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EXAM SYLLABUS

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The Flexible Education System (FES), when extended to the Fellowship exams in November 1988, will provide a Pension Track. Pension specialists will be able to select more Fellowship "courses" that are relevant to pension consulting than ever before.

o This session will describe the Pension Track and present ideas as to how a company can structure its pension actuarial training programs in light of FES changes.

MR. ROBERT J. MCKAY: The purpose of the session is really twofold. To begin with, we will be discussing background on the FES, some of the reasons why it was developed, its reasons for being adopted, as well as some of the specifics, and how it will apply to pension actuaries. As you learn some of the background, one of the key reasons that the system was changed is to improve the educational material in the examination structure for pension actuaries.

Second, we'll be looking at an analysis or a discussion of the implications of the FES on actuarial student programs and on organizations that employ a lot of pension actuaries, in terms of how they set up their study time, recruit students, and how students move through the examination system.

Pat Scahill is a pension consultant with Mercer-Meidinger-Hansen in Baltimore, Maryland. When she's not doing pension work, she is a Vice-Chairman of the Society's Education Committee. Pat is the individual who has managed the development of the new educational material for pension actuaries. She has a committee of about ten actuaries in the United States and Canada who have been working with her for the last year or so putting together the syllabus and it's an incredible effort. Pat and the other members of that committee have done a terrific job. Hopefully the students will appreciate it as well. Pat's been involved in the education process with the Society for a number of years and has written several study notes that are on the syllabus. She will focus on the content of the syllabus, for obvious reasons, since she's the one who came up with the content.

Gerry Wilson is with Hewitt Associates in Lincolnshire, Illinois. Gerry has not been directly involved in the system since he passed his exams a number of years ago, after trying out the engineering profession. At the present time, Gerry's functions at Hewitt Associates include being Chairman of the Executive Committee and managing the actuarial practice in North America. He's had a number of discussions with the various regional actuarial managers at Hewitt Associates in terms of how to set up a study program, and what kind of study time to give if somebody is writing a ten-, twenty-, or thirty-credit course.

When we were putting together the panel, I talked to a number of people and it was clear that not many firms had reviewed that and thought through those issues. So we've got some interesting thoughts on how to structure a program. Gerry will be speaking about the impact on the students as well as on the organizations themselves.

Wayne Berney is one of three education actuaries working at the Society's office. Wayne is in charge of the Pension Track, Warren Luckner focuses on the Associateship exams, and Linden Cole focuses on the other two tracks, Group Benefits and ILA (Individual Life and Annuity). Wayne has been involved with Pat, providing support from the Society's office in developing the pension syllabus. Previous to joining the Society, Wayne worked for The Alexander Consulting Group and London Life before that. He is a welcome addition to the Society's staff.

I'm the Chairman of the Society's Examination Committee. My responsibility is to get the examination part of the FES up and running and hopefully running very successfully. I'm a consultant with Hewitt Associates in Toronto and work both in the pension and flexible benefits' fields. Now, why don't we ask Pat to give us some background on this and tell you about all of the exciting upcoming changes.

MS. PATRICIA L. SCAHILL: I'm going to start out talking about the reasons why the FES was developed and then talk specifically about the Pension Track. I'll spend a little bit more time on the U.S. since that seems to be the major area of interest for this group.

It was obvious that the actuarial profession was becoming more complex. There was quite a bit of material that actuaries needed to be familiar with to practice in their area and the Society was no longer able to educate each of us in all of the different disciplines. It could no longer make us experts in Pensions, Group Benefits and Individual Life and Annuity issues. There was also a need for each of us, as students, to specialize in certain areas as well.

We weren't practicing in all of these areas and while it still helps us as professionals to have some general background across all of the tracks, as pension actuaries we really weren't interested in exactly how to put together a life insurance company annual statement. We weren't interested in all the taxation issues that affected life insurance companies. The FES was developed to help get at these issues, to get a meaningful block of information that could reasonably be expected of a student in the course of pursuing Fellowship designation. Also, it was developed to allow the student to specialize in the area that he or she chose to practice in.

Another issue from the Pension side was that the previous exams were strongly oriented towards insurance companies. In the U.S., in particular, a lot of pension actuaries were getting their Associateship designation, going on and getting the EA designation and then stopping. Students would take a look at the material that would be learned in the other Fellowship parts and decide it wasn't worth the effort. Employers were not pushing students to obtain their Fellowship. Perhaps from the employers' perspectives, when you looked at someone who was an ASA EA, compared to one who was an FSA EA, there wasn't a meaningful difference. That was another issue that the Society wanted to address.

The Society exams were not covering many areas in which pension actuaries practiced. Again, by allowing specialization and eliminating some of the material on the insurance company issues, as well as eliminating some material on the group benefits issues, one had the exam hours and study hours available from the students' perspective, to let students get involved in these other pension subjects. As an employer takes a look at what the student will now learn between the ASA EA and the FSA EA designation, there will be a meaningful difference. Employers may offer more encouragement and then more incentives for the student to continue.

Another factor was for insurance company pension actuaries, as their business was also changing. Clients were approaching insurance companies and asking them to act as traditional consultants. Even insurance company pension actuaries didn't need quite the same kind of background that the Society examinations had been giving them. As a result, that allowed the development of a Pension Track that will hopefully meet the needs of both consulting and insurance company pension actuaries.

There are electives available that will allow students with a little bit different background to get some exposure to some other areas. Both insurance company actuaries and consultants who practice in only defined benefit work can take electives that will be meaningful.

In review, the tracks were developed to allow specialization. Electives were allowed from other tracks to provide a broader education. Core courses that are fundamental for all actuarial students will assure at least a basic exposure to all of the different areas in which actuaries practice, and will provide a good overall understanding of financial security programs, encompassing group benefits, individual insurance and pensions. The requirements that the students are going to have under the FES are 100 units of core courses, which consists of three specific core courses, 90 units of pension required courses and 60 units of unrestricted electives.

I'm going to talk just a little bit now about the specific courses that are going to be offered. For U.S. students, EA-1, Segment B and EA-2, are both included in the Fellowship courses. EA-1, Segment B is Course P-360U and EA-2 is Course P-365U. There will be no change in these. They will still be jointly sponsored with the Society, ASPA and the Joint Board. The content of the courses will still be set up by the Joint Board so that students can meet the requirements for enrollment under ERISA. However, the units of credit from these courses will count toward your Fellowship designation. The credit will count towards the 90 required credits of pension education. We have two pension design courses, P-361C and P-362U. In comparing these two courses, the units of course credit are different because of the units allowed for the enrollment exams. Overall, students will receive a comparable amount of education in each of the different areas. Under the design courses, we are not allowing credit for both the U.S. and Canadian courses. The material is too similar to justify allowing credit for both. Both of these courses will build on material that will be covered in the core course.

We have a funding vehicles course which is not country specific and students will see trusteed plans and plans funded through insurance, GICs, and other insurance vehicles, and investigate requirements of trust agreements and a lot of the issues around the funding aspects of the course. This won't deal with asset valuation methods though; that will come up in the valuation courses. We have

two courses on regulations. For the U.S., the regulations course is EA-2. The Canadian regulations course is P-364C. We do allow credit for both of these courses. The reason we did that is that some students in Canada have a need to become EAs. Also, on the regulatory side, there is simply no overlap.

We have two pension valuation courses. For Canadian students, it's course P-460C and it's a 35-unit course. For U.S. students, it's split in two. Part of the course is EA-1, Segment B, course P-360U, which is funding methods, asset valuation methods and additional material that is tested by the Joint Board. Then, course P-461U is a 20-unit course. There we're going to get into funding, accounting and some of the issues that the Joint Board doesn't test on. But when you put them all together, you're going to have a pension valuation course that will give you a good background on all the different valuation issues.

The courses I've just mentioned are required courses. The design, funding vehicles, regulations, and valuation courses are all required courses. Looking at electives in the Pension Track, we're offering a course on international benefits that will be offered in the spring for the first time. That is not a country specific course. We're offering two social insurance courses, one for the U.S. and one for Canada. Credit can't be received for both courses. Those courses will be offered in the fall. We have an executive compensation course that will be a fall course, although it will not be offered until the fall of 1989. executive compensation course is not country specific, so students will learn issues in executive compensation for both the U.S. and Canada. Then we have an expert witness course, again not country specific. The electives will help a student pick areas that particularly pertain to what that student actually does in practice or wants to do in practice. Perhaps a student had typically been an in-house valuation actuary and wants to get into expert witness work. Here's a chance for the student to get some meaningful background. Perhaps you do a variety of consulting issues but don't have much experience in executive compensation. Your employer would really like to have you be able to go out and meet with clients and discuss executive compensation. Here's a course that you can take in the Society structure, as you're preparing for Fellowship, to help you learn things that cover your interest and hopefully your employer's objectives for you.

MR. GERALD I. WILSON: I'd like to offer you two views on the impact of this FES on training in an organization that has a number of students who would be pursuing this Pension Track. The first view is that this is a training program as training is generally understood. The second view is that this is a program for the student employee who is seeking the FSA designation. As I talk about these two views, I see them as rather separate considerations to address, as one tries to assess what the impact of this new system is on the other sorts of training and on the student program that probably already exists within each of our organizations.

To view the impact on training in general, meaning preparation to do the work in our specific business, these are some comments. First, this has to be viewed in conjunction with, or perhaps as part of, the training in many subjects and in many processes that we provide for the professional staff in general. It can't be set aside and not be considered within the context of training that is going on for many professional people within each of our organizations who are not actuaries and are not pursuing this designation but, in fact, are part of an overall training program. One way of looking at the impact of this new Pension

Track and the new set of courses might be to say that it has no bearing on the training programs that are preparing people to do the work of our business. We could argue the timing isn't good and it's too late for basic training in these subjects by the time a student gets to this level. Certainly if they have joined you when they were in the early exams and have taken a while to get on to the later exams, the timing of exposure to that material is too late, at least too late for basic training in those subjects.

Second, this form of training lacks the interaction with attorneys, accountants and others that is part of training which many of us would offer within our own organizations. With the continuing complexities in what I would call the actuarial legal area and the actuarial accounting area, to have this training going on within the single side of that and not have the interaction between the professions as one discusses many of these issues and conducts training, and as a result within that training has discussions, does not provide the same level of training one would expect from the kinds of in-house training that we would do in this subject.

Third, there's some question about depth, at least in the practical sense. And finally, this training isn't tailored to the particular organization. Each organization has its own attitudes and some proclivities to certain kinds of plans, approaches, design issues or funding issues. Certainly organizations address the process of our business -- how we work on the subject, how we work with clients, and if we're in the consulting part of the subject. We each have different processes that are also part of and mixed in with the subject training. An organization like the Society cannot begin to accommodate the needs we have, to tailor some of these concerns.

However, I wouldn't conclude there is no value. There is some value, just as part of one's training program. Certainly there's some value in the reinforcement that comes from exposure to exams, that answers the other training and work, somewhat without regard to which comes first. There is reinforcement going through issues and then going through them again. As a practical matter, this has in the past, and I expect in the future, created a situation where on some subjects the students get the first exposure through the exams and have it reinforced through some other training or work experiences. In other cases, the training work experience has come first and maybe that makes the exams a little easier, but there is a reinforcement when one gets to the exams. There's some value that way.

There are subjects where there is depth added that we probably don't feel is necessary to do the day to day business. We probably don't spend much time on them in our in-house training -- things like the history of Social Security, international pension issues, or the actuary as the expert witness. Some of these subjects are not ones we necessarily get around to in a hurry within the kind of training we're running for a number of professional people. Yet this is all helpful background and broadening in terms of the longer term career of people in the business and understanding broader issues. Is it worth the price in time off for the additional training in going through things twice and reinforcing them? It would be a hard decision for the employers to support this program and say that training, for training's sake alone, would be worth the study time hours and so forth. In conclusion, on this point, training in this sense should not be the expectation of the Society, or the employer or the student. We are in a profession and are looking for professional designations.

That leads me to the second point, which is to view this as part of a program to support the student employee, who is interested in acquiring a professional designation. Therefore, what is the employer's attitudes, support and so forth, of the student employee who is interested in attaining the full professional credentials, within a profession like this?

I have three overview comments on this subject of the student employee program. One is from the organization's perspective. Again, this support must be considered along with support of MBA programs, law school at night and other sorts of programs, such as Certified Employee Benefit Specialists (CEBS). We can no longer think that actuaries are in a special category and have a set of rules that provides things like study time and perhaps exam increases and other sorts of things that are viewed as perks by other professionals, without considering similar kinds of support to be offered for other programs.

Second, we believe that the FSA is worth supporting. The EA is viewed as a weak credential, perhaps like a BA from an ex-teachers college that is now called part of the state university. It's a credential which some people have acquired in ways that one would think has not required very thorough in-depth understanding of the subject. We're certainly supportive of people becoming EAs but view that as a limited objective, instead of an ultimate objective.

Third, the employer doesn't need the Fellowship exams for screening. We get very adequate screening from college grades and at least from college grades plus the courses up to life contingencies. So in the sense of supporting the program, we are not looking for additional screening in the sense of whether a person is able to pass the Fellowship examinations. We've had plenty of screening before that.

Now, more specifically with regard to the student program, let's begin with a review of the current procedures and those have generally related study time and pay increases to examinations. We now have smaller courses, smaller exam chunks, and we need to go back and reevaluate what this means in terms of the implementation of these programs. Our study time rules are, if you have formal exams, increased rules are not quite as complex as the catalog of these new courses; but most of them are not very simple either. As we get into changes, these programs will not get any simpler in the future either.

When we look at the smaller chunks, one question that pops out on the pension side of this is the question of whether the study time and pay increases, if they're related, are tied to course credits or hours of exams. This comes at one right away in the enrollment side, because we have more hours of exams than course credits. It doesn't take students very long to observe that and they want to know what the rules are and whether it makes any difference. We have addressed that and talked about it and we would certainly be comfortable with a short-term conclusion that ought to pay attention to the hours of exams. We're certainly not going to try to sit in judgment of which exam has more difficult material and therefore deserves more study time. We're going to need some sort of a simple prop to either base it on course credits or hours of exams. We are trying to be supportive of the enrollment exams. We think those examinations are particularly important. Since there are more hours of exams, we're going to pay attention to the hours of exams, at least initially.

Second, what is a full load to get full study time? You can either ask if you need to pro-rate down, if somebody isn't taking a full load, or you can start

with building blocks that say you have this much time if you take one course or one exam and add those up. In the end, there is a question of, if one has 100 study hours and takes three hours of exams, one needs to question, do you pro-rate down or do you start the other way around -- you have so many hours, is there some maximum? We have some people who are going to take only one exam at a particular session. We may have some people who are very aggressive, ambitious, and perhaps very talented, who in fact may be willing to bite off a very large chunk. As somebody providing the program, there are questions about how you support both ends of the spectrum. I'm not sure that we feel very comfortable with any particular conclusion, but I would think that full study time as it has been perceived in the past ought to be available for somebody who is taking three, four, or five hours of exams. That's generally what an exam's length has been in the past -- what we were giving "full study time" for -- and we ought to preserve something like that.

We have discussed that with groups of students, and I don't think there's any perceived unfairness about that or any perceived unfairness that you pro-rate down. We may have a discussion of what happens if I only sign up for one course and does that then mean I'm only allowed one-third or one-quarter of the time? Won't that lead me to sign up for three or four even though I only intend to take one? We all understand that people could figure out games like that, but that kind of thing could have happened in the past too. People signed up for exams and didn't really get in enough study time to have an honest chance to pass, but those things happen for all kinds of reasons, sometimes because of the work we impose on people and things that get in the way of studying. As a result, we don't need to try to figure out some terribly clever way to monitor the system, but instead just try to do something that seems fair and see what happens.

There's a new question about exam days. It has been brought to my attention that a student may have a one-hour exam on each of three days. What then is the expectation about the student coming to work? Ordinarily in the past, there's been either one or two days of exams at the most and probably students didn't participate in the work effort on those days. If there are single hours of exams that happen to fall on different days, then you're at least going to have to answer the question. That's not a big issue but it's another one of those details that somebody has to look at and decide what should be done. If you're trying to run a consistent program for students who are in a number of different offices, it can be very difficult when students find out that their manager is interpreting things differently than somebody else's manager within the same organization. We all know that it's helpful to find whoever has the most generous and make comparisons to that and ask why that isn't provided, but it's particularly difficult if within a single organization there isn't some consistency. If you look at the details of how one's going to relate their study time and perhaps exam increases to this new program, there are some things to be worked out.

The change to courses, which seems more comparable to college courses in general, does raise more directly this corollary issue of study time and pay increases, especially the study time issue, for those pursuing an MBA, a law degree at night, or those taking the CEBS courses. I don't think we have a conclusion. In the past there has been a different level of support of the actuarial student than there has been of students taking the other courses. Courses have been paid for and some tolerance given for time off of very modest

proportions -- such as getting to classes or days of examinations -- but not the up-front promise of study time that has been available to the actuarial student.

A third point about the program under this new syllabus is that there will be more frustration for students. Actually, the exam syllabus went from eight to ten exams while I was in the middle, and I remember there being frustration at that point. There's been frustration with each change especially for those who are caught somewhere in the middle at the time of the change; and we're going to have another round of that, maybe greater this time, because it touches a greater number of people and maybe in a greater variety of ways than the previous changes have. It appears like it's going to take longer. That may appear to be especially true for some of those in the middle. In discussing that with students, I'm sure they'd readily admit that they think it actually will be faster for some and slower for others. The one who had a lot of near misses probably has a chance to progress a little faster than they have and the one who has had a number of modest successes may get slowed down a little bit. It looks longer and those who are in the middle now are concerned about it.

There's a whole issue about one-hour tests and the frustration related to that. There's a great feeling that the exams have been curved before. When you have only one-hour exams and it's curved and there are issues about the mix of people taking this test, that raises fairness issues about the process. That may be more the problem of Pat Scahill and Bob McKay and others who are designing this, but it's going to be a problem to the employer as well because there's going to be a great deal more frustration.

Making these more like college courses, but having what I would describe as a tough test on difficult points (as opposed to requiring a higher standard on a straighter test), is part of the fairness issue. It is perceived that one gets credit for a college course by demonstrating a reasonable knowledge of the material offered in the course, as opposed to the kinds of things that may come up on a difficult test which is oriented to particular concepts or points that are only tested on a one-hour examination. At least within the pension area, the EA may consider getting an MBA instead of an FSA. The process to get the MBA, at least initially, is viewed as fair. The MBA is viewed as broader. The outcome of spending all those hours is viewed as more predictable for one's effort, than putting those hours into this series of one-hour exams, which have tough curves. That is going to be something to deal with -- the frustration of students.

I've put the students in three categories. There are some who will pass under any system; that's not going to be our big problem. There are some who will struggle and may not stick it out to FSA under almost any system. Finally, there's the third category that will struggle but will probably make it. That's the area of our challenge, to encourage those people to hang in there, at least as much as we've been able to encourage them to hang in there in the past. In this third group, there are a lot of late starters, the people who came out of a small liberal arts school, people who found out about the profession later and are faced with passing this whole series of courses or exams, all as part of a work study kind of thing later on. They get to places where, because it's going to take however many years in the work environment, as opposed to being part-way through in the university environment, other priorities like work and family and those things crop up more for such people. They've had trouble hanging in there in the past, and some of the reaction I've had from students has been the appearance of this being a longer process. With all these courses, it's just

going to be more discouraging to people who come into the system late. As a matter of fact, some of our liberal arts graduates have suggested that maybe this is the ultimate professional ploy to discourage new members in the profession, except for children of members who get into the system early.

The last point about the program is the question of whether the employer is going to get into course selection or guidance. Now that we have a choice of these courses, some of them elective, we have something that's more than obvious. Should the person who is working basically pension-related business pursue the Pension Track? We have questions about group versus pension that may have been in there somewhat, but are in there more now. Currently within the Pension Track, we have the question about electives and whether or not the employer is going to pursue this issue or not.

The employer might see the selection first in terms of the subject. Again, my pick would be (based on the current catalog for those electives), any Pension Track elective course, group benefit elective course, the group benefit design course that's required (G-320), and the group insurance pricing course (G-422). As somebody looking at this from a subject standpoint, that would be my short list.

Now, the student may have a little different perspective. The student may see the selection first in terms of getting credit. That is, in what do I have the best possible chance of passing? There will be concerns such as, do you risk a tougher curve if you go out of your track? Inevitably, there will be some sort of a reputation developed by these courses over a period of time, and the word will be passed around that this one is particularly tough or this one is a better course to take in terms of the effort required to get the credit.

If the employer is going to participate or vocalize in the course selection question, the attitude may be expressed in several ways. The employer may set forth a policy or a recommended list. Second, the employer may offer a list as a suggestion but not monitor as to whether students are following that suggestion, or they may offer for whatever value of guidance or perspective there might be. Third, the employer may respond if asked, in a guidance sense. In a university sense, we have been through or our children have been through the frustration of a large catalog, when one isn't quite sure how to play the system. Some students will need guidance, and they'll get that from other students. Initially, there will not be many people who have been through this system. As a result, there are going to be questions about who do you go to talk to, and what's a reasonable decision, if one is the kind of student who would like to talk those things through with somebody. We're going to have to be available, at least for some sort of guidance in making suggestions. Whether or not we want to get into policy or specific recommendations about which courses is a harder decision. In summary, with regard to the programs, the smaller exams should be worked in fairly easily. There will be more frustration on the students' part, at least for a while. Ultimately, there will be some impact on nonactuaries taking other professional courses.

MR. MCKAY: A number of the comments that Gerry Wilson made on some of the possible difficulties were actually reasons that the Board of Governors went in this direction for flexible education. They had perceived a difficulty coming up in recruiting actuaries in the future and instigated the new system. Time will tell how successful it was. To give you an example, one issue is that students have had many transitions in the past and it's very difficult to do. This change

is perceived or put in place in part to prevent that type of problem recurring in the future. This would be the last transition. The problem in the past was when we had these five- or six-hour exams with four topics in them. As we tried to keep the syllabus up to date and modified as legislation changed or as practice changed, we tried to take a chunk out or move a chunk from one exam to another. We ran into issues in regards to giving credit for people that had passed that exam, and eventually we ended up splitting the exam into two or three pieces and we had a transition. It was felt that by having unique little blocks of exams, that problem would be prevented in the future. You can take one block and replace it by another without messing around with these two or three other things that are thrown into the larger exams. That was a key consideration. The more complex our profession became, the more difficult it was for this five Fellowship exam structure to adapt to the rapid changes.

Grading one hour exams is an issue. Certainly the goal of the exam committee is to pass students who show reasonable knowledge of the material. That will not change in moving from the old system to the FES. The same level of preparation should indicate that the candidate passes. If everybody writes five hours of exams, under the FES that shouldn't be a problem. The same hours of exams will be passed as they would have under the old system. The difficulty arises as students change their strategies. The feeling was if one put a flexible system in, where the student could build a course of study that would meet their particular interests and needs, it would be much more attractive to people or help prevent people being skimmed off into other professions.

It's important to look at it from two points of view. Looking at it from the educational side, that was the goal. If one focuses on the exam side concerning ten credit courses, one can obviously reach another conclusion. I encourage you when you're talking to students or fellow students, to emphasize the educational side. The early returns from the Associateship exams indicate that we're not experiencing that problem, at least not so far. Bern Bartels, the Registrar of the Society informed me that we have the highest registration ever for Society exams coming up this May. Currently, we're estimating over 13,000 candidates and that will be increasing rapidly.

Finally, when we were putting this panel together, Pat called me and volunteered to be on it. Normally, you don't get people calling and volunteering to be on panels, even in California. Pat reasoned that she had just become very heavily involved in this and had a number of sessions with students at Mercer-Meidinger-Hansen. A number of these students were what we would call career ASAs. They had gone through, they passed their EA and they said: "I don't want to put in the effort to complete my exams under the Society system. It isn't relevant to me and I'm not going to get anything out of my efforts." After describing the new syllabus and the new approach to students, a number of them basically said that this sounds really great, it's much more attractive, and they're going to get back into the system. Pat felt very strongly that, at least in that group, it was an attractive option. She then volunteered to come to California to spread the word.

MR. MAREL K. BATES: I'd like to congratulate you on your efforts on the Fellowship exams. It's a great improvement. But, I still have a problem with a pension person still having to sit for more hours of exams to become an FSA than a life insurance person. Is that still true? It has been the case in the past.

MR. MCKAY: Yes, the U.S. pension student has to write EA exams and doesn't get the same proportional credit. For instance, it takes nine hours to write both exams and you get about 50 credits. The reason is that it was felt, by the E&E committee, that the preparation required is equivalent to preparation for 50 credits of exams in the other tracks.

MR. BATES: I couldn't disagree more strongly. You passed 24% on the last exam.

MR. MCKAY: We didn't pass 24%; the Joint Board set the pass mark.

MR. BATES: I think you had some input to the Joint Board. My primary response is that you talk about the Fellowship exams becoming more relevant in recruiting and that's just not relevant. In recruiting, the student is looking at Parts 1, 2, and 3 or the courses that used to be in Parts 1, 2, and 3. Those courses now are so mathematical that what we are doing is screening out the people we should be screening in. Ninety percent of the applications that cross my desk are from non-English speaking mathematical whiz kids. This is one profession that they can succeed in without being able to speak English very well. This is a serious problem. We could use some of those people in our profession, but the 90% that I see is just an indication to me that something is wrong. Again, other professions are more attractive to English speaking people and French speaking people in certain areas of Canada. That is the thrust of my comments. Those early mathematical exams, particularly for pension people, could not be less relevant. They might as well be studying oriental languages given the thrust of the people that we are attracting. That might even be more relevant than to be able to communicate to the actuaries of the future.

MR. MCKAY: Do you have any comments on that, Gerry -- on what kind of people you have seen when we're doing our recruiting?

MR. WILSON: The observation would be the same if you look at the universities that have actuarial programs, and see which students have selected courses that are in the actuarial major, in the actuarial courses, or within a business or math major. The comment about the mix of people who are finding this profession a possibility because they have strong mathematical skills includes a great mix of people. I wouldn't have any different comment about it. Programs where there has been recruitment at the college level into actuarial programs are sort of up and down and all over the place. Some of them seem to be thriving and some of them are disappearing. I understand that the University of Texas is dropping their course and it was a small program. That's just another one that's disappeared as a college that's endeavoring to provide some sort of actuarial courses and an actuarial major of some sort.

MR. MCKAY: There is definitely a concern among the leadership in the Society, the Board of Governors, on what kind of actuaries we're recruiting for the future. There is, as you may know, a committee named, "The Future of the Actuary, The Actuary of the Future," that is studying that particular issue. A number of years ago, the mix of what you might call back room actuaries to front room actuaries was probably 70% of the techie-type person -- very strong mathematical skills, but limited communication and management skills or big picture skills. There's a feeling that those percentages are flipflopping and we're going to need 70% or 80% with the broader perspective. There is a concern among some people that the early exams can give the wrong indication to people or can attract, unfortunately, more of the people that are technically

proficient but don't have the other skills. That's definitely recognized by the leadership and they're investigating it. One of the things that was considered to get around that was the Future Education Methods (FEM), some of which are being implemented in the next year or so, that would move away from some of the traditional exams that we have. One of the approaches was that if you got a B in certain mathematical courses from a recognized college or university, you could get credit for Course 100 or 110. That was to attract people who weren't in actuarial programs or who heard about the profession later on. It was felt that we could screen later on with old Part 4, but it would broaden the base. The membership rejected that because they said, "Just a second, you're loosening up our standard." It was recognized and there are some solutions but it takes a long time to change things among the membership.

MR. WILSON: As an employer, the expectation of the professional credentials or the support of the professional designation is that you expect somebody who is very good in that discipline. I'm not expecting the actuarial profession or the legal profession to tell me that somebody is a well-rounded businessman. It seems to me that's my problem as an employer and I recruit people from all sorts of backgrounds, some of which are professionals and some of which don't have any particular professional specialty. When you have somebody that does have that professional designation, you expect they are very competent in that particular area. Offering credentials and representing people as qualified to perform or to deal with the subject matter of this profession is the thing we have to make sure that we're doing well at the Society level. The question of whether the Society is able to recruit well-rounded business people isn't really the Society's problem. We need to recruit the right kind of people to get them into the system if we believe in having both well-rounded people and people who have the professional designation. I don't think that is the Society's problem. Society's problem is to make sure that they are well-qualified as professionals if they are in the system.

MR. DOUGLAS J. CAREY: When I took the exams about ten years ago, most of the Associateship exams were multiple-choice and the Fellowship exams were about half multiple-choice and half essay. I always thought that mix was a little bit odd because it seemed as though the essay required a much more in-depth understanding of the subject matter and multiple-choice tested the ability to memorize picky little details. Then I spent a couple of years on the exam committee to understand why everything wasn't essay exams. Could one of you comment on what the mix is now and why you arrived at that particular mix of essay and multiple choice exams?

MR. MCKAY: The Associateship exams are pretty well the same, with one exception. We've added questions which will require longer answers on Course 150. For those of you without your secret decoder, that's old Part 4, Life Contingencies. That was primarily because the new textbook, Actuarial Mathematics, has a number of areas that just don't lend themselves to multiple-choice questions. You can't probe the understanding of the material with multiplechoice questions. You can't look at the development or the student's ability to understand it. In part, because of their mathematical content, the focus is on multiple-choice in the Associateship exams. It's also a practical issue of trying to grade all of those papers. We get many, many people writing those exams. They pretty well have to be multiple-choice. We have had limited success with what we've done with Course 150. The candidates haven't performed terribly well, probably because it's the first essay type question they have seen. In the Fellowship exams, there will be more emphasis on essay exams. If you look

through the Implementation Announcement, there's proportionately more essay exams than there used to be. I am not sure I agree that essays are more difficult; it depends on the individual. Some people find multiple-choice much more difficult.

We try to look at the material and what the best way is to test that particular subject. Is it essay questions that can allow you to answer some questions that maybe combine information from several pieces of material or does the material lend itself to brief type questions? We're also interested in coming up with something in between -- something that isn't a traditional multiple-choice or an essay -- to help solve this one-hour exam issue. You want to test enough things to allow the student to pass, even if they have to start out slowly or have one particular area of the syllabus that they're weak in. If you have an essay question in that, you're in trouble. The balance is a little more essay in the Fellowship exams.

MR. JEFFREY K. DELLINGER: For those of us working in the retirement savings/annuities markets, and participating in 401(k), 403(b), 457 and IRA markets, having no defined benefit plan valuation work, the Pension Track may still provide the best background of all the tracks. But could the EA-2 pension law exam be elective rather than required for those of us who work in retirement savings markets? To attain Fellowship the defined benefit plan regulations must be mastered to the degree necessary to attain enrollment status. There are those of us who really don't desire to have enrollment status as we are in companies having no defined benefit work.

MR. MCKAY: I certainly can't answer that one with all those American references.

MS. SCAHILL: In direct answer to the question, can EA-2 be elective? No. It's important that a Pension actuary understand the regulatory environment and realistically, the defined benefit area is much more heavily regulated. It's true in Canada and it's certainly true in the United States. In the plan design course, and in the funding vehicles course, you'll find both defined benefit and defined contribution treatment. For the enrollment exam, because enrollment is a designation that pertains only to defined benefit actuaries, because the only point of enrollment is to allow you to sign a Schedule B, which pertains only to a defined benefit plan, you're not going to get specifically into defined contribution regulations. There are parts of the Code that apply to both defined benefit and defined contributions. Some of those parts are covered on EA-2.

There are going to be a number of actuaries who are going to fall in areas where none of the tracks are ideal. Social Security is another area where the Social Security actuary doesn't have the perfect track to go down. A little bit of group benefits and a little bit of Pensions is more satisfactory.

Unfortunately, you'll just have to pick the one that does suit your needs best. We're really not insensitive to that, but in looking at the body of material that is appropriate to expect a U.S. pension actuary to understand, it does include EA-2.

MR. MCKAY: That issue was looked at and debated significantly when the tracks were being put together. One proposed solution was to come up with a generalist track that took certain courses from each of the three tracks. It could be attractive to a pension actuary working in an insurance company,

maybe somebody in the educational field and some of the other areas. When we looked at that, it ended up that you didn't get depth in anything, you took the basic courses in everything and it was felt that at the end of the day you really hadn't earned an FSA. You'd taken a lot of neat courses and had a broad education but you couldn't get into any of the topics in enough depth. As a result, it was felt that we couldn't have an infinite number of tracks and we're starting with three. Eventually there may be other tracks such as a Health Insurance track.

MR. HAROLD ISAAC BARR: I passed my Associateship and completed my enrollment exams in 1981. I haven't taken an exam in about five years so this new exam system is drawing me back into the system. Now it seems possible for a pension actuary, which is what I am, to find the time in-between clients to study for a shorter exam than a longer one. One question I have is, will the syllabus for the November examinations be available soon?

MR. BERNEY: At the present time, it's at the printer. As soon as I get back, I'm going to proof it. The Fall Catalog is supposed to be printed by the end of the first week in May and then be distributed as soon thereafter as we can get it out.

MR. BARR: I notice that nowhere in the electives was anything mentioned in the area of investment strategies or similar topics that the Investment Section deals with. Will there be courses like that in the future?

MS. SCAHILL: The Pension Track is not currently planning an investment strategies course. The Investment Section has talked about possibly developing a track of their own. The funding vehicles course is going to get somewhat into the options available to pension actuaries and some of that material is in the core courses.

MR. BERNEY: Basically, the old Part 8 material has some updating but not a lot. Again, it's supposed to appeal to all actuaries and not just someone who wants to specialize in investments. Within three to five years, there will be an Investment Track, if the Investment Section continues to want it, and then provides the people to develop one. That's the key.

MR. BARR: In the FES announcement bulletin, there was a lack of clarity, for some of us, especially someone like me who has been out of the system for a while. What might be, if not the required prerequisite, the suggested prerequisites? What should you take? What should you consider making a point of taking before taking other courses?

MR. BERNEY: I tried to address that in a section of the Catalog that has advice to candidates. To come up with a suggested order for taking examinations, I found it an extremely difficult issue to address. Generally speaking, the Core or 200 level courses should be taken first, if possible. Beyond that, it's hard to say what order you should take courses in, on any particular track. Maybe in another year or so, the Society will have a much better idea, but at the moment it's generally lower-numbered courses first. It depends on the individual. Some people can jump right in and take the electives because they're already working in that area and they know quite a bit about it. For others, the electives will depend considerably on some of the survey courses, some of the 300 and 400 level courses.

MR. ROBERT L. BARTHOLOMEW: I'm a nonpension actuary and am looking to specialize in either group benefits or individual life. What sources could I look at to get greater detail in both areas, compared to the ones here today for pension?

MR. MCKAY: The Catalog will have a lot more detail than the announcement that was sent out. I'm not sure if the other tracks are planning similar sessions.

MR. BARTHOLOMEW: Which Catalog is that?

MR. MCKAY: The Fellowship Catalog that Wayne is referring to.

MR. BARTHOLOMEW: The syllabus?

MR. MCKAY: Yes. That will certainly have significant detail about the courses, and will indicate what the study material is, and what the sources are.

MR. BERNEY: We're producing two Catalogs per year, one for the fall courses and one for the spring courses. The one we're producing now is, of course, the fall one. The Catalogs will have the detailed syllabus for the fall courses, together with basically the same description you've already seen for the spring courses, but perhaps modified a little bit.

MR. BARTHOLOMEW: Also, I find the background you discussed today enlightening and if that will be done at a future seminar, I'd be interested in receiving something on it.

MR. MCKAY: Another source of information, for you in particular, is Dan Fitzgerald at Massachusetts Mutual Life, who until a couple of weeks ago was the Chairman of the Education Committee and coordinated all of the tracks. I'd recommend that would be the place for you to start.

MR. CAREY: When I took the exams, there were two areas of specialization: individual life and group benefit. Sometimes it had some advantages in that you learned about topics that you wouldn't ordinarily cover in your business. You might think you have no use for these areas, but it's amazing how some of that comes back years later. Now with the specialization that you have, will the students still have that or will the study of pensions be so in depth that they won't know what a whole life insurance policy is? I'm sure it won't be quite that. It won't bypass the area of individual so much, but will a have the appreciation of other areas of actuarial practice, and have that information available to him or her, as they conduct their business? That was a definite advantage.

MR. BERNEY: The three Core courses represent 40% of the total required courses. These cover basically most of old Part 6, 7, and 8, with some things being reduced. Everybody has to take these Core courses, and they're everything, at the moment, that every actuary has to know about everything. They're pretty inclusive of all fields, including some new material on casualty actuarial science.

MR. MCKAY: Part of the educational advantage from the new structure is that people are studying things that they they don't normally come across in their business -- being exposed to some things that they're not being trained for in

their organization. That was definitely a trade-off or a struggle when we were putting it together -- the ability to give somebody a broad education in a number of areas versus specifically focusing in one area of practice. We didn't want to create little pension robots that have no breadth of education. We had some preliminary ideas that went even further than this. We were going to force people to take up to 20 of their elective credits outside their track. Unfortunately, that fell apart when we were trying to put all the numbers together. But that would force people out. We are also going to make the international course mandatory. That would give people exposure to what's done in other countries and help people step back from focusing on merely what the latest IRS regulation is. Again, when we were putting everything together, we didn't have room to do all the things we were trying to do. That one then became optional.

MR. CAREY: Broadening would be helpful. There is very definitely a danger of getting too narrow. People are talking about the Investment Track and the other multitude of tracks that you have. I am concerned that we as a profession don't become too narrowly specialized in our own areas and do not have a broad view of what it means to be an actuary. To the extent that you're revising this in the future, I would encourage you to have some type of required broadening, whether it is taking required electives, or doing something else to insure some real level of knowledge that's comparable. You had to get it in the past. Now, there still are very definite advantages in being able to specialize, but let's not go too far in that direction for the sake of the other direction.

MR. MCKAY: That's an area where the manager of a student can help. To give you an example, somebody from Hewitt Associates called to ask me about this deferral of the executive compensation course which is part of the Pension Track. It's being deferred one year, because of the time it takes to develop the material. He was saying that that's slowing him down because that's the course he wanted to take. Then I recommended attractive courses in the Group Track. There's a flexible benefits course that might be attractive, and there's a course in continuing care retirement communities, those kinds of emerging issues. But he was focusing only on the Pension Track and there's this concern that you're being graded against Group people. I've urged the managers of students to help them take courses that will give them tools they're going to be using in the future. That might be a little idealistic because people may tend to take the ones that they hear are the easiest.

MR. SERGE CHARBONNEAU: I disagree with the comments the last gentleman made. It is alright to allow generalization, but you should not force anything. Also, the actuary who chooses to be specialized will not have general knowledge.

MR. FREDERICK W. NELSON: Have you been able to assess whether the amount of material required on the new Pension units will be about the same as is required currently for pension on the Fellowship side for FSA? Will it be significantly more or less?

MS. SCAHILL: As far as I know, the amount of material will be very similar to what is commonly required. We pay a lot of attention to how much material we're asking students to learn and how much credit we're giving for those units. It will be comparable.

MR. BERNEY: If I understand your question correctly, will a one-hour exam have 20% of the material of the current five-hour exam? If that's your question, the then answer is yes, it will be very comparable. If your question regards

the amount of pension material that exists on the current syllabus today that's required of pension actuaries or people that take the pension primary, versus the amount that will be on the Pension Track, then there's a lot more on the Pension Track. But one doesn't have to take some of the other courses, so there's those trade-offs. We tried hard on all of the courses, and tracks, to say 10 credits is worth approximately this amount of material. Fifty credits is worth five times that, which is equivalent to a current exam. We tried to keep the amount of material as close as possible to the current amount per hour of exam, with the exception of the EA exams over which we have no control.

MR. WILSON: There is another aspect that we've touched on here, namely, the person who reached the ASA level and then has not continued. I heard two reasons from some people in that category as to why they will reenter the exam system. One of them is the smaller chunks reason, and the second is that those chunks do seem to be more relevant to the business when a greater percentage of the chunks can be in subjects that one has elected. These subjects are closer to the area of activity that you've been in, therefore they seem to have a functional purpose besides the purpose of getting credits towards the designation. They actually feel that there's a relevance in the material that encourages people to be willing to jump both hurdles. Whereas before, they were simply viewed as hurdles to get over; there weren't enough incentives. For some kinds of people, it's very helpful to have these additional choices and the ability to take a greater percentage of it in subject matter that people feel is relevant. That's not to say some people will also feel the greater variety of things is more attractive. We've allowed for people who look at the system either way, to have some choices now.