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Organization of the Actuarial Function

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Summary: The actuary working in a life insurance company environment needs to support the organization objectives while serving in an ethical and professional capacity. The organization of the actuarial department may help or hinder these efforts.

In this session, experts discuss alternative methods of organizing the actuarial department. Specific topics to be covered include:

- *Functions of an actuarial department (pricing, valuation, corporate) and how they relate to company objectives*
- *Levels of responsibility (student, associate, fellow) and how they complement each other*
- *Liaison between the actuarial department and other company functions (accounting, investment, marketing)*
- *The advantages and disadvantages of business units versus functional organizations*
- *Characteristics of a productive, cost-effective actuarial department*
- *The right size for an actuarial department*
- *The right actuarial department structure to support corporate objectives*
- *Organizational characteristics that help or hinder compliance with professional responsibilities*
- *The actuarial department and its effect on the actuarial decision-making process.*

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Editor's Note: Philip Gath's portion is not included due to technical difficulties.

Ms. Yiji S. Starr: Times are really changing and I think this topic is relevant because a lot of companies are undergoing organizations or reorganizations of their actuarial functions or perhaps more widespread company-wide reorganizations. How many of you or your companies have gone through some type of reorganization in the last two or three years? About two-thirds. Wow, so I guess this is a very, very relevant topic.

I'm going to talk about the actuarial function and organization of the actuarial function. I'm also going to share with you some of our survey results and then I'm going to turn it over to my two panelists, Bob Beuerlein of Franklin Life and Phil Gath of Nationwide Financial Services. They're going to talk about how the actuarial functions are organized at their companies and the advantages and disadvantages and strengths and concerns of those functions.

While I was trying to think of what the actuarial functions are, the first thought I had was perhaps I should just write them all down and categorize them two ways: traditional and nontraditional. As I was attempting to do that, I realized that many actuarial functions were at one point perhaps nontraditional, but at this point many will argue they are traditional. I found that it was not as easy of a job as I thought it was going to be, so instead I decided to just list them all. And I have to also confess, it was not as easy as I thought either. There are just so many categories. I attempted to cover as many categories as possible, so I apologize in advance if I missed some categories or if some categories are overlapping a little bit. Some companies may not have all of the functions, and other companies might call them by slightly different names. The actuarial functions as I have listed them are pricing and product development; dividend management, which is probably more appropriate for the mutual companies with participating blocks of business; financial reporting and analysis; business forecasting or plans for your business; valuation, which includes GAAP, statutory, and tax; experience studies; expense analysis; reinsurance reporting—as more and more companies are using reinsurance to hedge their risks; cash-flow testing; asset liability management (ALM); and interest crediting strategies. When we did the survey we found that most companies had these functions, so I think this is a pretty good list to start with. So, what we really want to talk about at this discussion is the organization of these functions.

We found there are a couple of ways companies might organize these functions. One is by business units such as a line of business or a market segment such as individual versus group or annuities versus life; another is by function where all actuaries or marketing people work in one area. Or, more commonly, companies might do a matrix of the two. I'll explain that a little bit later. We then asked companies to categorize their organization—whether it was a more centralized approach or a decentralized approach. The results I'm going to share with you are

based on a survey we've done with 11 life companies. They were medium- to large-sized, primarily stock companies. Some of these companies are in the process of demutualization, so they may not be quite public or stock yet.

There are four results I'd like to share with you today from the survey: the overall organization of the company, the actuarial organization within the company, some of the changes and trends these companies are undergoing, and, finally, some of the strengths and concerns they have.

First, overall actuarial organization. They are organized by one of these six ways: legal entity, market segment, distribution channel, line of business, product, and function. Those of you who are actuaries might ask, "How come my numbers don't add up to 11?" I'll get to that. Of the companies we surveyed, one company did not respond to that question. Two companies were organized both by legal entity and market segment, five companies were organized primarily by market segment, one company was organized by line of business, and two companies were organized by product. That's how you add up to 11. Many companies have a primary organization and a secondary organization; this is how they're split. One is secondarily organized by legal entity, one by distribution channel, two by line of business, four by product, and two by function. It's quite a wide range. The only observation I want to make is that 7 out of the 11 are organized by market segment primarily. However, for those that are not organized by market segment primarily, none of them choose to use market segment as an organization at all. And there are none organized primarily by function, although two are organized secondarily by function.

Moving on to the actuarial organization. We asked for the reporting relationship of the actuarial units. Three reported to the head of the operating unit, wherever that might be. That could be a line of business or a market segment. One reported to the head of the operating unit with an oversight from the corporate actuary, and five reported to the head of the operating unit with a dotted line to the corporate actuary. One reported to both the head of the business unit and the corporate actuary, and, finally, one reported to the corporate actuary only.

As you can see three report only to the operating unit and one reports only to the corporate actuary. Many—seven—are a mixture of the two, sort of a matrix-reporting relationship, either more formally reporting directly to both or maybe less formally either with a dotted line or with oversight.

With respect to the changes and trends, we really didn't find any. It seems that companies are going back and forth between the two. Four of the 11 companies we surveyed had moved or are moving towards decentralization.

What are three commonly listed strengths of the centralized approach? It's more autonomous and has less overhead and bureaucracy. The business units can get work done faster and can focus and have the ability to develop expertise necessary for that business unit. The business units also have dedicated actuarial resources. On the other hand, sometimes they have inadequate resources within the business unit and the corporate actuary and the line actuaries may have competing priorities. There is also some inconsistency among the line actuaries either in their assumptions or their methodologies.

What are the strengths and concerns of the decentralized approach? One strength is its efficiency, but an interesting concern raised by one of the participants is that career potentials are limited in a decentralized approach where all actuaries work together. The actuaries can move up within the business unit, perhaps to a role outside of the actuarial field, as opposed to moving up within the actuarial function.

In summary, we found there are really no right answers or trends. The actuarial function should support the corporate objective. The best structure to support that corporate objective varies from company to company. And last, it doesn't really matter how it's organized. It still requires cooperation and teamwork to be successful.

So, those are just some survey results to lead off this discussion. Now I'm going to turn it over to my panelists. Bob Beuerlein serves as the chief actuary for the American General Life Companies, which include American General Life, American General Life & Accident, Franklin Life, and U.S. Life Companies. This position involves managing the actuarial function of companies located in multiple locations. Bob is also a member of the Board of Governors for the SOA and served last year as the general chair for the SOA Education and Examination Committee. Phil is the chief actuary of Nationwide Financial Services. He graduated from Grove City College with a B.S. in mathematics. He started with Nationwide as an actuarial technician. He was vice president of individual life from 1984 to 1997, and vice president and product manager of individual annuities from 1997 to 1998. He is currently senior vice president and chief actuary of Nationwide Financial Services. Without further ado, I'll turn it over to Bob.

Mr. Robert M. Beuerlein: Let me begin by proposing a puzzle. Assume that you are the bus driver here in Atlanta and at the first stop three people get on the bus. The bus goes on a little ways and at the next stop two people get off and one person gets on. At the third stop four people get on and two people get off. The question is, what is the age of the bus driver? Remember, I started out the puzzle with you as the bus driver, so the age of the bus driver is your age. Is there a right answer to that puzzle? Yes, there is. Are there multiple right answers? There sure are. And

that's the way it is with organizing actuarial functions. There is a right answer probably for every organization, but that right answer varies by the organization.

If you look at the program, this session is sponsored by both the Financial Reporting Section and by the Management Section, so we need to put on our management hats when we're thinking about this today. There are no real right answers that we can give you, but we can give you a lot of ideas so you can determine what your right answer is. That's what management's all about, adapting to the situation that you have in hand. That's where we want to go today with all of this.

As Yiji said, I'm the chief actuary for the American General Life Companies. For those of you who aren't familiar with that, American General is one of those firms that has been buying companies over the last few years. American General purchased Franklin Life in Springfield, Illinois back in 1995 and American General Life & Accident back in 1982, which is located in Nashville, Tennessee—so we have Springfield and Nashville. American General Life itself is located down in Houston, Texas. American General has also purchased U.S. Life Companies in the last couple of years. U.S. Life Companies are made up of Old Line Life of Milwaukee, All American Life of Chicago, and U.S. Life of New York, which is in New York City and its neighboring suburbs. When you have actuaries at five or six locations, how do you organize the actuarial function for something like that? That's what we're going to talk about today, and that's what I struggle with all the time because we do have multiple locations that are not just across the street. They're all across the U.S. and they involve lots of different things.

As an overview we want to start out talking about the role of the actuarial function, and I want to look at it historically and also going forward. For the next topic, how many people are familiar with the big tent that Howard Bolnick has been talking about? I hope everyone raised their hand. Howard is really excited about the big tent. I think that's where the actuarial profession is going, so maybe we'll talk about that a little bit.

It's important to remember also that we have professional responsibilities. That's very important. We're actuaries as you know. We're in management, we're in business, but first of all we're actuaries and we have to realize that professionalism goes along with being an actuary.

The next item we want to talk about is staffing issues. Is there a right answer for an actuarial department? How many actuaries should be there? That goes back to that first little puzzle we had. There probably is a right answer, but that right answer is not the same for any two companies.

The last thing I want to talk about and spend most of my time on is, what's the actuarial function of the 21st century? We can talk about what's happened in the past 20 years or so, but really it's important to visualize where the actuarial function in the life insurance company is going in the next 10 years, for example.

In general, if I had to describe the function of the actuarial area I would say that it is to ensure a consistency between the theoretical and the practical elements of the life insurance company. The actuary has all these great ideas floating around—5,000 feet above everything—but those ideas have to be turned into something concrete so that the life insurance company can operate. Once these ideas are implemented, the actuary is also responsible for making sure that they are carried out on an ongoing basis. In fact, I wonder how many of you have read the landmark paper by Jeremy Goford. Jeremy Goford is one of our colleagues over in the U.K. who works with Tillinghast. He wrote a paper back in the 1970s. He called it, "The Control Cycle." For those of you who have not read it, it's a good paper to read. Even though it was written in the 1970s, it's very applicable to an actuary these days. The control cycle is very simple. It talks about control in a product-related environment. It starts with an actuary who designs a product and puts it on the street. The company must implement it and make sure that everything is in place, that all the cash values are encoded in the computer right, that all the premiums are being charged and commissions are being paid. All the things that were in the product design are actually implemented. Then step three, the actuary takes a step back and starts monitoring experience. Are the lapse rates what I expect them to be? How about expenses? What about mortality? How about my interest margin? Are these things doing what they should?

For all of the assumptions that go into a life insurance product, there are variances, so we go to step four. Step four says go back to step one, which is design a new product or redesign or modify what you have. You can do that in par products through your dividend scale. You can do it in universal life (UL) through adjusting the interest rates, mortality rates, things like that. So, basically, control is the friend of an actuary. Start out with an idea, implement the idea, take a step back, look to see how that idea is going, and modify it so it stays on track.

If you go back and think about the 1970s, things were simple back then weren't they? Nothing is ever simple, but things were simpler back then, I think, than they are now. A lot of times you would go into an average-sized company and you would have an actuarial department. You'd have your chief actuary, your product actuary, your valuation actuary, and a person who was in charge of special projects. That's the way an actuarial function was set up a lot of times back in those days. It used to be a simple-product portfolio. This was back before UL and variable products were popular—simple product portfolio, single distribution system. We

weren't going through the banks or the Internet. It was fairly straightforward. Let's jump 20 years later to the beginning of the 1990s. If you were to go to a lot of actuarial departments, what would happen? You probably still had your chief actuary. You had your product actuary. You had your valuation actuary and your special project actuary. Everything was kind of the same as it was back in the 1970s, except we have computers now and the computers make things faster, but we were still doing the same thing as we were back in the 1970s. But is that the efficient way to do it? If things were still the same as they were 20 years ago, maybe that would be the way to do it—just to have the same structure and add computers. But they're not the same. We have multiple product lines. We have multiple distribution channels, and we have multiple companies. The days of the 1970s of having a simple company are gone. I don't think there are too many simple companies left anymore—can we have a simple actuarial function? You have to keep up with the times. We have to have a more complex actuarial organization in order to function in the new life insurance environment.

Let's just take a look at some examples. The financial function. We talked about the financial actuary and the valuation actuary. Back in the 1970s the financial actuary talked about valuation. Now we have someone called the valuation actuary. A lot of times we used green columnar pads; now we have PC-based systems. We still have some people who are using green columnar pads, but we're gradually weaning all those people away. But a lot of times those green pads will just turn into Lotus worksheets and they're the same thing for valuation. We had factor driven systems. Now we have GAAP, tax, statutory, risk-based capital, and other kinds of models to keep up with the financial side.

On the product side, are things the same? We used to run the old asset share and look at present value of profits in relation to premiums. We had fixed assumptions. We might run a few sensitivity tests here or there on a mainframe computer. You submit them and then an hour or two later you might get your profit run back out. Now what do we have? We have multiscenario tests. If you don't run hundreds and hundreds of scenarios, you're not doing the job correctly. The standards of practice, actually, tell you when and how to do cash-flow testing.

We don't look just at present value of the profits any more. We look at distributable earnings. The stock market drives a lot of things. Distributable earnings and stockholder dividends drive a lot of things, even for the mutuals and GAAP profits.

Instead of one set of fixed assumptions with a few scenarios, which are sensitivity tests, we now have all kinds of dynamic assumptions that are interrelated. They're on a PC platform so we can turn things around quicker. Have things changed? They've changed, but are we keeping up with things? We'll find out.

We talked about the big tent. Again, we're talking about overview. What could be going on in the actuarial profession? The big tent really talks about the actuary not being the typical backroom actuary. Under the big tent approach, we need to figure out the skills of actuaries and leverage them throughout the company. Actually, the real big tent theory talks about leveraging actuaries throughout all businesses, but in this context we need to leverage actuaries throughout the company.

We need to align these functions with a corporate executive. If actuaries are going to be helping out all parts of the company, they have to be aligned with the corporate objective. But while we have actuaries out working with marketing, underwriting and other types of departments, we need to make sure that actuaries still have the professionalism, the quality of work, and the ethics that are required of them. But, most of all, the big tent in my mind talks about an actuary thinking outside of the box. Instead of focusing in their little box that they feel comfortable with, actuaries need to get out of that box and think about things in the big picture—how an actuary can help not just the actuarial department but the entire company.

What do we mean by supporting the company objectives? Of course, we want to have a nice place to work, students passing the exams, and all that. Are those company objectives? No, the company objectives are things that help out the shareholders, the policyholders, and the agents. We can talk about our many objectives in the actuarial department, but when we talk about an actuarial function, we need to talk about how we support the shareholders, the policyholders, and the agents.

We talked about control and quality of work a little bit earlier. Can we control the quality of work in a decentralized environment? Can we have it in a centralized environment? Should we be using a functional type of approach? Should we be using what I would call a strategic business unit (SBU) type of approach? Can we have a central depository of tools to ensure our quality of work? How can we have peer review of all of our work products? How can we make sure that the actuary is operating in this big tent with all these things in all the different areas? How can we make sure that there is quality of the work product? And how can we ensure that there's professionalism? Do we have answers for all of this? I bet each one of you can figure out answers for your companies, but I can't give you exact answers for your companies. These are the type of things we need to consider.

We talked about the central depository of tools. How many of you have thought of a central depository of actuarial tools? You have actuaries throughout your organization, but do you have any control over how the actuaries are working? I think it's important to think about establishing a common platform for your actuarial

models. For instance, if you think about your central depository as a library full of these little models that product actuaries and the valuation actuaries use, maybe someone is doing special projects for various area users. If you have control over the central models, then they can use them in other parts of the company and have some consistency with what's going on. But we need to have procedures, of course, for modifying these models.

How do you use your actuarial models within your organization? For product development, cash-flow testing, ALM, GAAP, forecasting, budgeting, and valuation? I bet you can come up with a list three times this long if you sat down for ten minutes. What kind of ad hoc studies have you been doing, or what kind of ad hoc studies can you expect an actuary to be doing? You have to be working with underwriting, marketing, budgeting, investment, senior management, and policy service. What is this saying? This is saying that actuaries are operating, or should be operating, in a big tent within their company. Gone are the days when an actuarial department existed on a particular floor of the building and every once in a while got a request from somebody and acted on that request. Actuaries need to be proactive in dealing with all these areas. Of course, how do you do that without stepping on people's toes? That's part of the management process, being able to deal with all these various areas without causing problems. But we have to realize that actuaries do offer a lot to the company. The actuary's skills need to be leveraged.

Professional Responsibility

Who is responsible for all this? What are the levels of responsibility, and how is the level of professionalism maintained? Is that something that has to be figured out in order to have actuaries operating in a big tent? We talk about structure and staffing issues. What is the right size of the department? Are there rules of thumb? Can you come up with what the optimal size should be? How do you develop a synergistic actuarial department? How do you develop a department that can work with other parts of the company and do it both efficiently and effectively? And how can you do it still within the structure that supports the corporate objective?

For instance, what do you do to determine the right size? Figure out the function you have and the level of expertise you need. Are there rules of thumb that you can apply? Are there ratios of FSAs to ASAs to support personnel? These are all things that can be worked out. I don't think that these rules exist. In a lot of companies, people go out and recruit for students every year and get what they get. If they don't get anything, they go on and wait until the next year to recruit again. That probably happens more than you expect. We need to have more structure and identify the person we're looking for.

Identify the person from desirable qualities. For instance, are we looking for someone who is quiet and creative who can get the job done, or are we looking for someone who can communicate? Or can we find somebody who is quiet and creative, gets the job done, and communicate? If I can find someone like that, I'll hire them even if they're not in my plan.

Well, so far I'm throwing out a lot of questions. I hope you've noticed that there are not a lot of answers to these questions. Moving into the 21st century, what is it that we need to focus on for an actuarial function? First of all, we need to realize that people make the difference. The actuaries we have working in our companies today make the difference for the life insurance industry. Unless we realize that—that we need more than a bunch of FSAs and ASAs and so forth—we're not going to get the value of actuaries. We need individual actuaries who will make the difference. And those actuaries need to be able to communicate. Without communication, actuaries can do wonderful work, but they can't convey it to the managers who need to understand it. And we need to have actuaries who are committed to integrity. We've had several workshops over the last few days talking about professional issues, about how we deal with working with other parts of the company when an actuary feels pressured to have a very competitive product. How far can an actuary go, for instance, as far as pricing the product? We still need to have actuaries who have the energy and drive to succeed.

How many people know an FSA (and hopefully none of you are like this) who passed through exams 10 or 20 years ago, hasn't really moved on in their profession that much, and is doing the same thing the way he or she was 10 or 20 years ago? I see a lot of people nodding. What do you think we ought to do with those people? We ought to kick them in their rear end and give them the energy and drive to succeed because people do make the difference and without these people, we're just not going to move forward.

Those are the kinds of thoughts that I have as far as where we need to go with the actuarial function, but how do we move to the next millennium? It doesn't necessarily mean this is the way I'm doing things at American General and that you ought to be doing the same things at your company, but these are just ideas of how the actuarial functions could be structured as we go forward.

You have to remember that we're going into a new millennium. This Y2K is a big buzzword. It's a big line in the sand. We really are moving into new things. You see consolidation throughout all industry. We're seeing tremendous advancement in technology. But in addition to consolidations and advances, we've gotten multiple lines of business. We have multiple distribution channels. You have the banks, the Internet, your personal producing general agents, your career companies,

and your brokers. We're seeing companies that are using more and more different distribution channels.

Multiple Locations

My company is a typical example. We have five or six locations that we're trying to operate out of and multiple actuarial requirements. An actuary of 1970 who has not moved forward is not going to be able to operate in the year 2000. It's not going to happen.

To answer the thought about centralization versus decentralization, what's the right answer? Well, there is no right answer, but there probably is a right answer for your situation. The way I look at it, I think that we need to have centralization and decentralization. You centralize some of your corporate functions and decentralize some of your other functions into the SBU. For instance, if I had five or six locations that I was dealing with, I would have a corporate location located one place to make sure things were done on a consistent basis, but I would give up a lot of the control down to the SBU. Again, each SBU is going to have its own products and its own distribution channels, and the actuaries within those SBUs are going to be understanding their business better than anyone else. People in the corporate areas can understand at a high level what's going on, but there's no way that a corporate person is going to be as intimately involved with the day-to-day operations and understanding them as well as someone down in the SBU. So my vote on that one is both decentralization and centralization.

What does a corporate function really need to do? It's important that this corporate function, which is the centralized part of the actuarial function, really dictates what the standards are. We have our standards of practice from the American Academy of Actuaries and the SOA. Here we are talking more about standards with regard to pricing. What are our pricing objectives? What is going to be the driving force throughout all of the SBUs as far as pricing?

How about financial reporting? With all of these little things going on you could have different ways of financial reporting and different approaches to GAAP, some more conservative and some less conservative. We want to have consistency there also. And profitability, of course, goes along with pricing but it really goes even further. It goes back to that control cycle. Remember, the control cycle starts out with the pricing, but then you need to monitor the product and make changes to it to ensure your profitability. The standardization comes from a centralized location.

ALM

A lot of times you'll see a centralized investment function. In order to get the efficiencies of the investment function, ALM will happen at the corporate level.

Compliance of the SBU with Corporate Guidelines

The corporate area again needs to be the watchdog or the police officer to make sure that the SBUs are not suboptimizing, that they are working within the corporate guidelines. How many of you work in an actuarial department that doesn't always support the corporate guidelines? It's very common for us to see only our own little backyard, but we need to have someone at a more centralized location really seeing the big picture as opposed to just the backyard situation.

What else should the corporate function be doing? Acquisitions and divestitures. We hear a lot about acquisitions, but I think divestitures are just as important as acquisitions. You have to continuously monitor all these little things that are going on in the SBUs. If they're not working out, they need to go somewhere else. Maybe someone else can take care of lines of business and distribution channels. Anything that goes on in the SBUs that doesn't support the corporate objectives should be eligible for divestiture, and, of course, acquisitions if you're looking for something that will have a synergistic effect.

Regulatory Issues

Do you need people out in all the SBUs looking at regulatory issues? They need to be aware of them, but I think that can be centralized without having a lot of overlap.

Planning and Modeling Support

Remember we talked about this whole centralization—a central depository of models. If we can do that in a corporate area and get the consistency we need, a lot of talent gets centralized there through the areas of planning and modeling.

I think one of the drawbacks of operating in an SBU environment is that there is not a lot of upward mobility. You get into an SBU and you're stuck there. We need to make sure that people in the SBUs are not treated as second-class citizens. They need to have all the upward mobility potential as someone who operates more at the corporate level. Again, this is done through cross-training. This should go through transfers, locations, and so on and so forth. Again, we said people make the difference and in order to keep these people interested and moving forward we have to keep them up to speed on what's going on in the whole preparation. We also need some cross-training.

Professional Consistency

There definitely has to be someone who's really concerned about the professionalism of actuaries. Actuaries are very professional, but we need to make sure we have someone reminding us that professionalism is needed.

Control

I think we've talked a lot about control, but control needs to be your friend. We talked about the control cycle. Control has a very negative connotation. If you tell someone you're a control freak, that's bad. If you tell someone that you're in control or that you're going to be controlled, that's all bad. It sounds bad. So without control we're going to lose. We're going to have payouts within all the organizations. We have to think of control as our friend and treat it that way. It's not bad, it's good. Overall experience studies are another way of monitoring and controlling what's going on.

To quickly go through it: If we're sitting at a corporate level and the standards are coming down, we're going to do some ALM, we have our compliance with corporate objectives, and we're going to be talking about acquisitions and divestitures, regulatory issues, planning, modeling, consistency, cross-training, professional consistency, control, and experience studies. That all sounds like corporate stuff, doesn't it? But shouldn't that be going on in the SBU as well? What should be going on in the SBU? Again, as I said down in the business unit, the actuaries there have the most intimate knowledge of what's going on. People in the business units, the actuaries, will know the agents out in the field. They'll know who's doing what out in the field that's causing trouble. They'll understand how products are sold. They'll understand the commission structure and the expense structure. They'll understand why lapse rates change. They'll understand the mortality. They'll understand the business. The people at the corporate level can understand that, just not as intimately. That's what we have down at the SBU level. And that's why you want the SBU people doing your pricing. That's why you want them doing your valuation actuary work and dealing with the field, doing business, of course, dealing with policyholders—the day-to-day things that make a company a value-added company.

Can you do that and still maintain control? The biggest challenge, I think, for the actuarial function is trying to figure out how you're going to minimize duplication of corporate and SBU actuarial issues.

Those of you who have a corporate actuarial function, do you feel that corporate people get in the way of the SBU a lot? Yes, corporate people are always asking for information and wanting to know numbers, but they don't really tell you why they want numbers or why they want you to do things. If you're going to operate in the year 2000 with this type of a setup, you have to minimize the duplication of the corporate and the SBU actuarial issues. You have to give the SBUs sufficient autonomy with control coming from the corporate areas. That maximizes the strength of the SBU and the strength of the corporate unit. You don't have people doing things just to be doing things, and you don't have two people doing the same

thing. You have it clearly defined where things are to be done. Is that easy to do? Well, 80% of the time it is, but 20% of the time you'll still have that overlap. You'll have to continue working on that.

We've thrown out a lot of ideas and you've seen some of my biases on how we ought to proceed, but how do we actually move to the 21st century? First of all, could everyone sit down and define what their actuarial function is today on a piece of paper? I know back in 1970 it was easy to do. You had your chief actuary, your valuation actuary, your product actuary, and your special project actuary. But can you do it today? We have actuaries strung out throughout companies sometimes. You have some doing this, some doing that. Is there a central strategy for what's going on? Well, the only way we can make changes is by knowing where we are right now, so we have to be able to identify what is the actuarial function right now. If you move into this corporate SBU-type setup, you have to figure out how to reduce and eliminate the redundancies between the corporate and SBU functions. This is a big challenge. While doing all this we want to make sure that we don't suboptimize. Everything that we're doing is going to align with the corporate objectives.

And last, but definitely not least, we need to implement it by doing the right thing, not doing things right. We need to be effective, not efficient. Have you all run into that? In our actuarial department we used to have 1 student who spent probably 60% of his time filling out surveys and he did a great job. He had all these surveys computerized. He did his job right. But is his job a right thing to do? You have one central product development function and each of those products has a little tweak for a distribution channel or for a particular market, but in order to get the efficiencies of developing a joint survivor variable UL product, you're going to have to have centralization so that a product can be used across distribution channels and across companies.

ALM is another key example of centralization. I think five years from now after taking another look and seeing where you are you probably will want to decentralize some things and centralize others as things continue to change. But the big thing we want to continue to remember in all this, and that's why I asked about it earlier, is the big tent. I think that we have to realize that we're actuaries now, but actuaries are not doing what they did back in 1970. We're doing what we should be doing in the year 2000. We don't have green columnar papers anymore. We have PCs, but we're just not people who punch stuff into PCs. We have to see the big picture and that involves everyone from the student actuary up to the top actuary. We have to understand the big picture, be able to operate in this big-tent environment where you define the big tent as your whole corporation that you operate in, and understand how the corporate objectives fit into the day-to-day

operations of the actuarial organization. In this day of mergers and acquisitions, if we don't have an efficient and effective actuarial function, then someone else can come buy the company and turn it into that effective and efficient actuarial function.

So those are some ideas. Like I said, there's no one right answer, but there is a right answer. I can't tell you what that right answer is, but with these ideas I think you can go back and figure out what the right answer is at your organization.