate specified in the policy for calculating cash surrender values should be kept in mind when reviewing the next two sections.

3. Cash Surrender Value of Paid-Up Nonforfeiture Benefits. The cash surrender value of a policy continued under a paid-up nonforfeiture benefit is required by section 3 to be at least equal to the present value of the future benefits. The interest rate to be used in that calculation is covered by language added in 1980:

> Under any paid-up nonforfeiture benefit, including any paid-up dividend additions, any cash surrender value available, whether or not required by section two, shall be calculated on the basis of the mortality table and rate of interest used in determining the amount of such paid-up nonforfeiture benefit and paid-up dividend additions, if any. (5-c(8)(b)).

4. Valuation of Paid-Up Nonforfeiture Benefits. The interest rate used in determining the minimum standard for the valuation of a life insurance policy does not change when the policy is continued under a paid-up nonforfeiture benefit.

For example, for policies issued on and after the effective date of the 1976 amendments and before the operative date of section 5-c of the Standard Nonforfeiture Law for Life Insurance, the Standard Valuation Law distinguished between single premium life insurance policies and other policies. The 5-1/2 percent interest rate permitted for the valuation of single premium life insurance is one percent higher than the rate permitted or other life insurance. The higher single premium rate does not apply to life insurance policies continued as paid-up nonforfeiture benefits.

Any argument that the higher rate should be permitted for valution of paid-up nonforfeiture benefits would probably involve the point that continuation as paid-up insurance is comparable to the purchase of a single premium policy. The argument for the more liberal treatment is weaker here than in the single premium case since those policies issued in a given year which are eventually continued on a paid-up nonforfeiture

status are so continued at various times over several years following the issue of the policies and the establishment of the valuation standards.

5. Paid-up Dividend Additions. The minimum standards for the calculation of reserves and cash surrender values for paid-up additions are the same as those discussed in sections 3 and 4 for paid-up nonforfeiture benefits. The Standard Laws provide for this by appropriate use of the phrase "including any paid-up additions." Of course, this does not mean that reserves held and benefits provided must be on the same basis; it merely requires that paid-up additions and nonforfeiture benefits are subject to the same minimum standards.

ACTUARIAL GUIDELINE XIII

GUIDELINE CONCERNING THE COMMISSIONERS' ANNUITY RESERVE VALUATION METHOD

Preamble. At its December 1976 meeting, the NAIC adopted the Commissioners' Annuity Reserve Valuation Method (CARVM) and incorporated it in its model Standard Valuation Law. CARVM is now included in the laws of nearly all of the states. Differences in interpretations of CARVM have developed in practice, particularly on whether and under what conditions surrender charges may be taken into account in determining CARVM reserves. This guideline is intended to clarify which surrender charge factors may be taken into account and which are to be disregarded under CARVM.

Reserves according to CARVM depend in part upon the present values of "future guaranteed benefits, including guaranteed nonforfeiture benefits." It has always been recognized that this phrase, as used in the NAIC model Standard Valuation Law, includes cash surrender values based on contractual guarantees after reduction for any contractual surrender charges available to the insurer. This is illustrated in the Proceedings. See proceeding of the National Association of Insurance Commissioners. 1 (1977), 538-45.

Guideline. The phrase, "future guaranteed benefits, including guaranteed nonforfeiture benefits," as used in CARVM include the cash surrender values based on contractual guarantees after reduction for any surrender charges available under the contract.

In recent years, annuity contracts with contingent surrender charges have become more prevalent. For example, a contract may provide the option to surrender without surrender charge if the rate at which interest is credited falls below a specified rate, referred to in this guideline as the "bail-out" rate. Contingent surrender charges may not be available upon cash surrender at future contract anniversaries, and it is not consistent with the conservative nature of CARVM to reduce the value of future guaranteed benefits on account of such contingent surrender charges.

The value of future guaranteed benefits under CARVM may not be reduced by contingent surrender charges which may not be available upon cash surrender.

There may be some contracts with contingent surrender charges with bail-out rates which are so low that it would not be contrary to the conservative intent of CARVM to treat such surrender charges as available. The calendar year

statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty years, which is used in the Standard Valuation law in connection with the definition of guaranteed duration for most annuities and guaranteed interest contracts, provides an appropriate measure for this purpose. Whether or not such surrender charges should be treated as available should be determined as of December 31, 1984 for contracts in force at the date and as of the date of issue for contracts subsequently issued.

For contracts issued on and after January 1, 1985, contingent surrender charges with bail-out rates less than or equal to the calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty years issued in the same year may be treated as available. For contracts issued prior to January 1, 1985, contingent surrender charges with bail-out rates less than or equal to 6.00% the calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty years issued in 1984 may be treated as available.

There are some contracts with contingent surrender charges with bail-out rates which are a function of an external index whose future values are not known. Judgment is required to determine whether or not such surrender charges may be treated as available. Comparison to the calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty years may be useful.

For contracts with contingent surrender charges with bail-out rates which are a function of an external index, a judgment as to the availability of the surrender charges may be made by comparing historical values of the function with corresponding values of the calendar year statutory valuation interest rate for life insurance with guarantee duration in excess of twenty years. If the values of the function have generally been less than or equal to the valuation rates, then the surrender charges may be treated as available.

For the purpose of this guideline, in the case of a variable annuity that offers the policyholder a choice of multiple investment options, a surrender charge that may be waived for all the accounts of the contract by reference to one or more of the accounts will be treated as a contingent surrender charge that may not be available upon cash surrender with respect to the entire contract. If no surrender charge is imposed on transfers among the accounts, and the surrender charge may be waived for one account, provided the formula for the availability of the waiver is set at the date of issuance, then the surrender charge will be treated as a contingent surrender charge that may not be available upon cash surrender with repsect to the entire contract.

Since this guideline is intended to apply to all contracts in force that are subject to CARVM, its application may work an undue hardship on some insurers who have, on the basis of good faith interpretation of CARVM, held reserves less than required by this guideline. In cases of severe hardship, state insurance commissioners may wish to permit insurers to conform on a gradual basis.

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ACTUARIAL GUIDELINE XIV

SURVEILLANCE PROCEDURE FOR REVIEW OF THE ACTUARIAL OPINION FOR LIFE AND HEALTH INSURERS

To assist regulators in their responsibility for surveillance of life and health insurers, the NAIC adopts the following interim procedure for use of the Actuarial Opinion to be used until such time as model legislation and/or regulations are adopted and become effective.

1. The regulator should accept Actuarial Opinions only from qualified actuaries. The educational and experience standards established by the American Academy of Actuaries for this purpose offers evidence that an individual is so qualified.

2. The regulator should determine if an opinion is qualified in any respect, or omits items from the outline provided in the Instructions to the Blank. If so, a follow up with the actuary rendering the opinion as to the nature of the qualification or omission is appropriate if the opinion does not provide a satisfactory explanation.

3. The regulator should examine the circumstances where the actuary rendering the opinion differs from the prior actuary, and ascertain the reasons for the charge. In come cases the regulator may wish to discuss the change with the current and prior actuaries.

4. The regulator should, if desired, obtain for reviews, documentation supporting the Actuarial Opinion. Except in matters of professional discipline, the regulator's use of these documents should be considered within the Department's guidelines for confidential information.

5. The regulator may require that the actuary furnish an Actuarial Report supporting the Actuarial Opinion. The report should conform to the standards of the American Academy of Actuaries with respect to Actuarial Reports (Opinion 3 to the Guides to Professional Conduct). It should document the methodology and approach to assumptions used in making the opinions and, additionally, provide specific details in reference to items in 6 through 10 below if such details are required by the regulator.

6. In the Actuarial Report, the actuary providing the opinion should refer to the NAIC Insurance Regulatory Information System (IRIS) ratios, point out ratio values outside the prior year's range of usual values, and provide explanations for those which are significant.

7. In the Actuarial Report, the actuary providing the opinion should make specific reference to the extent to which the good and sufficient analysis considered all the unmatured obligations of the company, in aggregate, guaranteed under the terms of its policies. (Note: To the extent that the insurer declares guarantees more favorable than those in the policy, such declared guarantees shall be used in the calculation of all the unmatured obligations.)

8. In the Actuarial Report, the actuary providing the opinion should make specific reference as to whether the good and sufficient anaylsis, with respect to annuities and other products with benefits (guaranteed or non-guaranteed) sensitive to interest rates, considered future insurance and investment cash flows as they would emerge under a reasonable range of future interest rate scenarios, and if so, what those considerations were.

9. In the Actuarial Report, the actuary providing the opinion should make specific reference as to whether the good and sufficient analysis considered the inter-relationships of assumptions with respect to guaranteed benefit payments, future expenses, policyowner dividends, and post-issue premium or benefit adjustments, especially among persistency, mortailty, morbidity, inflation, and interest rates, and, if so, what those considerations were.

10. In the Actuarial Report, the actuary providing the opinion should document the extent to which the opinion is influenced by a continuing business assumption, and, if the impact is material, comment on the company's plan of operations with regard to this assumption as it affects assumed expenses and interest rates, and future reserve requirements.

11. A review of the documentation obtained in (4) above, undertaken or sponsored by the regulator, should:

    a. Be done by a qualified reviewer.

    b. Emphasize an examination of the appropriateness of the actuary's work process, methodology, and approach to assumptions.

12. If at any time during the review, the regulator requires more information deemed to be material to the development of the opinion, the company would be expected to comply with requests for such information.

ACTUARIAL GUIDELINE XV

ILLUSTRATIONS GUIDELINE FOR VARIABLE LIFE INSURANCE MODEL REGULATION

Any sales illustration shown or furnished in connection with the sale of Variable Life Insurance must conform with the following requirements except that these requirements only apply to the variable portion of contracts with fixed variable funding options. Item 9 specifically pertains to variable life insurance contracts offering both fixed and variable funding options.

1) The hypothetical interest rates used to illustrate accumulated policy values must be an annual effective gross rate after brokerage expenses and priority and any deductions for taxes, expenses and contract charges.

2) If illustrations of accumulated policy values are shown then for the highest interest rate used one illustration must be based solely upon guarantees contained in the policy contract being illustrated. (For example, if the illustration includes the effect of mortaility charges and administrative charges which are below the guaranteed maximums for

such charges, an illustration must be prepared which involves the effect of the maximum charges).

3) Except for illustrations contained in the prospectus, the pattern of premium payments used in an illustration should be the initial pattern requested by the proposed policyholder at inception or upon charges in face amount requested by the policyholder.

4) If the illustrated policy contract provides for a variety of investment options, the illustration may either use an asset charge which is reasonably representative or use the asset charge of a particular option. The illustration should clearly identify the asset charge and either label it "hypothetical" or identify the fund.

5) The illustration must disclose the transaction charges which will be levied against the contract because of transactions requested in accordance with rights and privileges specified in the policy contract. Any charge for the excerise of a right or privilege upon which the illustration is based must be reflected in the illustrated values. The nature of any other such charges must be disclosed in a clear statement accompanying such illustrations. (For example, a charge to switch from one investment option or death benefit option to another).

6) A clear statement must be made following the table of illustrated accumulated policy values that use of hypothetical investment results does not in any way represent actual results or suggest that such results will be achieved and must indicate that the policy values which actually arise will differ from those shown whenever the actual investment results differ from the hypothetical rates illustrated. Assumptions upon which illustrations are based must be clearly disclosed.

7) Any sales illustration to a prospective policyholder must reflect the policy being presented accurately. Misleading statements or captions or other misrepresentations are prohibited.

8) The requested sales illustration must be printed clearly and legibly on hard paper copy. An illustration displayed on a computer screen may be used in addition to, but not as a substitute for, hard paper copy.

9) In connection with variable life insurance contracts offering both fixed and varible funding options:

   a) An illustration of the variable funding option must comply with these guidelines.

   b) If an illustration of the fixed funding option is shown, accumulated policy values must be shown on the basis of guaranteed rates. One or more additional rates may also be shown but such rates may not exceed current rates.

   c) A summary illustration may be given in which results from comparable illustrated and hypothetical interest rates are combined. Such summary must cross-reference to the

accompanying separate illustrations of the fixed and variable funding options.

10) Nothing herein shall prohibit the distribution to the prospective policyholder of illustrations in addition to those required by Article VII of the NAIC Model Variable Life Insurance Regulation provided that, except for Item 3 which shall only apply to required illustrations under Article VII, such additional illustrations comply with the standards set forth herein.

ACTUARIAL GUIDELINE XVI

CALCULATION OF CRVM RESERVES ON SELECT MORTALITY AND/OR SPLIT INTEREST

Text:

When CRVM reserves are bing calculated, it is necessary to determine the value of ${}_{19}P_{x+1}$. The Standard Valuation Law permits the use of Select Mortality Factors with the 1980 CSO Table. While the maximum valuation interest rate for any policy is level for all durations, the law permits the use of other interest rates as long as the resulting reserves are not less than those according to the minimum standard. Thus, it is possible to calculate reserves by the CRVM method using split interest rates, i.e., interest rates that are not the same at all durations.

When either Select Mortality Factors or split interest are involved, the "net level annual premium on the nineteen year premium whole life plan" is the renewal net level premium for a 20 payment life valued on the full preliminary term basis. That is ${}_{19}P^{[x]+1}$ should be used instead of, for example ${}_{19}P^{[x+1]}$.

Background Information:

The Report of the Society of Actuaries Committee on Specifications for Monetry Values - 1980 CSO Tables recommend this approach. This Report was accepted by the Board of Governors of the Society and forwarded to the NAIC early in 1984. This approach is logical because it is consistent with the calculation of the "net level annual premium equal to the present value, at the date of issue, of such benefits provided for after the first policy year, divided by the present value, at the date of issue, of an annuity of one per annum payable on the first and each subsequent anniversary of such policy on which a premium falls due..." (see section 4 of the Standard Valuation Law, emphasis added).

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ACTUARIAL GUIDELINE XVII

CALCULATION OF CRVM RESERVES WHEN DEATH BENEFITS ARE NOT LEVEL

Text:

In the definition of the Commissioners Reserve Valuation Method, the Standard Valuation Law (section 4) refers to the "net level annual premium on the nineteen year premium whole life plan for insurance of the same amount..." The law does not define "the same amount" for cases when death benefits are not level. For policies issued after the operative date of section 5-c of the Standard Nonforfeiture Law for Life Insurance (section 5-c provides for the use of the 1980 CSO Table, among other things) "the same amount" is to be taken as the renewal 9 year arithmetic average, i.e., the arithmetic average of the death benefit at the beginning of each of policy years 2 through 10, inclusive.

Background Information:

The Report of the Society of Actuaries Committee recommended this approach. Walter O. Menge in his paper Commissioner Reserve Valuation Method, RAIA XXXV (see pp 277ff, especially p 283), defined a "equivalent level renewal amount" which has been accepted and still is the appropriate function for policies issued before the operative date of section 5-c of the Standard Nonforfeiture Law for Life Insurance. The Society Committee indicated that the strongest factor that weighed in its conclusion was the effect on reserves for such plans as jumping juvenile. Menge noted the similarity between his definition of "equivalent level renewal amount" and the definition of "equivalent uniform amount" in section 5 of the Standard Nonforfeiture Law for Life Insurance. In the same way, the function prescribed above is consistent with the "average amount of insurance" in section 5-c of the Standard Nonforfeiture Law for Life Insurance. A principal reason for the change in the Standard Nonforfeiture Law was to simplify calculations, and this guideline will also have that result.

ACTUARIAL GUIDELINE XVIII

CALCULATION OF CRVM RESERVES ON SEMI-CONTINUOUS, FULLY CONTINUOUS OR DISCOUNTED CONTINUOUS BASIS

Text:

The Standard Valuation Law uses the "excess of (a) over (b)" in the definition of the modified net premiums in section 4. If reserves are calculated on a basis other than curtate, i.e., using semi-continuous, fully continuous or discounted continuous functions, the excess of (a) over (b) may be calculated using the same basis (semi-continuous, etc.).

Background Information:

The Report of the Society of Actuaries Committee recommended this approach. The excess of (a) over (b) is sometimes referred to as the initial expense allowance. Basing this expense allowance on curtate functions is

conservative as this results in the smallest amount of expense allowance. Also, the expense allowance is the same regardless of which type of functions are used. On the other hand, the use of curtate functions when the basic calculation is based on other functions can result in complications in calculation. The difference in the resulting reserves does not justify the additional complication.

ACTUARIAL GUIDELINE XIX

1980 CSO MORTALITY TABLE WITH TEN-YEAR SELECT MORTALITY FACTORS

Text:

The Standard Valuation Law and the Standard Nonforfeiture Law for Life Insurance make reference to the Commissioners 1980 Standard Ordinary Mortality Table with Ten-Year Select Mortality Factors. The Ten-Year Select Mortality Factors referred to are those developed by the Society of Actuaries Special Committee to Recommend New Mortality Tables for Valuation (see Report on pp 617ff and table of 10-year select mortality factors on p 669 of TSA XXXIII).

The NAIC model regulation regarding mortality tables independent of sex refers to certain specific tables which are blends of the male and female mortality rates of the 1980 CSO Table and specifies that these tables may be used with or without Ten-Year Select Mortality Factors. The Ten-Year Select Mortality Factors to be used with these blended tables are to be determined by use of the formula in the letter from Robert J. Johansen to Ted Becker reproduced on p 457 of NAIC Proceedings-1984 Vol. I.

Background Information:

The published report of a committee of the Society of Actuaries contains two sets of alternative select mortality factors. While that committee recommended that the alternative factors not be adopted, their publications has caused come confusion.

ACTUARIAL GUIDELINE XX

JOINT LIFE FUNCTIONS FOR 1980 CSO MORTALITY TABLE

Text:

The tables of uniform seniority and the "Ultimate 1xx tables" in Appendix 5 of the Report of the Society of Actuaries Committee on Specifications for Monetary Values - 1980 CSO Tables are acceptable for use in calculating reserves or nonforfeiture values for joint life policies on the 1980 CSO basis. These tables from Appendix 5 of the report are reproduced on the following pages of this Actuarial Guideline. (Note: These tables are numbered A5-1, A5-6 and A5-7 to coincide with the page numbers of these tables in Appendix 5 of the Society Committee Report. These are the only tables considered necessary for the purposes of this guideline.)

Other methods of calculating joint life functions may also be acceptable. In particular, it is acceptable to calculate "exact" joint life functions using published 1980 CSO mortality rates for the actual ages and genders of the lives to be insured.

1980 CSO AND 1980 CET TABLES

Tables showing the deduction to be made from the age of the older of two lives in order to obtain the equivalent equal ages. The equivalent equal ages are then used to enter tables of functions derived from tables based on one male and one female of the same age.

Male/Male		Older Male/Younger Female		Older Female/Younger Male		Female/Female	
Difference in Ages	Deduct from Older Age	Difference in Ages	Deduct from Older Age	Difference in Ages	Deduct from Older Age	Difference in Ages	Deduct from Older Age
0- 1 Years	-2	0- 1 Years	0	0 Years	0	0- 1 Years	3
2- 3	-1	2- 4	1	1- 2	1	2- 3	4
4- 6	0	5- 8	2	3- 4	2	4- 6	5
7- 9	1	9- 14	3	5- 6	3	7- 9	6
10- 13	2	15- 27	4	7- 8	4	10- 13	7
14- 19	3	28- 54	5	9- 11	5	14- 20	8
20- 32	4	55 & Over	6	12- 14	6	21- 48	9
33- 55	5			15- 18	7	49- 70	8
56 & Over	6			19- 25	8	71 & Over	7
				26- 47	9		
				48- 70	8		
				71 & Over	7		

It is not appropriate to apply values from the FEMALE/FEMALE column so that a negative joint equal age results. In such situations equivalent equal age zero should be used.

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ULTIMATE ℓ_{xx} TABLES
MALE/FEMALE - JOINT EQUAL AGES

Age	1980 CSO ANB	1980 CET ANB	Age	1980 CSO ANB	1980 CET ANB
0	60,560,928	16,765,573,343	50	50,059,381	12,731,016,815
1	60,133,368	16,611,833,035	51	49,476,690	12,538,651,151
2	60,016,709	16,554,688,329	52	48,854,768	12,334,020,364
3	59,908,679	16,500,057,858	53	48,189,855	12,115,954,884
4	59,802,641	16,446,102,669	54	47,476,163	11,882,965,072
5	59,699,780	16,393,146,218	55	46,711,322	11,634,492,272
6	59,600,678	16,341,343,876	56	45,894,341	11,370,389,297
7	59,505,913	16,290,849,123	57	45,025,102	11,090,791,424
8	59,415,464	16,241,650,759	58	44,105,689	10,796,774,543
9	59,328,717	16,193,575,473	59	43,138,010	10,489,174,436
10	59,243,877	16,146,128,297	60	42,120,816	10,168,205,698
11	59,160,343	16,099,143,064	61	41,050,947	9,833,163,320
12	59,073,969	16,051,489,601	62	39,922,456	9,482,414,384
13	58,981,223	16,002,211,528	63	38,727,178	9,114,117,409
14	58,878,596	15,950,364,363	64	37,455,765	8,726,038,290
15	58,763,783	15,895,335,606	65	36,104,361	8,317,746,958
16	58,635,678	15,836,840,771	66	34,673,184	7,890,297,942
17	58,494,366	15,774,918,724	67	33,168,368	7,446,389,780
18	58,341,111	15,709,926,059	68	31,598,177	6,989,702,695
19	58,180,090	15,643,001,774	69	29,974,031	6,524,328,290
20	58,012,531	15,574,485,426	70	28,301,780	6,052,945,571
21	57,841,394	15,505,178,966	71	26,582,447	5,577,062,990
22	57,669,027	15,435,715,764	72	24,815,246	5,097,324,032
23	57,497,173	15,366,563,757	73	22,997,777	4,614,505,500
24	57,326,406	15,297,875,217	74	21,131,047	4,130,490,018
25	57,156,720	15,229,646,694	75	19,226,083	3,649,618,370
26	56,989,251	15,162,179,359	76	17,303,859	3,178,781,104
27	56,822,842	15,095,162,526	77	15,392,302	2,726,027,311
28	56,656,351	15,028,290,956	78	13,522,753	2,299,540,338
29	56,488,648	14,961,264,778	79	11,725,985	1,906,364,931
30	56,318,617	14,893,789,474	80	10,025,717	1,551,018,508
31	56,145,156	14,825,724,856	81	8,438,546	1,235,758,486
32	55,966,614	14,756,488,721	82	6,977,243	961,383,029
33	55,783,044	14,686,100,270	83	5,651,637	727,555,449
34	55,592,824	14,614,138,379	84	4,470,897	533,319,971
35	55,393,802	14,540,044,697	85	3,444,826	377,233,215
36	55,185,521	14,463,709,462	86	2,579,176	256,609,122
37	54,964,779	14,384,303,697	87	1,872,714	167,383,564
38	54,728,980	14,301,162,422	88	1,316,256	104,405,498
39	54,476,679	14,213,496,296	89	893,896	62,098,302
40	54,204,296	14,119,829,355	90	585,350	35,106,033
41	53,909,967	14,019,719,765	91	368,642	18,789,100
42	53,590,820	13,911,767,923	92	222,531	9,470,646
43	53,246,767	13,795,743,779	93	128,118	4,461,337
44	52,876,702	13,671,168,213	94	69,801	1,940,503
45	52,480,127	13,537,874,323	95	35,420	760,483
46	52,055,563	13,395,455,885	96	16,202	255,127
47	51,602,680	13,243,953,279	97	6,225	65,264
48	51,120,195	13,083,039,247	98	1,699	9,381
49	50,606,437	12,912,305,585	99	200	200

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ULTIMATE ℓ_{xx} TABLES
MALE/FEMALE - JOINT EQUAL AGES

Age	1980 CSO ALB	1980 CET ALB	Age	1980 CSO ALB	1980 CET ALB
0	60,347,148	16,688,703,189	50	49,768,036	12,634,833,983
1	60,075,038	16,583,260,682	51	49,165,729	12,436,335,758
2	59,962,694	16,527,373,094	52	48,522,312	12,224,987,624
3	59,855,660	16,473,080,264	53	47,833,009	11,999,459,978
4	59,751,210	16,419,624,444	54	47,093,742	11,758,728,672
5	59,650,229	16,367,245,047	55	46,302,832	11,502,440,784
6	59,553,296	16,316,096,500	56	45,459,722	11,230,590,360
7	59,460,688	16,266,249,941	57	44,565,396	10,943,782,984
8	59,372,090	16,217,613,116	58	43,621,850	10,642,974,490
9	59,286,297	16,169,851,885	59	42,629,413	10,328,690,067
10	59,202,110	16,122,635,680	60	41,585,882	10,000,684,509
11	59,117,156	16,075,316,332	61	40,486,702	9,657,788,852
12	59,027,596	16,026,850,564	62	39,324,817	9,298,265,896
13	58,929,910	15,976,287,946	63	38,091,472	8,920,077,850
14	58,821,190	15,922,849,984	64	36,780,063	8,521,892,624
15	58,699,730	15,866,088,188	65	35,388,772	8,104,022,450
16	58,565,022	15,805,879,748	66	33,920,776	7,668,343,861
17	58,417,738	15,742,422,392	67	32,383,272	7,218,046,238
18	58,260,600	15,676,463,916	68	30,786,104	6,757,015,492
19	58,096,310	15,608,743,600	69	29,137,906	6,288,636,930
20	57,926,962	15,539,832,196	70	27,442,114	5,815,004,280
21	57,755,210	15,470,447,365	71	25,698,846	5,337,193,511
22	57,583,100	15,401,139,760	72	23,906,512	4,855,914,766
23	57,411,790	15,332,219,487	73	22,064,412	4,372,497,759
24	57,241,563	15,263,760,956	74	20,178,565	3,890,054,194
25	57,072,986	15,195,913,026	75	18,264,971	3,414,199,737
26	56,906,046	15,128,670,942	76	16,348,080	2,952,404,208
27	56,739,596	15,061,726,741	77	14,457,528	2,512,783,824
28	56,572,500	14,994,777,867	78	12,624,369	2,102,952,634
29	56,403,632	14,927,527,126	79	10,875,851	1,728,691,720
30	56,231,886	14,859,757,165	80	9,232,132	1,393,388,497
31	56,055,885	14,791,106,788	81	7,707,894	1,098,570,758
32	55,874,829	14,721,294,496	82	6,314,440	844,469,239
33	55,687,934	14,650,119,324	83	5,061,267	630,437,710
34	55,493,313	14,577,091,538	84	3,957,862	455,276,593
35	55,289,662	14,501,877,080	85	3,012,001	316,921,168
36	55,075,150	14,424,006,580	86	2,225,945	211,996,343
37	54,846,880	14,342,733,060	87	1,594,485	135,894,531
38	54,602,830	14,257,329,359	88	1,105,076	83,251,900
39	54,340,488	14,166,662,826	89	739,623	48,602,168
40	54,057,132	14,069,774,560	90	476,996	26,947,566
41	53,750,394	13,965,743,844	91	295,586	14,129,873
42	53,418,794	13,853,755,851	92	175,324	6,965,992
43	53,061,734	13,733,455,996	93	98,960	3,200,920
44	52,678,414	13,604,521,268	94	52,610	1,350,493
45	52,267,845	13,466,665,104	95	25,811	507,805
46	51,829,122	13,319,704,582	96	11,214	160,196
47	51,361,438	13,163,496,263	97	3,962	37,322
48	50,863,316	12,997,672,416	98	950	4,790
49	50,332,909	12,821,661,200	99	100	100

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ACTUARIAL GUIDELINE XXI

CALCULATION OF CRVM RESERVES WHEN (b) IS GREATER THAN (a) AND SOME RULES FOR DETERMINATION OF (a)

Text:

The Standard Valuation Law used the "excess of (a) over (b)" in the definition of the modified net premiums in section 4. If the excess of (a) over (b) is negative and the policy is issued on or after January 1, 1987, the excess is to be taken as zero.

The Standard Valuation Law defines (a) as a net level premium, subject to a maximum. The net level premiums for the policy are a uniform percentage of the respective gross premiums such that the present value at issue of the net level premiums payable on and after the first anniversary is equal to the present value at issue of the benefits provided for by the policy after the first anniversary. The net level premium used in determining (a) is the net level premium payable on the first anniversary. The maximum for (a) is the net level premium on the nineteen year premium whole life plan for a policy with level premiums issued at an age one year higher than the age at issue of the policy.

The value of (a) is to be calculated as defined in the Standard Valuation Law, even if the resulting reserves are not equal to those according to the full preliminary term method.

Background Information:

The Report of the Society of Actuaries Committee on Specifications for Monetary Values - 1980 CSO Tables recommended that a negative excess of (a) over (b) be taken as zero. Walter O. Menge in his paper Commissioners Reserve Valuation Method, RAIA XXXV (see pp 260 and 261) pointed out the illogic of a negative excess of (a) over (b). A negative excess, if used, would result in CRVM reserves that are greater than net level premium reserves. This principle has been recognized since Menge wrote his paper, but some actuaries are not aware of the paper.

Defining the net level premiums as being a uniform percentage of the respective gross premiums is consistent with the definition in Menge's paper. Since the denominator of (a) is the present value of an annuity commencing on the first anniversary, the logical value for (a) is the net level premium (as defined) payable on the first anniversary.

In his paper, Menge indicates that CRVM reserves are equal to full preliminary term reserves unless the value of (a) is the maximum defined in the Standard Valuation Law, or unless the excess of (a) over (b) is negative. Menge does not appear to have considered the case where the gross premium for the first policy year does not equal the gross premium for the second policy year. For such policies a literal application of the Standard Valuation Law does not result in full preliminary term reserves.

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ACTUARIAL GUIDLINE XXII

INTERPRETATION REGARDING NONFORFEITURE VALUES FOR POLICIES WITH INDETERMINATE PREMIUMS

Text:

Indeterminate premium policies provide that premiums after issue will be determined by the insurer based on then current assumptions as to future experience. The policies also provide a schedule of maximum premiums which the premiums actually charged will not exceed.

The minimum nonforfeiture values for an indeterminate premium policy are the greater of those assuming that the gross premiums for the policy are (i) those according to the schedule of gross premiums based on current assumptions at issue and illustrated to prospective policyholders, or (ii) those according to the schedule of maximum gross premiums included in the policy.

Background Information:

Indeterminate premium policies are a fairly recent development in life insurance. They can serve a legitimate function by enabling a nonparticipating policy to include a safety margin that need not be called upon unless it is needed. Indeterminate premiums are sometimes used to avoid deficiency reserve requirements. In general, regulators have not objected to this.

Section 6 of the Standard Nonforfeiture Law for Life Insurance refers to "any plan of life insurance which provides for future premium determination, the amounts of which are to be determined by the insurance company based on then estimates of future experience...." This is a direct reference to the types of life insurance policies commonly known as indeterminate premium plans (see "Detailed Analysis of Recommended Changes in the Standard Valuation Law and the Standard Nonforfeiture Law for Life Insurance; NAIC Proceedings - 1981 Vol. II, p. 831). The Standard Nonforfeiture Law for Life Insurance provides that minimum nonforfeiture values for such policies are to be computed by a method consistent with the principles of the Law as determined by regulations promulgated by the commissioner.

Section 5 and Section 5-c of the Standard Nonforfeiture Law for Life Insurance each provide that "the adjusted premiums for any policy shall be calculated on an annual basis and shall be...(a) uniform percentage of the respective premiums specified in the policy for each policy year...." Indeterminate premium policies provide for two amounts of premiums for each year; the actual premium to be charged and the maximum amount of the actual premium. This raises the question of which premium is to be used in setting adjusted premiums as a uniform percentage of the gross premiums.

The maximum premiums have the advantage that they are known at the time the policy is issued. However, use of maximum premiums to determine minimum values can lead to manipulation. A level premium whole life policy has a readily determined set of minimum values in accordance with the Standard Nonforfeiture Law for Life Insurance. If the policy has indeterminate premiums and the premiums illustrated to the customer (with

proper disclosure of their indeterminate nature) are level for life, there should be no change in the minimum values. If the minimum values were determined by reference to the maximum premiums and not to the schedule of premiums on the current assumptions, introduction of maximum premiums that increase by duration would result in lower minimum values.

This guideline was written with policies other than universal life insurance in mind. However, it is possible to design a fixed premium universal life insurance policy to which this guideline would be applicable.

ACTUARIAL GUIDELINE XXIII

GUIDELINE CONCERNING VARIABLE LIFE INSURANCE SEPARATE ACCOUNT INVESTMENTS

A variable life insurance separate account shall be deemed to have sufficient net investment income and readily marketable assets to meet anticipated obligations under policies funded by the account, as required by (statuary reference for state), if, and only if, it can be demonstrated to the satisfaction of the Commissioner that the sum of the market value of readily marketable assets in the account at the date of valuation, plus the anticipated net investment income for the calendar year following the date of valuation exceeds by at least 15% the anticipated death benefits, surrenders, withdrawals and other such obligations payable from current account values during the same period. For the purposes of this demonstration, readily marketable assets means cash or those investments which have readily ascertainable market value and which can be marketed before the close of the next business day; net investment income excludes capital gains or losses; and the value of the anticipated death benefits, surrenders, withdrawals and other such obligations payable during the calendar year following the date of the valuation shall not be estimated at less than 10% of the market value of the account assets at the date of valuation.

If a variable life insurance separate account is divided into separate series, portfolios or other investment subdivisions, each series, portfolio or investment subdivision shall comply with this subsection.

ACTUARIAL GUIDELINE XXIV

GUIDELINES FOR VARIABLE LIFE NONFORFEITURE VALUES

Minimum cash surrender values for variable life insurance policies shall be determined separately for the basic policy and any benefits and riders for which premiums are paid separately. The methods pertain to a basic policy and any benefits and riders for which premiums are not paid separately.

Minimum cash surrender values for variable life policies may be determined using option B (Retrospective Method), C (Prospective Method), or D (Maximum Charge Method).

A. Definitions

(1) "Valuation Rate" as used in this guideline means the higher of the Assumed Investment Rate (AIR) or guaranteed interest rate

included in the policy, if any, otherwise the highest valuation interest rate allowed under the Standard Nonforfeiture Law.

(2) "Net Cash Surrender Value" means the maximum amount payable to the policyowner upon surrender.

(3) "Cash Surrender Value" means the Net Cash Surrender Value plus any amounts outstanding as policy loans.

(4) "Policy Value" means the amount to which separately identified interest credits and/or investment return and mortality, expense, or other charges are made under a variable life insurance policy.

(5) "Accumulation Rate" means the net investment return and/or any interest credits applied towards the policy value.

B. Retrospective Method

The minimum cash surrender value (before adjustment for indebtedness and dividend credits) available on a valuation date shall be equal to the value using the Accumulation Rate through that date of the premiums paid minus the accumulation through that date of (i) the benefit charges, (ii) the averaged administrative expense charges for the first policy year and any insurance-increase years, (iii) actual administrative expense charges for other years, (iv) initial and additional acquisition expense charges not exceeding the initial or additional expense allowances, respectively, (v) any service charges actually made (excluding charges for cash surrender or election of a paid-up nonforfeiture benefit) and (vi) any deductions made for partial withdrawals; all accumulations being at the Accumulation Rate at which changes in policy values have been made unconditionally to the policy (or has been made conditionally, but for which the conditions have since been met), and minus any unamortized unused initial and additional expense allowance.

Accumulation for the premiums and for all charges referred to in items (i)-(vi) above shall be based on the Accumulation Rate for the applicable accounts(s) from and to such dates as are consistent with the manner in which such Accumulation Rate is credited in determining the policy value.

The benefit charges shall include the charges made for mortality and any charges made for riders or supplementary benefits for which premiums are not paid separately. If benefit charges are substantially level by duration and develop low or no cash values, then the Commissioner shall have the right to require higher cash values unless the insurer provides adequate justification that the cash values are appropriate in relation to the policy's other characteristics.

The administrative expense charges shall include charges per premium payment, charges per dollar of premium paid, periodic charges per thousand dollars of insurance, periodic per policy charges, and any other charges permitted by the policy to be imposed without regard to the policyowner's request for services.

The averaged administrative expense charges for any year shall be those which would have been imposed in the year if the charge rate or rates for each transaction or period within the year had been equal to the arithmetic average of the corresponding charge rates which the policy states will be imposed in policy years two through twenty in determining the policy value.

The initial acquisition expense charges shall be the excess of the expense charges, other than service charges, actually made in the first policy year over the averaged administrative expense charges for that year. Additional acquisition expense charges shall be the excess of the expense charges, other than service charges, actually made in an insurance-increase year over the averaged administrative expense charges for that year. An insurance-increase year shall be the year beginning on the date of increase in the amount of insurance by policyowner request (or by the terms of the policy).

Service charges shall include charges permitted by the policy to be imposed as a result of a policyowner's request for a service by the insurer (such as the furnishing of future benefit illustrations) or of special transactions.

The initial expense allowance shall be the allowance provided by Items (ii), (iii), and (iv) of Section 5, or by Items (ii) and (iii) of Section 5c(1), as applicable, of the Standard Nonforfeiture Law for Life Insurance, as amended in 1980, for a fixed premium, fixed benefit endowment policy with a face amount equal to the initial face amount of the variable life insurance policy, with level premiums paid annually until the highest attained age at which a premium may be paid under the variable life insurance policy, and maturing on the latest maturity date permitted under the policy, if any, otherwise at the highest age in the valuation mortality table. The unused initial expense allowance shall be the excess, if any, of the initial expense allowance over the initial acquisition expense charges as defined above.

If the amount of insurance is subsequently increased upon request of the policyowner (or by the terms of the policy), an additional expense allowance and an unused additional expense allowance shall be determined on a basis consistent with the above and with Section 5c(5) of the Standard Nonforfeiture Law for Life Insurance, as amended in 1980, using the face amount and the latest maturity date permitted at that time under the policy.

The unamortized unused initial expense allowance during the policy year beginning on the policy anniversary at age $x + t$ (where "x" is the issue age) shall be the unused initial expense allowance multiplied by $\frac{\ddot{a}_{x+t}}{\ddot{a}_x}$ where $\ddot{a}_{x+t}$ and $\ddot{a}_x$ are present value of an annuity of one per year payable on policy anniversaries beginning at ages $x + t$ and x, respectively, and continuing until the highest attained age at which a premium may be paid under the policy, both on the mortality guaranteed in the policy and the Valuation Rate for the policy. An unamortized unused additional expense allowance shall be the unused additional expense allowance multiplied by a similar ratio of annuities, with $\ddot{a}_x$ replaced by an annuity beginning on the date as of which the additional expense allowance was determined.

(Note: The drafters chose a whole life initial expense allowance for several reasons. Variable life insurance is generally considered a permanent life

insurance plan and most companies encourage a premium level which will provide lifetime insurance protection. Every variable life insurance policy of which the drafters are aware has a "net level premium" that could be computed which would guarantee permanent protection using some suitable life interest assumption. As a result, it is expected that most variable life insurance policies will be sold as permanent plans.

Traditional whole life insurance, which is accorded a permanent plan expense allowance by the Standard Nonforteiture Law (SNFL), is much more flexible than is often realized. Premiums may be stopped with term coverage resulting, policy loans can result in "stop and go" premiums, or a vanishing premium arrangement can be effected, all without the permanent plan expense allowance being affected. The SNFL does not require cash values for many forms of term insurance. All other permanent plans develop an expense allowance greater than that for whole life insurance under the SNFL.

The alternative of basing the initial expense allowance on a policyowner's "planned premium" was considered but rejected as artificial and subject to substantial manipulation by agents and/or insurers.)

C. Prospective Method

The minimum cash surrender value (before adjustment for indebtedness and dividend credits) available on a date as of which interest is credited to the policy shall be equal to $[(1) - (2) - (3) - (4)]$, where:

(1) is the present value of all future benefits;

(2) is the present value of future adjusted premiums. The adjusted premiums are calculated as described in Sections 5 and 5a or in Section 5c(1), as applicable, of the Standard Nonforfeiture Law for Life Insurance, as amended in 1980. If Section 5c(1) is applicable, the nonforfeiture net level premium is equal to the quantity $\frac{PVFB}{\ddot{a}_x}$,

where PVFB is the present value of all benefits at issue assuming future premiums are paid by the policyowner and all guarantees contained in the policy or declared by the insurer, and using the Valuation Rate.

$\ddot{a}_x$ is the present value of an annuity of one per year payable on policy anniversaries beginning at age x and continuing until the highest attained age at which a premium may be paid under the policy.

(3) is the present value of any quantities analogous to the nonforfeiture net level premium which arise because of guarantees declared by the insurer after the issue date of the policy. $\ddot{a}_x$ shall be replaced by an annuity beginning on the date as of which the declaration became effective and payable until the end of the period covered by the declaration.

(4) is the sum of any quantities analogus to (2) which arise because of structural changes in the policy.

(Note: Structural changes are those changes which are separate from the automatic workings of the policy. Such changes usually would be initiated by the policyowner and include changes in the guaranteed benefits, changes in latest maturity date, or changes in allowable premium payment period.)

Future benefits are determined by (1) projecting the policy value, taking into account future premiums, if any, and using the guaranteed interest rate, if any; otherwise, the lesser of the AIR, if any, or the highest state approved nonforfeiture interest rate, and using the morality, expense deductions, etc. contained in the policy or declared by the insurer; and (2) taking into account any benefits guaranteed in the policy or by declaration which do not depend on the policy value.

All present values shall be determined using (i) an interest rate (or rates) specified by the Standard Nonforfeiture Law for Life Insurance, as amended in 1980, for policies issued in the same year and (ii) the morality rates specified by the Standard Nonforfeiture Law for Life Insurance, as amended in 1980, for policies issued in the same year of contained in such other table as may be approved by the Commissioner for this purpose.

(Note: The types of quantities included in (3) are increased current interest rate credits guaranteed for a future period, decreased current mortality rate charges guaranteed for a future period, or decreased current expense charges guaranteed for a future period.)

D. Maximum Charge Method

(1) Definitions: Wherever used in this Section, the terms have the respective meanings set forth or indicated in this paragraph.

(a) Policy Value is equal to gross premiums paid (excluding separate indentified premiums for riders or supplementary benefits which are not credited to policy value) plus net investment income (which may be positive or negative and may vary based on policy loans) less the following as specified in the policy: (i) adminsitrative charges (which may be taken in part from premiums and in part from policy value), (ii) acquisition and other charges, (iii) deferred acquistion and other charges, (iv) benefit charges, (v) service charges, (vi) partial withdrawals, and (vii) partial surrender charges.

(b) Benefit Charges made to the Policy Value are the mortality charges made for life insurance on the insured person or persons and any charge made for riders and supplementary benefits.

(c) Service Charges made to the Policy Value are charges for transactional costs such as partial withdrawals, reallocations of policy values and benefit illustrations. Transactional charges shall not be assessed unless specifically permitted by law or regulation for transactions made under mandatory policy provisions.

(d) Adminstrative Charge is a per policy charge made regularly to the Policy Value (or deducted from premiums on scheduled premium policies) for the cost of administration. This charge may not exceed $5.00 per month in 1986. In subsequent years the limit for any new or inforce policy shall be the product of $5.00 and the ratio (not to exceed 2.00) of (1) the Consumer Price Index (for all urban households) for the September preceding the year for which the determination is being made to (2) the Consumer Price Index for September 1985. The Commissioner may allow a higher charge upon an insurer demonstrating a justification.

(e) Acquisition and Other Charges are charges deducted from gross premiums before they are credited to Policy Value and/or made to the Policy Value. They may be expressed as a percentage of premium or a dollar amount per $1,000 of insurance or a dollar amount per premium payment or a per policy charge (other than the Administrative Charge). They do not include charges made as a reduction in investment return. These charges may vary by premium size, policy size and by policy year.

(f) Excess First Year Acquisition and Other Charges shall be the maximum excess of (A) over (B) based on the assumption that any premium (other than a single premium) payable in the first policy year is also payable during the entire premium paying period. (A) is the Acquisition and Other Charge made in the first policy year and (B) is the arithmetic average of the corresponding charges which the policy states would be made in policy years two through twenty.

(g) Excess Acquisition and Other Charges for a Face Amount Increase shall be the maximum excess of (A) over (B) based on the assumption that the net level whole life annual premium for the increase (as defined in (j) below) applies throughout the remaining premium paying period. (A) is the Acquisition and Other Charge for the increase, and (B) is the arithmetic average of the corresponding charges which the policy states would be made in the nineteen policy years following the increase.

(h) Net Investment Return is the actual amount credited to Policy Value net of investment expenses and/or other charges made as a reduction in investment return.

(i) The net level whole life annual premium at issue is based on the assumption of level insurance and level annual premium for life, the mortality table rate used to calculate the maximum mortality charges and an interest rate based on the higher of 4% or that specified in the policy.

(j) The net level whole life annual premium for an increase in the face amount of insurance shall be determined as of the date of the increase as though such increase were a separate policy

under (i) above. Only increases in the face amount requested buy the policyowner and increases in the face amount pursuant to the terms of the policy (e.g. an option to purchase or a cost of living increase) shall give rise to such a premium and the associated Excess Acquisition and Other Charges for a Face Amount Increase. Increases for this purpose shall not include increases in face amount resulting from a change in the death benefit option or changes in death benefit pursuant to policy terms that do not affect the face amount. Increases for this purpose shall be reduced by the amounts of any earlier decreases that have not been offset against an earlier increase. Such decreases shall include a decrease by reason of a partial withdrawal, but not a decrease resulting from a change in the death benefit option.

(k) Surrender Charge is a deferred charge made to the Policy Value in the event of a full or partial surrender of the policy, reduction in the face amount of insurance or premium, or a lapse.

(l) Cash Surrender Value is the Policy Value less any Surrender Charge, before reduction for outstanding loans or other amounts due under the policy.

(m) Deferred Acquisition and Other Charges are Acquisition and Other Charges deducted from the Policy Value after the first policy year.

(2) Cash Surrender Values determined in accordance with this subparagraph shall meet minimum requirements.

(a) If Acquisition and Other Charges do not exceed the sum of:

(1) 90% of premiums received up to the net level whole life annual premium at issue (regardless of when received).

(2) 10% of all other premiums received.

(3) 90% of the net level whole life annual premium for increases in the face amount of insurance as defined in 1(j).

(4) $10 per $1,000 of initial face amount in the first policy year.

(5) $1 per $1,000 of face amount in subsequent policy years.

(6) $10 per $1,000 of any increase in the face amount of insurance other than an increase resulting from a change in the death benefit option. Increases up to the amount of earlier decreases are included here but not in (3) above.

(7) $200 per policy in the first year.

(b) A surrender charge may be established provided that the initial surrender charge together with the actual Acquisition and Other Charges made in the first policy year (and on premiums up to the net level whole life annual premium if received after the first year) do not exceed the sum of (1), (2) in the first year, (4) and (7) in (a) above. Additional surrender charges may be established after issue in connection with an increase in face amount provided that any such additional surrender charge and any Acquisition and Other Charges made in connection with such increase do not exceed the sum of (3) and (6) in (a) above.

(c) A Deferred Acquisition and Other Charge may be charged against the Policy Value in any policy after the first, such that the total of all such charges imposed to date plus the surrender charge for that year does not exceed the maximum initial surrender charge. The Deferred Acquisition and Other Charge in any one year may not exceed the maximum allowable surrender charge for that year. Similar Deferred Acquisition and Other Charges may be imposed with respect to an increase in face amount.

(d) The maximum allowable surrender charge for any year shall be the maximum initial surrender charge multipled by $\ddot{a}_{x+t}/\ddot{a}_x$ where "x" is the issue age and "t" is the number of years since issue. Similar maximums shall be determined with respect to any additional surrender charges, with x and t based on the date of increase.

(Note: The minimum cash value methods B, C, or D are not intended to prohibit the current practice of allowing the imposition of additional surrender charges defined as follows. In the case of combination general account and separate account variable life products, additions or amounts derived from more favorable interest, mortality, and expense than those guaranteed in the policy on the general account fund and credited within 12 months prior to surrender may be subject to forfeiture upon surrender.)

E. Minimum Paid-Up Nonforfeiture Benefits

If a variable life insurance policy provides for the optional election of a paid-up nonforfeiture benefit, it shall be such that its present value shall be at least equal to the cash surrender value provided by the policy on the effective date of the election. The present value shall be based on mortality and interest standards at least as favorable to the policyowner as (1) the mortality and interest bases, if any, specified in the policy for determining the policy value or (2) the mortality and interest standards permitted for paid-up nonforfeiture benefits by the Standard Nonforfeiture Law for Life Insurance, as amended in 1980. In lieu of the paid-up nonforfeiture benefit, the insurer may substitute, upon proper request not later than sixty days after the due date of the premium in default, an actuarially equivalent alternative paid-up nonforfeiture benefit which provides a greater amount or longer period of death benefits, or, if applicable, a greater amount or earlier payment of endowment benefits.

(Note: It is possible that policies will have secondary guarantees. Such guarantees should be taken into consideration when computing minimum paid-up nonforfeiture benefits.)

Ever since the adoption of the original Standard Nonforfeiture Law (SNFL) in 1942, provision has been made for nonforfeiture calculations on the basis of substandard mortality. (See sections 5, 5-a, and 5-c of paragraph 8(e) of SNFL.) While this provision has been used infrequently in the past, it is anticipated that substandard mortality will be more frequently utilized in variable life insurance, given its flexible nature, to reflect the mortality classification assigned to the policy by the insurer.

A charge may be made at the surrender of the policy provided that the result after the deduction of the charge is not less than the minimum cash surrender value required by this guideline.