

Born the year before Ford's first Model T
came off the assembly line,
Jim Gardiner's actuarial career has spanned
most of the 20th century and spilled over into the 21st.
Guess he's just not the retiring type.

ABOUT GARDINER

73 Years an Actuary

BY LINDA MALLON

ON OCT. 31, 2002, Jim Gardiner finally decided it was time to put aside his calculator and collect a pension.

He was 95 years old and had spent 73 of those years working as an actuary.

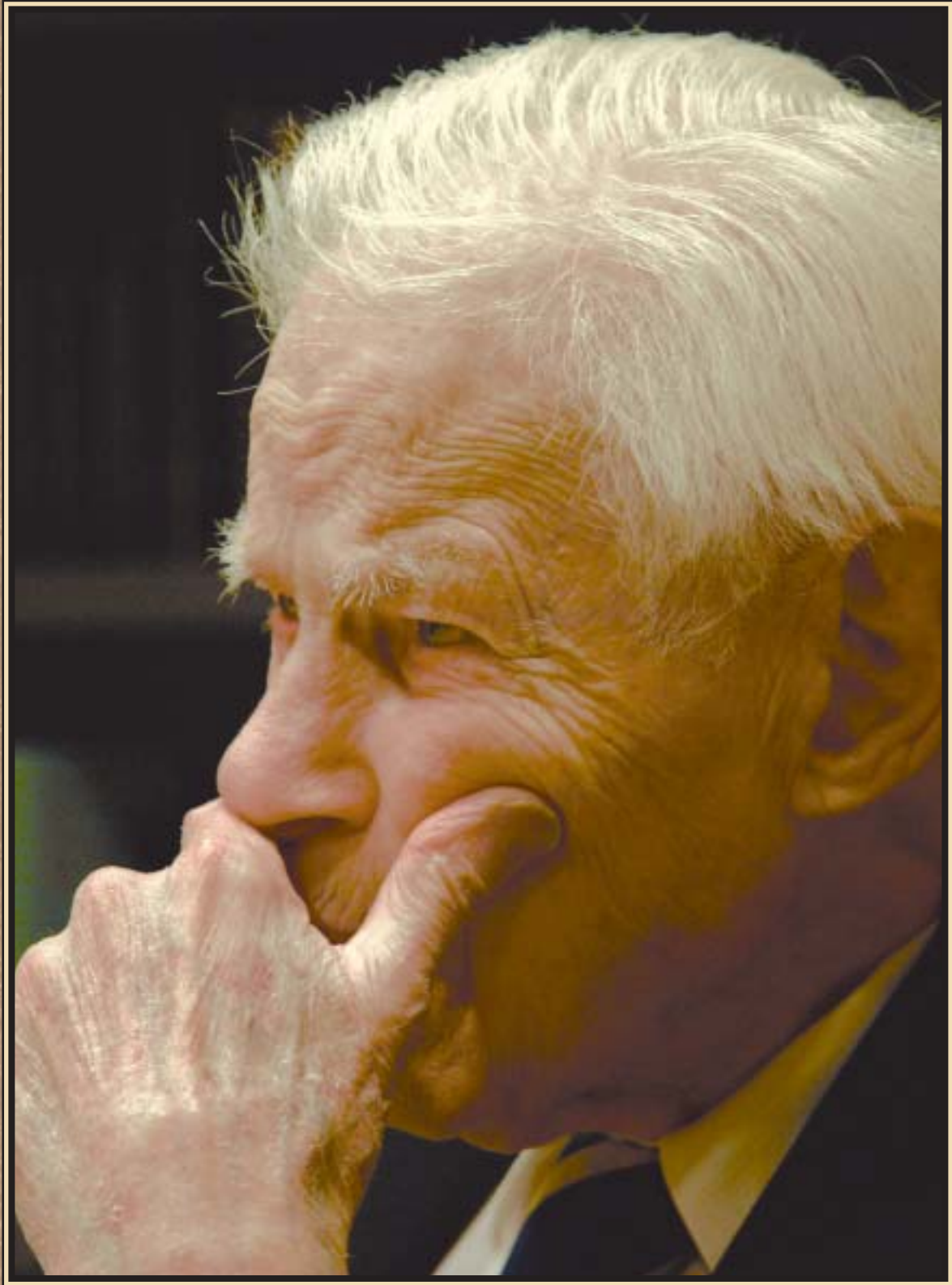
What are the odds?

Pretty long, as Gardiner can tell you (in a soft but authoritative voice that only occasionally betrays his age). In fact, there are only four fellows of the Society of Actuaries (SOA) who are older than Gardiner. And, he's quick to point out, they all retired years ago.

But until this past year, retirement held no particular charms for Jim Gardiner. Forced to leave his position as vice president in charge of group pensions at the Metropolitan Life Insurance Co. when he reached the mandatory retirement age of 65 in 1972, Gardiner

brought his skills over to the New York State Insurance Department where he became a supervising actuary. "I knew the state had been looking for an actuary," Gardiner recalls, "so I thought, well I'll give it a whirl for a year."

He ended up staying 30 years. During that time he assisted in quinquennial examinations of the eight pension systems that are regulated by the state insurance department, worked to establish standards for the public retirement systems in accordance with existing regulations, and analyzed pension-related legislation. When the city of New York faced bankruptcy in the mid-1970s, Gardiner was detailed to serve on the blue-ribbon task force that worked to bring solvency to the city's pension plans (whose actuarial assumptions hadn't changed since 1920). In recognition of



these and other achievements over the course of a surprisingly long second career, the Academy presented Gardiner with the Robert J. Myers public service award in 1997.

When Gardiner finally announced his retirement last year, he says nobody believed him because he had been talking about possibly retiring for the past 10 years. Besides, “When a practicing actuary gets into his 90s, he becomes an oddity, an anachronism,” Gardiner says. This time, however, he meant it.

Gardiner has a history of bucking expectations. He became an actuary against the wishes of his paternal grandfather, who wanted him to become a lawyer—the apogee of professional achievement in Amsterdam, N.Y., where Gardiner was raised. “To please the family, I went and spent one year at Harvard Law School,” Gardiner says. But his heart wasn’t in it: “In the morning I was going to classes, in the afternoon I was briefing cases in the library, and in the evening I was working on parts three and four of the actuarial exams,” Gardiner says.

Gardiner first heard of actuarial science while studying mathematics as an undergraduate at Yale. He asked one of his math professors about possible careers for mathematicians outside of teaching and engineering. “The professor said that he had had a student—back around World War I—who had gone up to Hartford and had become what was called an actuary,” Gardiner says. “But the professor didn’t know what it was. Didn’t have the slightest idea. ‘The actuary was with one of those insurance companies,’ that was the way he put it.”

Undaunted by this backhanded recommendation, Gardiner wrote to the Actuarial Society of America and arranged to take the old part one exam in 1927. He confidently assumed he was prepared for the six-hour exam because of his college math courses. “I failed miserably,” Gardiner says. “I didn’t realize the necessity to study in depth.”

One-Third of a Lawyer

Out of that first failed test, however, came an offer from Metropolitan Life for a summer job as a clerk. Gardiner spent the summer in New York and returned to his senior year at Yale with a more specific understanding of actuarial work. He took (and passed) both the first and second exams in the associate actuary series.

When Gardiner passed actuarial exams three and four in the spring of his first year in law school, he accepted the obvious and gave up jurisprudence for actuarial analysis. As for his grandfather? “Well, he was just resigned to the fact that I was going to be a complete failure,” Gardiner recalls with a laugh. “Unfortunately, he died the following year, so he never lived to see what a howling success I became.”

Ironically, Gardiner says, he had no idea at the time how much of his life’s work would require a legal perspective. “I made the decision to become an actuary because math came easily to me. Little did I realize that as you go on through the exams, you get away from the math and get more and more into administration and law,” Gardiner says. Particularly during his second career as a regulator, Gardiner says, he was often accused of practicing law without a license. “I’d tell them I’m one-third of a lawyer,” Gardiner says, smiling.

It was during his first summer clerking at Metropolitan that Gardiner met Princeton undergrad Gilbert Fitzhugh, future chairman and chief executive officer of Metropolitan and a future president of the Society of Actuaries.

Before returning to their respective colleges, the two headed north to the Adirondacks and scaled Mount Marcy, the highest point in New York. For Gardiner, it was the beginning of a lifelong friendship

and the first of many climbing adventures that eventually led him to the highest points in 32 states.

In the summer of 1929, in the wake of his decision to leave law school, Gardiner joined Fitzhugh on an extended road trip



Jim Gardiner, clockwise from above, while practicing as an actuary at the Met in 1937, as a student at Yale, and with his grandfather in 1913

1907 Jim Gardiner is born

1912 Jim's first car produced—a “Corbin” with kerosene taillights—purchased years later for \$65

1924 Jim graduates Gov. Dummer Academy

1927 Jim's summer actuarial internship @ \$20 a week

1905

1910

1915

1920

1925



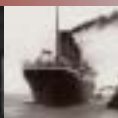
1903 Wright Brothers' first flight



1908 Ford's Model T



1910 Mark Twain dies



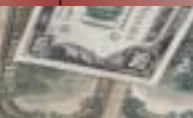
1912 Titanic goes down on maiden voyage



1915 Einstein postulates his Theory of Relativity



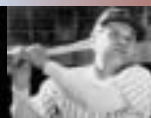
1917 Bolshevik Revolution



1920 Legislature mandates NYSID's supervisory role of public pensions (in anticipation of hiring Jim)



1926 First public demonstration of television (Jim says it will never catch on)



1927 Babe Ruth hits 60 home runs

WAIT, DON'T TELL ME!

James Gardiner enjoys doing math in his spare time. Surprised? In fact, to relax he often sits down with a mathematical puzzle.

In a recent interview, he described a favorite one (originally published in *Scientific American*).

- Construct a nine-digit number, like a Social Security number, using no zeros and using each of the nine digits only once.
- When read from left to right, the number you have constructed should be divisible by two for the first two digits,

divisible by three for the first three digits, divisible by four for the first four digits, and so on up through all nine digits, which should be divisible by nine.

Gardiner says there is only one number that satisfies all conditions. How long did it take him to find it? "I guess about an hour, because I couldn't develop any formula for it," Gardiner says. "I had to go all across the board for permutations."

Care to try your hand? Keep track of your time. The answer is on Page 71.

across the country. Racking up more than 18,000 miles in a Model A Ford, the two covered 35 states in 10 weeks. Few roads west of Kansas City were paved at the time, and Gardiner recalls going through two sets of tires on the journey. While in California, the two climbed Mount Whitney (14,498 feet), doing it in just one day, Gardiner says, because they didn't have any camping equipment for an overnight.

Fitzhugh and Gardiner returned east and started work at the Metropolitan, studying for the SOA associates exam in their spare time. Both passed. Fitzhugh then decided to sit for both the SOA fellowship exams (two nine-hour exams) and the American Institute of Actuaries exams (four three-hour exams) at the same time. "He spent one week, Monday through Friday, three hours in the morning, three hours in the afternoon. His record has never been equaled," Gardiner says of his friend, adding dryly, "That sort of helped him become chairman of the board of Metropolitan."

In 1931, the two took another long road trip, having bet their colleagues at Metropolitan that they could drive from New York to Cocoa Beach (now Cape Canaveral) and back over the long Washington's birthday weekend. They made it (see box) and recouped the cost of their trip with their winnings.

Despite the fact that he started his job at the Metropolitan on Sept. 11, 1929, scant weeks before the stock market crash, Gardiner was only lightly touched by the Depression. Unlike

lawyers, actuaries were in short supply. Starting out at \$40 a week (a good salary at the time, he notes), Gardiner received regular raises with each actuarial exam he passed.

Gardiner gained his fellowship in the Society of Actuaries in 1935, the same year that Social Security was created. At the time, Gardiner was working under Reinhard Hohaas (one of the architects of Social Security and another future president of the SOA) in Metropolitan's group annuity unit, a pioneer in group pension contracts. Still relatively rare, employer-sponsored pension plans were mostly financed through the purchase of group annuities. With the imposition of a Social Security tax on the first \$3,000 of earnings, however, many employers sought to adjust their annuities so they wouldn't have to pay twice on the first \$3,000 but would make pension payments only on money earned above the Social Security limit. This adjustment process, called integration, was extremely complicated, Gardiner recalls. But there was a silver lining: "It was a bureaucratic nightmare, but it came in handy because I'd just gotten married and I needed the overtime," Gardiner says.

Gardiner's increasing involvement in pension work mirrors a similar expansion in the actuarial profession beyond its roots in the life insurance industry. Past masters of mortality tables, actuaries in the last 50 years have expanded their skills to cover all sorts of diverse probabilities and contingencies. When the Supreme

1928 Jim graduates Yale University

1929 Jim begins career at MetLife and logs 18,000 miles in a Model A Ford, visiting 35 states

1935 Jim receives his FSA

1937 Jim marries Nancy

1942 Daughter Cynthia is born

1948 Jim promoted to manager, Group Contract Bureau

1950 Jim marries Margaret

1951 Son James is born

1930

1935

1940

1945

1950



1928 First Mickey Mouse cartoon, "Steamboat Willie," released

1929 Market crashes; construction on Empire State Building is begun

1932 Charles Lindbergh, Jr. kidnapped

1936 Hindenburg crosses the Atlantic; burns, 1937

1939 Hitler named *Time* magazine's man of the year; invades Poland

1942 *Casablanca* released

1943 Penicillin first used

1945 Atomic bomb dropped on Hiroshima; WWII ends

1948 33 rpm LP record introduced

1951 Julius and Ethel Rosenberg convicted of espionage

1953 Edmund Hillary reaches the summit of Mt. Everest

Court ruled in the 1949 *Inland Steel* decision that pension plans could be included in collective bargaining agreements, for instance, the need for pension—and consulting—actuaries exploded. “You see, before the *Inland Steel* decision, actuaries were mainly confined to the life insurance companies,” Gardiner says.

At the Metropolitan, Gardiner was involved in the company’s early diversification into asset management with the development of immediate participation guarantees (IPG), forerunners of individual pension accounts that have proliferated in the last decade. Unlike insurer pension trusts of the time, which required insurers to cover expenses and build up reserves before paying dividends (a competitive disadvantage, since banks that handled pension trusts did not have to meet the same requirements), IPGs offered no guarantees to the policyholder and required very little in the way of contingency reserves.

Gardiner sees the evolutionary process continuing. With the decline in defined benefit pensions, Gardiner predicts more and more new actuaries will go into property and casualty insurance. “There’s been tremendous growth in the casualty line, with disasters and terrorism,” Gardiner says.

The Best Mountain in New York

Terrorism touched Gardiner directly on Sept. 11, 2001, as he was working in state insurance offices about four blocks from the World Trade Center. Shortly after he was evacuated from his office, Gardiner was engulfed in the storm of ashes and smoke that cloaked all of lower Manhattan when the towers fell. “We put handkerchiefs on our noses and went out. There was this white fog of powdered concrete everywhere. We did not know what direction we were going. You couldn’t even see street signs,” Gardiner says. “When I came to a subway on Wall Street that I recognized, I then turned east to get away from it as much as I could. After 20 minutes, we got to where we could see.”

Because he lives in Stuyvesant Town in lower Manhattan, Gardiner (at the age of 94) simply continued walking the remaining four miles to reach his apartment.

The attacks destroyed a landmark that had particular meaning for Gardiner. For 10 years the state insurance department

had its offices on the 81st floor of the World Trade Center. When the department celebrated its first anniversary in its lofty perch in 1975, Gardiner, still an avid mountain climber, organized an event that soon became an annual tradition.

“I was talking with a small group of us and I said, ‘We’ve got the best mountain in New York. Let’s climb it!’,” Gardiner recalls. He got half a dozen volunteers who were willing to join him and they started up from the 81st floor, went up to the 107th floor, then down to the first-floor lobby and then back all the way up to the 81st floor. In ensuing years, Gardiner made the round trip climb some 40 times, sometimes starting at the

bottom and other times at the top, averaging 55 minutes going up and 30 minutes coming down, with a pulse check every five floors. (Gardiner believes he could have made the descent more quickly, but he purposely slowed down after he discovered that the rotation involved in descending 107 floors made him dizzy and nauseated.)

Through a friend in the insurance department, Gardiner was introduced to the French high-wire artist Philippe Petit, who in 1974 had annoyed officials and delighted the public by making an unauthorized high-wire crossing between the twin towers.

Gardiner invited Petit to join him on one of his stairwell ascents and Petit agreed. After the first couple of floors, however, Gardiner and his group lost sight of Petit, who was setting a blistering pace. “When we stopped to get a drink of water, he didn’t bother to get a drink but was in constant motion, doing push-ups, knee bends, and so on,” Gardiner remembers. “And when he started going down, his feet were going so fast, you couldn’t see them move individually.”

Needless to say, Petit lapped Gardiner and the other climbers. “He did the round trip, I think it was 33½ minutes, or something like that,” Gardiner says. “It was really phenomenal.”

With the heightened security at the World Trade Center following the 1993 truck bombing, Gardiner’s climbs came to an end. His last climb was on Jan. 20, 1993—his 86th birthday.

Although he no longer climbs mountains (“I do subway steps—and I’ve learned to use the railing,” he says), Gardiner



Jim and Alice Gardiner, 1994

1959 Jim’s Cadillac convertible produced

1965 Jim participates in developing immediate participation at MetLife

1969 Jim elected national president of the Sons of the American Revolution (No, he didn’t fight in it)

1972 Jim retires from MetLife and joins NYSID

1978 Jim inducted into the “Buccaneers”—an after-hours examiners club devoted to the pleasures of fine food and spirits

1955

1960

1965

1970

1975



1954 First polio inoculations by Dr. Jonas Salk

1955 Rosa Parks arrested for refusing to give up her bus seat to a white man

1957 First satellite launched by the U.S.S.R.

1960 Elvis Presley discharged from the army

1963 President John F. Kennedy assassinated

1964 Beatles appear on *Ed Sullivan*

1969 Miracle Mets win World Series (Jim thinks it’s his company team)

1969 First moon landing

1973 Watergate hearings

1974 Patty Hearst joins SLA

1975 Microsoft founded

TAKE GOOD CARE OF YOURSELF

From the vantage point of 96 years, James Gardiner has some thoughts for the rest of us who might want to emulate his longevity.

Choosing an actuarial career might be a good first step. Compared to, say, lawyers, "there's less stress and reasonable pay," Gardiner says. "You never get rich, but you don't starve."

Of the five actuaries who became fellows of the Society of Actuaries in 1935 (the same year as Gardiner), two are still alive. "There are four others who are older, but two of them took the exams after we did. I've checked that. I've had a running list for some time of those who got their fellowship before me," Gardiner explains, adding somewhat ruefully, "I feel like the last leaf on the tree."

Going to Yale might be another good step. In the class of 1928, Gardiner's class, there are 30 still surviving out of 850. Gardiner knows because he writes the class notes for the alumni magazine. Considering that Yale was all male then, those are pretty good odds. "Yes, it's about 3 1/2 percent, roughly," Gardiner admits.

Taking good care of yourself is key. Gardiner suspects his lifelong devotion to exercise helped. But there are other elements. "One of the most important things, of course, is to keep your weight down," Gardiner says. "You rarely see a fat actuary."

Also, don't smoke. Gardiner actually smoked for 30 years, but quit in 1959 at the age of 52. "Quitting is the best thing I ever did for myself," Gardiner says. "It's so addictive, it wasn't easy for me. I had to substitute martinis for it." But, he cautions, martinis in moderation.

Staying involved is also important. Gardiner was married three times and is the father of two and the grandfather of three. He married for the third time in 1994, when he and his bride Alice were both 87. Gardiner's continuing employment has helped him keep in shape mentally.

Still, Gardiner himself can't quite believe his continuing refutation of most actuarial tables. "I stand at this particular age and wonder where all the years went," Gardiner says, adding with a bemused smile, "I wish I had taken better care of myself."

continues to keep physically and mentally active. Now that he's retired, Gardiner is looking forward to having the time to explore his family history. Despite his age, Gardiner is startlingly good with dates. He credits his organizational skills. "I think that started in freshman year (in college) when we had world history," Gardiner says. "I started making up a big chart with countries across the top and dates down the side. I'd then pick out a couple of key dates to memorize and then I could fit the others in. Like 1399 and 1485—1399 was King Henry IV and 1485 was Henry VII. So if I get any more Henrys, I know where to put them."

This probably comes as no shock, but Gardiner is also very good with mathematical puzzles (see box). But he does admit that computers fluster him. In fact, the introduction of computers into the once simple relationship between an actuary

and his or her sharpened pencil marks another watershed that Gardiner witnessed over the course of his exceptionally long career. "As I understand it, on the exams they've eliminated commutation columns," Gardiner says somewhat wistfully. "Now you just punch a key on the computer and it goes through."

But don't computers free up actuaries to do more creative work? "I better take the Fifth on that," the country's most recently retired oldest working actuary says with a smile. ●

LINDA MALLON IS EDITOR OF THE *UPDATE*, THE MONTHLY NEWSLETTER OF THE AMERICAN ACADEMY OF ACTUARIES, AND A FREQUENT CONTRIBUTOR TO "BOOKLINKS" IN *CONTINGENCIES*. SHE LIVES IN WASHINGTON, DC.

● **1980** Jim launches his semi-annual "WTC Stairway Challenge"

● **1994** Jim marries Alice

● **1997** Jim receives Academy of Actuaries Robert J. Myers Public Service Award

● **2003** Jim celebrates his 95th birthday surrounded by friends, co-workers, and lots of good wishes

1980

1985

1990

1995

2000



1976 U.S. celebrates bicentennial



1981 Space shuttle Columbia launched



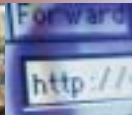
1983 CD is introduced



1989 Chinese soldiers open fire on protesting students in Tiananmen Square; thousands believed killed



1990 Liberation of Kuwait after Desert Storm



1993 World Wide Web introduced to personal computer users



1995 O.J. Simpson trial



2000 MetLife demutualization approved



2001 9/11