



SUB-COMMITTEE ON  
RADIOCOMMUNICATIONS AND  
SEARCH AND RESCUE  
11th session  
Agenda item 6

COMSAR 11/6/1  
5 December 2006  
Original: ENGLISH

**MATTERS CONCERNING SEARCH AND RESCUE, INCLUDING THOSE RELATED  
TO THE 1979 SAR CONFERENCE AND THE IMPLEMENTATION OF THE GMDSS**

**SAR Services issues related to the implementation of the Long-range  
Identification and Tracking (LRIT) system**

**Submitted by the United States**

**SUMMARY**

<i>Executive summary:</i>	This document discusses the need for SAR services-related issues to be considered as the Long-range Identification and Tracking (LRIT) system is further developed and implemented
<i>Action to be taken:</i>	Paragraph 2
<i>Related documents:</i>	None

**1 Introduction**

1.1 MSC 81 adopted SOLAS regulation V/19-1 on Long-range Identification and Tracking (LRIT) of ships. The amendment comes into force 1 January 2008, and the LRIT system is to be operational by 31 December 2008. The SOLAS regulation provides for Contracting Governments to be entitled to receive LRIT information, with certain exceptions, from:

- a) Ships entitled to fly the flag of that Contracting Government wherever the ship is located;
- b) Ships that have declared their intent to enter a port or place under the jurisdiction of that Contracting Government;
- c) Ships not entitled to fly the flag or intending to enter a port or place of that Contracting Government, if navigating within a distance not to exceed 1000 miles of the coastline of that Contracting Government; and
- d) Ships in an area where a SAR operation is underway.

1.2 Because LRIT data will be available to support SAR operations, this paper discusses the SAR-services related issues that should be considered as the LRIT system is further developed and implemented. LRIT information collected from a ship will only be required to include the ship's identity (based on its IMO number), position of the ship (latitude and longitude) and, the date and time of the position provided. Automatic reports are to be made at 6-hour intervals.

1.3 LRIT information will be available to the SAR services of Contracting Governments for use in relation to rescuing persons in distress at sea, and this information, including on-demand information, would be free of charge (MSC 81/25, paragraph 5.92), but also subjected to an audit process. The LRIT system could perform one of the functions performed by many of the ship reporting systems now in operation around the world, namely, locating ships for SAR operations.

1.4 In general, the LRIT system will consist of LRIT shipboard equipment connected by means of communications service providers (CSPs) and/or application service providers (ASPs) to various types of LRIT data centres through an international LRIT data exchange. SAR authorities should not typically need to understand details about how this works.

1.5 SAR personnel will need to know how to obtain LRIT data when needed for a SAR incident. LRIT data will be provided to SAR authorities recognized by IMO or the International Civil Aviation Organization (ICAO). The SAR authority will likely work through its associated LRIT Data Centre or the International LRIT Data Centre.

1.6 The LRIT system is envisioned to provide data for SAR that will overlap or supplement data that is available from other ship reporting systems (SRSs) used for SAR. It may be useful to make some general observations:

- a) While ships must comply with applicable requirements of mandatory SRSs, they may opt into participation in voluntary SRSs used for SAR and may, under certain conditions, not be subject to LRIT reporting. Therefore certain ships may be included in one or more such systems, and not in others;
- b) The data set collected by LRIT consists of reports with only the ship's identity, position and date/time; other SRSs may collect, store, or otherwise determine additional information of SAR value, such as course and speed, ship characteristics and special capabilities, etc.;
- c) LRIT data will be transmitted from ships by equipment installed and/or used for that purpose; reports to other SRSs depend on ship capabilities and preferences, or specific requirements of SRSs involved;
- d) LRIT is a future system designed to track ships for maritime security and other purposes approved by the Organization; it is not yet fully designed, implemented or proven; its eventual costs are not clearly known; and, when finally operational, it will take time to assess its value, both as a SAR tool and in comparison with other SRSs used for SAR; and
- e) Ship participation and SAR use of SRSs such as Amver have been growing, which reflect a growing appreciation for the value of ships as rescue units.

1.7 Some examples of SAR-related LRIT issues that need to be better resolved include:

- a) How will Rescue Co-ordination Centres (RCCs) access LRIT data?
- b) What is the procedure for on-demand LRIT information?
- c) What audit recordkeeping and restrictions might be required of SAR authorities who obtain LRIT data for SAR?

- d) Will there be provisions for collecting LRIT data from ships beyond 1000 miles offshore for SAR?
- e) Will Governments limit LRIT data for SAR purposes, and if so, by what mechanism?
- f) What SAR-related guidance needs to be provided to those responsible for the operation of LRIT and to SAR authorities?
- g) Will some Governments incorrectly or prematurely assume, as some did when GMDSS was introduced, that LRIT will reduce or eliminate the need for other SRSs for SAR?
- h) What is the process for ICAO access to LRIT information for aeronautical RCCs with maritime SAR regions? and
- i) Should development of SAR guidance, e.g., IAMSAR Manual or MSC circular, await experience gained after LRIT has been in operation?

1.8 The concept appears to be that to obtain LRIT data, a recognized RCC will likely have to notify its “associated” LRIT data centre of its need for data in a particular area where an actual or potential distress situation exists. That data centre will then likely query the international LRIT data exchange to trigger all other data centres to provide at least archive LRIT information of the ships each is responsible for that may be in the distress area, and report back. On-demand LRIT information is to be available to SAR services to obtain the most current information. All of this will likely require active involvement of SAR authorities with the LRIT system authorities to refine the processes and procedures as they implement this new system.

## **2 Action requested of the Sub-Committee**

2.1 The Sub-Committee is invited to:

- .1 note the comments above; and
- .2 consider encouraging SAR authorities to co-ordinate with their respective national LRIT authorities so that SAR services-related issues are given due consideration as the LRIT system is being further developed and implemented.