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A STRATEGIC PREMISE FOR ACTUARIAL EDUCATION

REPORT OF THE EDUCATION AND EXAMINATION COMMITTEE*

EXECUTIVE SUMMARY

At a meeting of the Education Policy Committee on August 26, 1981 to discuss the changes being proposed for the Associateship syllabus, the General Chairman of the Education and Examination Committee was asked to express the Committee's understanding of a strategic premise on which the recommended changes were based. This request was underscored by the Board of Governors at their Annual Meeting in October, 1981, when they asked that the Committee set down its understanding of the conceptual framework for the development of Actuarial education in general.

These requests stemmed from a concern that the policy making bodies had not been provided with a clear understanding of the guiding philosophy for the Society's educational process.

This report summarizes the background to the current issues being debated, reviews some historic and current perspectives of actuarial education, and observes the major external trends affecting our profession. It then proceeds to outline the E&E Committee's views on the direction of these trends, how they will shape the practical and philosophical considerations underlying actuarial education in general and, in particular, the changes that these trends suggest for the content and structure of the Society's syllabus.

The report revisits the question of what is an actuary, and concludes with a strategic premise for actuarial education, the essence of which is:

1. To provide an understanding of fundamental mathematical concepts and their application.
2. To give a picture of the various environments in which financial arrangements operate.
3. To expose techniques that the actuary can identify, apply, and recognize as to their limitations.
4. To expose a range of actuarial practice, including application of concepts and techniques.
5. To develop a sense of inquisitiveness to explore non-traditional methods and practices.

The E&E Committee hopes that this report will provide the Board of Governors and the Education Policy Committee with a strategic basis for Actuarial education and a philosophical foundation for education policy.

* Michael J. Cowell, Chairman, 1983 Education and Examination Committee.

BACKGROUND

In 1968, Julius Vogel formed a Study Group consisting of Messrs. Fibiger, Miller, Plumley and Watson, then General Officers of the E&E Committee, to review the mathematical content of the Society's education and examination syllabus. The Study Group based its report on the premise that the Society's syllabus should keep pace with developments in mathematics. The thrust of the Study Group's report was that the Society's Associateship syllabus had not kept pace with the rapid developments in mathematics since the 1940's, and that corrective action was necessary if the Associateship syllabus was to continue to form a sound foundation for the education of actuaries. Subsequent reports were written in 1972, 1974 and 1976 by General Officers of the Committee and by others involved in the Society's Education and Examination program. These reports, and the 1968 report that initiated the chain of events, formed the basis for a number of changes in the Associateship syllabus during the 1970's, including, most recently, the introduction in 1980 of Operations Research on Part 3 and the addition of "Advanced" Life Contingency Theory to Part 5.

Both of these most recent changes resulted from the Society's joint sponsorship of Part 4 as EA-1, the basic enrollment examination of the Joint Board.

Even as these changes were being implemented the Society had sponsored the authorship of a new text on Contingency Theory to reflect the increasing shift in Actuarial practice away from deterministic and toward risk theoretic treatments of the subject.

Concerned about the seemingly piecemeal development of what had once been viewed as an urgently needed restructuring of the syllabus, the E&E Committee asked David Holland to recommend action that would complete the task envisaged by Messrs. Fibiger, Miller, Plumley, Vogel and Watson, and in the process respond to the needs perceived for Actuarial Education in the 1980's.

Mr. Holland responded in January 1981 with a landmark report, "Restructuring of Associateship Examinations," which was widely circulated among the Society's educational policy making bodies and the actuarial academic community in Canada and the U.S.

Not surprisingly, in view of its scope and significance, Dave Holland's report evoked a wide spectrum of response ranging from enthusiastic support to serious criticism. The major points of the criticism were that syllabus changes to date had been ill-timed and unsuccessful; over emphasis on risk

theory would relegate actuarial mathematics to an applied branch of statistics; the Society's E&E structure depended for guidance too heavily on academics and not sufficiently on practitioners; and, perhaps most significantly for the future of the actuarial profession, the Society would attract a different mix of candidates, favoring theoretical mathematicians at the expense of practical business students.

The responses to the Committee's proposals in general, and to Dave Holland's Report in particular, were the subject of lively debate and correspondence that continued throughout 1981 and into 1982. A compendium of this material, including two follow-up reports by Dave Holland has been assembled for review by members of the Society's educational policy hierarchy; Linden Cole will be glad to make copies available on request to anyone wishing to read the specific details.

The follow-up Reports by Dave Holland respond to the various alternatives that were proposed to the Committee, and reflect the aspects of those proposals that the Committee believed were worthy of adoption.

Throughout this process, the E&E Committee has attempted to fulfill its role of implementing the educational policy of the Society as developed by the Education Policy Committee and approved by the Board of Governors. In taking the steps to bring about the changes in the Associateship syllabus to date, the E&E Committee has reported on its actions to the Education Policy Committee, and has had a number of its actions specifically referred to the Board of Governors for their concurrence. At no time has the E&E Committee made changes in the syllabus or the examinations to intentionally arrogate to itself the policy making prerogatives of the Board or of the Education Policy Committee.

The E&E Committee perceives that it, like all other Society bodies, is expected to conduct its activities in a more open environment, and has responded by introducing a number of new media for communication with the members of the Society at large and its various representative publics. Indeed, the Committee believes that to some extent, it is the very openness of the discussion of its plans, especially as they relate to Associateship syllabus changes, that has stimulated debate on this issue and has brought the situation to what some may perceive as a crisis.

Another viewpoint is that the crisis is more perceived than real, and that it can be principally attributed to the Committee having operated in the absence of a clearly enunciated strategic premise for Actuarial education, and understanding of the philosophical basis for the Society's development of policy in this regard.

The Committee believes that this view more accurately reflects the true situation, namely that the underlying problem is basically one of poor communications. As stated in the Executive Summary, the Committee sincerely hopes that this report will provide the philosophical and strategic rationale against which its recent direction and plans for completion of the proposed changes to the syllabus can be evaluated.

ACTUARIAL EDUCATION—HISTORIC AND CURRENT PERSPECTIVES

In seeking a foundation for educational strategy, a natural inclination is to turn to the literature of the Society, its predecessor organizations and its sister bodies in other countries. The question of what an Actuary is, and how an Actuary should be educated and trained has been a perennial staple of professional actuarial journals down through the years.

Actuaries have been asking themselves—and others—the first question for at least a hundred years. The following sample of some of their questions—and answers, with apologies in advance for the male orientation of the language of the times—reveals that over the past hundred years, Actuaries have made considerable progress in coming to grips with their often perceived crisis of identity:

"An actuary; why, don't you know that an actuary is just—an actuary! Well, gentlemen, although I have been for fully twenty years engaged in the profession, I candidly confess that it is a most difficult thing to give a more popular definition of the term 'actuary' than that '. . . An actuary is no longer regarded . . . as a sort of calculating machine. He has now become more practical and of more importance, . . .' "

Thomas Marr, FFA, FIA, President's Inaugural Address to the Actuarial Society of Edinburgh, November 4, 1880. (TASE, I, 1886).

"What is an actuary? An actuary should be a man of general culture, with a knowledge of books and men, and the more he has of both the better. He comes in contact with various classes of the community, and will be of little use unless he can understand and sympathize with the different habits of thought of his clients."

Arthur H. Bailey, FIA. Presidential Address to the Institute of Actuaries, November 28, 1881. (JIA, XXIII, 1882).

"He must of necessity be immersed in figures, formulae and mathematical problems, to some extent—perhaps to a large extent—but wide as is this extensive sphere, he must stretch out into still broader fields of labor and thought, if he will justify the boundless promise of his

profession that he will 'substitute facts for appearances and demonstrations for impressions . . . ' Almost every task of importance that the Actuary performs, almost every effort he makes to throw the light of the past and present into the obscurity of the future . . . ''

William T. Standen, FASA, Address to the Actuarial Society of America, Philadelphia, October 19, 1893.

''What is an actuary?'' ''An actuary is that professional who is trained in evaluating the current financial implications of future contingent events.''

Frederik W. Kilbourne, FSA, FCAS, Panel Discussion on Expanding Actuarial Horizons, Joint Meeting of the Casualty Actuarial Society and the Society of Actuaries, April 10, 1978 (Record, Vol. IV, No. 1, p. 14).

It soon becomes obvious, however, that to incorporate more than a fraction of such wisdom in one's research on the subject could become a full-time long-term proposition. Moreover, except for a sprinkling of gems of wisdom that seem more or less eternal, much of this literature is steeped in the educational conditions of yesterday's Actuary; any worthwhile strategic premise is necessarily based on educating the Actuary for the future.

The importance of a forward view has been most cogently underscored by Professor Jewell in his recent observations on actuarial education in general:

''And finally, there must be continuing evolution of the educational process, for the student of today is the actuary of tomorrow, and must be trained in the concepts and methods which will be useful in the future. As indicated earlier, I perceive a serious mismatch between the abilities of today's graduate and the demands placed upon him or her by current actuarial examinations and professional assignments.''

William S. Jewell, Models in Insurance: Paradigms, Puzzles, Communications and Revolutions [Transactions, 21st International Congress of Actuaries, Zurich, June 19, 1980 (with underlining for emphasis)].

And so, without disparaging in any way the valuable lessons of those students of the subject who preceded us, we have focused the balance of this Report principally on the questions of the range of roles that will exist for tomorrow's Actuary, and the kind of environment in which tomorrow's Actuary can expect to operate.

In terms of formal guidance from the Board of Governors and the Education Policy Committee, we do have the benefit of the February 1980 Statement of Operating Policy of the Education and Examination Committee.

This statement, adopted by the Board in March 1980, was developed as an extension of the Education Policy Committee's statement of policy at the request of Barbara Lautzenheiser, then Chairman of the Committee. Those statements are attached as Appendices 1 and 2.

In addition to guidance provided by these statements of strategic and operational policy development, and to direction from the Board and the Vice President in charge of Education and Examinations, the E&E Committee has received a most helpful statement from a member of the Education Policy Committee, outlining the formulation of a strategic premise for the Associateship syllabus. This statement calls for the authors of such a strategy to develop a ". . . clear picture of:

1. The *future* environment in which actuaries will be operating;
2. The *future* actuarial mission or role; and
3. The objectives underlying the . . . (changing) design of the Associateship examinations."

The E&E Committee is, indeed, flattered to think that anyone would attribute to it the wisdom to develop a clear view of anything, let alone the future! While we are pleased to rise to the occasion, we would remind our readers that one of the very arguments we are making in our recommendations for including more advanced risk-theoretic statistical topics on the syllabus is that we need to enhance our students' understanding that actuarial assumptions and predictions are, at best, estimates of the mean value of an underlying distribution. Such estimates are used at the estimator's peril if not accompanied by a thorough understanding of higher order moments of the distribution. In this case, we would caution that our clear picture of the future has an unstable mean and an enormous standard deviation.

A 'PARTLY CLEAR' VIEW OF THE FUTURE

For I dipped into the future,
far as human eye could see,

Saw the Vision of the world,
and all the wonder that would be;

Tennyson, Locksley Hall, 1842

In considering the conceptual framework for an educational strategy, we undertook an analysis of the current situation facing the Actuary. The following 'situational analysis' highlights, in a most summarized fashion, some

of the more significant components of change, and the direction we believe they portend.

These forces of change are categorized here for convenient reference as social (and demographic); political; economic; and technological. In reality, of course, they operate interdependently, each serving at once as cause and effect. Indeed, so much has been written in recent years about the rapid rate of change wrought by these forces, that we are somewhat hesitant to address these issues in the relatively focused context of this report. However, to ignore the existence of these forces, and their specific manifestations in the financial services industry would, we believe, not enable us to do full justice to the evaluation of the type of environment in which actuaries will be working ten or twenty years hence.

Socio-Demographic

The Actuary of the past worked in a relatively stable socio-demographic environment. The future will be far more dynamic and will require a flexible approach to both the work and education of the Actuary. Two examples follow:

> As recently as 1960, the 'typical' family unit in North America consisted of a working father, a non-working, or part-time working mother who spent most of her time as a 'housewife,' and their two or three children. This societal structure, with a clearly identified 'breadwinner,' provided the market base from which the life insurance business built its growth and derived its strength for much of the 20th century. Within less than one generation, the previous 'typical' family structure has become a minority. The financial dependence by many families on a single 'breadwinner' has decreased; as a result, the market for personal individual life insurance, particularly the cash-value form, has undergone major change.
>
> In the pension arena, the aging of the population is placing a severe strain on the productive capacity of the economy to support retirement benefits. This trend is a particular concern in the planning of social insurance and retirement plans, and was a major fact underlying the passage of ERISA.

Political

Prior to the 1970's the Actuarial profession—at least in the U.S.—was largely unregulated. The Actuary made assumptions as to interest and mortality as he deemed appropriate, with minimal interference or regard to political considerations. In the U.S., the single most direct political impact on the profession was the passage of ERISA in 1974. In addition, an increasing

number of jurisdictions are requiring certification of Actuaries to sign annual statements, to value casualty loss reserves and, more recently, to validate the soundness of health insurance arrangements. Others have attempted by legislation or regulation, to limit the prerogatives of the Actuary in selecting assumptions that are regarded by certain special interests as contrary to their vision of the public good.

However, with the broader discretion implicit in the new valuation and nonforfeiture laws, the general trend is to fewer limitations on the Actuary's judgment in product design and valuation, and to increased reliance on his certification that the liabilities based on his assumptions represent amounts sufficient to meet the obligation to the policyholders. In this respect, the situation in the U.S. is moving toward the generally less restrictive climate in which our Canadian members have traditionally operated.

Notwithstanding this trend to less restrictive regulation, the outlook is for the Actuarial profession to become more, not less, involved in the legislative and regulatory arena, and to have to defend the exercise of its prerogatives in selecting assumptions relative to the contingencies whose impact it is responsible for evaluating.

Economic

For the first half of the 20th century, inflation in North America, with the exception of brief periods following each of World War I and II, was little more than an academic consideration. Indeed, for a prolonged period in the 1930's the reverse condition was prevalent. Long-term interest rates held for much of this time within a fairly narrow range around the 3% level, and a major concern among life insurers during the deflationary period of the late 1930's and early 1940's was whether funds could be invested at rates to meet their long-term guarantees. Although rates rose steadily through the 1950's and early 1960's, they were at such low levels in contrast to those that have resulted from the upheavals in the money markets during the past ten years, as to become, in retrospect, today's criterion for normality.

In this environment, the Actuary's approach to interest and contingency theory was, with rare exceptions, to assume that interest would continue at a single unchanging rate over the life of the financial arrangement he was evaluating. One direct result of this tradition of expressing benefits in terms of fixed dollars, is that many members of our profession in the early 1980's find themselves responsible for the actuarial management of insurance and pension plans that are delivering only a fraction of the purchasing power

that the participants and beneficiaries had in mind when these plans were established. Our ultimate customers had come to rely on such plans during their productive working years, and not until they began to depend on them for their financial well-being did many of these retirees realize—usually too late—how inadequately such plans meet their expectations.

Today's Actuary cannot claim to have discharged his responsibilities in the financial management of insurance and pension plans without reflecting the impact of inflation. In anticipating the direction of this trend, and the related levels of interest rates, the Actuary has few, if any stable indicators on which to rely.

Among the more optimistic seers in the economics community, predictions are that inflation rates of at least 6% will continue through the end of the century. Even among mainstream economists, the prospects of hyper-inflation and runaway interest rates are no longer dismissed casually, while our more influential business journals carry articles on impending depression, if not outright economic cataclysm.

We have seen the impact of unstable economic conditions on interest rates, and must be prepared to evaluate the effects of further volatility on insurance and pension plans. As investors factor this volatility into their expectations for interest yields, and seek higher premiums on "risk-free" rates to hedge against inflation, Actuaries will have to anticipate not only higher levels of interest, but greater fluctuations around their expected values.

The reduced influence of mortality and the increased role of interest has accompanied—indeed may be a substantial reason for—the decline of the protection element and the greater significance of the accumulation element in many of the arrangements for whose actuarial soundness we are asked to vouch. In this environment, the U.S. Actuary can expect to be held more responsible for the asset side of the arrangement, and for the interrelationship between assets and liabilities, a situation that is becoming more familiar to the Canadian Actuary, and one that has always been part of the British Actuary's experience.

Technological

Thirty years ago, the digital computer was little advanced beyond the status of an experiment in an electronics engineering laboratory. Today, people are made to feel like second-class citizens if they do not have a home computing system with which they are fully conversant. Actuarial problems that only 20 years ago could not even be addressed because of their com-

putational challenge, are now solved in minutes by actuarial students with access to their company's computer—or their own home system.

The potential range of problems that Actuarial science can address has been extended further in the past 20 years than in the preceding two hundred. Yet, in spite of the greatly enhanced power of the tools available to them, Actuarial students are still being instructed in mathematical concepts that have a closer relationship to the technology of Babbage's "Difference Engine" than to today's pocket calculator, let alone large scale computer.

Our sister professions in the financial services industry have not been constrained by the methods of yesteryear, and we now find ourselves competing with accountants, financial analysts, investment managers, pension planners and statisticians, all of whom assume some level of expertise in advising their publics on various aspects of insurance and pension arrangements. And each of us, in turn, is now competing with the XYZ Computer Corporation's newest home computer system with plug-in "logic" packages that promise to program its prospective purchaser's overall financial plan.

Every indicator suggests that in the environment of tomorrow, the Actuary will have to contend with the further evolution of this trend.

WHAT IS AN ACTUARY?

As demonstrated, the literature of our profession is replete with articles on the education and training of the Actuary. Not surprisingly, the question of what skills and disciplines should replace the toolkit of yesterday's Actuary are again being raised as we attempt to prepare today's students for tomorrow's tasks. Unlike his counterpart of a generation previous, who was trained for a fairly static environment, today's Actuarial student must be readied for a role that is not only a moving target, but that is simultaneously being aimed at by other occupational groups.

We can offer only a cloudy view of the Actuary's role in this environment; indeed the only 'clear picture' we can see is for an expanding and changing role. What is an Actuary? More important, what will an Actuary be ten years—twenty years—hence? *What do we want the Actuary to be?*

With apologies to Messrs. Bailey, Marr, Standen, Kilbourne, and the many others who have offered their definitions, the General Officers of the Education and Examination Committee now submit that the work of the Actuary is to apply the scientific method:

To cast the light of experience, mirrored by the judgment of today, on

to the future of financial arrangements so as to measure, manage and communicate the impact of contingent events on those arrangements.

This suggests a role for the Actuary in any arrangement involving a financial transaction dependent on a contingent event, or on a certain event where the timing is contingent. This definition embraces the traditional Actuarial roles in insurance and pension arrangements, uninsured health care programs and social welfare plans. It implies taking a principal role in the interpretation of experience from these arrangements, and exercising judgment in the application of that experience and other knowledge to the future operation of such arrangements. It goes beyond the traditional view of the Actuary as a passive observer and evaluator by suggesting an active role in 'managing' the impact of contingent events, and in effectively communicating their expected outcome to the Actuary's interested publics.

Finally, this definition, and the educational program that it presages for tomorrow's Actuary, should emphasize the importance of expanding the student's horizon from that of a technical specialist to a broad gauge generalist, fluent in numerous aspects of the financial arrangements for which he is responsible.

A STRATEGIC PREMISE FOR ACTUARIAL EDUCATION

In a broad sense, the mathematical elements of actuarial education in the Associateship syllabus prepare the actuary to 'measure' the impact of contingent events on financial arrangements, while the practice oriented subjects in the Fellowship syllabus prepare the Actuary to 'manage' that impact and those arrangements, and to 'communicate' their predicted outcome in a dynamic environment. To that end, a strategic premise for actuarial education and the ongoing development and evolution of the syllabus could be summed up as:

1. To provide the actuary with an understanding of fundamental mathematical concepts and how they are applied, with recognition of the dynamic nature of these fundamental concepts in that they must remain consistent with developments in mathematical knowledge.
2. To provide the actuary with an accurate picture of the socio-demographic, political and legal, and economic environments within which financial arrangements operate, along with an understanding of the changing nature and potential future directions of these environments.
3. To expose a broad range of techniques that the actuary can recognize and identify as to their application and as to their inherent limitations,

with appropriate new techniques introduced into this range as they are developed.

4. To expose a broad range of relevant actuarial practice, including current and potential application of mathematical concepts and techniques to the various and specialized areas of actuarial practice.
5. To develop the actuary's sense of inquisitiveness so as to encourage exploration into areas where traditional methods and practice do not appear to work effectively.

In a word, the Actuary's training should emphasize the heuristic approach, one that teaches by practical example how to tackle problems. We see this as the most likely way to lead to new and better ways to get the job done in an environment of rapid change.

No educational plan can properly claim to prepare its students for all eventualities. The Society's education program should develop students trained to operate in the mathematical and statistical environment of today, but educated to recognize the changes in this environment that will reflect on their continued ability to judge, measure, manage and communicate the impact of contingent events on the financial arrangements for whose future soundness they are responsible.

SUMMARY

The Committee recognized from the outset that in describing the rationale for the changes being proposed to the Society's Education syllabus, it would be difficult to avoid the temptation to philosophize on the many topics related to this issue.

We have described what we see as the major influences in today's Actuarial education environment, the background to how we reached our current position and, as requested, we have developed a statement as to where we believe this leads in terms of educational strategy.

In so doing, we have attempted to stray no further from our objective than we felt necessary to illustrate our views. We did not go so far as to attempt to describe the Actuary of the future in detail, although in several places we did more than allude to the type of environment in which tomorrow's Actuary can expect to function. We believe that our strategic premise for the education of tomorrow's Actuaries will help them function more effectively in that environment.

The Chairman of the Committee thanks all those who helped in the development of our strategic premise, in particular, Barry Watson for his guid-

ance, enthusiastic support, and unflagging patience through numerous earlier drafts, and Linden Cole and Jim Murphy for their invaluable suggestions that improved both the format and content of this Report.

APPENDIX 1

To the Board of Governors

Statements of Operating Policy

The Board of Governors at its meeting on May 22, 1979 adopted a "Statement of Educational Policy" as recommended by the Education Policy Committee. A copy of that statement is attached. It is purposely brief and covers major points in a general way.

Proposed statements of operating policy have now been prepared by the Education and Examination Committee and the Continuing Education Committees. These statements are attached and are recommended for adoption by the Board.

Also attached is a list of the duties of the Continuing Education Committees. While this is not part of the formal operating policy statement, it is included for the information of the Board.

On Behalf of the
Education Policy Committee
Barbara J. Lautzenheiser, Chairman

STATEMENT OF EDUCATIONAL POLICY

The following statement of educational policy is intended as a basis for the establishment and furtherance of actuarial education and research and related professional standards.

There are three basic objectives underlying the educational goals of the Society of Actuaries:

A. To provide and to foster a comprehensive system of actuarial education

   1. for persons desiring to acquire the knowledge and skills necessary to attain competence in the various areas of actuarial specialty.
   2. for persons wishing to maintain, update, renew and expand their knowledge and skills, and
   3. for other persons who seek knowledge of professional actuarial matters.

B. To provide, where necessary, systems adequate to measure and establish standards of educational achievement.

C. To promote and to foster educational activities and research that will expand and enhance the overall base of actuarial knowledge.

APPENDIX 2

Society of Actuaries
EDUCATION AND EXAMINATION COMMITTEE
Statement of Operating Policy

The comprehensive system of actuarial education for the qualification of members is implemented through the development of a course of study subdivided into groups of generally related topics. The examinations given on these topics are intended to measure the degree of educational achievement by students, in accordance with established standards.

A. Goals for the Examination Syllabus and Course of Reading

1. The theoretical, mathematical topics and techniques which will have relevant application to current and emerging actuarial problems, and to the related areas of actuarial practice.
2. The basic principles (or "common knowledge base") appropriate for all students in each established (or emerging) specialty area of actuarial practice (e.g., in life, health or casualty insurance, or in pensions, etc.).
3. The availability of current study materials required for in-depth education of students, at intermediate and at advanced levels, for the various combinations of specialty areas they may select.
4. The adequate recognition and treatment of the unique national characteristics that may apply in each of the specialties.
5. A common-core base of subject matter that maximizes the potential for joint sponsorship and administration of examinations by the various actuarial organizations in North America.
6. The preparation of the actuary to make soundly-based judgments consistent with high standards of professional conduct and competence.
7. An avenue for satisfying the requirements of any external licensing, certifying or enrollment body, with respect to actuarial practice.

B. Goals for the Content and Conduct of the Examinations

1. A means to identify those candidates who, as a pre-requisite for qualifying for Society membership, demonstrate adequate knowledge of the course of reading, based on standards that are formulated and applied consistently from year to year.
2. Representative, clearly worded questions which thoroughly test candidates' knowledge of the principles and techniques in the required course of reading, and also test their ability to apply these to actuarial situations that might be encountered in the real world.
3. Administration of examinations under conditions as uniform as possible for all candidates, with an absolute minimum of conditions that are distracting or that provide opportunity for improper giving or receiving of assistance.
4. Preparation and grading of examinations in a thorough and timely manner, with grading standards and procedures that are as uniform and objective as possible for all candidates.
5. Overall administration of the examination system with a monetary framework which is as self-supporting as is reasonably possible.
6. Adequate and timely communications to students and examination supervisors.

C. Committee Functions and Procedures

1. Adequate staffing and timely recruiting of qualified General Officers, Part Committee leadership and members, Education Committee members, and consultants.
2. Adequate and timely communications with the Education Policy Committee, Board of Governors, the Society Office, and with the other joint examination sponsoring and administering bodies, as well as with Society members and students.
3. Implementing of policy, as defined by the Education Policy Committee and the Board of Governors.
4. Reviewing and updating the Course of Reading, and making any necessary restructuring of examinations as may be required.
5. Developing and overseeing the administration of the examinations in accordance with sound operating guidelines.