



## Doing the right thing

Richard Grant is living proof one person can make a difference. In May, 1992, Mr. Grant (M.Eng '84, TUNS), found himself deeply troubled by the deaths of 26 miners in the Westray coal mine disaster in Pictou County. He was concerned by information uncovered about the oversight and deficiencies that occurred prior to the disaster.

"There were people entrusted to do the appropriate things, and they just didn't do them," says Mr. Grant, owner of Grantec Engineering Consultants Inc. in Hammonds Plains, Nova Scotia. "Those miners shouldn't have been working in that mine."

As a staff member at the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB), Mr. Grant had experience as an advisor of the North Sea regulations and standards for offshore structural safety. He never wanted to see a similar tragedy occur on Canada's offshore.

He began noting deficiencies in offshore standards and regulations hoping that if he could make changes to increase the level of safety, he would. During his time at the CNSOPB and continuing after he left in 2002, Mr. Grant pushed tirelessly for the most stringent regulations to

protect the lives of those working offshore and the waters they work in.

"Ultimately, in noting significant issues with respect to fire and explosion safety within the Canadian regulations, I was able to change what was in the standards, thereby changing the regulations (which reference the standards)."

With support from industry and the Canadian Standards Association (CSA), and working with experts from the United Kingdom and Norway, Mr. Grant influenced Canadian standards, and helped bring a higher level of safety to offshore structures all over the world. His work also influenced changes made to the International Organization for Standardization (ISO) standards.

In 2003, Mr. Grant received the CSA Award of Merit for his guidance in advancing of offshore structural standards, one of only three people to have won the award in the last decade within the offshore structures committees.

"I just don't want to see anything like Westray happen again, and if I can help make a change to do that, I'll do that," he says.

An accomplished engineer of nearly 30 years, Mr. Grant began Grantec in

2006, consulting on unique structures, structural dynamics, vibrations, fluid dynamics and response of structures to time-varying loads.

With expertise on advanced stress analysis, Grantec performed the mechanical and structural design of the Sequoia Detector and Sample Vessels at Oak Ridge National Laboratory in Oak Ridge, Tennessee. Grantec's expertise meant they could adhere to the strict specifications, including requirements for the maximum deflections under vacuum and strength requirements like fatigue, collapse and seismic resistance.

One of the largest vacuum chambers built in North America, the Sequoia is part of the Spallation Neutron Source (SNS) project (the most powerful neutron source in the world), funded by the U.S. Department of Energy and considered the world's foremost facility for the study of neutron science.

For this and his many other achievements, Mr. Grant was recognized with the 2010 Lieutenant Governor's Award for Excellence in Engineering from Engineers Nova Scotia.