

Dr. Ron Pelot ○ ○ ○ ○

ON OCEAN PATROL

We all have our own personal built-in risk analysis system. Using data we've collected over time and experiences from the past, we intuitively assess the scenarios that could happen and their likelihood. Then we make our decisions based on our risk tolerance. Sometimes we do this without even knowing it, but it's the thought process used whether we're ordering dinner, choosing a university or setting up a mortgage.

In 1996, the Canadian Coast Guard in Nova Scotia wanted to establish a similar risk analysis system so it could make better strategic plans for search-and-rescue decisions on the water. The goal was to capture a comprehensive set of data that included marine activity, the number of incidents (i.e. fires, sinkings, collisions) among this traffic and the incident outcomes.

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Quite surprisingly, this type of comprehensive traffic modeling on the water was ahead of its time. “Aside from related projects by militaries around the world, no one else in general marine management was doing this type of data collection and analysis 10 years ago,” says Dr. Ron Pelot, the professional engineer from Dalhousie who created this system. “The Coast Guard was definitely in front of the curve with its thinking. Of course, that has changed since September 11th and now this type of increased attention to marine traffic has become a trend.”



What Pelot and his team developed went well beyond original expectations – so much so that the Coast Guard in Ottawa wanted to expand the local project. The team created software called MARIS (Marine Activity and Risk Investigation System) which could be put on every Coast Guard manager's desk, allowing them to view traffic levels at various locations, accident rates based on vessel type and time of year, and other data.

“Now they had the ability to consider whether their response rate would be better if they stationed an additional search and rescue crew in Saint John's or Halifax, for example,” says Pelot. “MARIS is a GIS program, but it's one we developed on our own so it would be affordable enough to be of practical use.”

MARIS helps the Coast Guard translate information into the best decisions – decisions that can mean the difference between life and death. They can pick any grid on the water and quickly determine the expected travel time for the nearest rescue ship to get there.

While still very involved in marine activity information, Pelot has taken on a new risk management challenge. He serves as the Director, RBC Centre for Risk Management in the Faculty of Management, mandated to coordinate risk analysis at the university. “Risk management is very much in vogue around the world today and for good reason. I think that it will be a trend well into the future.” ■