



on the  
lighter  
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## Actuaries and the Rule of 11

by Donald R. Sondergeld

Actuarial students are supposed to be familiar with the 52-card deck of playing cards. I wonder if this is too much to ask, as the percentage of bridge-playing actuaries is probably decreasing. For many years, one of the social events at the annual meeting of the Society of Actuaries was the duplicate bridge tournament, held on the first evening. The number of people attending this event decreased, and it became a thing of the past, with the last tournament held in 1986.

Actuaries have long been associated with bridge. Perhaps the most famous was Oswald Jacoby (1902-1984), a Society Fellow. He was considered to be the best all-around card player in the world. He was a bridge columnist, won 43 national bridge championships, and for many years was the leader in accumulated "master points," which are awarded by the American Contract Bridge League (ACBL).

William M. Anderson (1905-1969) was president of both the Canadian Institute of Actuaries and the SOA. He was a friend of Charles Goren, whose "point count" system replaced Eli Culbertson's "honor trick" system of evaluating each hand during the bidding process. Goren assigned points for high card "strength" (four points for an ace, three for a king, two for a queen, and one for a jack). Anderson used his actuarial training in probability and statistics to suggest to Goren that

additional points be given for distributional values (i.e., "shortness" and "length" in a suit), which Goren then included in his new system.

Not only are bridge players indebted to Anderson, but the actuarial profession became a true profession under Anderson's guidance. Anderson advocated that the SOA develop guides to professional conduct, along with procedures for investigation and disposition of problems relating to professional conduct. As a result, the SOA adopted a code of ethics and professional conduct for the first time shortly after Anderson's 1955-56 presidency ended.

### Bridge and actuarial exams

Although I was one of those college students who preferred playing bridge to studying, I only became a student of the game when I retired in 1991. It seems like only yesterday that I took my first actuarial exam. In fact, it was in 1955. At that time there were eight SOA exams, and they were offered just once a year, each May. The exams were numbered 1 through 8. Subsequently, the first exam was eliminated, and the fourth exam became two exams, numbered 4A and 4B so as to not change the numbers assigned to the other exams. This was apparently done to help those actuarial students who had trouble remembering numbers. The change caused people to suggest that actuaries do not count very well, as the eight actuarial exams were then numbered 2, 3, 4A, 4B, 5, 6, 7,

and 8. How does this relate to the modern game of bridge?

I suspect the 52-card deck was invented in the Stone Age, possibly in the Chicago area. The 52 cards must have represented the 52 weeks of the year. The four suits probably were the four seasons. In the Middle Ages, the four seasons became suits and represented the four social classes (nobility was swords, now spades; clergy was cups, now hearts; merchants were coins, now diamonds; and peasants were staves, now clubs). The 13 cards in each suit might have represented the 13 lunar months, or perhaps the inventor had 13 fingers.

### I suspect the 52-card deck was invented in the Stone Age, possibly in the Chicago area.

The cards in each of the four suits were simply numbered 1 through 13, with 1 being the lowest and 13 being the highest. Presumably, Stone Age man thought there were 364 days in the year, as the sum of 1 through 13 in the four suits totals 364, representing the 364 days in his year. Actuaries may well have been involved in the evolutionary process shown below. Note that like the former numbering of the SOA exams, the lowest card is numbered 2.

	Stone Age	Age of Royalty	Modern Age	
Highest card	13	King (13)	Ace (14)	
	12	Queen (12)	King (13)	
	11	Jack (11)	Queen (12)	
	10	10	Jack (11)	
	9	9	10	
	8	8	9	
	7	7	8	
	6	6	7	
	5	5	6	
	4	4	5	
	3	3	4	
	Lowest card	2	2	3
		1	1	2

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### The Rule of 11

In the Stone Age, as now, all 52 cards were dealt. The four players were designated wind, earth, water, and fire, and they played clockwise in that order. Wind and water were partners and earth and fire were partners. A new person was designated as wind with each new hand (or new deal), which consisted of 13 “tricks.” (This was a forerunner to the bridge game now called “Chicago.”) There was no “trump” suit. It was required that wind begin the

play of a new deal, and it was the custom for wind to lead the “fourth highest” card from his longest suit.

Then Earth’s cards were placed face up on the ground for all to see. (For some reason we now refer to these “down-to-earth” cards as the “dummy.”) Fire would choose which of earth’s cards to play. The object was to win the most number of tricks.

Water and fire would each use the “Rule of 10” to calculate the number of cards that were larger in the suit that was led. The Rule of 10 was to subtract the pip value (number) of the card led from 10 (e.g. if the 6 was led, then there would only be four higher cards outstanding in the other three hands, as  $10 - 6 = 4$ ). If water could see one higher card on the ground, and water

had three of the four higher cards, then water knew that fire had none.) The Rule of 10 was easy to remember, as most people had 10 fingers.

Modern man now uses the Rule of 11 because the cards are, in effect, numbered 2 through 14. It is conceivable that an actuary was involved in this new numbering system. If the SOA ever requires 13 exams, the exams should be numbered 2 through ace in an attempt to recapture the bridge-playing actuary. The public could then refer to an actuary who has completed all of the exams as an “Acc.”

**Donald R. Sondergeld, 1991-92 SOA president, played in the SOA bridge tournaments. He expects to become an ACBL Life Master soon.**

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## on the lighter side

### At last: crossing the finish line

by *Jacqueline Bitowt*  
SOA Public Relations Specialist

**D**evoted bridge player Don Sondergeld has fulfilled his own prediction. At the end of his article "Actuaries and the rule of 11" (*The Actuary*, October 1997), he said he expected "to become an ACBL (American Contract Bridge League) Life Master soon." In a foursome with his wife, Mary, in March 1998, Don crossed the finish line when they won the final gold points he needed.

Don and Mary were getting ready to end a ski vacation in Lake Tahoe

when Don said to her, "The nationals are being held in Reno." With all the black, silver, and red points he needed and only 0.15 point of gold away from his goal, Don persuaded Mary to enter the competition. "We played with two ladies from British Columbia," Don said, and the foursome was good enough to win the two matches needed to enter the gold-medal round. Their success in that play gave Don the final gold.

An avid bridge player in college, Don dropped out of serious competition for most of his professional life, then began playing again when he retired in 1991. "I discovered there were many excellent Life Masters and some not as good," he said. "I thought, 'It's not so hard. I can do that.'" He entered his first national tournament in November 1996. Gaining the title was a relief. "I was glad it was over, because I knew it would happen. It was just a matter of when."

Reflecting on the highs and lows of bridge, Don started with the lows. "There are times when you do foolish things and don't get as many points as you know you should have. You think, 'How could I be so stupid?'"

But he had two recent highs to mention as well. The first occurred about two weeks after winning the Life Master title. Don, a "B" player, played with a stronger "B" player (participants and levels of play are ranked A, B, and C based on their master points) in competition, and they took first place in the A strata and first for the entire competition. A few days later, Don approached a high-level B player and persuaded him to be his partner. They played in an event that only A players usually enter. Among 62 pairs of players, some of them champions from Britain, France, and other countries, "We came in eighth," Don said. The pair's success was only slightly more exciting to Don than persuading the top-flight player to become his partner. "When he asked what pairs I wanted to play against, I said, 'I want to fly with the eagles.' I guess he was impressed with my boldness."

The Life Master title ends Don's pursuit, but it's just the beginning of more dedication to the game. "Every bridge hand is different," he said, "and it's really fun to play with good players." **Don Sondergeld can be reached by e-mail at [dsonder@worldnet.att.net](mailto:dsonder@worldnet.att.net).**

### Seeking a finish line to cross?

Don Sondergeld says bridge helps exercise the mind and so should be popular with actuaries. He notes that at one time, the leader in accumulated master points was the actuary Oswald Jacoby (1902-1984), considered by many the best all-around card player in the world. He was a bridge columnist, and he won 43 national bridge championships. Might another actuary step up to fill his shoes?

The American Contract Bridge League (ACBL), headquartered in Memphis, Tenn., sponsors tournaments in the United States, Canada, Mexico, and Bermuda. Today, the ACBL has about 165,000 members. Almost 40% of them, 64,000, are Life Masters, and about 60% of ACBL members are women.

To become a Life Master, a player must accumulate 300 points: 25 gold, 25 red or gold, 50 silver, and the remainder any of those or black.

Gold and red points are awarded at three national and 150 regional ACBL tournaments annually, silver at about 1,000 sectional ACBL tournaments. Black points are awarded at local games held by the 3,400 bridge clubs associated with ACBL.

"Local clubs offer bridge games, partners, and lessons," Don said. "There are also many good books on the game. Whether you are nearing retirement or not, you can find bridge interesting and enjoyable."

**The End**