Contrary to what you have been earlier told, the main purpose of this dinner is to make you fed up, first with food and then with me. To mark the 100th anniversary of the start of the actuarial program at the University of Manitoba is merely a secondary purpose. It would have been appropriate to have you addressed by one of the original students of the program. He—they were all “he” in those days—he would be currently aged about 120 years. He is unfortunately unavailable owing to a phenomenon that gives actuaries a good living. After studying my birth certificate, the organizing committee for this dinner correctly concluded that I am the next best thing. So I stand before you as the triumph of seniority over merit, which should qualify me for honorary membership in the teachers’ union.

What is an actuary? Definitions abound, mostly incorrect, humorous, and insulting. The abominable no-man. A person who never makes a little mistake. Etc. For the purpose of my presentation, an actuary is a person who, if you give him an inch, measures it.

I do not know when the organizing committee started its work, but they evidently realized at some point that there’s little point in marking the 100th anniversary of anything without some attention to what happened to it during the 100 intervening years. I am given to understand that the University’s records of what happened are a shambles. That does not surprise me if the stereotypical stories of the absent-minded professor are half true. But the organizing committee was smart, or lucky, even if absent-minded. They found an amateur, but capable and willing historian in Laird Rankin. They commissioned him to do the big dig through the shambles and to write a coherent narrative of his findings which could be understood by both people and actuaries.

It is said—and, like some things that are said, it may be true—it is said that, in 1702, when Queen Anne visited the newly-built St. Paul’s Cathedral in London, she said to its architect, Sir Christopher Wren, “Your cathedral is amusing, artificial, and awful.” Wren should have been, and was, delighted with the compliment. You see, “amusing”, “artificial”, and “awful” have changed their meaning since then. What did the Queen mean? Amusing—that which diverts the attention. Artificial—skilfully made. Awful—awesome, in current teen-speak.
As a result of the labours of Laird, we have *Assessing the Risk*, a history of the actuarial program, which, in my view, and in Queen Anne’s usage, is amusing, artificial, and awful. My view is apparently shared by the authorities. They have asked Laird for an encore: to write a history of the business school, which now is a mere 75 years old. That goes to prove that no good deed goes unpunished. Laird’s second opus is coming out soon. A pity. He should have produced it for the school’s 100th anniversary. He could chair the resulting dinner and I could make you fed up again.

Now, I have to ask for a show of hands. Which of you have read *Assessing the Risk*? Hmmm. Well, I have, several times. So, it is the textbook, I am the teacher, and you are the class.

At first blush, one would not expect *Assessing the Risk* to command the attention that the somewhat similar history of Harry Potter did. 100 years of actuarial program, or 100 years of actuarial anything, is not the stuff of a Harlequin novel, or its cover. One does not lightly undertake to read an actuarial book. It reminds one of the saying that life is too short to learn German. Or of the question: what is the thinnest book in the world? Answer: *400 years of Swedish Humour*. No, I expect that *Assessing the Risk* will appeal to what may euphemistically be called “a select audience”. Like the attendees at the Actuarial Research Conference. I have not had the privilege of attending a Conference. I understand that you spend the day reading algebra to each other.

But that is merely a first blush impression of *Assessing the Risk*. The reality is astonishing. It was astonishing to me who spent four years in the actuarial program and the subsequent years as a distant but interested observer. It is a tale of good vs. evil. The actuarial program’s corrugated past is peppered with the grim struggle between them. The good guys are those who nourished the program in its infancy, fought to preserve it in its jeopardy, and kept it associated with the business school. The bad guys wanted to discontinue it, failing that, to kick it out of the business school. Come to think of it, maybe *Assessing the Risk* is not so different from Harry Potter or the Harlequin novel, because, at the end, the Good Guys won, and history, as always, was written by the victors.

    Large streams from little fountains flow,
    Tall oaks from little acorns grow.

A modest beginning can lead to a stellar success. Facebook in a dormitory and Google in a garage. Jesus in a manger. Isaac Newton hit on the head with an apple, not the kind that comes with apps. The actuarial program at the University of Manitoba.

Modest beginning indeed. A course in Finite Differences in the fall of 1912, and a course in Probability and Life Contingencies in the following winter. Those of you who are young and/or unactuarial—a double misfortune—you may not have heard of Finite Differences, which in my salad days was a big actuarial deal. But not to worry. I am going to tell you everything that you need to know about Finite Differences. Remember, I am the teacher. Finite Differences is *not* the opposite to Infinite Differences. It is the opposite to Infinitesimal Differences, otherwise known as calculus. “Calculus” means stone in Latin. It is what actuaries get in their kidneys when they drink too much cheap port. That is everything that you need to know about Finite Differences. The reason that that is everything that you need to know about Finite Differences is that Finite Differences has been superseded by the products of Mr. Bill Gates, thanks to which he can drink expensive port.

Time does not permit me to tell you everything that you need to know about Probability and Life Contingencies. They are still a big actuarial deal. I refer you to the Proceedings of the Actuarial Research Conference.
Let us look at a few milestones in Laird’s history.

In 1917 an evening course in life insurance was offered. The tuition fee was one dollar. One dollar. No wonder the students in Montreal are making so much fuss.

In 1945, the university acquired five Monroe calculators for the statistics laboratory. I see that you are not impressed, but you should be. The Munroe calculator was the sine qua non, the ne plus ultra, the cat’s meow of calculation technology. It was slightly smaller than a washing machine but just as noisy. They were still in use when I entered the actuarial program in 1951 and learned how to do heavy arithmetic without taking off my shoes and socks. The Munroe calculator required the constant use of both hands, so no one-armed paper-hanger need apply. It was green technology—no climate-warming electricity needed. To multiply 112 by 46, for example, you enter 112 on the keyboard with your right hand, then grasp the crank handle and turn the crank 4 times. You then flip the keyboard one space to the right with your left hand, turn the crank again, this time 6 times, and presto, the job is done. I feel really sorry for today’s youngsters. They have only their smart phones. After doing their arithmetic, they have to go to the gym to get their exercise.

Laird rather unsentimentally wrote as follows:

Dozens of Munroe calculators...were sold in the University Garage Sale of 1983. Obsolete in the classroom, the machines had the potential for second careers: their weight and size made them ideal candidates for use as ballast or as fill for a dock crib.

Alas, an inconvenient truth!

In 1961, the students’ actuarial club held its first Fish Dinner, which, in Laird’s words, became “an enduring networking event designed to bring together local actuarial students and practicing actuaries from across North America...” I have been to three of those dinners, so I can tell you everything that you need to know about them. Remember, I am the teacher. The reason for calling the event a Fish Dinner is that no one eats fish at it. That is everything that you need to know about the Fish Dinner.

Since 1912, the actuarial program has expanded to cover everything that an actuary needs to know and everything that the rest of you don’t want to know. But I do not know whether to be perplexed at the subtlety, or amazed at the diversity, of the names of what we celebrate tonight. I do know that I admire Laird Rankin’s prowess in keeping straight what can only be called the “numbing nomenclature” of my beloved alma mater. This event is billed as a dinner “in celebration of the 100th anniversary of the actuarial program...” But “actuarial program” is what it isn’t. It’s almost everything else. Is it a department? Is it a school? Is it a faculty? Is it a centre? It’s all of the above, at different times. There seems to be a 100-year difficulty in somebody making up his or her mind. I suppose that if it talks like a department, and it walks like a school, and it quacks like a faculty, then it must now be a centre. Extrapolating—actuaries love to extrapolate—extrapolating, we can expect a name change every 25 years on average. Why? Universities love committees as much as actuaries love extrapolation, and every committee needs to have something to do.

I earlier said that I found Assessing the Risk to be astonishing. I had no idea that, in the 1980s and early 90s, the actuarial program was in serious jeopardy of being separated from the business school or even being jettisoned. To separate the actuarial program from the business school may not be the dumbest idea that I ever heard, but it
would have to be on any short list. What kind of person do the sponsors of that daft idea think a practicing actuary is? Some kind of ivory tower nerd who spends the working day squaring his own root? I think of myself as a professional and a businessman. I see no inconsistency or conflict between the two. And I’m not alone. Mercifully, that daft idea was rejected, for now. I hope that it is not like in Macbeth: “We have scotched the snake, not killed it.” May it never raise its ugly head again. May it rest forever interred. Pun intended.

I haven’t told you everything that you need to know about Assessing the Risk, even though I am the teacher. You need to read it for yourself and I encourage you to do so. If you have already read it, then read it again. Then you can be a teacher.

I am a habitué of Heather Reisman’s bookstores. Books by Canadians are scattered through the store, but there is also a concentration of them in a prominent space near a stirring sign: The World Needs More Canada. I hope that I am not unduly nationalistic when I say, “Amen!” But Heather’s admirable slogan suggests another slogan even more admirable: The world needs more actuaries. I hope that I am not unduly chauvinistic when I say: “Amen!”

That the world needs more actuaries is a thesis easy to prove. The world’s economies are in a mighty mess, thanks, in large part, to the dead hand of the past. Today, we eat the bitter fruit of the unmeasured consequences of entitlements nonchalantly granted yesterday. What we needed at the time is someone who, when you give him what is thought to be an inch, measures it, and, having measured it, persuasively says, “You are not giving an inch, you are giving the whole damn yardstick!” Where we fail as actuaries is not in the correct measurement of entitlements, but in the loud proclamation of their magnitude. Those who create entitlements are well-intentioned but they know not what they do. We need more actuaries, and more persuasive actuaries. I well remember a favourite saying of my dear departed friend, Andy Webster, a great actuary: “The work of the actuary is to save the future from the ravages of the present.”

In Canada, we are less deeply in the mighty mess than most other places. Is that because we have more actuaries per capita than the other places? Just a thought.

Question: what do a European actuary and a European politician have in common? Answer: they both specialize in ERM. Next question: what is the difference between a European actuary and a European politician? Answer: they both specialize in ERM, but for the former it is enterprise risk management, and for the latter it is economy risk mismanagement.

Now let me tell you a tale of a lucky guy. I entered university I suspect for the same reason that many people do. My parents told me to, and anyway it was the thing to do. I entered the business school for no particular reason that I can remember. University was a wonderful learning experience! I learned how to play hearts in the common room, and became proficient. I learned how to drink beer, not proficiently—that came later. One frigid February day— I should explain that, in those distant days, it was cold in Winnipeg in winter—one frigid February day, a real live actuary—“live actuary” is not an oxymoron—a real live actuary came to the University and said to me, “How would you like a job this summer in New York?” Yikes! New York! The Big Apple! So I replied, in a manner well bred, “Where do I sign?” The nature of the job and the identity of the employer were of no importance. He told me anyway. It turned out that the job wasn’t in New York, but in nearby Newark, which in those days was....well, you all know the one about when the world needs an enema. No matter. I could live in the suburbs, work very junior actuarially in Newark during the week, and play in New York during the week-end. All that was my carefully-thought-out plan for a happy career as an actuary—a career not yet fully
over, for old actuaries never die, they just fade asymptotically away. It wouldn’t have happened without the actuarial program at the University of Manitoba. So, I am rather in favour of said program, even though I am not averse to poking fun at it. And I still remember everything that I need to know about Finite Differences.

*Plus ça change, plus c’est la même chose.* Well maybe. In reading *Assessing the Risk*, I had to ask myself: Has anything really changed since those distant days when I was young? I see two, and they make a strange pair—technology, and women. Technology. Not only do the things that we used to do get done a thousand times faster, but also we can do a thousand things that were impossible before. Which is just as well, because we are called on to do a thousand new things and, please, to report by e-mail before close of business today. Women. I don’t mean that women have changed, which is just as well, but the demographic composition of the profession has changed big time in their favour. Uneasiness, however, was the initial reaction in the old boy’s club. I think of *The Mikado*:

And that singular anomaly, the lady novelist,
I don’t think she’d be missed,
I’m sure she’d not be missed.

Well, the lady actuary would be sorely missed, because she now comprises half of the new entrants, and maybe she’s the better half.

What do the next 100 years hold for the actuarial program? Why, the same as the past 100 years I guess. Ups and downs, triumph and tragedy, two steps forward, one step backward, name change every 25 years. It is humorously said, of nothing in particular, that the first 100 years are the hardest. Believe it not. That is a tale, told by an idiot, full of sound and fury, signifying that he doesn’t know his ass from his elbow. The second 100 years are going to be just as hard, probably harder. The good news is that the first 100 years are a glorious example to look back on with pride, to look up to in admiration, to emulate—“emulate” in the sense of “imitate”. The bad news is that people expect us to emulate—“emulate” in the sense of “surpass”

Do better we must. Yes, we can! So I say to those responsible for the actuarial program: You have done much, and done well. But you must do more, and do better. For the world needs more actuaries, and better actuaries. Happily, I see it happening. The young actuaries today are so much better than I was at their age—and I was great! But to emulate, in the sense of “surpass”, will be a continuing challenge to the deans, directors, chairs, professors, lecturers, graduate assistants, administrators, hangers-on in the actuarial program’s departments, schools, faculties, centres. But also a challenge to those of us in the outside actuarial community, to encourage and support the program. I can do no better than to quote the old motto of the Institute of Actuaries. “I hold every man a debtor to his profession, from which men do of course seek countenance and profit, so ought they also, by way of amends, to be a help and an ornament thereunto.”

We stand at the cusp of history. The age of globalization and cynicism. Our society, our economy, our world are in flux, and not always good flux. Professionals, including actuaries, are more needed, yet less trusted, than ever. The world needs not just more actuaries but more actuaries both technically skilled and well-rounded. The words, uttered in 1968 by Frank Redington, a great actuary who was both technically skilled and well-rounded, live on: “An actuary who is only an actuary is not an actuary.”
So I end with a paraphrase of my hero, Winston Churchill. Let us therefore brace ourselves to our duties, and so bear ourselves that, if this 100-year old infant lasts for a thousand years, men will still say, “This was its finest hour.”

I thank-you for your kind attention.