1987 VALUATION ACTUARY
SYMPOSIUM PROCEEDINGS
SESSION 5A

STATUS OF THE VALUATION ACTUARY IN THE UNITED STATES

(PANEL DISCUSSION)

MR. BURTON D. JAY: Good morning! I am the Chief Actuary at United of Omaha Life Insurance Company and also the current Chairman of the Joint Committee on the Valuation Actuary. Our session is entitled the Status of the Valuation Actuary in the United States. The purpose of this panel discussion is to report on some of the most important activities and events with respect to what has come to be know as the valuation actuary movement.

The panel members believe that the major areas involve new legislation, new standards of practice and research activities. In the legislation arena, we have the NAIC Special Committee on Valuation Law. This committee, co-chaired by Carl B. Ohman and Robert G. Maxon, has the simple task of designing a new NAIC model valuation law embracing some form of the valuation actuary concept. We will hear about the development of a new academy of actuaries standard of practice specifying how and, perhaps when, cash flow testing should be done. Bringing us up to date here will be Edward S. Silins, Principal of Coopers and Lybrand, and Chairman of the Academy's Committee on Life Insurance Financial Reporting.

Our third speaker will be Robert W. Stein, Partner, Ernst & Whinney and Chairman of the Society of Actuaries Committee on Valuation and

Related Areas. He will tell us about all of the committee's research now in progress and recently completed that will enable the valuation actuary to do a better job.

Finally, I will relate some of the recent activity of the Joint Committee on the Valuation Actuary and share other things that may be of interest. We will take a few questions or comments after each presentation.

Carl R. Ohman reported on the status of the NAIC Special Advisory Committee on the New Valuation Law. No comments were submitted.

MR. EDWARD S. SILINS: The American Academy of Actuaries Committee on Life Insurance Financial Reporting has been working in the area of cash flow testing -- that is, the related revision of Recommendation 7, for about three-to-four years. Since I have been a member or chairman of that committee throughout the entire period, I was asked to give my perspective as well as a status report of what is going on in both the Academy and Interim Accounting Standards Board arena. In addition, I will discuss some of the consequences of a potentially expended actuarial opinion for statutory reserves.

THE AAA AND CASH FLOW TESTING

First, I would like to give you a history of some of the academy activity, including the revising of Recommendation 7. The exposure draft for this revision was released in July 1985. At that time, there were no requirements either from the profession itself or externally from regulatory authorities that required any cash flow testing back in July 1985. Our intent was to be prepared to provide guidance for actuaries in the area of cash flow testing, should any regulations come down either through the NAIC or through any of the various states that might require such testing. It was not our intent to mandate cash flow testing as of that time.

Recommendation 7 focused on statutory reserve requirements and, to a lesser extent, statutory surplus testing. Our thought, however, was that we did not know the timetable indicating when the cash flow testing would ultimately be required. Our work evolved from the report by Mr. Jay, a member of the Joint Committee on the Valuation Actuary, which focused on the dual standards of minimum statutory reserves -- that is, the standard evaluation statutory reserves -- plus an adjustment area which would be determined through cash flow testing of the reserves. The report's focus was on whether the actuary could do the sufficient work in order to provide an opinion as to the adequacy of the reserves. Many actuaries have commented that such an opinion or requirement was onerous and placed a frightening responsibility on the valuation actuary. Many joked that there would be very few actuaries under age 50 who would want to sign an opinion based on cash flow testing.

Another aspect of work was that the Committee's report required outlining the actuary's scope, methodology and results. There were many concerns expressed about the preparation of the report, a few being that it was time consuming and perhaps drew attention to areas that some actuaries did not want to disclose -- areas in which short-comings existed or where short cuts were taken in order to complete the work on a timely basis. But there were many positive aspects about requiring such a report, those include a complete disclosure of all aspects of the methodology; any reliances that were made by the actuary; any givens in the areas of management prerogatives; and investment scenarios or investment strategy. All these positive aspects relate to the protection of the valuation actuary in the event of any subsequent litigation.

The original draft also focused on the C-3 risk, although it was later broadened to include other aspects. The initial draft primarily related to the C-3 risk because that was the nature of the industry's thinking at the time. The thinking of the industry has expanded to include both the C-1 and C-2 risks and the combination of risks as well. Now the preference is to address all risks in cash flow testing and not focus on any one of them. Apparently, New York liked the Recommendation 7 exposure draft as it stood because it was incorporated in Regulation 126 and much of it was incorporated without change.

All of this work leads me to draw an analogy between the valuation actuary's work and the resulting opinion, to what physicists call the "theory of everything." Physicists have long been searching for a theory of nature that incorporates known forces of nature -- nuclear, gravitational, and electromagnetic forces -- into one theory or formula. I somewhat analogize the "theory of everything" to the actuarial opinion resulting from cash flow testing, from which one can assume that the actuary has done all of his tests, analyzed the asset and liability cash flows, and, in the opinion of the actuary, has found those reserves to be sufficient. Just as physicists have not found the "theory of everything," for natural forces, to date, actuaries have not found the theory that would incorporate all of the aspects of cash flow testing for actuarial opinions. However, we should not stop pursuing it.

NEW AAA STANDARDS OF PRACTICE: CASH FLOW TESTING

The standards of practice arena has shifted from the Academy to the IASB; in particular, the Life Committee of the IASB has taken on the responsibility of drafting standards of practice for actuaries who are pursuing cash flow tests. Since I happen to be a member of the Life Committee of the IASB as well as the Academy's Committee on Life Insurance Financial Reporting, I have the privilege of acting as a liaison. Because the Academy has been active in this area, the IASB Life Committee has asked the Academy Committee on Life Insurance Financial Reporting Principles to help in drafting standards of practice for actuaries doing cash flow testing. The thinking has shifted a little bit, and I'm sure there is a variation in how severe that shift has been depending on who you ask. One difference is that the IASB is taking a proactive role, not waiting for potential regulations, but stepping in to fill a standard's vacuum that may exist. It does result from a sincere desire to enhance the standing and stature of the actuarial profession. The scope of the project for drafting standards of practice has also expanded beyond the mere testing of the reserve. What we currently contemplate is that standards are required for pricing studies; testing of alternative investment strategies; testing of renewal rating and dividend studies in the area of interest crediting; projections and forecasts that an actuary might be called upon to do; valuing blocks of business, target surplus studies; and as mentioned by John O. Montgomery, regulators are using cash flow testing to verify the transfer of risk in reinsurance treaties. I am sure there are other instances where cash flow testing can be useful.

The IASB as well as the Academy is currently discussing and focusing its attention on whether the standards which we draft should include a requirement that cash flow testing be done, and whether or not the standards should require an actuarial report. These are two issues that are being discussed and we would certainly appreciate comments from the membership. The current timetable calls for a draft of the standards of practice from the IASB some time in December 1987, and exposure to the Academy membership should be some time in 1988. I would like to encourage responses to those exposure drafts when they do come out. It certainly would give a signal to the IASB to help us gain a sense of direction of the Academy membership in this new and evolving area.

THE ACTUARIAL OPINION FOR STATUTORY RESERVES

I will now address the question of whether there should be an opinion or report concerning the valuation actuary's work. Some have expressed the belief that current statutory opinion given by the actuary has become mechanical and, hence, lost some of its credibility. Mr. Montgomery has suggested that we consider replacing the actuarial opinion with a report. Further thought needs to be given to this idea. The belief has been expressed that the absence of a report outlining the actuary's work methodology, assumptions, and reliance may lead to vulnerability in the case of litigation. Regulation 14 of the NAIC was recently adopted which allows for a regulator to request cash flow testing in specific instances in support of reserves. Many people believe that the adoption of Regulation 14 was a formality in that regulators had always had the ability to request cash flow testing in certain instances.

The current statutory standard valuation law opinion is a yes/no proposition for the most part -- that is, either the reserves meet or do not meet the prescribed reserve standard. I realize that the good and sufficient provision might cause complications in that an actuary might have to do additional work to come to that conclusion. But I feel it is still basically a yes/no proposition. When cash flow analysis comes into the picture, it is more in the nature of projection, and those projections may or may not hold true. Accordingly, in both the exposure draft that was released in early 1985 and in some of the work that is being done now, we thought that certain caveats and reliances would seem appropriate. As I indicated, these are projections and not guarantees as to what will happen. Assumptions may hold true, but then again, they may not.

Reliance is another area which would be appropriate in either a report or an opinion. The motivation behind reliance is that one person cannot be responsible for all areas within the company. There are investment strategies; there are reinsurance transactions; there are expense assumptions; there is a whole list of potential reliances including the current EDP reliance where the actuary relies on somebody to make sure the inventory of policies is appropriate. I think these are all reasons that a stated reliance is appropriate.

For my final comments, I would like to raise a question. Who really has the ultimate responsibility for company solvency: Is it the actuary or is it management in general? I don't think we can resolve that issue, nor do I think actuaries feel prepared to take on the responsibility now. At the same time, many company managements have indicated an unwillingness to assign the responsibility solely to the actuary.

In the end, it might be a moot point unless and until some problems result.

MR. ROBERT W. STEIN: I'm going to address the status of the research that the Committee on Valuation and Related Areas has been doing the last seven or eight years. I would like to address several aspects of the committee's work during that period, where we stand at this point, and what we're trying to do prospectively. The committee believes that the present time is an appropriate point in their analyses and thought processes to take stock of what has happened, where we are now, and what we can conclude from our work. First, I'd like to review the committee's role to date, what its charge has been, and how it has responded to that charge. Secondly, I'd like to touch on the present role of the committee. These views will reflect my own point of view as the chairman, although I think you would find that other committee members agree with this perception of our current role. Finally, and perhaps most importantly, I'd like to discuss the status of the research work of the committee and review certain fundamental conclusions or positions which we have drawn from that work. Conclusions might be a bit strong, but, nonetheless, they are our fundamental findings and positions at this time.

You may notice a somewhat different perspective on these issues than what Mr. Silins has been saying and you may want to compare and contrast some of Mr. Silins's remarks with my comments concerning what we can do and where we are with respect to standard setting.

My comments are based on the work of the task forces over the years. Each task force will be presenting their conclusions, findings, and positions at the Montreal meeting, but it seems appropriate, at this Valuation Actuary Symposium, to give a preview of those thoughts.

THE COMMITTEE ON VALUATION AND RELATED AREAS: THE PAST AND PRESENT ROLE

First, then, a review of the committee's past charge and role. The yearbook identifies the charge of the committee as being the study of underlying actuarial principles in connection with the valuation of assets and liabilities and in the determination of adequate surplus levels. However you read that phrase, the charge is a very broad mandate to analyze the factors impacting the values associated with assets and liabilities and provides an opportunity to explore considerations for measuring surplus needs. These are some fundamental issues and I think the committee has responded quite well.

First, of course, the committee identified and described the risks to which an insurer is exposed. You're all familiar with this work, which leads to the definition of the C risks and the formation of the C-1, C-2 and C-3 task forces, and the combination of risk task forces. These task forces were formed to handle the issues related to measuring and valuing assets and liabilities and determining surplus requirements. Each task force was charged with evaluating the risks which they were assigned -- individually, the C-1, C-2 and C-3 risks, and the combination of risks. The task forces, over the years, have addressed the way these risks manifest in the operations of an insurer, how they can be identified, and how they can be measured and understood. Most importantly, the task forces began to address how these risks could be managed. I think we are in the beginning stages of that process which ultimately is concerned with research that will be of practical application in the management of identified risks.

An important part of the task forces' work in the area of the management of identified risks was the fundamental development of methods, procedures, techniques, and approaches to performing these kinds of analyses. We are talking about risk measurement, a relatively new area and one where agreed-upon methodologies and accepted analytical approaches were not available. The task forces can take substantial credit for developing basic and accepted approaches to performing the analyses that led to the extensive research that the task forces have completed. Obviously, the task forces have analyzed the results, interpreted the findings, and tried to glean what they could from that work -- that is, draw conclusions concerning risk measurement and risk management.

Finally, one aspect of the charge of the committee and its task forces has been to accumulate and disseminate the results of that research, particularly with respect to methods and procedures. I'd like to come back to this point, but the committee's goal has been both to complete certain pure research, and to disseminate that data to the membership so that practicing actuaries could complete similar functions and analyses in their own companies.

During the past years we have certainly done a lot of work. The committee previously was led by Donald D. Cody, and under his leadership the task forces produced a tremendous number of research papers, presentations, speeches, and articles at sessions like this and at Society meetings. More recently, our focus has been on the accumulation and dissemination of this and other newer information. This has been in response to the Society's needs and to the thought that the analyses are too hard, that the practicing actuary can't do them, and that the methodologies and techniques are not available. Thus, the emphasis in the recent past, and into the next year, will be on the documentation of the findings of the task forces, the organization of that material, and the distribution of that work to membership of the Society and the Academy. As I said earlier, this will culminate at the Montreal meeting this fall, where each task force will be making a presentation with respect to their findings and their conclusions at this stage of their research.

That's where we've been. Before we discuss the findings of the committee, I'd like to review my perception of our current role. I think the committee would agree with this role and it might give you an idea of what kind of information to expect from the committee in the future.

First of all, I think it's important to realize that the committee is a research organization. I couldn't emphasize this more. Mr. Jay certainly implied that in his remarks about the role of the committee. We do not establish policy, we do not set standards, we do not define and promulgate regulations or legislation or, necessarily, take a proactive role in supporting legislation or regulation. The committee is a research organization. Having said that, however, it's obvious that the research body performs a technical support role to those other functions -- namely, to the standard-setting function and the regulatory function and is available to assist in that role as well as to complete some underlying pure research.

With regards to the standard setting area, the committee has supported the development of standards of practice in the valuation actuary area. Actually, we have more broadly supported standards in the valuation of assets and liabilities by developing methods and procedures to perform the kind of work which is believed necessary and consistent with the defined role of the valuation actuary. That is, we can all talk about the role of the valuation actuary, but it won't be able to be adequately performed by the profession unless the underlying methodologies, procedures, and techniques -- that is, the thought processes underlying those analyses -- have been made available to the profession. The committee believes that they have made the required information available.

In addition to the methods, of course, there's the questions of assumptions. The committee does not believe that we will, or should be, responsible for specifying assumptions. However, we do believe that in a variety of areas our work will provide guidance with respect to establishing assumptions -- the factors to consider in setting assumptions, the implications of various types of assumptions and the need for internal consistency.

Another support function in the standard setting area which the committee will perform as each standard is proposed is to evaluate alternative approaches to meet the requirements of the standards. Thus, we will evaluate the practicality and feasibility of the alternatives, and help assess which of the alternatives may be the most appropriate. We sometimes seem to lose sight of what the whole valuation actuary exercise is about and, as we evaluate standards and legislation, we need to keep our purpose in mind. The committee stands by, ready to perform this role with respect to setting standards.

At this time, there has not been much work done in the standards' area. However, it is expected that we would respond to an exposure draft of a revised Recommendation 7 later this fall.

In the regulation area, we are not directly involved. However, we are available to provide technical support in an assessment of the feasibility and impact of alternate proposals in the valuation area. In a general sense, the committee is on "standby," ready to assist the

NAIC task force when and if something comes out of there that needs technical analysis. Until such time, however, it is unlikely that the committee will take an active part in the development of the regulatory or legislative framework.

That's my view of the present role of the committee. What have we done in the last few years? The committee has been in effect for many years and now is a good time to discuss some of the things that have been discovered.

First, as I'm a relatively new member of the committee, but its chairman, I would like to thank the committee members, the task force chairmen, and the task forces. In particular, I would like to thank Michael E. Mateja, who leads the combination risk task force, for his tremendous analysis and research and for his thoughts on the conclusions and finding of the committee. Also, Stanley B. Tulin, who has headed the C-3 risk task force, Irwin T. Vanderhoof, and Joseph J. Buff, who have had different roles with respect to C-1 risk analysis. All have performed extraordinarily well. And, of course, I want to thank Mr. Cody, who previously led the committee and continues to provide insights and comments.

The results that we will talk about here are presented as findings, not conclusions. We may, on occasion, let the word <u>conclusions</u> creep into our discussion, but we need to keep in mind that we are presenting findings. Perhaps the first thing that we learned in this whole process is that there are no absolutes. The circumstances in any particular company or product line or period in time vary. New methods and techniques for analysis will certainly become available and it is highly likely, almost a certainty, that new insights will be developed and emerge. The research, while important, is not yet finished and may never be completed. There certainly will be new and interesting developments in the future.

Some of the comments that I'll make may seem self-evident or obvious. Keep in mind that the research and conversations that we have today about C-3 risk or C-1 or C-2 risk, combination risk issues, cash flow analysis and the kind of methodologies that have been presented, have grown out of the work of the committee members over the past years. Discussing their earlier work may seem basic at this time. However, we do believe that the things that we're going to talk about collectively represent a fundamental statement (probably a first-time kind of statement by the Society) concerning the nature of risk in an insurance enterprise, its measurement, and the valuation of assets and liabilities in any organization which assumes risk. The comments that are made and the findings that are discussed are presented in terms of an insurance organization. However, we're talking about something much more fundamental than that. We're talking about business risk in a broad sense, and, if you were to take these concepts and move over to any other financial institution, you'd be able to apply the same underlying concepts.

Some of these fundamental statements follow.

First, we always talk about risk and we thought it should be defined. I think Mr. Mateja has done that for us. It may be a simple statement, but the committee believes that risk is the possibility that cash flows will vary from the expected level of cash flow. In the end, the identification of risk, risk measurement and risk management is a cash flow process. We're trying to evaluate and measure the fluctuations of cash flows about their expected value.

Flowing from this statement is the notion that cash flow analysis is a reasonable and appropriate means to evaluate and measure risk. The committee believes that the methodology and technology is currently available in the industry to reasonably evaluate the risk assumed by an insurer.

In this regard, deterministic techniques are certainly useful for analyzing the specific levels of risk, but the committee believes that probabilistic techniques, while very difficult and complex to implement, are probably necessary to fully understand and appreciate the risk to which companies are exposed.

Another basic statement is that company and product circumstances are so varied that any generalizations about the risk level or the exposure to risk at individual companies or among product lines is nearly impossible. The variation in product lines, product features, the markets in which companies operate and how they operate, investment philosophies and portfolio strategies, tax postures, and relationships with policyholders and stockholders -- all of these and many, many other factors make it virtually impossible to make any categorical statement with respect to risk under any particular circumstance.

This thought is reflected in the need to study risk in a great many different ways -- that is, we talk about analyzing an individual risk for a specific product, but there also is the need to evaluate that risk as it manifests itself with respect to other products. Thus, for example, the work of the committee has been to examine the C-3 risk as it reflects itself in an annuity product line, an ordinary life product line, or a health product line. And similar analyses across product lines need to be made for other risks. Similarly, within a product line it's necessary to evaluate the combination of risks. To date, the combination of risk's task force primarily has been involved in studying the combination of risks -- that is, how various risks operate within a specific product line. The committee also recognizes that it will be essential to evaluate the combination of products, both with respect to specific risks and with respect to various risks. Thus, product aggregations also are quite important in this process.

All of this suggests that multiple scenario testing is essential to developing an understanding of the risks to which companies are exposed.

Finally, I believe the committee would be willing to say, based on the research they have done, that the measurement of risk is extraordinarily difficult. It is a moving target. However, we believe that the methods and understanding of risk measurement processes are available to permit professionals to make judgments concerning the adequacy of reserves. I might be inclined to go on and say "and surplus," but I think that might go beyond what the committee is comfortable with at this point.

If we were to boil all this down, in the context of the valuation actuary, to a single question and if that question was: Can we, as practicing actuaries perform the valuation actuary's role?, then the committee would answer, yes we can. The state of the art has moved to a position where judgments can be made with respect to the adequacy of reserves.

THE COMMITTEE ON VALUATION AND RELATED AREAS: THE STATUS OF RESEARCH

I would like to make a few comments about where the committee will go from here. Having made these statements concerning these findings, it is not implied that all the research that can be done has been done. Anything but that is the case. The committee intends to continue certain analyses in the C-1 area, particularly regarding junk bonds and default rates. This, in part, is in response to a specific request from the ACLI, and will be led by Mr. Buff with some assistance from Irwin Vanderhoof.

Also, the C-2 area needs additional work. We have not completed a thorough analyses of the C-2 area. Nonetheless, there are considerable exposures in this regard and additional work is necessary. The committee intends to do some of that work. In addition, I have referred to the need for analyses for combined product lines. This kind of combination of risk needs further analysis and also will be completed.

Finally, we plan to take stock of the work to date. We want to produce a written document of the findings that we have now discussed. That will be a near-term goal of the committee and we hope to summarize our current thinking in the relatively near future.

Prospectively, we hope to expand our activities beyond the kinds of analyses specifically related to the C-risks that have been identified. We plan to address broad issues regarding the relationships between the pricing function, the evaluation of liabilities' function, and surplus management. We will explore the way these are intertwine and the way they relate to the financial reporting and financial management function.

Finally, we are ready and willing to address the needs of the standard setting and regulatory bodies as they move forward and take some actions in these areas.

Thank you.

MR. STEPHEN R. RADCLIFFE: I have a question for Mr. Stein. Last year at our symposium Mr. Tulin described a beaker theory where he was going to hedge liabilities instead of hedging assets to immunize a company from the C-3 risk. Has your committee gotten anywhere on the beaker theory?

MR. STEIN: There has been some examination of that. That area is what I was referring to concerning the combination of products with respect to a specific risk. The C-3 risk paper that will be presented at the Montreal meeting will contain some information with respect to these liability management issues.

MR. JAY: Now I will say a few words about the recent work of the Joint Committee on the Valuation Actuary.

The Joint Committee serves as a steering committee to: (1) communicate and coordinate with non-actuarial audiences such as insurance regulators, the insurance industry, and the accounting profession; (2) coordinate the work of the committees within the actuarial profession addressing the problems relating to the responsibilities of the valuation actuary in the United States; and (3) monitor the progress of all of the projects and activities related to the valuation actuary movement and make recommendations to the SOA and AAA Boards where board level support would be effective and is needed to stimulate progress and achievements. Members on the Joint Committee represent the Society of Actuaries, the American Academy of Actuaries, the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, and the Canadian Institutes of Actuaries.

The Joint Committee has produced two or three status reports during each of the last couple of years outlining all of the activity relating to the valuation actuary movement. We are in the process of completing an updated report soon to be provided to the boards of the organization that we represent, and others.

In addition to the above status reports, the Joint Committee has spent much of the year drafting a reflections paper outlining the changes in Joint Committee thinking since our February 1985 report and a strategic direction statement mapping future activity that the Joint Committee believes is needed to implement the valuation actuary concept. At the direction of the boards of the Society of Actuaries and the American Academy of Actuaries, these two documents have been combined into the 1987 Report of the Joint Committee on the Role of the Valuation Actuary in the U.S. (see Appendix B). This report, which has been submitted to the Executive Committees of the SOA and the AAA for recommendation to the respective boards, is designed to:

1. Place the valuation actuary concept within an historical perspective;
2. Report to our sponsoring organizations;
3. Seek an endorsement from our sponsors of our modified recommendations; and

4. Encourage support for our recommended strategic directions.

It is envisioned that this report will be given wide distribution when approved by both boards.

APPENDIX B

1987 Draft Report of the Joint Committee On the Role of the Valuation Actuary in the U.S.

In February, 1985 the Joint Committee on the Role of the Valuation Actuary in the United States prepared a "Final Report" for the boards of the American Academy of Actuaries and the Society of Actuaries. This report was subsequently accepted by the boards of the two sponsoring bodies. In the past two years, other organizations and individuals have responded to our Final Report and the Joint Committee has modified its recommendations. This report is designed to:

1. Place the Valuation Actuary concept within a historical perspective.

2. Report to our sponsoring organizations.

3. Seek an endorsement from our sponsors of our modified recommendations.

4. Encourage support for our recommended strategic directions.

With the above in mind, we considered it preferable to write a comprehensive report that is complete without reference to earlier reports of the Joint Committee and of other organizations.

For those readers familiar with the background and our original report, we summarize below the modifications to our original recommendations:

1. Appointment of the Valuation Actuary by a member of management designated by the Board is an acceptable alternative to appointment directly by the Board.

2. An opinion of the Valuation Actuary on the reserves, and the adequacy of the assets supporting them, would accompany the Annual Statement, and a report on the adequacy of overall assets would be provided for management.

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I. History

A. Background

Historically, actuaries who did life insurance company valuations operated within a narrowly defined structure of responsibilities and duties. For a long time, the actuary merely had to make sure that the valuation process was performed accurately and that the reserves established by the company met the minimum legal requirements. These minimum requirements were precisely defined in terms of prescribed methods, and specified interest rates and mortality tables.

In June 1975, the NAIC adopted a requirement that the annual statement must contain the statement of a qualified actuary setting forth his or her opinion relating to policy reserves and other actuarial items. "Qualified actuary" was defined to be a member in good standing of the American Academy of Actuaries, or a person who has otherwise demonstrated his or her actuarial competence to the satisfaction of the insurance regulatory official of the domiciliary state. The statement of actuarial opinion must include a paragraph identifying the actuary, a scope paragraph identifying the subjects on which an opinion is to be expressed and describing the scope of the actuary's work, and an opinion paragraph expressing his or her opinion with respect to such subjects. Among other things, the opinion paragraph should indicate that, in the actuary's opinion, the reserves and other actuarial items are computed in accordance with commonly accepted actuarial standards, meet the requirements of the insurance laws of the state of domicile, make a good and sufficient provision for all unmatured obligations of a company that are guaranteed under the terms of its policies, and include provision for all actuarial reserves and related statement items which ought to be established. An actuary unable to form an opinion should refuse to issue a statement of actuarial opinion. If the actuary's opinion is adverse or qualified, the actuary should explicitly state the reason(s) for such opinion. The actuarial profession, through the American Academy of Actuaries, has issued recommendations and interpretations delineating the responsibility of the actuary in developing the actuarial opinion.

In the late 1970s, a number of events gave rise to a movement within the actuarial profession and the regulatory community to expand and define more broadly and formally the role and responsibilities of the actuary who forms the opinion. It is this expanded scope of the actuary's function that has loosely come to be known as the concept of the "valuation actuary."

The increased volatility of financial markets and interest rates and the introduction of interest-sensitive products that began around this time were principal factors that initiated this thinking. The valuation laws had operated on the theory that products were sold in broad homogeneous markets, and that fluctuations in interest rates would occur rather gradually and within relatively narrow ranges. Some changes seemed necessary since that theory no longer applied. The product revolution that was taking place in the life insurance industry and in other parts of the financial services marketplace was characterized by increasingly competitive long-term guarantees. It was felt that it was no longer possible to prescribe specific statutory valuation standards that would be appropriate for all products under all circumstances. Another pertinent development during this period was an acceleration of state enactments of guaranty fund laws for life insurance companies.

These major changes suggested a public-interest need to assign more responsibility to the actuary to make a professional judgment as to the adequacy of reserves. This judgment should be based on an analysis of an insurer's risks as opposed to a mere determination that reserves are at least equal to a rigidly defined minimum statutory standard.

The concept of the valuation actuary first began to receive serious consideration in the United States in connection with the adoption of the 1980 amendments to the NAIC Standard Valuation Law. The increased volatility of financial markets and interest rates, mentioned earlier, had caused the ACLI to propose changes in the law to make the statutory minimum valuation standards of interest and mortality respond automatically and more rapidly to changing economic and demographic conditions.

The ACLI proposal was an adaptation of the existing valuation structure to rapidly changing conditions, rather than a major reform of valuation practice. In commenting on the proposed 1980 amendments, the Technical Advisory Committee on Dynamic Interest and Related Matters to the NAIC (C-4) Life, Accident, and Health Subcommittee stated:

> The ACLI's proposed dynamic law would not change the basic existing legal structure and tradition. As a result of accepting this practical constraint, the proposal neither coordinates valuation of assets with the valuation of liabilities nor expands the professional responsibility of the actuary signing the actuarial statement of opinion. . . . It is the opinion of the Advisory Committee that any proposal should neither restrict nor inhibit pursuit of more fundamental solutions of the valuation-nonforfeiture questions and that such eventual solutions may well incorporate requirements for consideration of asset valuation, reliance on professional or regulatory judgment, and recommendations for revised surplus standards.

The clear message from the Advisory Committee was that the 1980 amendments were only an interim step. The Committee felt that the statutory valuation system that had lasted over a hundred years, when interest rates were relatively stable, was inadequate to measure the risks inherent in a volatile interest rate environment.

At about the same time, the Society of Actuaries Committee on Valuation and Related Areas presented a discussion draft, entitled "Valuation, Surplus and Related Problems," which suggested a conceptual framework for the balance sheet of an insurance enterprise and the valuation of policy liabilities. It identified three adverse contingencies, designated as the C-1, C-2 and C-3 risks, for which provisions must be made in the balance sheet. The C-1 risk relates to asset losses arising from defaults, destruction of assets, or other declines in asset value other than changes in market value due solely to changes in the prevailing interest rates. The C-2 risk relates to losses arising from pricing inadequacy. The C-3 risk relates to losses resulting from swings in interest rates. This Committee is continuing to produce basic and practical research on these risks as well as their combined effect.

The Committee's discussion draft gave a particularly good exposition of the C-3 risk. It indicated the problems the actuary faces in determining the degree to which the company is immunized against future interest rate variations through the matching of future asset and liability cash flows. It also pointed to the deficiencies of the current valuation system, which assumes only one path for future events, and suggested the need for actuarial analysis of future cash flows under a variety of interest rate assumptions.

B. The Final Report of the Joint Committee on the Rate of the Valuation Actuary in the U.S.

The next significant step in the development of the concept was the establishment in December 1983 of the Joint Committee on the Role of the Valuation Actuary in the United States by the boards of the American Academy of Actuaries and the Society of Actuaries. The Joint Committee was asked to make recommendations concerning the appropriate role for the valuation actuary in the United States and what is necessary to effect and support this role.

In its final report published in February 1985, the Committee's first major recommendation was that each state enact a statute requiring the directors of a life insurance company licensed in that state to appoint by resolution a valuation actuary and to inform the appropriate state regulator of that appointment and of any subsequent appointment of a different valuation actuary. Valuation actuaries who are members of the American Academy of

Actuaries would be subject to its qualification standards to assure that they remain knowledgeable concerning current valuation principles and standards of practice. The Committee's second major recommendation was for the establishment of principles and development of practices underlying the valuation of life insurance companies for solvency and solidity purposes. Initially these principles and practices would be superimposed upon the existing specific legal solvency requirements. In time, the solvency standards promulgated by state or regulation might evolve to cover only principles, and possibly a minimum standard methodology. The assumptions selected and the associated methods used in making a valuation would be left to the professional judgment of the valuation actuary and would be fully described in the valuation actuary's report to management, which would be available to regulators on a confidential basis.

The proposed valuation system would envision an actuarial opinion to the effect that reserves make good and sufficient provision for all future obligations on a basis sufficient to cover future reasonable deviations from expected assumptions. The opinion would further state that reserves plus additional internally designated surplus make good and sufficient provision for all future obligations on a basis sufficient to cover future plausible deviations from expected assumptions. "Plausible" deviations are assumed to have a much lower probability of occurring than "reasonable" deviations. The amount of internally designated surplus and its determination would be available for review by regulators but would not be shown separately on the balance sheet.

The Committee also recognized and recommended further work (1) to develop proposed changes in laws and regulations, (2) to continue research on valuation principles, (3) to educate students and practicing actuaries in the principles and standards of the new valuation system, and (4) to develop and codify principles and standards of actuarial practice.

C. Response of Organizations to the Joint Committee Report

1. American Academy of Actuaries:

The Academy Board approved the Joint Committee Report in October 1984. In July 1985, the Academy issued Discussion Drafts on Qualification Standards and on Standards of Practice for Valuation Actuaries. These Standards have yet to be promulgated. The Interim Actuarial Standards Board (IASB) is now responsible for promulgating standards of practice, and active work is underway in this area. Qualification standards are also in process of further development.

2. The Society of Actuaries:

The Society's Board approved the Joint Committee Report in October 1984. Its Committee on Life Insurance Company Valuation Principles has developed an exposure draft on Life Insurance Company Valuation Principles. This draft was approved in May 1987 by the Board for exposure to the Society membership.

3. Interim Actuarial Standards Board:

The IASB plans to develop standards of practice for cash flow testing or the application of other appropriate technology for assets supporting life insurance company policy obligations.

4. Casualty Actuarial Society:

The CAS has formed a committee on valuation principles and techniques to consider the application of valuation concepts to property and casualty insurance.

5. ACLI:

The ACLI Board of Directors, at its meeting on May 7, 1985, approved the recommendation of the Joint ACLI/HIAA Task Force on Insolvency Prevention that "the concept of a 'valuation actuary' should be supported as an important contribution toward developing means to reasonably assure solvency of companies and a special Task Force should be created to study this concept in more detail."

The Task Force addressed the issue from a management perspective and from the standpoint of the industry's and a company's relationship with the regulatory authorities. The Task Force's objective was to recommend a course of action that would enhance the prospects that the concept of the valuation actuary would develop in a form that the industry would support.

After examining the concept of a valuation actuary as a means of helping to assure the solvency of insurance companies, the Task Force recommended that:

1. The ACLI generally support the strengthening of the role of the valuation actuary, by the profession and through regulatory requirements, to the extent that such strengthening does not infringe on proper management prerogative or generate costs that are out of line with potential benefits;

2. The ACLI support regulatory requirements that would require life insurance company boards of directors to either appoint, or to designate someone to appoint, a qualified actuary who is an employee of the company or someone hired by the company to perform the duties of the valuation actuary;

3. The ACLI support regulatory requirements that the valuation actuary make a public statement of actuarial opinion as to the adequacy of the reserves of a life insurance company;

4. The ACLI oppose any regulatory requirements that the valuation actuary report on the adequacy of surplus; and

5. The ACLI not oppose any reasonable regulatory requirements for the valuation actuary to test a minimum number of specified possible future scenarios in developing a statement of actuarial opinion on the adequacy of life insurance company reserves.

The ACLI's position with respect to the concept of the valuation actuary is based on an understanding that the concept would include the following conditions:

1. The regulatory authorities would be no more involved in the oversight of company surplus levels than they are at the present time.

2. There should be appropriate exceptions from testing requirements for products where the valuation actuary demonstrates that the volume of business or the nature of the risk indicates such testing is not warranted.

3. The development and impositions of standards of practice for determining the methodology and techniques used in developing an actuarial opinion should be determined by the profession. The report of the Task Force and its recommendations outlined above were adopted by the ACLI Board of Directors at its September 5, 1986 meeting. The Board resolution adopting the report acknowledged that the recommendations in the report are appropriate for the present, but put the ACLI on record as encouraging the actuarial profession to develop accepted methodology and techniques for taking quality of asset information into account in determining the adequacy of reserves. The resolution also contained an understanding that the ACLI

would make every effort to obtain relief for companies from existing regulatory functions that would be made unnecessary by the activities of the valuation actuary. Such relief would be particularly important for smaller companies for whom the costs of a valuation actuary would prove substantial.

6. NAIC:

The NAIC adopted Actuarial Guideline XIV in 1986. This Guideline provides surveillance procedures for review of the Actuarial Opinion of life and health insurers. This Guideline states that it provides regulators with an "interim procedure for the use of the Actuarial Opinion to be used until model legislation and/or regulations are adopted and become effective." It states that a regulator may require that the actuary furnish an Actuarial Report supporting the Actuarial Opinion. The Guideline specifies that, among other requirements, the Report should make specific reference as to "whether the good and sufficient analysis, 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 interest rate scenarios, and if so, what those considerations were."

An NAIC Special Advisory Committee on the Valuation Law has been appointed to report to the NAIC Life, Health and Annuity Task Force.

The charge to the Committee is as follows:

> Develop first a conceptual framework, and from that a draft of a model law and accompanying model regulations to replace the current form of the Standard Valuation Law including, among other things, (a) incorporating the concept of the Valuation Actuary, (b) considering solvency determination, and (c) coordinating life, health, annuity, credit and miscellaneous lines of business.
>
> The new Standard Valuation Law and regulations will utilize current available valuation analysis techniques and reflect feasible application of them. It will have as its major focus an actuarial opinion that focuses on the

adequacy of the assets supporting reported reserves to provide for in force benefit provisions. The opinion will be based on cash flow analysis or other emerging technology, as appropriate.

The new Standard Valuation Law and regulations will also redefine the test for solvency as it utilizes reported reserves so that the effectiveness of company risk management procedures, as reported by the opining actuary, serves as a basis for the applicable minimum reserve level.

Complete conceptual framework of the new standard will be available for discussion in April, 1988; proposed language for the new law and regulation, September, 1988.

7. Individual States:

To date, only New York has enacted specific laws and regulations with regard to the Valuation Actuary. The New York Insurance Law requires that a qualified actuary provide an opinion concerning the reserves for annuities, annuity benefits and guaranteed interest contracts. The alternative is to value such reserves very conservatively. The Superintendent, in Regulation 126, has prescribed the calculations and form and substance of any opinion, report or memorandum supporting the calculation of the reserve amounts.

Amendments to the New York valuation law have been discussed that would extend similar requirements to single premium life insurance (probably applicable to policies issued in 1982 and later) and to all annuities and guaranteed interest contracts in force. Similar provisions with respect to Universal Life are expected within the next year or so.

The actuary's opinion must include the statement that he/she has conducted cash flow tests on a "going concern basis" for policies in force on the valuation date. The regulation requires that the Actuarial Memorandum describe the methods used to project future cash flows and recommends certain minimum scenarios be used in testing such future cash flows.

II. The 1985 Report Recommendations Revisited

A. Regarding the Role of the Valuation Actuary

1. 1985 Report Recommendations

Each state should enact a statute requiring the directors of a life insurance company licensed in the state to appoint by resolution an actuary to be the Valuation Actuary of the Company and to file a certified copy of that resolution and of every subsequent resolution relating to the appointment, dismissal or change of a Valuation Actuary with the appropriate state regulatory authority on a timely basis.

Valuation actuaries who are members of the American Academy of Actuaries would be subject to qualification standards established by the Academy, and accountability would be ensured through the Guides to Professional Conduct and accompanying disciplinary measures. The qualification standards would address the problem of assuring that the Valuation Actuary remain knowledgeable concerning current valuation principles and standards or practice.

The Academy would work with the state regulators to establish analogous standards and measures for valuation actuaries who are not Academy members.

2. Concerns Expressed About the Recommendations

(a) The Valuation Actuary should be a part of senior management. Some accept that he/she can be charged with a special duty regarding adequacy; others would say that this duty is the CEO's, who would call upon the Valuation Actuary to aid significantly in the carrying out of this duty.

(b) It is highly desirable that the Valuation Actuary be an employee of the company or hired specifically by the company to serve in that role.

3. Current Position of the Joint Committee

The New York regulations require appointment by the directors. The ACLI position would permit appointment by the directors or by a designated member of management. While we believe appointment by the Board to be more clearly an expression of responsibility, appointment by a designated member of management is an alternative consistent with our thoughts.

Questions have been raised as to whether an actuary employed by a life insurance company can bring the required degree of objectivity to the position of Valuation Actuary. The Academy's historic position is that there is no need for actuarial independence with regard to activities of actuaries involved in life insurance company valuation work. The Joint Committee sees no need to suggest there be a change to that position in view of the evolving definition of the work of a Valuation Actuary.

B. Regarding Valuation Principles

1. 1985 Report Recommendations

The Committee believes that ultimately the Valuation Actuary should be responsible for the selection of assumptions and the establishment of reserves appropriate under the circumstances. Guidelines for selecting the assumptions and making the calculations would be provided in the form of principles contained in actuarial literature and standards of practice promulgated by the actuarial profession. The availability of such principles and standards, along with the qualification standards for the Valuation Actuary and his/her relationship to management and regulators, as described in the first recommendation, would provide regulators with the confidence level needed.

Until such time as comprehensive valuation principles and standards have been developed, we believe that specific legal solvency requirements must continue to be defined. The basis of these requirements is the statutory annual statement in which reserves are determined in accordance with the Standard Valuation Law, other statutes and regulations, and statutory accounting principles. These requirements are accepted as being necessary to provide the regulators and the courts with an identifiable basis for enforcing appropriate remedies in the case of a company failing to meet such requirements.

In addition to the legal solvency requirement, a Statement of Actuarial Opinion would be required from a qualified designated Valuation Actuary that:

(1) the reserves established are such that the related anticipated policy and investment cash flows will make a good and sufficient provision for all future obligations on a basis sufficient to cover future reasonable deviations from expected assumptions; and

(2) that such reserves and additional internally designated surplus are such that the related anticipated policy and investment cash flows will make a good and sufficient provision for all future obligations on a basis sufficient to cover future plausible deviations from expected assumptions.

Satisfying Part (1) of the Opinion may require reserves to be established which exceed the legal solvency standards. Any portion of surplus necessary to satisfy Part (2) of the Opinion must be recognized by management (i.e., internally designated). This amount, together with the basis of its determination, would be available for review by regulators, but would not be required to be published in financial statements. Significant changes in operations or in valuation assumptions during the year must be assessed as to the materiality of their impact on designated surplus.

Documentation of the basis for the Opinion would be provided in the Valuation Actuary's report to management and to the Board of Directors.

In time, when confidence in the protection afforded by the actuarial opinion becomes firmly established, the solvency standards promulgated by statute or regulation should cover only principles, possibly including a minimum standard methodology. It is expected that the actuarial profession would work closely with the regulators to develop these statutory valuation principles. The selection of assumptions appropriate to the company and environment and consistent with the statutory principles would be left to the professional judgment of the Valuation Actuary. These assumptions and the associated methods would be fully described in the Valuation Actuary's report which should be submitted to regulators on a confidential basis.

2. Concerns Expressed About the Recommendations

(a) The Valuation Actuary should not enjoy complete freedom in selecting assumptions for the establishment of reserves, the basis and level of which can significantly affect income tax.

(b) The terms "reasonable" and "plausible" have not been defined. Some would say they are incapable of definition.

(c) The Valuation Actuary should not be required by the regulators to give an opinion on the adequacy of a company's surplus. The concept of the Valuation Actuary should not be a device for regulators to assert any greater involvement in the oversight of company surplus levels.

3. Current Position of the Joint Committee

The ultimate goal expressed in the 1985 Recommendations is still appropriate. We have concluded additionally that this goal is probably not attainable as long as the work of the Valuation Actuary is used for purposes other than to provide confidence in the long-term viability of the Company. Conflicts arise when the subject of the same opinion and report has several other uses, such as tax calculations and earnings statements.

A new definition of solvency reflecting risk management may be an appropriate step. The last two years have provided much additional technology. Risk management, in terms of in-force business, can be attained; a traditional uniform, factor-driven basis which sets a common, conservative fixed reserve level for all companies, may not need to be a continuing part of the Standard Valuation Law. However, in the near term a formulated level may prove to be desirable as a point of departure reflecting differences in risk management.

After consideration of the concerns expressed, we have modified our 1985 recommendations as follows:

(a) The concept of "designated surplus" has been removed. The Valuation Actuary would not be required to address adequacy of surplus in the Statement of Actuarial Opinion. The Opinion would exclusively address adequacy of assets equal to reserves covering future reasonable deviations from expected experience.

(b) The impact on total assets of more severe and unlikely conditions than are used to test assets equal to reserves would be described in a confidential report to management. The report would also provide documentation of the bases of the Opinion.

Practical definitions of "reasonable" and "plausible" -- or of any alternative equivalents of these troublesome, though necessary, concepts -- are being developed by research. Further work is needed here.

A company's failure to meet a given overall adequacy test should not trigger legal insolvency. Insolvency, including the drastic legal steps that ensue, should be triggered only if it is unreasonable to expect that the company can meet its obligations. The "two-tier" approach we suggested was an effort to establish a corridor within which the company management and regulators would be able to attempt to monitor the long-term viability of the company. The "two-tier" concept is currently in effect in the U.K. and has been proposed and supported by regulators and the industry association in Canada. In both countries, the "second tier" is a required formula add-on to reported reserves. Ignoring the issue of overall asset adequacy is likely to result in similar arbitrary requirements in the U.S., or, as an alternative, defining the first (reserve) tier at levels approaching that of the combined tiers. We believe our suggested approach to be much preferable.

C. Regarding Implemention

1. 1985 Report Recommendations

We believe that valuation standards, appropriate for all products under all circumstances cannot be prescribed by statute or regulation. If this were once possible, with traditional products and more stable economic environments, it is certainly not possible today. Judgment by an actuary knowledgeable concerning the specific product, the situation of the company and possible economic environments is necessary in order to calculate reserves appropriate for any given purpose. Such calculations should be based on sound actuarial principles. We agree that, to date, the actuarial profession has neither identified nor promulgated such principles and thus we cannot expect regulators to accept a new valuation system when one of its major building blocks is not in place. But until we require actuaries to go beyond the statutory formulas in valuing life insurance companies, it is unlikely that the necessary energies will be devoted to the task of developing valuation principles.

To solve this "chicken and egg" problem, we are recommending the superimposing of the requirement for a Valuation Actuary's Statement of Actuarial Opinion on statutory solvency requirements. This additional requirement will necessitate the development of valuation principles. It is our expectation that within a few years sufficient principles, and associated standards of practice, will be developed and promulgated that it will be generally agreed that reserves based on such principles and standards should replace outmoded and inflexible statutory requirements.

However, with or without statutory valuation standards, a Statement of Actuarial Opinion by a Valuation Actuary, even assuming appropriate competence and independence, will not necessarily prevent a company from becoming insolvent as a result of current unsound business practices. Audits and reviews, both internal and external, will be necessary to assure the accuracy of asset and liability information. The Academy committee charged with establishing standards of practice for the Valuation Actuary must address the question of the appropriate scope of the Actuarial Opinion. For example, to what extent does it cover the accuracy of the in-force records or the quality of the investment portfolio?

2. Concerns Expressed About The Recommendations

   (a) Completely subjective standards will increase the risk of company insolvencies.

   (b) The requirement for an Actuarial Opinion could impose serious legal and other obligations on the Valuation Actuary.

   (c) The cost of implementation.

3. Current Position of the Joint Committee

The Joint Committee believes that the recommendations with respect to implementation made in the 1985 Report are still appropriate. An increasing number of actuaries and regulators believe that a sounder valuation structure is needed and can be provided only by incorporating the individual judgment of an experienced qualified Valuation Actuary observing published standards of practice and utilizing new tools and technology that have been developed over the last several years. The tools and technologies will continue to evolve in the future but enough is now available for significant improvements to be implemented.

We are encouraged that the NAIC has authorized a Study of the Reconstitution of the Standard Valuation Law, and that it is considering a near-term approach that will (a) consider adequacy of assets supporting reported reserves, and (b) include alternative solvency bases to provide incentive for risk management and analysis.

The recently adopted New York Regulation 126, which bases minimum reserve levels for annuities and other deposit or investment type contracts on the application of a new valuation actuary technology, is an example of such a basis.

Many actuaries have expressed valid concerns surrounding the legal, and other obligations that might attach to a statement of Actuarial Opinion. Such a professional statement that is based on appropriate application of current methods and practice standards; it is not a guarantee of long-term solvency. The Opinion needs to reference current principles and practice standards.

We are encouraged by the progress made in the development of principles and practice standards by the profession.

We recognize several open issues and believe they are appropriate and resolvable. These are:

(a) Analysis of benefits of the work involved in view of costs. Alternative approaches need to be available in situations where risk structures suggest they are appropriate. These may allow omission of cash flow analysis.

(b) Actuaries must better understand assets for purposes of quantifying effects of C-1 and C-3 Risks.

(c) Additional research is needed in testing the adequacy of all assets so as to include financial plans for new business and undertakings.

We are pleased that there is more substantial information now available as a resource for actuaries.

III. Strategic Directions for the Valuation Actuary Movement

A. Overall Objective

In its 1985 report, which was approved by the Boards of both the Academy and the Society of Actuaries, the Joint Committee recommended that each state enact a statute requiring the Directors of a life insurance company licensed in the state to appoint by resolution an actuary to be the Valuation Actuary of the company. Our report went on to recommend that a Statement of Actuarial Opinion be required from the qualified designated Valuation Actuary.

The Joint Committee continues to support the overall objectives stated in the 1985 Report with the modifications that the Board of Directors be permitted to delegate the appointment of the Valuation Actuary and that the public opinion relate only to the assets supporting the reserves. The confidential report to management would address the work done in support of the Opinion and provide the results of more severe tests as they impact total company assets.

B. Activity

Much activity has taken place since 1985, and momentum is increasing. As indicated in this report, a variety of organizations and working groups within those organizations have responsibilities which are unique to their charges, but greatly inter-relate. Our function is to monitor and coordinate the effort of these groups so that their work product is consistent in its progress and ultimate results.

In the end, the creation of the status of the Valuation Actuary is a statutory event. However, it will require the support of both the industry and its regulators, as well as the professionals who will perform the duties assigned to it.

We believe that the revision of the Standard Valuation Law and the development of supporting standards of practice, qualification standards and valuation principles now being pursued are the next major steps toward the ultimate goal of a valuation system relying on general principles, standards and actuarial judgment. We envision that subsequent progress will be incremental and that each future step will take the experience of the previous structure into account.

This section of the report details both the agenda and the role that each of the working groups has assumed in the overall development of the Valuation Actuary portion of reconstitution of the valuation process of the life insurance business in the United States.

C. Agenda and Role of Organizations and Working Groups

1. NAIC Special Advisory Committee on Valuation Law Revision.

   (a) Present report containing a proposed draft of a new Model Valuation Law to the NAIC Life and

Health Actuarial Task Force by June 1988. The proposed new Law should:

(1) incorporate the concept of the Valuation Actuary;

(2) contain a requirement for an Actuarial Opinion focusing on the adequacy of assets supporting total company reserves and actuarial liabilities;

(3) provide for variation in required reserves for companies to reflect the risk connected with the structures of their policy and contract liabilities and their supporting assets and the effectiveness of their processes for managing that risk;

(4) provide for less expensive alternatives to cash flow analysis if it can be demonstrated that the structures of liabilities and their supporting assets are such as to limit the risk connected with those structures to an accepted level;

(5) contain a requirement that each company's board of directors be responsible for the appointment of a qualified Valuation Actuary (it is acceptable that this responsibility be delegated) to be filed with and accepted by the states' insurance regulatory authorities; and

(6) specify qualification requirements for an appointed Valuation Actuary.

(b) Seek input and advice from the Surplus and Solvency Subcommittee and the actuarial profession through the Joint Committee on the Valuation Actuary during the development of the report.

2. NAIC Life and Health Actuarial Task Force.

(a) Supervise the development of the report of the NAIC Special Advisory Committee.

(1) Review and report on progress at each meeting of the Task Force.

(2) Receive the completed report by June 1988.

(b) Expose the report widely from June to November 1988, or beyond if necessary.

(c) Recommend adoption of the report and the new Valuation Law to the NAIC in December 1988 or later if more time is needed to develop the necessary support.

3. Surplus and Solvency Subcommittee under the Standing Technical Advisory Committee to the NAIC.

(a) Advise the Special Advisory Committee in developing the report containing the proposed revision to the Standard Valuation Law and monitor the results. January 1987 - June 1988.

(b) Advise and assist the NAIC Life and Health Actuarial Task Force in planning for the development of further enhancements and revisions to the Standard Valuation Law consistent with evolving concepts and technology. 1988 and beyond.

4. AAA Board of Directors or Executive Committee.

(a) Provide review, oversight and support to the Committee on Life Insurance Financial Reporting in their work on standards of practice for Valuation Actuaries. This is to include standards for existing state laws and regulations requiring actuarial opinions with respect to life insurance company reserves, existing NAIC Actuarial Guidelines requiring such opinions, and the revised NAIC Standard Valuation Law when adopted.

(b) Provide review, oversight and support to the Committee on Qualifications in their work in developing Valuation Actuary qualification standards corresponding to the above standards of practice. Promulgate qualification standards for existing laws, regulations and guidelines during 1987 and for the revised Model Valuation Law immediately after it is adopted.

(c) Respond to recommendations of the Joint Committee on the Valuation Actuary with respect to AAA roles to keep planned progress on schedule.

5. AAA Committee on Life Insurance Financial Reporting.

(a) Continue to revise and enhance proposed standards of practice for Valuation Actuaries under the direction of the IASB/ASB.

(1) Develop proposed standards of practice for existing state laws or regulations requiring actuarial opinions with respect to life insurance company reserves and existing NAIC Actuarial guidelines requiring such opinions. 1987.

(2) Extend proposed standards for any new such laws, regulations or guidelines when they become effective.

(3) Support new proposed standard of practice for valuation actuaries signing the Statement of Actuarial Opinion required by the NAIC Annual Statement based on the latest working draft of the revised Recommendation 7 under the direction of the IASB/ASB. Expose the proposed standard by year end 1987.

(4) Suggest enhancements in the standards of practice to incorporate new technology (C-1, C-2, combination of risks, etc.) as it becomes available from the SOA Committee on Valuation and Related Areas and other sources.

(5) Review the Valuation Principles for Life Insurance Companies as developed by the SOA Committee on Life Insurance Company Valuation Principles when articulated by the SOA Board. Ensure that the standards of practice incorporate and are consistent with the principles.

6. AAA Committee on Qualifications.

Redraft Valuation Actuary qualification standards to support each of the above practice standards promulgated by the IASB. Submit to AAA Board of Directors for promulgation shortly after the practice standards become effective.

7. SOA Board of Governors or Executive Committee.

(a) Articulate the Valuation Principles for Life Insurance Companies at the October 1987 Board meeting or as soon after the exposure period ends as practicable.

(b) Direct the appropriate staff members, committees and sections to provide education programs and to conduct and publish research to meet the needs of valuation actuaries. Ensure that the Valuation Actuaries Symposium be continued on an annual basis. Coordinate programs with other actuarial bodies where feasible.

(c) Respond to recommendations of the Joint Committee on the Valuation Actuary with respect to SOA roles to keep planned progress on schedule.

8. SOA Committee on Valuation and Related Areas.

(a) Support the work of the AAA Committee on Life Insurance Financial Reporting and the IASB by developing and presenting the technical tools, especially on the C-1, C-2, C-3 and combination of risks during 1987. This effort is to include specific response to the request by the ACLI Board of Directors for the actuarial profession to include recognition of quality of assets in support of actuarial opinions on life insurance reserves.

(b) Support the work of the NAIC Special Advisory Committee on Valuation Law Revision as requested by that Committee.

(c) Continue to develop and publish needed new technology.

9. SOA Committee on Life Insurance Company Valuation Principles.

(a) Follow through with the Principles document during and following the exposure period. Redraft, as appropriate, and submit for articulation at the October, 1987 Board meeting or as soon thereafter as practicable.

(b) Provide continuing support with principles development as appropriate.

(c) Continue to update the Valuation Actuary Handbook.

10. IASB (including its Life Operating Committee).

(a) Promulgate standards of practice for valuation actuaries in support of actuarial opinions on life insurance company reserves that are required by existing state laws or regulations or NAIC Actuarial Guidelines during 1987, or by new such laws, regulations or guidelines when they become effective.

(b) Promulgate standards of practice for valuation actuaries signing the Actuarial Statement of Opinion required in the NAIC Annual Statement by early 1988 and revise such standards as appropriate immediately following NAIC adoption of revised Model Valuation Law.

11. CAPP.

(a) Sponsor educational programs to members to keep them informed of current events and progress regarding the revisions of the Standard Valuation Law and related activities.

(b) Continue to consider special problems for consulting actuaries.

12. CAS.

(a) Monitor work of various organizations working on questions related to valuation to determine how developments may affect property/casualty business.

(b) Acquaint members with the fundamental ideas of valuation.

13. ACLI, NALC.

(a) Follow closely the developing revisions to the Standard Valuation Law and provide input to the process when proposals are brought before the NAIC.

(b) Review the periodic reports of the NAIC Special Advisory Committee on Valuation Law Revision and adopt industry policy positions on the proposed new Standard Valuation Law.

14. Joint Committee on the Valuation Actuary.

(a) Secure approval of this report, specifically including the Strategic Directions, by the AAA and SOA Boards.

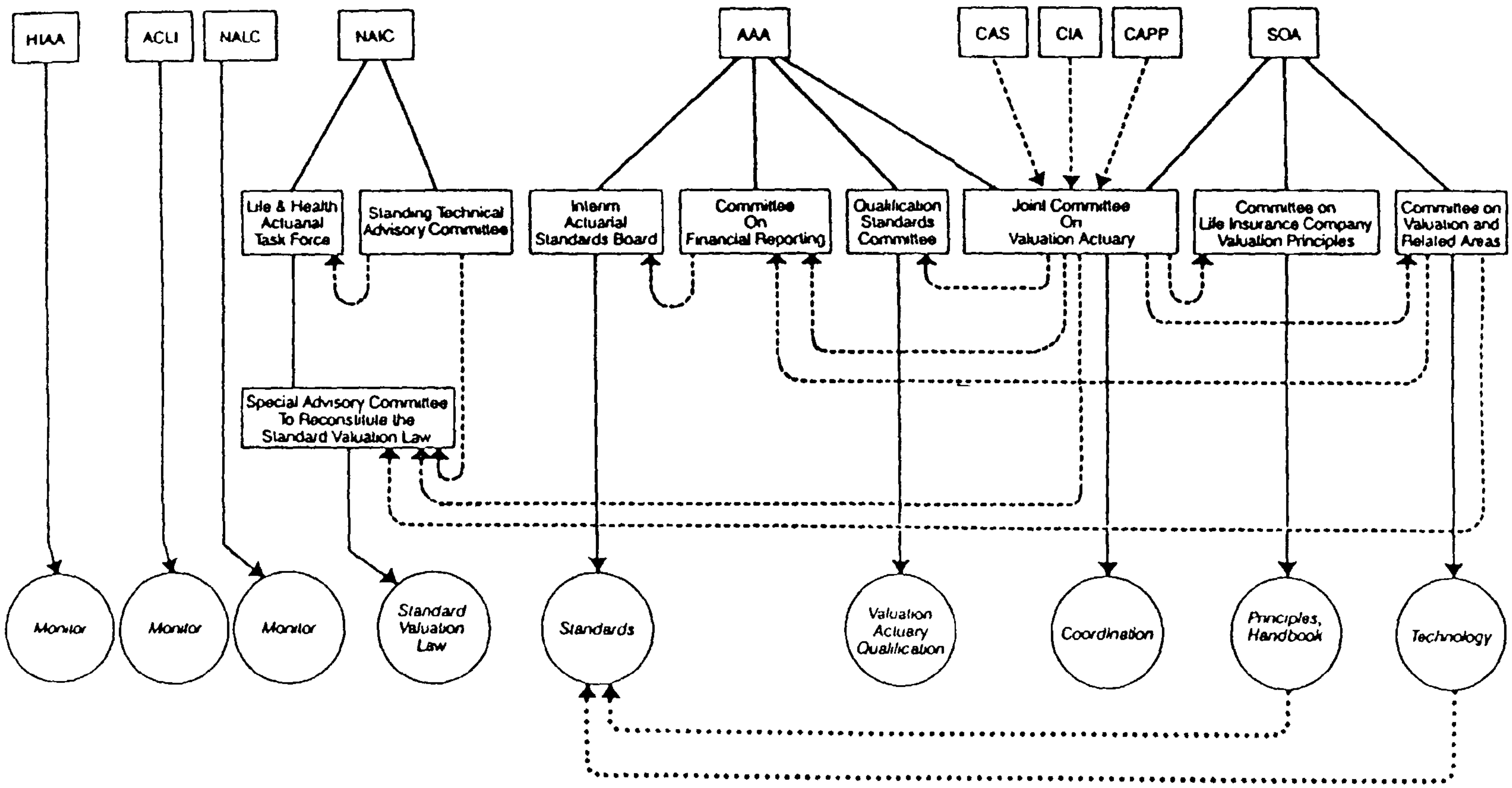
(b) Communicate the Strategic Directions to each of the above entities which have been identified as having some role to play with respect to the valuation actuary movement.

(c) Provide advice, direction, or the Joint Committee's desires, as appropriate, to each of the above organizations on an ongoing basis.

(d) Monitor and coordinate the progress of the above projects and activities.

(e) Make recommendations to the SOA or AAA Boards where Board level support would be effective and is needed to stimulate progress or achievements.

Valuation Actuary Road Map



—— Denotes a direct reporting relationship
– – – Denotes an advisory relationship
• • • • Denotes input

IV. Request for Approval

We respectfully request approval of this report, specifically including the revised opinions of the Joint Committee, its agenda as noted in (14) above, and the overall role of the portion of the profession the Boards represent as it effects the Valuation Actuary concept.

Casualty Actuarial Society
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Canadian Institute of Actuaries
David R. Johnston

Conference of Actuaries In Public Practice
Michael A. Tuohy

American Academy of Actuaries
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Walter S. Rugland
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