Lost at Sea

Captain Ron is stranded alone in a small motorized inflatable boat in the middle of the Pacific Ocean near the Equator. He is out of food and water. All he has is a compass, enough fuel to last about 75 minutes, and, of course, a bottle of rum which is nearly empty. He has no radio or other communication device, no GPS or inertial navigation device, no flare gun, no mirror, nothing to calculate with, not even pencil and paper, and he never learned to do basic arithmetic anyway. The sky is completely overcast.

He spots a ship directly north of him and can tell it is moving east. The ship is 5 nautical miles north and moving directly east at 30 knots, but Captain Ron has no way to determine these numbers. His boat can go 31 knots. He wants to catch up to the ship so it can rescue him. Captain Ron’s first instinct is to steer his boat so that at all times it points directly toward the ship. If he does this, will he catch up to the ship before he runs out of fuel? Can you suggest another navigation rule he might use?

This puzzlement is another creation of Jon Evans.

Editor’s Note: Puzzle solutions will appear two issues after the puzzles appear, instead of in the next issue, as now. This will allow readers enough time to work on the puzzles.

Discipline Report
Suspension of Donald Gould

The Discipline Committee Panel of the Casualty Actuarial Society (CAS), acting in accordance with the CAS Bylaws and with consideration of the findings from the Actuarial Board for Counseling and Discipline (ABCD), hereby suspends Donald E. Gould, ACAS, from membership for a period of two years from August 26, 2012–August 25, 2014 for materially failing to comply with Precepts 1, 3 and 4 of the Code of Professional Conduct.

Mr. Gould materially violated Precept 1 in connection with his preparation of July 2008 and August 2009 IBNR Reserves reports by failing to use appropriate actuarial methodology, failing to use appropriate tests for reasonableness, failing to document his work appropriately, failing to state relevant actuarial assumptions, failing to disclose the limitations of his analysis, and otherwise failing to exercise appropriate skill and care.

Mr. Gould materially violated Precepts 3 and 4, with regard to the same reports, by failing to appropriately identify data, assumptions and methods used in his reports in a manner sufficient for another actuary qualified in the same practice area to objectively appraise the reasonableness of the reports; failing to identify the purpose or use of IBNR estimates; failing to identify the measure of his selected estimates; failing to understand the nature of unpaid claim estimates; failing to use and document methodology for estimating unpaid claims that was appropriate to the circumstances; and failing to assess the reasonableness of the unpaid claim estimates.