



IMMARBE

International Merchant Marine Registry of Belize

**IMPLEMENTATION OF THE LRIT SYSTEM
LONG-RANGE IDENTIFICATION AND TRACKING OF SHIPS**

TO ALL SHIPOWNERS AND OPERATORS, DEPUTY REGISTRARS, RECOGNIZED ORGANIZATIONS, GSI INSPECTORS

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1. BACKGROUND

1.1 The Long Range Identification and Tracking of Ships (LRIT) is a maritime domain awareness initiative developed at the IMO as part of the wider Maritime Security measures adopted following the terrorist attacks of 11 September 2001. The LRIT system enables Administrations to receive position reports from ships flying their Flag worldwide. It will also allow Governments to receive similar position reports from all ships in the vicinity of their coastlines and territorial waters.

1.2. LRIT is given effect through amendments to chapter V of the SOLAS Convention and the introduction of regulation SOLAS V/19-1. This regulation requires ships to transmit the following information for LRIT purposes:

- the identity of the ship (IMO Number and Name),
- the position of the ship (Latitude and Longitude), and
- the date and time of the position report

2. APPLICATION

2.1. SOLAS V/19-1 applies to the following ships engaged on international voyages:

- passenger ships, including high-speed passenger craft,
- cargo ships, including high speed craft, of 300 GT and upwards, and
- self propelled mobile offshore drilling units, when not on location.

2.2. Yachts over 300 GT in commercial use or which hold a Cargo Ship Safety Radio Certificate are subject to the provisions of SOLAS V/19-1 and must comply with the requirements for LRIT.

2.3. The abovementioned ships must be provided with the capability to automatically transmit the information specified in paragraph 1.2 above as follows:

- 2.3.1. ships constructed before 31 December 2008 and certified for operation:
- in sea areas A1 + A2 and A1 + A2 + A3 not later than the first survey of the radio installation after 31 December 2008.
 - in sea areas A1 + A2 + A3 + A4 not later than the first survey of the radio installation after 01 July 2009. However these ships must comply with the requirements for ships certified for operations in sea areas A1 + A2 + A3 when operating in those sea areas.
- 2.3.2. Ships certified solely for operations in sea area A1 and which are fitted with AIS are not required to comply with SOLAS V/19-1.
- 2.3.3. Ships to which SOLAS V/19-1 applies which are constructed after 31 December 2008 must comply with these requirements upon delivery.
- 2.4 If you are in any doubt as to the applicability of SOLAS V/19-1 to your ships, kindly contact our Registry as soon as possible:

INTERNATIONAL MERCHANT MARINE REGISTRY OF BELIZE (IMMARBE)

Technical Department

Tel. (501) 223-5026 / 5031 / 5047

Fax. (501) 223-5048 / 5070

e-mail. Immarbe@btl.net

3. FUNCTIONALITY

- 3.1. LRIT makes use of existing marine satellite technology to transmit position reports from ships to the Flag Administration and to other Governments with a legitimate right to the information.
- 3.2. The following “platforms” are considered most suited to the transmission of LRIT data, in order of practical suitability:
- Inmarsat “Mini-C”-type Mobile Earth Station (as used for SSAS and / or commercial tracking applications);
 - Secondary Inmarsat C Mobile Earth Station (typically the “back-up / redundant” GMDSS largely on stand-by);
 - Primary Inmarsat C Mobile Earth Station (typically the main GMDSS and system used for bulk email communications).
- 3.3. From the ship, the position report is sent to a “Data Centre” via an “Application Service Provider” utilising a “Communications Service Provider”. The data may also be forwarded to entitled Governments with a legitimate right to the information via the secure “International Data Exchange”.
- 3.4. Position reports are automatically sent every six hours to the Data Centre, however additional position reports may be requested by increasing the position reporting up to each 15 minutes or “polling” for an immediate position report by entitled Governments.

4. IMPLEMENTATION

4.1 Phase 1 - Equipment Testing

4.1.1. We have appointed Pole Star Space Applications Limited (Pole Star) as an Authorized Testing Application Service Provider (ASP) to undertake shipborne equipment testing and the issuance of a Conformance Test Report.

4.1.2. Pole Star is a market leader in the provision of satellite ship tracking services.

4.1.3. **With immediate effect, Owners/operators of ships subject to SOLAS V/19-1 are requested to register the chosen Inmarsat C Mobile Earth Station for testing with Pole Star. Their contact details are as follows:**

Pole Star Space Applications Limited - "Pole Star", U.K.

(Email) lrtesting@polestarglobal.com

(Telephone) +44 (0)20 7313 7400

(Fax) +44 (0)20 7313 7401

4.1.4. Once registered, an activation code (known as a Data Reporting and Polling Closed Network Identity or "DNID") and other supplemental commands will be automatically downloaded to the chosen Inmarsat C Mobile Earth Station onboard the ship. This will activate the automatic LRIT transmissions.

4.1.5. Once the LRIT functions have been activated a period of testing, following the test specification guidelines contained in MSC.1/Circ.1257, is required to ensure the reliability and accuracy of the transmitted data. This testing will be carried out remotely by our Recognised Application Service Provider Pole Star, who will issue a Conformance Test Report on successful completion. **All ships must hold such a Conformance Test Report in order to comply with SOLAS V/19-1.**

4.1.6 By utilising Inmarsat C, the GMDSS equipment on the majority of ships will be able to support LRIT without modification or upgrading.

4.1.7. Owners/operators of ships with Mobile Earth Stations that do not support LRIT will need to either upgrade one of the Inmarsat C Mobile Earth Stations onboard or preferably install a "stand alone" LRIT terminal at their expense. **Therefore, Owners/operators are urged to have their existing terminals conformance tested as quickly as possible, especially since it is foreseen that there will be a great demand for LRIT compliant Inmarsat C equipment as the implementation date of 31st December 2008 approaches.**

4.1.8. Pole Star can advise on known compatibility issues and their possible solutions.

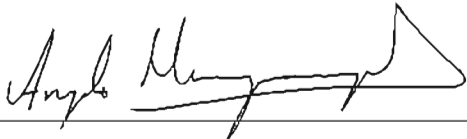
4.1.9. **The Testing Phase should be completed as soon as possible but not later than 30th September 2008.**

4.2 Phase 2 - Designated Data Centre

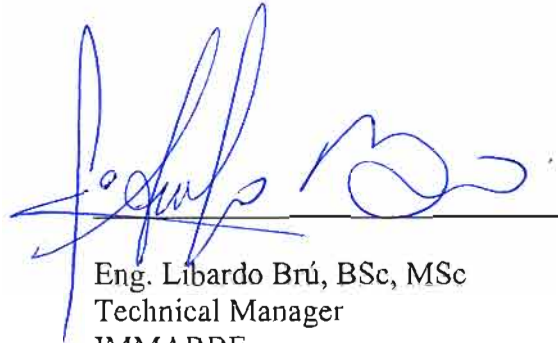
4.2.1. We will shortly be appointing Pole Star as our National LRIT Data Centre Administrator/Recognized Application Service Provider who will undertake the following tasks after Phase 1 is completed:

- integration of ship equipment into the designated Data Centre
- management of the Data Centre

- connection of the Data Centre to the wider international LRIT network via the International Data Exchange and Coordination of Data Centre to Data Centre arrangements.
- 4.2.2. By using Pole Star as the Recognized Application Service Provider and Inmarsat C as the data transfer conduit, hardware compatibility issues will be largely eliminated and equipment costs to Owners will be minimized.
- 4.2.3. Regardless of the date for the survey of the radio installation, all ships subject to SOLAS V/19-1 must be:
 - registered with the Recognized Application Service Provider Pole Star
 - hold a Conformance Test Report for LRIT and
 - be capable of transmitting automatic position reports **not later than 31st December 2008.**



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