# **RECORD OF SOCIETY OF ACTUARIES** 1986 VOL. 12 NO. 4B

# CREATIVE OPTIONS IN THE ACTUARIAL PROFESSION

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- Panel discussion on viable options for second careers utilizing an actuarial background. Society members who have moved into such career paths will offer their perspectives on:
  - Their personal experiences and options
  - The contribution of their actuarial training
  - How others view the actuary
  - Current and future options available to actuaries

MR. WILLIAM M. RING: Our purpose this afternoon is to discuss viable career options or deviations from so-called normal actuarial career paths. Our intent is not to cover every possibility, but rather through examples and our personal experiences, our goal is to leave you with an enhanced impression of the overall potential of an actuarially trained individual.

The first panelist to be introduced is someone who has served the business world and the Society of Actuaries in numerous capacities. He's recently been the director of the insurance consulting practice for TPF&C, and is currently Managing Director of the investment banking firm of Merrill Lynch. He has served the Society in many ways, as a speaker and as an author of many published articles.

\* Mr. Corey, not a member of the Society, is Chairman of the Board of Chicago Search Group in Buffalo Grove, Illinois.

He also served as a Vice President and as a member of the Board of Governors. I first met Bob in 1965. I was a summer student at an insurance company in Milwaukee, Wisconsin. I hadn't passed any exams at the time, and all of us "would be" students held Bob in rather high esteem. He had rocketed through the actuarial exams, and had one of the highest paid jobs any of us had heard of. I think it paid about \$9,500 at that time. I have continued, as I watched Bob's career, to be impressed with what he has been able to accomplish. I hold him in the highest regard even though he graduated from the University of Wisconsin!

MR. ROBERT D. SHAPIRO: It's my pleasure to introduce Mike Corey. Mike is the Chairman of the Board of Chicago Search Group. Mike has worked with actuaries and employers of actuaries for twenty years. He is well known to all of us. He's actually placed more than a thousand actuaries, which is more than 10% of the membership of the Society of Actuaries! In addition to running his executive search business, Mike is one of the two top people in a firm that does career counseling for professional athletes. Mike is also involved in a number of other entrepreneurial ventures. This is Mike's eightieth consecutive Society of Actuaries meeting!

MR. MICHAEL J. COREY: If you think that the University of Wisconsin is going to get a hand, you ought to know that Bill Ring went to Hillsdale College in Michigan, which is famous for the great half-back, Bill Ring. Bill played football, wrestled, was the valedictorian of his class, graduated summa cum laude and graduated number one in his class at Michigan when getting his master's degree in actuarial science. Bill started at Allstate, and I met him when he was about to leave there. He had helped start up a group operation and was called upon to organize from scratch a Mass Marketing Department. He did a great job as an Assistant Vice President at Allstate. Then came CNA. They had the foresight to bring Bill in to direct their Specialty Operations, including Mass Marketing. He was a Vice President at CNA. Later, in 1978, he talked to me about starting up a one-man operation in the basement of his house. He is now one of the truly premiere consultants in the country in direct response, and mass marketing.

MR. RING: Let's begin with a question that you might be asking yourself: "Why consider deviations from a normal actuarial career?" Here are just a few random thoughts. First, you may consider a deviation because it might represent a better opportunity for promotion. Let's think about that for a minute. Sometimes a normal actuarial career can be so well defined that it is difficult to recognize individual accomplishments or efforts. You simply tend to move along as part of the system.

Second, becoming a part of something new could help alleviate that situation. It could start you off at the ground floor, and everyone would have the same opportunity.

Next, you might desire a change. You've just become stagnant or bored, or you may feel the need to create. You need more freedom to do it your way or to do your own thing. A catch-all response is that your current situation is simply unfulfilling, for whatever reason that may be.

Finally, your boss tells you to change. This last thought had a lot to do with my beginning a career deviation. Most actuaries I've talked to are somewhat resistant to career deviations, and I was no exception.

Let me provide a little background. Several years ago I was working for Allstate Insurance Company, as part of a three man team which had started a group operation. That operation had built up to a point where it was very successful. One day my boss came to me and said, "You've been selected to start a direct response insurance profit center." Now bear in mind that this was back in the late 1960s. I squealed like a stuck pig. At that time this kind of insurance was sold through twenty-five cent coupons clipped from magazines. After having hinted at my position regarding this promotion, I went back to my office; I called my wife, I called my mother, I called Mike Corey, and the next day I got started building a direct response operation for Allstate Insurance Company. It's turned out to be one of their major profit centers, and it was the best decision that I ever made. Since that time, I have been in all aspects of direct response insurance, and as an actuary, I've been afforded many diverse and challenging opportunities as a result. This

brings me to what I specifically want to discuss with you: opportunities for actuarially trained individuals in direct response insurance.

There has been substantial interest and growth in this type of insurance in recent years. It is stronger now than it has ever been before. Let's look at why. First, there is a growing confidence and acceptance by the public. Fifteen years ago, surveys indicated that three to six percent of the people considering the purchase of insurance would buy it via the mails. Those percentages have now grown to twenty-five to thirty percent, and are still growing.

Next is third parties, particularly financial institutions, who are interested in marketing direct response insurance to their customer base. Another reason is the increase in the cost of the agency system. It's caused many companies to consider direct response insurance as an alternative distribution system for certain segments of the market. In other words, they can penetrate all the markets by using different distribution systems. Other reasons are that direct response insurance is highly manageable and efficient, and accurate research, particularly "simulator" research, is available. The success of other companies has been a motivator. If it is done right, there is profitable growth. If you accept the axiom that growth means opportunity, what we need to consider is how this growth in direct response insurance translates into opportunity for actuarially trained individuals. That is, why would actuarial training help in direct response insurance? Let's begin to answer this question with a listing of direct response insurance functions.

- o New Product Development
- o Pricing
- o Advertising
- o Research and Testing
- o Marketing and Sales
- o Production
- o Administration

We'll take a look at each one of these separately, the first being New Product Development.

The philosophy behind successful new product development in direct response insurance (and for that matter in any other field) is to deliver to the needs and desires of the customer. Traditionally, we insurance people have not done this. The home office has created a product and force-fed it through the system and ultimately to the consumer. This philosophy is very important to direct response insurance, because it is the number one reason for failing. If you take a "shelf" product, or copy a competitor's product, normally it is the quickest road to bankruptcy. At the other end of the spectrum is the fact that new product development is also the key to break-through marketing. It used to be that this was an advertiser's medium. You got break-throughs from advertising gimmicks. They may be computer letters, it could be involvement devices, and most recently, plastic ID cards. The number one area for break-throughs now is new product development. Let's take a look at what's required to achieve break-through ideas. It starts with a scientific examination of the key assets, and for direct response insurance, those key assets are the lists. This is where all direct response insurance should start. In evaluating whether you should do it or not, it's a matter of what kind of list you have, and what kind of information you have within those lists. What selection parameters exist for target marketing; what affinity exists amongst the group; and do you control the list, or is it a list that you have to purchase?

Next is a competent competitive analysis. Most of the analyses that I have seen of competitors' products deal with a simple comparison of the benefits. What is needed is an apples to apples comparison of the pricing, the features, the limitations, the exclusions, and to whom was it marketed? That is, what was the marketplace? Most importantly, you need an overall knowledge of insurance to formulate ideas with the direct response insurance characteristics of appeal, simplicity, and broad scale eligibility. I have a somewhat rhetorical question that I will be repeating throughout the remainder of my comments, and that's, "Who could do this better than an actuarially trained individual?"

We now have a product idea. Next it needs to be priced. Pricing for direct response insurance is a little different. For example, the key assumptions are response rates and solicitation costs. You could make dramatic changes in

mortality and morbidity assumptions, but they don't have the impact of relatively minor changes in the first two assumptions. You must also keep in mind the contractual arrangements, particularly if a third party is involved. You want to know the duration of the contract, and you want to know under what circumstances it can be terminated. Are there any restrictions to fulfillment offers, or add-on offers, or cross-sell efforts? I personally don't think that a third-party contract should ever be signed without an actuary taking a good look at it.

Very often, pricing for direct response insurance is done in preparation for research. Costly benefits or procedures should be isolated for separate pricing and testing. Also, the price needs to be accurate within 15%. A very common mistake is for an actuary, or even a non-actuary, to ball-park a price for research purposes, thinking it's not significant. Then when it comes time to take this research and use it in the real world, it is rendered completely invalid. You can also vary the price with research, and this is a very nice actuarial tool. You could have the benefits, the features, everything exactly the same, but, you could change the price. The only way you could do that is through some of the direct response research that is available today. Also, you could consider different pricing for different list segments. Who could do this better than an actuarially trained individual?

Next is advertising. Briefly, the advertising must accurately describe the product, benefits, rates, and exclusions. Further, precise direction is needed for preparation of the advertising packages, including the product description, the test design, and any guidelines for cost control. Again, who could do this better?

Our actuarially trained staff has now isolated a new product development idea. They've priced it and given detailed direction to the advertising people. You've done this; now what? Do you mail it and just pray? In the old days, that's the way it was done. Today's environment, however, demands research and testing, such as direct response focus groups, simulator testing, live tests, match keys and cluster analysis. Unfortunately, time permits us to talk only about a couple of these. The first is direct response focus groups.

For those of you who don't know what they are focus groups involve assembling groups of people and conducting a series of interviews with these groups of people. There is a highly trained moderator who handles these interviews. The entire process is observed through one-way mirrors. Amongst the observers are the actuarially trained individuals. These individuals attend each session. Then, based on the participants' comments, the actuary will change the benefits and price for subsequent sessions.

One of the most powerful research and testing tools is simulator testing. It's a pure direct response testing system. You need a product idea, but you don't need to manufacture or produce a product. You don't need to maintain inventory. There are no legal filings. You don't need to develop systems or hire manpower. It is, however, necessary to have an advertising package. With just an idea and an advertising package, you can use a simulator to predict sales rates and other income statement assumptions, such as benefit options, payment method preferences, and even the average premium. It can also tell you how to improve your advertising, and it tells you the target markets. That is, it tells you which segments of the list you should mail to and which segments of the list you shouldn't mail to. To do all of this, you need an individual who is knowledgeable regarding key test elements which have a significant impact on profitable growth, who is knowledgeable with respect to probability and statistics, and who is knowledgeable about insurance, in order to provide realistic and practical recommendations. Who could do this better than an actuarially trained individual?

After the research and testing, the product is ready for marketing and sales. The key responsibilities here are, the presentation of the research and testing conclusions, and the recommendations to key company and third-party personnel. This is one of the best selling techniques of which I am aware. There needs to be isolation of the markets with the best potential target marketing. Then there is sales and assistance in sales for sales to third parties. You might be interested to know that the three best salesmen I know in direct response insurance are actuarially trained individuals. Again, I just want to plant that question about who could do something like this better than an actuarially trained individual?

After you get the sale, you have to produce the material. Here the actuary needs to establish the marketing allowable costs, monitor the tape processing and production bids and review the final art boards for accuracy. Now that the materials have been mailed, and enrollment forms are coming back in, the administrative process begins. There are different requirements. It requires the analysis of response, issue and conversion rates, issuance procedures and timing, customer service correspondence, demographics of the buyers, and of course, profitability. Who could do it better than an actuarially trained individual? We could go on, but at this point in time, we've looked at enough of the functions in direct response insurance to draw some conclusions.

- Direct response insurance is big business, and is growing faster than ever with major insurance companies aggressively entering the marketplace.
- o The demand for talent in this area outweighs the supply.

Hardly a month goes by when I don't get several phone calls from people who are looking for individuals with talent in this area, particularly those with actuarial talent.

Direct response insurance is run by the numbers. It can be an actuary's game.

You'll know within 90 to 120 days after a mailing is made whether you are going to make it or not.

With specific reference to actuarially trained people:

- The scientific approach is necessary for consistent success, and it is ideally suited to the discipline and knowledge of actuarially trained individuals.
- o Actuarially trained individuals can be involved from top to bottom.

That's the way I like it -- seeing an idea you have end up being part of the statement of income. On the other hand, you might prefer to specialize in one

area of direct response insurance. It could be research and testing, for example.

 It's a dynamic, exciting business that allows an actuarially trained individual to deviate from the normal career path and still capitalize on his base of expertise.

Our intent this afternoon is to use examples and personal experience to help you realize your broad scale potential. Direct response insurance is only an example of that possibility. The point is that actuarially trained individuals offer very specialized talents. Many insurance companies consider new ventures, new ideas and change to be a definite part of their future, and a necessary ingredient for success in the future. With other noninsurance industries vitally interested in the insurance dollar, it is a great time to be an actuary. Just be open to different career options.

MR. COREY: Bob mentioned that I do a lot of work in what started out as an avocation, and it turned out to be a lot of fun. Fortunately, I've developed a staff to run the business. I do a lot of work with athletes, both professional and amateur. When we talk with athletes, especially in the professional arena, usually the people who respond most positively, the people that stand up first and raise their hand, are the people who don't need it. They are usually the brighter individuals, the individuals with the best education. They know there is a reason that they should be listening about career counseling and career planning.

This room is filled with a lot of people who are in very nontraditional roles. I count three or four people in the investment banking community. I can point out a number of people who have gone from large corporations to consulting, from big corporate jobs to one-man firms. It's interesting that the people who are interested in the nontraditional approach to their career or creative options, are probably people, who have already started and have already taken advantage of those creative options. After the statement that I am going to provide today, you won't leave here thinking that I'm one of the most brilliant speakers that have ever stood before you. You will find that there is a great deal of simplicity on how you approach your career, and how you attack it, and

how you take advantage of looking for creative options, and finding that pot of gold at the end of the actuarial rainbow. Why don't we start with that particular analogy?

Let's use, to begin this talk, an analogy drawn from the movie, "The Wizard of Oz." Let's position ourselves as the Wizard, and let's use the cast of characters. Let's start out imagining yourself as Dorothy, who is about to have many harrowing experiences. Toto will be your wife or girl friend or your family who is along for the whole time. The Tin Man will probably be your college professor, who was trying to impart a great deal of knowledge to you in a rather stern fashion. A tornado represents the ten actuarial exams you took and passed. You are on your way to the Emerald City. The Emerald City represents that executive suite down the road, that place that all of us look for, and we get there by the yellow brick road. From this point on, the yellow brick road really will represent the career track that each of you has taken, and the one thing that we all have in common is that we've all taken a career track. Some of us have done it easier that others, and some of us have done it better. Let's ease on down the yellow brick road.

We want to ease on down the road, but we want to go down that yellow brick road with companies which have heart, which have brains and courage. What are the career track decision points that each of us have to face? We start in college, we all realize that we are very smart, and we go through college with relative ease. After college, we get a job.

The real critical decision points are made after you've started your first job, and most of them are accidental. As Bill put it, many of us are told to make that career decision that really impacts our lives. Discovering the first job you like is done quite by accident. Companies have tried to minimize that for actuaries by setting up rotational programs. These rotational programs allow you to find out what your preferences are. You can find out where your skills and interests lie. Many actuaries end up doing product work, or financial, or EDP or get into management because the process lets them discover what they like. The fact is that some people are on the Emerald City express, and many aren't. A thought I've had from the very beginning of my dealings with people in helping them make these career decisions, is that there are people who want

to control their destiny, and there are people who either don't want to or don't care to, or don't think about it. But the person on the Emerald City express wants to control his or her destiny at all times. People on the Emerald City local make many changes because they are indecisive or have no particular concern. They let their careers pull them along instead of making things happen, and they let others control their destinies.

We were asked to talk about alternative options. Alternative options can be almost anything. Alternative options can be going from insurance company work to consulting, or insurance company or benefits consulting work to investment banking, to running a management consulting practice in direct response, to almost anything imaginable. There are many options. In management you have insurance company management, you have consulting management, and you have management in general industry. In general industry, it is not as easy to find those individuals who have gone that route, but a number have.

Next you have consulting as an option. That's dealing in the insurance arena with employee benefits, EDP, health care, and general management consulting, as well as governmental consulting.

Third, and becoming quite popular, is mergers and acquisitions, investments and pension work. Data processing is an option. You have management in the insurance world. You have consulting. You have industry, such as working with the Hewlett-Packards and the IBMs and others. You have sales and then, of course, technical. Another option is teaching at the college level, either full-time or part-time.

An area that is perhaps the fastest growing in terms of demand for actuaries, at least with my clients, is the area of marketing. Companies have come to the conclusion that the best marketing people are technically grounded and technically oriented. All of us here know that if you go to a LIMRA meeting, the first thing you talk about is marketing. Marketing in the insurance industry, for the most part, is sales management. More and more today, marketing is taking on a technical positioning. This industry is going through some great change. The profit margins are being narrowed, and we need to find ways to market products and develop new distribution systems. Actuaries are the

perfect individuals to become the senior marketing people in the insurance industry, both life and casualty. You have marketing consultants, and you have actuaries who can go outside the insurance industry to get involved in other marketing.

In governmental work, you have both insurance departments at the state level and governmental agencies at the national level. Then you have association work. There are a number of associations which employ actuaries. Obviously, there are a couple represented right here in the Society.

I was interested in knowing how many participants were in the individual disciplines, so using information we have in our computer databank I ran off some statistics. There are approximately 60 CEO and COO actuaries in the life insurance industry. That's in the U.S. and Canada. That percentage will grow dramatically, I think, over the next decade. There are 56 actuaries in the Society's yearbook who have "marketing" as part of their listed job title. In the U.S. insurance departments there are 44 actuaries employed. In the Canadian insurance departments there are 28. In the governmental agencies in U.S and Canada, there are 159. We have all looked at the actuarial books, so you will not be particularly excited to hear that there are two actuaries in the department of defense, one in the department of energy, 10 in the IRS, 20 in social security, and so on and on and on. These add up to 159. Obviously, those are alternative career options beyond the traditional actuarial position, whatever that is.

What are the future options? The future options, I think, are endless. I think you can let your mind wander, and consider examples such as communications, space, advertising, automotive, consumer goods, aviation, banking; obviously, industry marketing, and, very definitely, something entrepreneurial. If you think back to your exams, what you really did was develop more than specific knowledge, you developed specific disciplines. It was a tough and agonizing experience. Like the basketball player who dribbles the ball and shoots 50,000 shots in his carcer to fine tune his skills, you, by passing those exams, fine tuned your ability to develop certain types of disciplines. Those disciplines are represented in your everyday thinking.

In the entrepreneurial arena, you obviously have consulting, and there are a number of people who have done well at it. You have the buying, building, and selling of companies. You have creating and selling of product or distributive driven services, such as mass marketing, investment, pension administrative systems, and marketing systems.

The mind set that you have developed as an actuary can be utilized in any type of thinking, ranging from management, to technical, to making business decisions. I can think of an individual I know well who was a very successful consultant for a very successful benefits consulting operation. He was at the pinnacle of his career as the lead person in his particular office. One day he walked in and announced to his boss that he was leaving to build a church. Now here was an individual with a six figure income who had always dreamed of building a church. When he resigned, everyone was in shock. It was a great loss for the firm, but the individual went out for two years and built his church. He also started a small affiliated college.

After the two years he found someone else to run it, and he returned to the actuarial profession. Up until that time, he hadn't had the experience to realize that he could use his skills in something other than just actuarial science. He found out that he was very successful at almost anything he tried. He went back and started his own consulting firm, and today he has, I think, one of the fastest growing benefits consulting practices in the country. He now has not a six figure income, but a seven figure income.

What are the risks in following the nontraditional yellow brick road? You might have to tread where your contemporaries haven't. There is definitely the possibility of professional loneliness. Those of you who have gone off on your own may have discovered that professional loneliness is a bigger element than you had anticipated. The ability to wave the wand and have things done doesn't always happen very quickly when you are on your own. Some of the smartest, most successful people I know had to learn to re-tool themselves, to do things themselves. The successful ones today have done it. We call it the syndrome of the lonely guy.

Exams and Society credentials are less important in a nontraditional type of job. If you work outside the insurance industry, be it corporate work, other work, or work in consulting organizations where you provide support to another discipline, actuarial exams are probably less important. One of the common complaints I hear about making changes goes like this, "I don't want to move to that city, because I would be one of only two or three actuaries. Who am I going to talk to?" or, "That particular industry has no actuaries. Who do I talk to?" That's really a big point, and it's an important one, because professional loneliness is something that most people do not account for as being a factor, and it's always a big factor.

Competition is based more on instinct than on quantifiable techniques. I believe that each one of us programs our mind to react in certain ways. I think one of the great things about actuarial science is that it obviously develops a subconscious capability to make decisions. Many times I am just horrified by some of the most brilliant people who cripple themselves by not utilizing those skills in making just the most basic of decisions. In many ways, making a career decision is fairly basic.

Outside of the insurance industry, your credentials will mean less, but your skills will mean more. The bottom line is, and this is very important, there really is no risk. There is no risk to taking a chance after you have spent a good part of your life preparing to take advantage of your intellectual skills. By getting into an industry where just the supply and demand element really will provide you with long range career growth and a tremendous amount of opportunity, you'll find that it is pretty hard to mess it up unless you do something pretty drastic. That's because demand, in my mind, will continue to outstrip supply. I think as the world discovers the tremendous talents of actuaries, demand will always outstrip supply. Your technical grounding and your discipline is sought after.

About four or five years ago, I spoke to a similar group at a meeting in Colorado Springs. One of the ideas I proposed then and I'll continue to propose is that you need to market your skills to the rest of the world. People associate actuaries with insurance, but you have a lot of great skills which are very adaptable to almost any other industry. Your developed skill of logic

can provide you with programmable subconscious skills to bring you to any height of success. Mr. Ring and Mr. Shapiro are great examples of what taking risks can do.

Both started out in large life insurance companies. Both found themselves in very entrepreneurial-oriented businesses where they take risks every day. I've used this analogy before, but to me an entrepreneur is like a cave man. One morning he wakes up, walks to the edge of the cave, looks out, and sees a lion down the hill. He takes a big stick, runs down, and hits the lion over the head. He brings it back up, cooks it and eats it. The next day he does the same, and the day after that he does the same, and every day after he does the same. Risk is something you learn to like, especially when you understand that there is minimal risk even if you don't make it, if you try something and fail.

Those 60 presidents and those 60 marketing people made some right decisions. They probably didn't start out with any better skill tools than you have. Don't hesitate to ease on down the road, because that road to Emerald City will become golden and more golden as you go along.

MR. SHAPIRO: I would like to talk about (1) how we define the "science" that is actuarial science, and (2) how we define our business in today's and tomorrow's environment.

What is an actuary? There are a lot of different ways to answer this question. One is in terms of what an actuary is perceived to be. There are some uncomplimentary narrow views of an actuary, many of which are embedded in jokes we often hear. We are perceived in certain ways because of the actions we take every day and what we say we are.

Most important is what we want to be. We have a certain package of skills. There are businesses out there that need the skills we have. I would argue that an actuary can be what he wants to be, as long as he realistically aligns his skills and strengths with the needs of the financial services organizations he serves.

As our businesses change, the traditional actuarial route (i.e., from actuarial student to chief actuary) is changing. Although we are technically trained in our science, we apply that science in a changing family of financial services businesses. We need to be business people, not just technicians. Our technical training is critical; it's the core of what we are as a profession. But let's not look at it so narrowly that it inhibits us in managing our businesses, ultimately inhibiting the profession.

We face a world of tremendous change. There are dramatic changes occurring, not just in the businesses we serve, but in the actuarial profession and its attempt to respond to changes it sees.

There are also many new expectations of actuaries. In insurance companies, the road to chief actuary is often being replaced by a road to chief financial officer. What this means is that we now have new career competition. Chief financial officers don't necessarily have to be actuaries. These changes will have a dramatic impact on the way we must think of our profession and our careers.

Cornell ran a survey, which was published earlier this year in *Business Week*, that identified the goals corporations establish for business school graduates. Actuaries do well in meeting some of these goals. For example, we actuaries generally have a strong work ethic, strong analytical ability, and strong functional knowledge. However, we are often perceived to be less strong with regard to leadership potential, interpersonal skills and communication skills. These are things we as individuals, and we as a profession, need to think about.

For decades we've been successful doing just what we've always done in ways we always did it. We could always count on insurance companies and consulting firms to hire us. However, we will need to do some different things and do them in some different ways to be successful in the future. The things we have always done are often described in terms like analysis, review, design, development and reporting. What is the potential role of the actuary in conceptualizing or dreaming up new ideas? What about our potential roles as leaders and decision-makers? The list of traditional actuarial tasks may not be

defined in ways that will serve us well for the future. As we evolve from looking at businesses in a quantitative, reductionist, pyramidally organized way to a more qualitative, holistic, flat-structured view, we need to consistently reposition ourselves. How do we define and apply our actuarial capabilities to effectively support the changes that are occurring? How do we best position actuaries to serve financial services companies (formerly life companies) and managed health care programs (formerly health insurers)? Our life insurance "knitting" is often being redefined as a series of businesses. There's the protection business, there's the accumulation business, there's the marketing business, and there's the administration business. Each of these can be looked at and leveraged separately. How do we, as actuaries, reconceive what the actuary has historically done and create meaningful new roles within this new environment?

I should take a minute to talk about what an investment banker does and why I believe the actuary is generally well suited to fill an investment banking role. In mergers and acquisitions one needs to understand the combining businesses, evaluate the related organizations, identify desired strategic direction and assess values. An actuary is qualified to do these things, particularly in financial services businesses. On the corporate finance side of things, one deals with present values of various streams of contingent principal and interest payments. Isn't that right up our alley?

The insurance investment banking business is in many ways a natural extension of an actuary's science. Although almost any business that's built on future contingencies might lie within the potential domain of the actuary, I believe the actuary must carve out those businesses that best fit our profession's skills and historical underpinning.

Don't we really want to be perceived as business people, not just technicians; as advisers, not just specialists who present and analyze reports; as conceptualizers, not just people concerned with functional details and the technical aspects of things; as persuaders, concerned with convincing people to act; and as futurists, trying not only to project future expectations but to anticipate and influence the future?

We need to think about what we want the future to be before we think about quantifying it. This is a good guideline for us as individuals, for the profession and our businesses. The core of the actuarial profession is assessing the impact of future contingent events. We are looking at a future environment in which we will have new contingencies, new businesses, new management and analytical approaches, new management structures and executive positions and new companies. There are tremendous opportunities for us if we effectively align what we do well (or what we could do well) with the opportunities which are likely to emerge in the business environment of the future.

There are four basic questions that we need to keep in mind. The first two are, "What are the special skills we as actuaries have, or should have, because of our training and education?" and "What businesses do these skills naturally apply to?" The third question is, "What other professionals can do these things better than an actuary?" If we find the answer to this question to be "nobody else," we need to pay attention even if it's an area where we have not traditionally operated. Finally, "Who should define our future?" Should it be historical employers, who are not always looking at traditional actuarial values in as favorable a light as in the past, or should it be us by gearing up to deal with the changed environment, creating new needs for actuaries in old and new employers?

MR. RING: After listening to Mr. Corey and Mr. Shapiro, I'm ready for a change. I couldn't help but think when I was listening, that we might view ourselves as birds in a nest. My approach was more to step out of that nest first with one foot and then the other, and then to hang on to it so you don't get too far away from it. Tie a rope to it, and gradually go away from it. Mr. Corey I would interpret as being, "It's time to jump out of it and go for it, and don't worry about this and that anymore." I liked what Mr. Shapiro said, too. To me, it meant, "Let's just make this nest bigger and stay in it. Let's make it grow." What we really hoped to accomplish, and what we hope you come away with, is some new thoughts, and some better insight into your broad scale and rather unlimited potential.

MR. ALASTAIR LONGLEY - COOK: You've been talking quite a bit about what skills actuaries have and then how they can be applied to nontraditional

areas. It strikes me that one skill that you didn't discuss was the skill of balancing different interests. For instance, in the traditional role of a life insurance actuary, he or she may have to price a product that sells, meet the demands of the shareholders, but set aside the reserves for the policyholders and produce a product that does the right job for the policyholders in the long run. It seems to me that this act, of balancing conflicting interests is at the heart of business ethics. Have any of you run into actuaries who had gotten into that field?

MR. SHAPIRO: On the spectrum of unethical to ethical, I believe actuaries would tend to be much more on the ethical end, because of the sense of order that is basic to the nature of most actuaries.

One example of this tendency occurs whenever there is an insurance company merger or acquisition. Both sides often need an actuarial firm. I would submit that no profession checks out conflicts or potential conflicts any more thoroughly than actuaries when asked to assist one of the sides in this type of transaction.

MR. RING: My own personal experience is that as a consulting actuary, you sometimes run into a situation where an individual knows that your opinion might carry some weight with the top management, and he will attempt to influence your thought pattern and suggest that if you said something in a certain way, it might work out very well. When we have run across those situations, we simply have not done it, and it has not been to our detriment at all. In terms of handling all the different interests, I think if your principal interest is the welfare of people, and you don't take a defensive posture and you are courteous with everyone, that tends to alleviate most of the potentially conflicting situations that I've run across in that regard.

MR. COREY: The successful executive, the successful manager, the successful president, the successful entrepreneur, the successful consultant -- those individuals all have the ability to balance. You can talk to anyone who runs a consulting practice or runs his own business, and although his technical knowledge may be specific, he has to have the ability to market, to understand the bottom line, to be able to deal with any number of issues and any number of

interests all at the same time. I think that if you talk to a successful person in the entrepreneurial world, or take anyone in the actuarial consulting business, you will find that he will probably consider himself less of an actuary and more of a businessman. He has to be able to draw upon all kinds of areas, all kinds of avenues to become successful. The same thing is true with the successful CEO, or successful marketing person. They are probably drawing very little on their specific technical knowledge, but a great deal on that balance of skills that are involved in this whole decision-making process to be successful.

MR. EDWARD F. COWMAN: It seems that in the past and in our traditional way of thinking of actuaries, we have thought of the profession as a very technical one. Mr. Shapiro, regarding your presentation, do you see a movement from that perception to the more general, the conceptual and the managerial? If that is the case, do you see actuaries as being perceived on this higher, more general plane, rather than closely associated with the technical role? Is that something that we should aim for as individual actuaries?

MR. SHAPIRO: I don't think we should destroy the technical core that characterizes the actuarial profession. I do think we should constantly review that core to make sure that (1) we are not missing contingencies that actuaries ought to be dealing with, and (2) we are applying those contingencies to the "right" businesses. It is more a question of how we apply, what we apply and where we apply it. How should we communicate our results? How can we influence decisions, not just develop reports? Which businesses should we be working with?

Consider the utility business. The pricing and managing of this regulated business would seem to have many similarities to the insurance business. Or consider the trust component of the banking business. In the trust business there are representatives trying to convince individuals to name the bank as a trustee. There is a lot of money "invested" today with the hope that X out of 100 individuals name the bank as a trustee. Then there is the hope that an adequate proportion of these X people will actually leave their funds with the bank (How much money?) when they die (How many years in the future?).

At that point, many years in the future, the bank finally gets its income stream related to expenses incurred today.

MR. RING: Add on to this the idea of technical skills versus people skills. I'd hate to see us put a priority on one over the other. I think the natural progression is from the technical skills, and I think they are a requirement. That's the basis upon which we build. Good people skills can get you in the door, but at some point in time, in the long run, you've got to deliver. I certainly wouldn't want to be one to advocate people skills over technical skills or vice versa. Also, I think I see something behind your question. Many actuaries do get caught up in the technical skills and feel that they've made it and that it's over. Let's face it, you know we may be a little behind on social skills by the time we finish those exams. They don't leave you time to do anything else but study. These skills need to be developed. I wouldn't hesitate to recommend that you develop those people skills to the maximum that you possibly can, but don't abandon the technical skills in the process, because you are going to have to deliver.

MR. PAZDOR: Do you see a role for the Society in this? It sounds like you're talking about an individual thing. I probably agree with that. I'm just wondering if you saw a role for the Society in this development of the people skills? Most of the discussions I've seen about flexible education don't involve some aspect of bringing some sort of humanity into these things. Some people study their own way, I happen to study extremely well at 1:00 in the morning. There aren't a lot of people alive then in a city like Winnipeg, but there probably are in New York. I noticed there were a lot more on the streets there at 1:00; but there is that danger, as you talked about, of isolating yourself from human beings. Is there a role for the Society, or is this all up to us individually to take care of?

MR. SHAPIRO: There is a definite role for the Society. Society members ought to demand that the Society take a strong role, but not necessarily do the teaching. The Society is not necessarily the best teacher in management or communication skills, but certainly the Society can and should be involved in defining (1) where we ought to be practicing, (2) how we ought to be practicing, and (3) where we actuaries can get the needed educating. The

Society should not necessarily do the education, but it should at least help identify the proper educational path for its members.

MR. COREY: That's been a talked-about issue for a long time. I'd recommend perhaps some pressure from the Society on the actuarial programs that start at the college level to emphasize considerably more humanities-type courses. Interestingly, one of the things that companies like in Canadian actuaries is that they tend to have a broader humanities curriculum than the U.S. actuaries who go through the programs. I believe it's imperative that the Society try to develop some programs that can encourage that, because I think that it's very key to being what we call a businessman.

MR. RING: It seems that it would be difficult to try to produce this skill through an exam, where you answer a multiple choice, or write out a response. We actuaries could get "As" on personal skills if they told us what the answers were, and if we read it in the book, we'd do fine. At the seminars and educational symposiums, I think that is very much the case. With respect to the schools, I see that Dr. Ester Portnoy, from the University of Illinois, encourages the actuaries, when they are going through school, to take courses in speech and interpersonal skills. I think that we need to have that, or we are going to find ourselves being passed by people who have those skills, although we have all the technical knowledge.

MR. JEREMY GOLD: The process by which we self-select and become actuaries tends to collect people who at about age 20 or 22 really don't have any of the skills that we've been talking about. They are late developers, they are probably immature, they've been called under-achievers and maybe over-achievers in too narrow an area. That's who we are, folks. We're talking in most of this session about how we develop after that. I'm sure there are exceptions to what I've just said. I think it's a self-selection process, so I'd be curious how you folks became actuaries, not how you got out of it. How did you get into that nest, Mr. Ring? How did we all get into this? We were probably a little antisocial, but very good at books.

MR. RING: I came out of Hillsdale College, and I had a mathematical background and a business background together. I thought I would be a

researcher or a teacher. I also got a stipend to go to the University of Michigan. In talking with the people there, they suggested that a good blend of my skills might be a career in actuarial science. At that time, I was told that this is a professional businessman, that you are a businessman with a particular skill, and that had appeal to me. I agree with you, that when I got into the classes and looked around, some of the people were different. I hesitate to say this as a axiom, but I think you'll find that in general, actuaries who have the people skills do the best if you measure success in terms of the positions that they hold, and in terms of the dollars that they may make. It is a requirement, I think, for the future. Why does it attract those who don't have those skills in the first place? It may well be because it is a very well defined profession. You know what you have to do, you don't have to kowtow to anybody. You pass the exams, and that's your ticket. If that happens to be your thinking, you are all done when you're a Fellow of the Society of Actuaries. Everybody owes you something at that point. I think that is a mistake. I don't know where that attitude comes from, but, I've certainly heard it.

MR. DAVID A. WEBSTER: I think we are overemphasizing and trying to put a whole diverse group of people into one common basket. Mr. Corey mentioned that there are 60 CEOs and 60 senior marketing-type officers among the actuarial ranks. Maybe it is true that there is some normal distribution of actuaries where a whole bunch of them happen to fall under the category of shy, reticent, bookworm, studious-type people. But, a lot of the other kind of people take those actuarial exams as well. Also, I think that it is important to note that it's not necessarily success to be the CEO or the Senior Marketing Officer. The research scientist probably enjoys life a lot more than the CEO. If you measure success by doing that which is within you, it is what you really want to do. It's how you want to spend your time, how you want to spend your day. You can be a research scientist as an actuary and make a good living at it.

MR. RING: I'm glad you made that point. I don't believe it was the intention of the group to state that this is the way that everyone should go. I can see how it may have come off that way. The idea is more to say to actuaries with this special training, that you have more options if you want them, and I am glad you allowed us to help clarify that point.

MR. JAMES ROBERT HOPSON: I think that we do have a diverse group of individuals in the room here. I thought Mr. Shapiro hit the nail on the head. It's in the selling process. We sell numbers, and then we sit around and we complain because all we do is work with reports, and we don't guide. Is there not a requirement, a crying need, whether it's the insurance industry, or the utility industry, or the banking industry, or whatever, for people with our skills to lead? That's what I hear. It seems like maybe there is. We are not selling our profession, or we're selling it short, if you know what I mean. Add to that the fact that the body of knowledge doubles about every ten years, as I hear. What makes the problem extremely difficult is to know exactly what you're going to do. We see it all the time in the exam process. The exams are under reconstruction every year. Everybody's going through a reconstruction phase now, as opposed to when a lot of us old-timers took the exams. There wasn't much change from year to year. Now all the exams are under reconstruction all the time. But, no place on the exams do you see, anything that leads to CEO-type talent. It seems to me that it's either there, or it isn't there, and the ones that can sell or that have that, and can pass the exams, will lead the industries, and the ones that don't have it will not. I'll go back to the selling process. I have a question for Mr. Shapiro about his trust department analysis. When you compared 20-year old costs to current levels of income, did it include current day costs compared to 20-year-old costs for your differential interest rate? Did it include conversion factors, too, in the response to the trust department solicitations?

MR. SHAPIRO: Yes. Each of us needs to understand what we're good at and what we like to do, and then match these strengths and desires with the needs of the businesses we serve. It's this alignment that's important.

MR. COWMAN: My earlier remark was prompted by a conversation I had a few weeks ago with another FSA who was trying to make a very clear line of demarcation or distinction between being a professional and going into something else he perceived as a different level, a management-type role. I would suggest that if we are to grow as a profession, and to prosper and continue to draw capable people into our ranks (I did not agree with the distinction that he was making), we need to quit saying that, you're a professional as you're growing up doing product development and the more technical kinds of things that we've

become used to, but once you get beyond that and get into a more senior management role, suddenly you're no longer an actuary. I disagree with that, and I think that regardless of whether I'm doing product development work or a CEO in a life insurance company, or work in a trust department of a bank, I will always be an actuary. It will be that training and background that has equipped me to do what I'm doing, regardless of what it is. I think, as a professional, I would hate to see that distinction being made.

MR. RING: As we talked about before, I agree with you. There should be both. You might be interested to know that in the selling field, at least with respect to direct response insurance, it was the actuarially trained people that did the best job on sales. I'm talking about closing sales and having the clients happy. We've experimented in our firm with outstanding sales people, outstanding personalities, tremendous at dinner, but they haven't been able to deliver the account. It seems that, at least with the people we're working with, they want the results. They want the knowledge. They want the answers. They are not necessarily interested in all the other areas that a salesman may traditionally have brought to bear like being good at dinner and good at jokes. I would still not want to see your friend abandon his technical knowledge because he's going into management. It would be an awful mistake.

MS. CATHERINE D. LYN: Do you feel that actuaries working with firms of accountants are breaking new ground? Will this help your lobbying in Washington?

MR. SHAPIRO: I'm not sure I can answer that question directly. Many actuaries are employed by accounting firms. Unlike other professions, actuaries are closely intertwined with a certain set of businesses (e.g., insurance and employee benefits). Attorneys and accountants, for example, operate over the entire range of businesses. I think most actuaries in accounting firms are generally operating in the traditional "actuarial businesses."

MS. LYN: I was thinking more in terms of communication. Are the actuarial principles better understood now by the other groups of people? For example, in the employee benefits area and valuation of pension funds, the legislative requirements don't seem to be actually consistent with the calculations that we

do. Do actuaries working with accounting firms improve understanding between the two professions?

MR. SHAPIRO: I think it could, but I'm not sure I can answer the other question.

MR. MICHAEL KHALIL: Do you think it's necessary for actuaries to try alternate degree programs, in particular, MBA, CPA or a law degree, in order to gain greater acceptance by other professionals?

MR. COREY: I would like to address that if I can. I had the pleasure of talking with a young man who was both a Fellow and a graduate of Harvard Business School. We talked about that in some depth. My reaction was that it is a distinct positive to companies today in terms of looking at the individual and his long term potential as a businessman. I think it's unfortunate, but today, if you have a bachelor's degree from a university, you're perhaps at the same level that many of us were many years ago when we had a high school degree. Everybody looks for advantages, and one of the advantages is to broaden your skills as much as possible. I think that being able to acquire an MBA is probably the strongest of all the advanced degrees in correlation with fellowship. Many people have law degrees, and obviously, in the employee benefits area, that's very positive. I'm very strongly in favor of any advanced degrees that an individual can acquire. That's obviously tough after you've taken many years of exams, but there is no question in my mind that companies view that as a distinct positive. That gives you an advantage over another individual who is a Fellow without that particular kind of a background.

MR. SHAPIRO: One could argue that a liberal arts background would lay a better foundation for later technical training than the reverse process. The MBA degree has been under some attack because of the narrow, analytical types that critics say emerge from these programs.

MR. RING: I think an MBA would be good. I've got one from the University of Michigan along with the actuarial degree, and I think that it helped give me a start and a little broader perspective. It may, too, tie in with what we've been talking about, particularly during the question and answer session. How

do we gain these additional skills if we don't gain them through actuarial exams and seminars? Can we gain them with alternate degrees?

MR. PETER S. PALMER: I would like to expand a little bit on the point that Ms. Lyn made about actuaries being in accounting firms helping us with our lobbying. I would like to go back ten or twelve years when the question of enrolled actuary came up whereby the Society, for those of us who belong to it, were really pushed around by accountants, ASPA, lawyers, and everybody else. I would hope that the next time some official designation comes around, whether it's the valuation actuary or whatever, the fact that actuaries have expanded their worlds since 1975 should help us avoid being pushed around by other professions.

MR. LEONARD E. TANDUL: Somebody on the panel, I think it was Mr. Shapiro, mentioned that lawyers, accountants and so on, had contacts with all kinds of firms and all kinds of businesses, whereas the actuaries tend to stick to insurance for the main part. I think that's the problem. Our thinking has been very stultified. If you look at a lawyer, what's the common ground with all these firms? They all get sued, they all have to comply with certain laws. The accountant counts up the numbers of profits and losses on the income and outgo that they've taken care of, and he takes care of taxes. So, he has some common ground. What is ours? You can apply what we do to anything else that exists. A bridge eventually dies or becomes disabled totally, permanently, maybe temporarily. There are all kinds of probabilities that we deal with for infrastructure, for manufacturing, or for automobiles. I'm sure that automobile plants do quality control and use statistics for quality control, and maybe the statisticians get involved in that. But, consider predictions of how long a car will really last. How many new cars should be manufactured depending on population, demography and so forth, are areas that I don't think the actuaries have thought of getting into. I think that's the kind of thing we should expand into. We should think of techniques that are common to mortality and things of that nature so as to get into other fields and show that those skills are somewhat transferable, or maybe create some new skills that would be transferable.

MR. SHAPIRO: Consider the municipal bond insurance business. Municipal bond insurers cover the loss of principal and interest on municipal bonds. When I looked at how to price municipal bond insurance, it became clear that there were similarities to a disability income pricing model. Municipalities become disabled; they can't pay their scheduled principal and interest. Some recover and resume payments and some just die. Very few have died in the past, although more may die in the future. The point is that there very clearly is a role for the actuary in managing municipal bond insurance programs.

MR. RING: Thank you, Mr. Tandul, I think you did a nice job of summarizing what this session was all about.

MR. C. NORMAN BURGESS: I have three comments. One is a definition of an actuary that I heard a long time ago. Actually it was when I was writing the earlier exams, and I was wondering what it was all about. An actuary is someone who has good knowledge of men and books, and the more knowledge he has of either the better. I haven't seen that definition around for a while, but it seems to speak to some of the things that we've been talking about today. Earlier you mentioned that it might be impractical to have a later exam geared to human relations skills. Why couldn't you have a required university course, a credit course that would cover human relation skills, or management skills? If you are going the alternate route, you would think you could fit that in a little bit better.

MR. RING: Perhaps we could provide a special designation for having completed that course? A motivation?

MR. BURGESS: It would have to be a credited course that the Society agreed was of good caliber. In fact, I guess this is not quite on the topic, but, one of the students we hired from the University of Manitoba was very technically oriented. You could tell that as he went through the course (we had him for a few summers), the University of Manitoba really was trying to gear the students to the fact that they shouldn't just pass the exams. They were going to have to get into business management, so the University tried to give them courses on that and tried to encourage them in that direction.

MR. RING: I think that is a comment that we might want to pass on to the Exam Committee, and it will definitely be in the *Record*.

We want to thank you so much for coming. We enjoyed it. I think the best part of this session is when you all participated. I know I speak for all of us when I say that, if there is a time when you are facing a career decision, or you would like to talk to any one of us, just to think through things or go through a scenario, please feel free to call. We'd be delighted to help you. God bless you. May your careers be fulfilling.