
PART I

Introduction

1) The Search and Rescue (SAR) Convention 1979 provided a global plan for carrying out SAR operations. This convention failed to improve the communications which are so important in SAR operations. To overcome the main disadvantage of then distress system i.e, inefficient long-range alerting capability (assistance was sought from ships within MF range only and no specific signal sent to the shore side authority), the development of GMDSS system was proposed as part of Resolution 6 of the SAR Convention 1979. This system relies on satellite communications as well as High Frequency (HF), Medium Frequency (MF) and Very High Frequency (VHF) terrestrial radio communication. The basic concept of this system is that shore based stations (Coast Earth Stations, Coast Radio Station and Rescue Co-ordinating Centre-RCC) receives distress alert signal and then responsible selecting and informing shipping/ships for rescue purpose and co-ordinating SAR operations.

2) The safety aspect of this system includes Urgency and Safety communications as well as dissemination of navigational and meteorological information. This system incorporates both the satellite and terrestrial modes, which offer ship owners choice of ships radio system. Ships not using satellite terminals carry equipment for distress communications in the MF, HF and VHF bands as well as a simplified satellite system. The conventional equipment employs Digital Selective Call (DSC), radio telex (NBDP) and radio telephone. The GMDSS is divided in to 4 sub-systems:
   Alerting- Ship to Shore/Ship to ship and shore to ship;
   SAR co-ordinating communications- RCC and on scene SAR co-ordinator;
   On scene communication- between ships in distress and others; and
   Preventive action- Ship reporting, Maritime Safety Information, Automatic Identification System (AIS) and Long Range Identification Tracking (LRIT) System etc.

3) The GMDSS was introduced by means of amendments to SOLAS 1974 which were adopted in 1988 and entered into force on 01.02.1992. These amendments became fully operational by 01.02.1999.

4) SOLAS 1974 Chapter IV prescribes the requirements for radio communicating equipments for ships above 300GRT and other GMDSS related services. The Central Government recognizing the significance of safety of life at sea in the coastal waters of India and for Indian ships trading overseas as amended therefore, ratified SOLAS 1974 on 16.06.1976 and the provisions entered into force on
25.05.1980 internationally as well as for India.

5) The provisions of the Chapter IV SOLAS 1974 have been incorporated in the section 291 to 296 Merchant Shipping Act, 1958. Whereas, the detailed technical rules in respect of this chapter have been framed under the provision of Merchant Shipping Act, 1958 called MS (DSRC) Rules 1995. The Chapter IV of SOLAS 1974 has been amended by IMO several times. The Merchant Shipping (Distress, Safety and Radio Communication) Rules, 1995 have not been correspondingly amended by the Central Government. However, many Merchant Shipping Notices were issued by the Directorate addressing the provisions of new amendments effecting Chapter IV of SOLAS 1974 as amended.

6) To implement the provisions of certain service providers, under the adopted amendments in respect of Chapter IV Regulation 5- Provisions of Radio Communication services & Regulation 5-1, GMDSS identities SOLAS 74 as amended; the Central Government authorizes the following National Organizations to perform such services:

(i) Directorate General of Shipping (Director General of Shipping / Nautical Advisor to the Government of India) for effective functioning of GMDSS system established on the coast of India, issuing identity to mobile unit in respect of GMDSS radio equipment and exemption(s) from GMDSS equipments operator;
(ii) Ministry of Communication (wireless Advisor to the Govt. of India) to issue identities to shore units in respect of radio equipment /installations, operational licenses to personnel manning Indian ships and mobile or shore units in respect of radio equipment/installations under prevailing International Radio regulations;
(iii) Indian Coast Guard for the purpose of monitoring effective functioning of GMDSS system established on the coast of India including appropriate shore based facilities for Terrestrial Radio Communication Services having due regard to the recommendations of Organization (IMO) issued from time to time;
(iii) Indian Space Research Organization (ISRO) and Tata Communication (TC) for the purpose of monitoring effective functioning of GMDSS system established on the coast of India including appropriate shore based facilities for Space Radio Communication Services having due regard to the recommendations of Organization (IMO) issued from time to time.

PART II

Compliance with SOLAS 1974 Chapter IV as amended

Existing National Rules:
7) The Central Government has framed the following rules under the Merchant Shipping Act, 1958 including the amendments adopted by the IMO and issued Merchant Shipping Notices:-

n Section 291 to 296 - Radio Rule making & Control procedures;

n Merchant Shipping (Distress, Safety & Radio Communication) Rules,1995;

n Merchant Shipping Notice No 12/1998- Distress, Safety& Radio communication;
Merchant Shipping Notice No.20/98 - GMDSS GOC operator;

Merchant Shipping Notice No.23/1998 - Annual servicing of EPIRB/SART;

Merchant Shipping Notice No.19/1998 - False distress alert from EPIRB;

Merchant Shipping Notice No.1/2004 - Exemption from carriage of International Telecommunication Union (ITU) publication;

Merchant Shipping Notice 3/2006 - Proper use of Very High Frequency (VHF) at sea;

The existing Merchant Shipping (Distress, Safety and Radio Communication) Rules 1995 are under revision to cover the gaps under the revised chapter IV of SOLAS 1974. Under these circumstances, the mariners including ship owners and others concerned shall continue to comply with the relevant provisions of the act, existing rules, above stated notices and the new regulations as enumerated below:

**New Provision of Chapter IV of SOLAS 1974 as amended:**

8) In order to give effect to the provisions, all concerned to ensure compliance with the following amendments effecting Chapter IV of SOLAS 1974:

(a) **Regulation 5-1 (2)**

(i) All Indian ships and fishing vessel shall be registered for Global Maritime Distress and Safety System (GMDSS) Identities. The identities shall be given by the Organizations specified under Para 6 above. These identities shall be made available to Maritime Rescue Co-ordination Centre of Indian Coast Guard on 24 hrs basis.

(b) **Regulation 7**

(i) Every ship shall be capable of transmitting a distress alert through the polar(COSPAS-SARSAT) orbiting satellite service operating in the 406 MHz band; and

(ii) Every ship shall be provided with Search and Rescue locating device.

(c) **Regulation 9 and Regulation 10**

(i) Every ship shall be provided with means of initiating ship to-shore distress alerts shall be through the INMARSAT geostationary satellite service by a ship earth service station.

(d) **Regulation 15 (9)**

(i) Satellite Emergency Position Indicating Radio Becon (EPIRB) shall be tested for all aspects of operational efficiency, with special emphasis on checking the emission on operational frequencies, frequency stability, signal strength, coding and registration, at intervals as specified below:

(a) on Passenger Ships, within 3 months before the expiry date of the Passenger Ship Safety Certificate; and

(b) on Cargo Ships, within 3 months before the expiry date or 3 months before or after the anniversary date, of the Cargo Ship Safety Radio Certificate or Cargo Ship Radio Certificate as the case may be.

(c) the test may be conducted on board the ship or at an approved testing station annually and subject to maintenance at the time of battery replacement for GMDSS
equipment which shall not exceed 5 years. This maintenance shall be undertaken at an approved shore based maintenance facility.

(ii) In cases where it appears proper and reasonable, the Director General of Shipping may extend the testing interval of 12 months to 17 months.

(e) Regulation 18

(i) Position updating: All fixed two-way communication equipment carried on board a ship and fishing vessels which is capable of automatically including the ships or fishing vessels position in the distress alert shall be automatically provided with this information from an internal or external navigation receiver, if either is installed.

9) A copy of latest edition of SOLAS 1974 as amended, highlighting these amendments along with the Indian Rules and Notices as stated above shall be maintained on board Indian ships as well as ashore in the shipping company’s office for reference purpose.

10) The type approval of GMDSS Equipments shall be granted by the Indian Registrar of Shipping (IRS) for existing and new Indian ships. List of approved vendors for the Radio equipments are given in NT Branch Circular No. 2/2006 dated 1st December 2006 which is available on DG Shipping website. The approvals granted by IRS to the vendors on behalf of Govt. of India shall be made available to the user by them. However, the Director General of Shipping is the Competent Authority for the purpose of granting exemption(s) to the ships from compliance under the provision of Merchant Shipping Act, 1958.

11) The Director General of Shipping authorizes the Principal Officer, Mercantile Marine Department District or his Authorized Official to conduct the inspection prescribed under section 294 of the act and who shall detain the ships and Fishing vessels if found not complying with the provisions of the regulations and the act. He shall conduct the inspection in accordance with procedure laid out in IMO resolution 787 (19) as amended by 882 (21).

12) The Owner, Manager, Master, Crew, Agent and any other person affected by the decision of the authorized official of the Central Government or the recognized organization IRS has right to appeal against such decision. The appeal shall be made to the Director General of Shipping within a period of 15 days.

13) The Director General of Shipping notes that radio communication forms an important functions on board ship by far the most important contributing causes of collision is the failure to make proper use of Radar, Echo Sounder, Look Out, Excessive Speed and Take an Avoiding Action. Against this background, DG Shipping now issues the above the directives under the provision of Section 292, 293, 294, 295 and 296 of the Merchant Shipping Act, 1958.

14) The Ship Owner, Ship Mangers, Mariner, Harbour Master, Pilots and other concerned in the operation of ships and fishing vessels are directed to comply with the existing and new regulations specified in this notice as stated above strictly. The Director General of Shipping upon receipt of reports from the Principal Officer, Mercantile Marine Department District or his Authorized Official
that the provisions of this notice are infringed, may in addition to the detention of the ship initiate legal action prescribed under the act against the mariner or owner of the ship if deemed appropriate.

15) Co-operation of all concerned is solicited for the purpose of protecting sea borne Trade, Promoting safety of life, Property and preservation of Marine Environment.

16) This issues with approval of Director General of Shipping.

    Sd/-

    (Capt. Deepak Kapoor)

    Nautical Surveyor-cum-

    Dy. Director General of Shipping [Tech]