Fisheries and Oceans
Canada

Pêches et Océans
Canada

Canadian
Coast Guard

Garde côtière
canadienne

Canadian Coast Guard
Maritime Security

LRIT - Long Range Identification and Tracking

HIGHLIGHTS:

- Dedicated capacity
- Cost-Effective / Efficient
- On-going operational capability
- Maritime Security Branch Lead
- Enhanced Maritime Domain Awareness
- Security, Search and Rescue and Environmental Response benefits

Overview

The Canadian Coast Guard has taken a leadership role in the development and deployment of what is one of the most effective new tools in global maritime security: the Long Range Identification and Tracking (LRIT) system. In the wake of 9/11, the International Maritime Organization spurred the creation of a satellite-based system that would give participating governments (Flag States) the ability and time to evaluate the security risk posed by SOLAS Class vessels (ships of 300 gross tonnes or more on international voyages) intending to enter their ports or passing within 1000 nautical miles of their coast.

The Coast Guard was instrumental in the creation of LRIT, both from a technical and policy perspective. It was also one of its earliest implementers. The LRIT system began operations on July 1, 2009 and before year's end the Coast Guard had achieved its primary objective of implementing the security capabilities of LRIT, in concert with its Marine Security Operations Centre partners.

How It Works

A complement to the near-shore radio-based Automatic Identification System (AIS), LRIT is a secure point-to-point system which collects, stores and routes data from vessels wherever

they are on the high seas. Unlike AIS, LRIT signals are encrypted, ensuring they cannot be read by unwanted eavesdroppers. SOLAS Class vessels must automatically transmit their identity, position, and date and time of transmission four times a day, or, if required, as often as every 15 minutes.

Flag States store data on their own vessels in a dedicated or regional data centre, providing specific vessel data to other Flag States upon request when the vessel either enters that county's coastal waters or gives notice that it is intending to enter one of its ports. Data obtained by Canada's LRIT Data Centre can be relayed to a Marine Security Operations Centre and combined with other sensor data to improve marine domain awareness.

QUICK FACTS:

▶ *59 Data Centres representing 87 countries (Flag States)*

▶ *Number of SOLAS-Class vessels that enter Canadian coastal waters: approximately 800 per day.*