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THE MILITARY AFFAIRS COLUMN BY TIM DUNNE

Out at sea, navy crews can't dial 911

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Following the Feb. 27 fire on HMCS Protecteur, one of the crew told a television reporter, "When you're at sea, there's no 911 to call." The ship, with a crew of 279 sailors, was 600 kilometres from Pearl Harbour, Hawaii, when the engine room erupted in flames.

But RCN ships carry their own "911" response capabilities for any crisis on a ship at sea, and a warship faces many more dangers than a merchant vessel. On that fateful day, Protecteur carried some eight million litres of diesel fuel, ammunition, and JP5 aviation fuel for shipborne helicopters.

The RCN's men and women who serve and sail are the emergency workers. Each has specific responsibilities in an emergency, and each undergoes rigorous and vigorous individual and collective training to meet a potential life-and-death struggle to keep the vessel afloat, the sailors safe and the ship in fighting trim.

There were many heroes who fought Protecteur's fire that day. They learned those critical skills at one of the navy's two Damage Control Training Facilities (DCTF): DCTF Galiano at Canadian Forces Base Esquimalt, B.C., and DCTF Kootenay at Purcells Cove outside Halifax.

The Halifax-based facility's staff of 50 trains about 5,000 sailors per year, through courses that are 90 per cent practical, realistic, hands-on training.

"There are several critical events that can happen in a warship," Lt. Kayla Bouchard explained. "Fire, flood, loss of electrical power and CBRN (chemical, biological, radiological and nuclear) attack are among the most significant." Lt. Bouchard is the DC Division's administration officer.

Newly accepted sailors fresh from basic training receive 10 days training from Damage Control Division for every possible emergency, from a major pipeline leak or rupture to a hull breach. Entire ships' companies undergo biannual damage control training and four-member fire attack teams receive specialized training to prepare them to enter the fire (yes, enter the fire) and decide how to extinguish it.

This facility provides realistic training to prepare sailors for any possible situation that could endanger Canada's warships.

The DCTF Kootenay's three-storey building is a collection of doors, hatches and passageways with pipes, cables and spaces. Designed to resemble our frigates, destroyers and resupply ships, the training facility includes simulated ammunition magazines, heavy electrical spaces, compartments containing JP5 aviation fuel for the helicopter, and crew quarters.

This is a site of almost non-stop, seemingly frenetic activity, with alarms, gushing water and propane fires. The training is a disturbingly realistic venue for ships' personnel to manage any conceivable emergency or crisis.

Simulated floods have water coming from a leaking or ruptured pipe, or gushing from any of the hatches in the confined spaces in the simulated ship. Trainees instantly move equipment to the nearest available space to save time. The 4x4 wooden posts scattered throughout the "ship" are grabbed and cut to measure to provide as tight a fit as possible to stem the incoming flood.

"This will not stop water from entering the ship," instructor Master Seaman Tom MacManaman explains. "Then we use a submersible pump that can remove 40 tonnes of water per hour."

While there has been no major helicopter fire in any of our ships, 180 to 200 people per year learn to deal with this contingency. The training, overseen by MS Stacey Barnard, is visually dramatic, with a helicopter frame engulfed in a propane fire.

"We attack the fire initially using a twin agent unit that contains mixture of aqueous film forming foam (AFFF) and potassium bicarbonate, that lasts for about 90 seconds, enough for the firefighting team to extract the air crew from the airframe," MS Stacey Barnard explains as yellow-suited sailors douse the hull with high-pressure hoses.

Fighting ship fires has evolved. New compounds and resources generate new tactics. "We don't just pour water on the fire. Too much affects the stability of the ship," said Lt. Bouchard. "We also have tools such as AFFF in compartments that have petroleum, oil and lubricants like engine rooms, and halon is available in spaces that have a significant amount of electrical equipment."

The RCN cuts no corners to give our sailors the best training and gear available.

HMCS Kootenay's kisby ring hangs at the entrance to the Purcells Cove facility as a sombre reminder of why sailors train for these crises. The Restigouche-class destroyer fell victim to the Oct. 23, 1969, gearbox explosion and engine room fire that killed nine and seriously injured 55, the RCN's worst peacetime accident.

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