



# Safe Waters

NEWSLETTER

On Maritime Safety and Security

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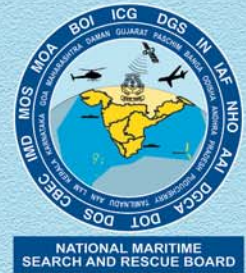


NATIONAL MARITIME  
SEARCH AND RESCUE BOARD



A Publication of the Indian Coast Guard

## From the Desk of The Chairman National Maritime Search & Rescue Board



The years gone by have witnessed a steep rise in the merchant traffic as well as the technology that supports maritime operations. Since the rise in cross-continent air travel, sea travel has largely been restricted to short trips and recreational cruises. Unlike a few decades ago, ships now predominantly ferrying cargo rather than passengers. The recreational sailing is all set to experience a tremendous boom and represents an increasingly lucrative source of tourist income. Similar boom is being experienced in deep sea fishing sector also. Due to such contributing factors there has been a significant increase in the number of people venturing into sea, and consequently, the requirement for SAR has increased enormously.

Various automation technologies have been introduced to shipbuilding and ship operations, including cargo loading systems, computerized navigation, the global positioning system (GPS) and Automatic Identification System (AIS). Automation has markedly reduced the number of crew needed, onboard ships, and improved safety standards substantially. However, despite major advances in maritime technology and rescue capabilities, it will be difficult to fully overcome the hazards faced at sea due to the very nature of the medium and the environment. Therefore, the most challenging task for the NMSAR Board in times to come will be to reduce the reaction time to emerging SAR contingencies at sea.

On behalf of the National Search and Rescue (NMSAR) Board, the Indian Coast Guard (ICG) has been progressively moving towards achieving an effective SAR regime with the wholehearted support of all the resource agencies. The enthusiastic response elicited from all member organisations during the 13<sup>th</sup> National SAR Board Meeting and subsequently in addressing relevant issues, indicates that the issue of maritime SAR is being accorded the priority, it deserves. I am confident that the same momentum will be carried forward in order to establish a more resourceful, efficient and responsive SAR regime.

As Chairman of the National Maritime Search and Rescue Board, I would like to assure the maritime community that the ICG will leave no stone unturned to ensure safer seas in our Search & Rescue Region, however demanding the situation. In its efforts to validate the existing SAR mechanism, ICG in coordination with INMCC Bangalore conducted the 6<sup>th</sup> 'Beacon' exercise on 12 Jun 14. Though, 100 percent detection of distress alerts by INMCC and quick follow up action by the MRCCs/RCCs was achieved during this exercise, certain issues related to beacon registration did emerge and necessary steps have been initiated with the stakeholders to resolve these issues. Another issue that needs to be addressed on priority is the receipt of numerous false alerts from DATs or low cost beacons. These false alerts besides wasting premium SAR resources also raises a question on the reliability of such equipment or its handling in future. Coastal States/Union Territories are once again requested to sensitise our fisherfolk carrying these equipment to ensure correct and safe usage of such beacons, while concurrently encouraging them to invest in these reliable and low cost devices which could be a life saver.

The past year has been very eventful insofar as acts of bravery at sea in saving precious lives are concerned. I am pleased to mention that Uttam Adhikari Mahavir Singh of ICG Ship Samudra Prahari has made our nation and the ICG proud for being commended by the IMO Council for his act of exceptional bravery at sea during the rescue operation of Master of SCI Tug URJA during salvage operations of the ill-fated container ship MOL Comfort in very rough sea conditions last year.

I also wish to take this opportunity to inform our members that I would be completing my innings as the Chairman NMSARB in January 2015 consequent to my relinquishing charge as DG Indian Coast Guard, but would surely watch the NMSAR Board achieve new milestones in the years ahead. I am confident that our combined efforts will ensure safer seas for all.

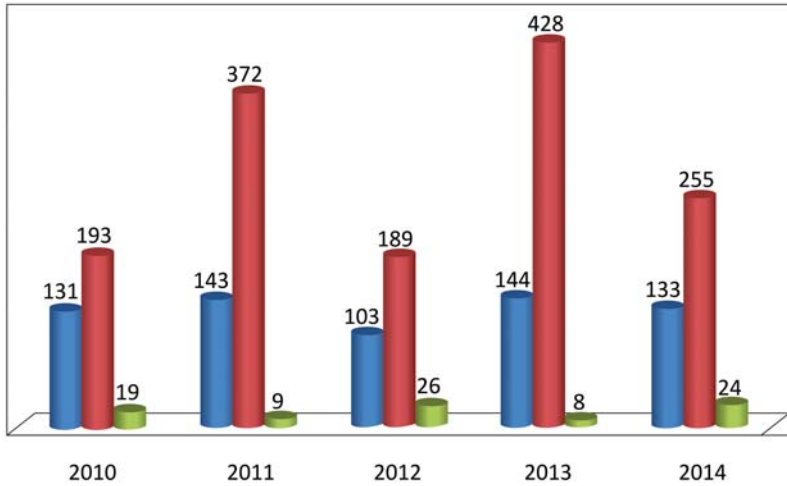
“VAYAM RAKSHAMAH”

(Anurag G Thapliyal)  
Vice Admiral  
Chairman  
National Maritime  
Search & Rescue Board

New Delhi  
05 Jan 15

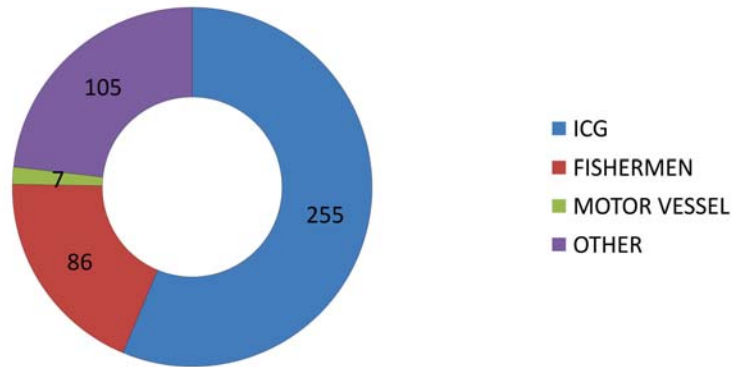
### SAR DATA : APR –DEC

MISSION LIVES SAVED MEDEVAC



Graph on the left side indicates number of missions undertaken, life saved and medical evacuations done by ICG during the period Apr- Dec.

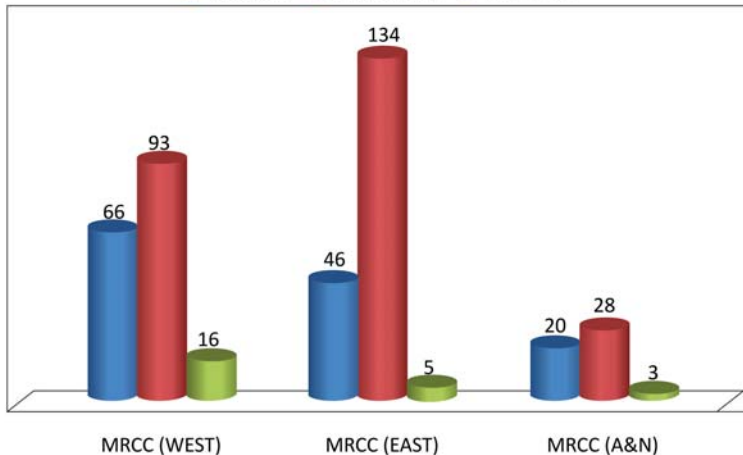
### LIVES SAVED APR –DEC 14



Graph on the right side indicates lives saved by ICG, fishermen, Motor Vessel and other resource agencies during period Apr-Dec 14.

### SAR DATA : APR –DEC-2014

MISSION LIVES SAVED MEDEVAC



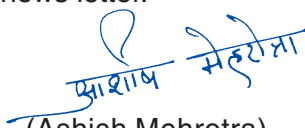
Graph on left side indicates the SAR missions and lives saved under three MRCCs.

The active participation of the NMSARB members has resulted in expeditious implementation of decisions and recommendations of the XIII NMSAR Board meeting. The actions are not only indicative of the enhanced inter governmental agency synergy but also the positive contributions of the private players in particular the National MSVs Operators Association in promoting measures for enhanced safety of seafarers.

The issue of distress beacon management, registration and de-registration is being very positively addressed by the user as well as the regulators. The recent circulars / notices by the regulatory authorities stand testimony to collective resolve.

As we move forward to the next year we hope to see better distress management and symmetric planning tools between the MRCCs and RCCs together with efforts to better integrate the littoral States into the SAR matrix.

While thanking all the esteemed NMSAR Board members and their representatives, I look forward to any feedback and suggestions from readers to improve upon the contents of this news letter.

  
(Ashish Mehrotra)  
Commandant  
Jt Director (Ops & SAR)

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## XIII NATIONAL MARITIME SEARCH AND RESCUE (NMSAR) BOARD MEETING AT MUMBAI ON 12 AUG 14

The XIII Meeting of the National Maritime Search and Rescue (NMSAR) Board was held at Coast Guard Regional Headquarters (West), Mumbai on 12 Aug 14. The meeting commenced with inaugural address by the Chairman, National Maritime Search and Rescue Board (NMSARB), Vice Admiral Anurag G Thapliyal, AVSM & Bar, Director General Indian Coast Guard (DGICG), followed by a report on Search and Rescue activities addressed by the agencies for the year 2013-14 by Director (SAR), CGHQ. Dr. NK Shrivastava, Manager, INMCC Bangalore also delivered a presentation on "Working Group-Technical", addressing policy decisions on various technical issues related to VHF Network, Communication Centres, Distress Alert Transmitters (DATs) and Satellite Aided SAR etc.

During his address, the Chairman highlighted various initiatives of Indian Coast Guard on behalf of NMSAR Board, for improving Search and Rescue infrastructure, services and support. He also stressed upon the requirement for training of the personnel manning Rescue Coordination Centres,



XIII NMSAR Board Meeting at Mumbai on 12 Aug 14

adherence to Safety Regulations, carriage of adequate safety equipment by fisher folks whilst proceeding to sea and procurement of low cost DATs. Further, he expressed his concern on issues such as sinking of Mechanised Sailing Vessels (MSVs), non-registration of Beacons with INMCC, Bangalore and receipt of numerous False Alerts from DATs/Low Cost Beacons and stressed upon the requirement for addressing these issues by all stake holders. The Chairman expressed his satisfaction on the keenness and promptness with which many merchant ships responded search and rescue missions at sea, which had helped in saving precious lives at sea. Whilst commending the coordination efforts of Airport Authority of India towards successful conduct of three refresher courses for RCC/MRCC Operators on Search and Rescue at CATC, Allahabad in Jan 13, Sep 13 and Apr 14. The Chairman requested AAI for continued cooperation for undertaking this biannual refresher course till the Operationalisation of Indian Coast Guard training facilities.

The 'ICG SAR Award for Best Fisherman' was awarded to Fishing Boat "FV Dev Sagar" for saving six lives in distress. The award was received by, Mr Dinesh Premji Salet, on behalf of the owner of the fishing boat 'Dev Sagar'.



Chairman, NMSAR Board presenting SAR Award to Best Fisherman

The 'M/s Essar SAR Award for Government Owned Unit' was presented by Mr. Anoop Kumar Sharma, CEO, M/s Essar Shipping Limited jointly to ICGS Priyadarshini, an Inshore Patrol Vessel (IPV) based at Vizag and Chetak helicopter (CG 805) Flight ex- Port Blair, Andaman & Nicobar Island.

MT Aquarius Wing belonging to M/s NS United Kaiun Kaisha Ltd. Tokyo, Japan was awarded the 'ICG SAR Award for Merchant Vessel' in recognition of its efforts for rescuing 11 precious lives on 13 Sep 13 from an Indian fishing boat 'Arpuda Matha' which sank North East of the Kadmatt Island in the Lakshadweep area.



Chairman, NMSAR Board Presenting SAR Award to Best Motor Vessel

Further, the Chairman appreciated both the Chairpersons of Working Group Legal and Working Group Technical, for their concerted efforts to resolve the outstanding maritime issues. The Chairman expressed hope that these two Working Groups would continue to work diligently towards drawing up of a road map for the improvement of National Maritime Search and Rescue frame work in India.

The Chairman also acknowledged the usefulness of the interactive session for resolving outstanding issues pertaining to Maritime Search

and Rescue and in providing a more comprehensive outlook to our M-SAR contingencies, which in long run will aid in establishing safer seas in our SRR.

## SAR NEWS

### Assistance to Adrift Fishing Boat “Riya Rayan”

At about 1115 h on 08 May 14, ICG Interceptor Craft(IC) IC-302 while on patrol sighted fishing boat ‘Riya Rayan’ with 11 crew onboard adrift due to engine failure in position 1.5 n miles North West of Ratnagiri. The Master of disabled boat requested IC-302 for assistance.



*The Disabled Fishing Boat under Tow*

IC-302 towed the disabled boat to Ratnagiri harbour and handed over to its owner at about 1130 h on 08 May 14.

### Assistance to Adrift Boat MFV “Child Jesus”

MRCC (Port Blair) received a message from Police Control Room at 1630 h on 22 May 14, intimating that one fishing boat with 02 crew was adrift between Tarasa and Chowra islands due to engine failure. ICGS Varad on routine patrol in Southern Andaman sea was diverted at 1750 h to render assistance. CGDO was also launched with first light on 23 May 14 for sea air coordinated search

and located drifting boat along with 02 crew at 0547 h on 23 May 14 off Tillongchang Island.

ICGS Varad was then vectored by the aircraft to the drifting boat to render necessary assistance. As repairs were not possible view non-availability of spares onboard, the boat was taken under tow along with a pontoon and was brought to Kamorta harbour amidst rough weather conditions and handed over to local administration, Kamorta at 0830 h on 24 May 14.



*The Disabled Fishing Boat under Tow*

### Assistance to Adrift Fishing Boat off Kodikarai

On 23 May 14 at about 1730 h, Maritime Rescue Coordination Centre (MRCC), Chennai received an information from Coastal Security Group (CSG), Nagapattinam intimating about fishing boat (Reg no. TN-57-5477) along with 03 crew adrift in position 9 n miles East of Kodikarai. The fishing boat ventured into sea on 19 May 14 from Mallipattinam.

On receipt of information, ICGS Rajtarang which was on routine patrol was diverted at 1800 h on 23 May 14 to render assistance. ICG ship located the disabled fishing boat at about 0445 h on 24 May 14 in position 4 n miles East of Point Calimere and towed the disabled fishing boat till off Topputtuari. Thereafter, the disabled fishing boat

along with crew were handed over to another fishing boat arranged by owner at 0715 h on 24 May 14.

### Assistance to Fishing Boat “St George”

At about 0035 h on 15 Jun 14, Maritime Rescue Coordination Centre (MRCC), Mumbai received an information from MV Zao Galaxy that fishing boat ‘St George’ with 09 crew onboard was adrift due to engine failure in position 43 n miles West South West of Vizhinjam.



*Rescued Crew of Fishing Boat*

On receipt of information, MRCC, Mumbai activated International Safety Net message at 0125 h on 15 Jun 14. ICG Interceptor Boat (IB) ICGS C-407 was deployed at 0715 h on 15 Jun 14 and ICG Dornier aircraft was tasked at 0930 h on 15 Jun 14 to search and locate the adrift fishing boat. ICGS Varuna on patrol was also diverted for augmenting SAR efforts. ICGS C-407 located the adrift fishing boat at about 1100 h on 15 Jun 14 and towed her to Vizhinjam. ICGS C-140 along with fishing boat and 09 crew arrived Vizhinjam and handed over the boat and crew to Assistant Director, Fisheries, Vizhinjam at about 1830 h on 15 Jun 14.

### Rescue of Crew from Grounded Vessel “MV Priyanka”

At about 1100 h on 14 Jul 14, Port Facility

Security Officer (PFSO), Revdanda telephonically intimated Maritime Rescue Coordination Centre, Mumbai that MV ‘Priyanka’ is dangerously listing in position 1.6 n miles north west of Revadanda (22 n miles south of Mumbai) and likely to run aground. There were 16 crew onboard the vessel and she was transporting iron ore from Revdanda to outer anchorage for lighthouse operation.



*Crew onboard Grounded Vessel*

On receipt of the information, Coast Guard Chetak, helicopter (CG-821) was launched from Mumbai at about 1200 h on 14 Jul 14 for providing assistance despite difficult weather conditions. CG 821 located the vessel and observed that the vessel had dangerously listed and sighted eleven crew onboard vessel awaiting rescue.



*CG Helo Rescuing Crew*

CG 821 winched up all eleven crew from vessel in four trips and handed over to local authorities at about 1330 h on 14 Jul 14. Other five crew members boarded vessel's life raft and reached shore safely.

### Rescue of Person from Lotus Business Park

At about 1335 h on 18 Jul 14, information was received from Disaster Management Cell, BMC regarding urgent requirement of immediate evacuation of 15-20 firemen stranded on roof top of high rise building Lotus Business Park, Andheri West, Mumbai.



*Stranded fire fighters on Top of Lotus Business Park*

On receiving the information CG 810 ex 842 Sqn (CG) was launched at 1418 h in severe weather conditions. The helo arrived on scene at 1428 h and carried out assessment of the situation in bad



*ICG Helo Rescuing Fire Fighter*

weather conditions of strong wind and rain coupled with fire/ smoke in vicinity, making the rescue extremely difficult and dangerous.

The helo carried out two circuits to evaluate the accessibility to building / surrounding area. During the third approach one survivor Mr Manik Ogle was rescued and lowered at a nearby ground. After this the helo made fourth approach to rescue three more fire fighters, as planned. However, by that time the fire was under control and the survivors could reach the ladders. CG 810 then vacated the area after positive verification from fire fighters that air rescue operation was no longer required.

### Assistance to FB “Baba Loknath”

At about 1330 h on 20 Jul 14, Maritime Rescue Sub Centre (MRSC), Haldia received an information from AD Fisheries, Diamond harbour that IFB ‘Baba Loknath’ with 16 crew onboard was adrift due to fishing net stuck in her propeller in position 64 n miles South East of Sagar Island.



*Distressed Boat under Tow*

On receipt of information, ICGS Rajkiran was deployed from Haldia at 1700 h on 20 Jul 14 to provide assistance to distressed fishing boat. ICG Dornier aircraft ex-Kolkata was also tasked at 1000 h on 21 Jul 14 for sea-air coordinated search. Additionally, three fishing boats, arranged by the



owner were also deployed from Kakdwip fishing harbour early morning on 21 Jul 14. However, due to inclement weather they returned back. ICGS Rajkiran arrived datum at 2030 h on 21 Jul 14 to find that all 15 crew were safe and healthy. The distressed boat was then taken under tow by ICG Ship and handed over to another fishing boat arranged by the owner, off Sagar Island, for further towing to harbour. The distressed boat entered Namkhana harbour, Sagar Island at 2140 h on 22 Jul 14.

### Flood Relief Operation “Odisha”

Coast Guard District Headquarters No 7 (Odisha) received request from the District Administration, Jagatsinghpur on 05 Aug 14 for ICG assistance towards rescue/evacuation of local populace from the flash floods affected areas in Balkani and Tandaptra villages of Kujang Tehsil (15 Km from Paradip) due to overflowing Mahanadi river. Further, a similar request was also received from the District Administration, Kendrapara (40 Km from Paradip) AM 06 Aug 14. An ICG rescue team was despatched with first light on 06 Aug 14 comprising of 20 personnel along with two Gemini and Station Ambulance to the flood affected areas in Jagatsinghpur.



*Medical Camp by ICG*

Another CG rescue team comprising 08 personnel and one Gemini was also tasked PM

06 Aug 14 at Kendrapara. Based on the assessment of situation, the second team was augmented with two Gemini and 18 personnel AM 07 Aug 14. Further, a joint survey of the area was undertaken by CG team on arrival at the scene at Kujang AM 06 Aug 14 alongwith personnel from District Administration, local Police and Odisha Disaster Rapid Action Force (ODRAF). Extensive sorties in Gemini were undertaken from 06 to 09 Aug 14, which included damage assessment by BDO and Tehsildar in Kathakata, Banasara and Hansura Panchayats, transfer of State Electricity Board technical team for assessment of High Tension wire and restoration of power in affected area and identification of weak points in river embankments by Administration. The CG team also accompanied the Kendrapada District Administration officials in undertaking recce for inspection of interior areas near Brahmani river catchment areas for contingency planning. CG team with Gemini also embarked media team for live coverage of the affected site.



*Rescue operations by ICG Gemini*

During the operation, the CG team evacuated a total of 32 persons including ladies and children to safer locations in Jagatsinghpur. Further, a construction worker who accidently fell in the water on 07 Aug 14, was rescued by the CG Team. CG

team also evacuated one pregnant lady suffering from labour pain to the Primary Health Centre, Kujang. Four ODRAF personnel, who fell in water after their boat broke down due to collision with a structure, were also rescued by the CG team in Kujang.



*Rescue Operation by ICG Gemini*

More than 60 people were examined by the medical team led by CG Medical Officer, DHQ-7, in Madhupur village in Jagatsinghpur. Two critically ill patients, a girl suffering from acute abdomen pain and one child suspected of snake bite were promptly treated. A medical camp was also conducted by the medical team led by the ICG medical Officer at Kendrapara. ICG personnel were also involved in the relief material distribution through the boat arranged by the Administration on 06 Aug 14. The rescue and relief operation continued till PM 09 Aug 14 and both the CG rescue teams were de-inducted on completion.

## **MEDICAL EVACUATION**

### **MV “Emma Victory”**

At about 1545 h on 11 Apr 14, ICG Dornier on surveillance sortie received distress call from MV Emma Victory reporting head injury to one crew (Mr. Joerex Levingrecia, age-25 yrs, Nationality- Philippines) in position 156 n miles West of Mumbai

and requested for immediate medical evacuation. The vessel was on passage from Toamasina (Madagascar) to Mumbai.



*Rescue Crew of MV Emma Victory*

Upon receipt of information, ICGS Subhadra Kumari Chauhan on patrol was diverted for medical evacuation. On arrival in area at about 2130 h on 11 Apr 14, ICG ship disembarked its medical team onboard MV ‘Emma Victory’. The patient was provided first aid. Thereafter, he was evacuated from vessel at 0010 h on 12 Apr 14 and brought to Mumbai. The patient was handed over to local agent in stable condition at about 0630 h on 12 Apr 14 for further medical treatment at Jaslok Hospital, Mumbai.

### **MV “Al-Hilal”**

At about 0900 h on 18 Apr 14, Maritime Rescue Coordination Centre (MRCC), Mumbai received an information from MV AL Hilal reporting about master (Mr Makdad Kasim Mahammed, age 59 yrs, Nationality - Holland) suffering from acute chest pain in position 200 n miles South West of Mumbai. The vessel had requested for medical evacuation.

Upon receipt of the information, MRCC, Mumbai advised the vessel to head towards Mumbai and Indian Coast Guard Ship Amritkaur on routine patrol



*ICG Medical Team Examining the Patient*



*First Aid being provided to rescued crew*

was diverted. Further, ICG Interceptor Boat (IB) ICGS C-154 was also deployed from Mumbai with medical officer embarked at 1445 h on 18 Apr 14 for medical evacuation. ICG ship arrived on scene at about 1715 h on 18 Apr 14 and embarked ship's medical team along with boarding party onboard MV Al Hilal. The ICG medical team assessed the patient and found him in stable condition. Thereafter, the patient was evacuated and brought to Mumbai by ICGS C-154. The patient was handed over to local agent at Mumbai for further medical treatment at Jaslok hospital.

### **MV "Tou Fu 3"**

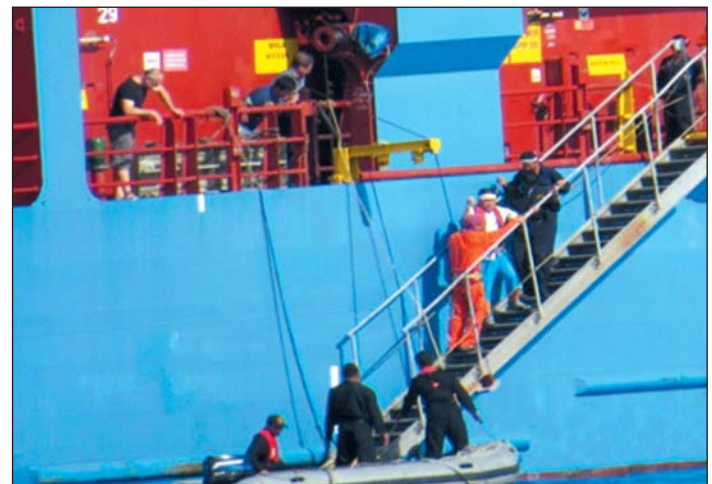
At about 0620 h on 21 Apr 14, Indian Coast Guard Headquarters, New Delhi received an information from China Maritime Search and Rescue Centre, informing that four crew of MV 'TUO FU-3' had suffered CO poisoning and required urgent evacuation. The vessel was anchored in position 165-Sagar Lt-45 NM (Sandheads Anchorage).

Upon receipt of the information, communication was established with the ship's local agent. The ship's local agent M/s Esskay Shipping Pvt Ltd, intimated that, two out of four crew had succumbed to injury in cargo hold itself, while other two were reported to be in critical condition. Tug 'Foug' arranged by local agent evacuated the two injured crew and two dead bodies

from MV 'TUO FU-3'. Simultaneously, Air Cushion Vessel H-188 was tasked from Haldia to R/V Tug 'Foug' off Sagar Island for speedy evacuation of injured crew to Haldia. At 1520 h on 21 Apr 14, ACV H-188 embarked two injured crew along with two attendants (all Chinese National ex-'TUO FU-3') and non-invasive ventilation with Oxygen was administered to injured crew by CG medical team. ACV H-188 arrived Haldia at 1645 h on 21 Apr 14 and the injured crew were shifted to hospital by the agent for further treatment.

### **MV "Asiatic Dawn"**

At about 1750 h on 13 May 14, Maritime Rescue Co-ordination Centre (MRCC), Port Blair received an information from master of 'MV Asiatic Dawn'



*Patient being disembarked from MV Asiatic Dawn*

intimating about one crew (Mr. Segovia, age 49 yrs, a Philippine national) onboard sustaining head injury. The position of the vessel was 220 n miles North West of Port Blair.



*Rescued patient in ICG Gemini*

Upon receipt of the information, MRCC Port Blair contacted the vessel and advised to head towards Port Blair. ICGS Rajshree was deployed at 0500 h on 14 May 14 from Port Blair for medical evacuation. ICG ship effected R/V at about 0715 h on 14 May 14 and evacuated the patient. ICG ship alongwith patient arrived Port Blair at 1025 h on 14 May 14 and handed over the patient to local agent for further medical treatment. The patient was later admitted in GB Pant hospital at Port Blair in stable condition.

### **MV “Star Eagle”**

At about 1530 h on 03 Jul 14, Coast Guard Regional Headquarters (West), Mumbai received a request from M/s ISS Shipping India Pvt Ltd local agent of MT ‘Star Eagle’ for medical evacuation of a crew member from the ship. The patient Mr Lordino Nicor Rose (Chief Bosun a Filipino national) was suffering from acute pain in abdomen on right side with bouts of unconsciousness and breathlessness. The vessel was 10.5 n mile South West of Mumbai.



*Preparation in progress for Evacuation of patient*

On receipt of information, ICG helo was launched at 1700 h on 03 Jul 14 from Mumbai for evacuation of the patient. The ICG helo evacuated the patient and brought him to Mumbai at 1750 h on 03 Jul 14. Thereafter, the patient was handed over to local agent and was admitted in Breach Candy hospital for further medical care.

### **MT “Ocean Crown”**

At about 2100 h on 18 Jul 14, Maritime Rescue Coordination Centre (MRCC), Mumbai received a request from local agent of M/s Atlantic Ocean Pvt. Ltd for medical evacuation of two injured crew member from Motor Tanker ‘Ocean Crown’. The vessel was in position 236 n miles west of Mumbai and was on passage from Sikka (India) to Sao Bastiao (Brazil). Both the patients were seriously injured while working on deck (one on both legs and other on right side ribs).

On receipt of information, MRCC, Mumbai advised the vessel to head towards Mumbai and the vessel arrived off Mumbai at about 1600 h on 19 Jul 14. Subsequently, ICG Chetek helicopter was launched from Mumbai for medical evacuation of the injured crew. ICG Medical Officer along with aircrew diver were winched down from helo for assessment of both the injured crew view non availability of landing space onboard the vessel.

# ARTICLES ON MARITIME SAFETY AND SECURITY

## LONG RANGE IDENTIFICATION AND TRACKING (LRIT)

The “Long Range Identification and Tracking” (LRIT) system adopted in May 2006 by the Maritime Safety Committee (MSC) of the IMO (International Maritime Organization) is mandatory equipment for all internationally operating commercial ships over 300 GRT. Only ships which operate exclusively in Sea Area A1 are exempted from the LRIT obligation.

The regulation is anchored in Chapter V of SOLAS on the Safety of Navigation and is mandatory for passenger ships, cargo ships, high-speed craft and mobile offshore drilling units.

The SOLAS regulation on LRIT is designed to improve maritime safety with the long range identification and tracking of ships. The LRIT system is stipulated in a multilateral agreement – on the exchange of information which requires that ships have to communicate their identity, position, date and time worldwide and continuously to a central LRIT data centre. The LRIT system consists of an onboard transmitter and the Communication Service Provider, the Application Service Provider and the LRIT Data Centre.

Contrary to the existing AIS system, which does not communicate any globally available data, LRIT is a globally available, satellite-supported system which meets the requirements of the Authorities of having access to the data of individual ship’s globally and at any time.

One of the most important differences between LRIT and AIS, however, is that AIS is a so-called broadcast system, i.e. public, whereas LRIT data



*ICG Helo Evacuating the Patient*

The patients were examined by the medical officer and provided necessary first aid. Subsequently, both the injured crew were evacuated by ICG helo at about 1612 h on 19 Jul 14 and brought to Mumbai. The injured crew were handed over to the local agent for further medical management and were admitted to Saifee Hospital, Mumbai at about 1804 h on 19 Jul 14.

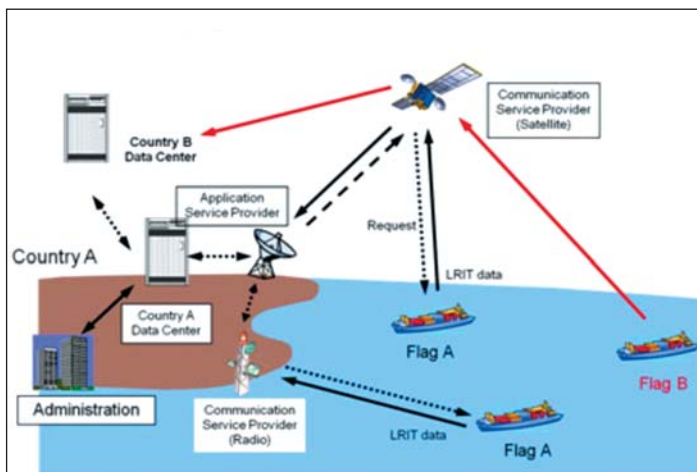
## SAR TRAINING

### M-SAR Training for MRCC/RCC Operators

The National Maritime Search and Rescue Board (NMSARB) conducted third refresher course on Search and Rescue for MRCC/RCC operators at Civil Aviation Training Centre (CATC), Allahabad from 28-30 Apr 14. Fifteen participants from Indian Coast Guard and Airport Authority of India attended the course.

The classes were conducted on various subjects related to Maritime and Aeronautical Search and Rescue operations. During the course, the participants also shared their experience, which resulted in enhancing inter-agency coordination between operators of RCCs and MRCCs.

## LRIT Configuration



are only available to institutions which have a (governmental) entitlement to the data and guarantee the confidentiality of these data.

*ICGS Mandapam*

## DIFFERENCE BETWEEN PIRACY AND ROBBERY PIRACY

As per the definition given by Art 101 of the UNCLOS 1982 Piracy consists of any of the following acts:

(a) Any illegal acts of violence or detention, or any act of depredation (plunder/pillage or take goods forcibly), committed for private ends by

the crew or the passengers of private ship or a private aircraft, and directed:

- (i) On the high seas, against another ship or aircraft, or against persons or property onboard such ship or aircraft.
- (ii) against a ship, aircraft, persons or property in a place outside the jurisdiction of any state.

(b) Any act of voluntary participation in the operation of ship or of an aircraft with knowledge of facts, making it a pirate ship or aircraft.

(c) any act inciting or of intentionally facilitating an act described in sub paragraph (a) or (b).

**Armed Robbery.** “Armed robbery against ships” means any of the following acts:

(a) any illegal act of violence or detention or any act of depredation, or threat thereof, other than an act of piracy, committed for private ends and directed against a ship or against persons or property on board such a ship, within a State’s internal waters, archipelagic waters and territorial sea;

(b) any act of inciting or of intentionally facilitating an act described above.

**Petty Theft.** It may be classified as robbery where loose items of ship i.e. paint, rope, wire, tools, brass and other metallic items are stolen for monetary gain.

## How to Restrain such Incidents?

Such incidents can be curbed by the combined efforts of Port Authorities and Law Enforcement Agencies. The Port Control shall issue a VHF warning to all merchant ships within their respective

port limits to keep effective Anti-piracy watch at all times. Vessels should be advised to report such incidents to nearest coastal Authority.

The regular presence and random patrol by Law Enforcement Agencies within the anchorage area form an effective deterrence to the robbers/fishermen attempting such petty robbery and generate confidence in Merchant mariners to report any such incidents to Law Enforcement Agencies. The units on patrol shall issue advisory to the anchored vessels to avoid reporting of petty thefts as piracy attempts and report such incidents to local port authorities /Law Enforcement Agencies so that early and effective action can be taken.

## **AIS, VDR AND COMMUNICATION: ESSENTIAL M-SAR COMPONENTS**

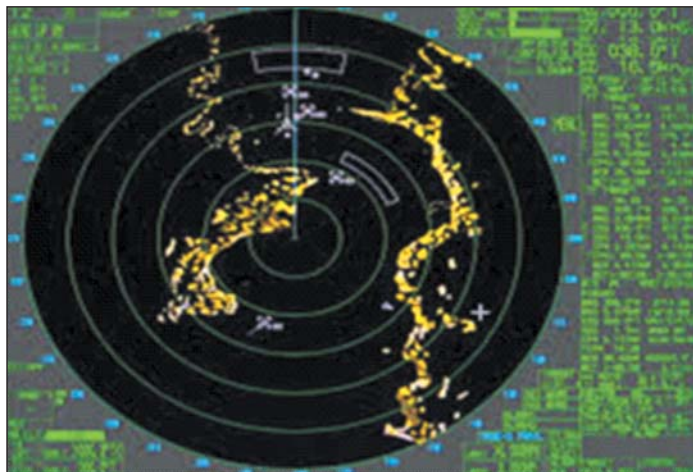
### **Automatic Identification System**

Automatic identification systems (AIS) is a mandatory carriage requirement for all vessels above 300 GRT and all passenger ships, regardless of size. AIS data is available to all other suitably equipped ships, vessel traffic systems (VTS) and participating shore-based services to clearly identify each vessel within range, together with the following details:



*Stand-alone AIS display*

Ship's name, International Maritime Organization (IMO) number, call sign, Maritime Mobile Service Identity, position, speed, heading, rate-of-turn, next port, estimated time of arrival to next port, and personnel on board.



*Radar Display with Radar and AIS Targets*

This information is displayed on dedicated AIS displays alongwith radar displays and Electronic Chart Display and Information System (ECDIS). Transmission of this static and dynamic information is synchronised by GPS timing, with transmissions being carried out on VHF frequencies (161.975 MHz and 162.025 MHz, max TX power 12.5w).

The system has many uses, including:

- Aiding in SAR operations;
- Protection of the marine environment;
- ID of vessels, including high-risk targets for maritime security;
- Powerful statistical tool.

### **Voyage Data Recorder**

The marine version of the 'black box' that is carried on aircraft is the Voyage Data Recording (VDR) system, which became an enforced carriage

requirement in July 2002, following IMO regulations for all passenger ships and other ships above 3,000 gross tonnage.

While the primary purpose of the VDR is for accident investigation, there can be other uses of recorded data viz. for preventive maintenance, performance efficiency monitoring, heavy-weather damage analysis, accident avoidance and training purposes to improve safety and reduce running costs. The lessons learnt by retrieving and analysing facts of any accident will lead to enhanced precautions/ following correct SOPs and there lies the essentiality of VDR as an effective M-SAR tool.

System includes a protective storage capsule, which is either fixed retrievable or float free, mounted externally on the ship which can be retrieved by divers in the case of sinking of ship. Locating the capsule/ship is aided by a salt-water-activated acoustic beacon mounted on the capsule.

The capsule contains 24 hours of recorded ship data including direct interface feeds from a variety of equipment and sensors, many mandatory and some optional. Examples of these would include engine/propeller and thruster information, automation data, rudders, hull openings, watertight and fire doors, VHF radio communications, bridge audio, radar, AIS and ECDIS, main alarms and sensors (depth, wind, speed, position, heading, et cetera).

### **Communications Installation**

A typical communications installation on SOLAS-compliant foreign going ship now contains, at least, the following:

(a) Very High Frequency (VHF) Transceiver (156-171 Mhz) + Digital Selective Call (DSC) to initiate distress alerts and provide general

communications (range line-of-sight / 30-60 miles)

(b) Medium Wave (MF) transceiver + DSC (2 MHz) for alerts and general communications with range of about 600-800 miles

(c) High Frequency (HF) Transmitter + DSC (4 – 16 MHz) for worldwide distress alerting and for general communications

(d) Emergency Position Indicating Radio Beacon (EPIRB) (406 MHz), this automatically or manually deployed beacon, when used in conjunction with the Low Earth Polar Orbiting (LEO) satellites (COSPAS/SARSAT) provides a distress positional fix and vessel identity to within 5km worldwide;

(e) Search and Rescue Radar Transponder (SART) (X band, 9.3-9.5 GHz) is a homing device to enable ships and SAR aircraft to accurately pinpoint a distress position using X band radar

(f) Navtex (518 KHz) (range 800n miles) for the receipt of alerts, weather forecasts and maritime safety information relating to navigational hazards and obstacles that the vessel may encounter during transit

(g) Satcom C (Inmarsat) for distress alerting and transmission and reception of maritime safety information via Enhanced Group Calling (EGC). Sat C may also be used for general communications and automated position polling

(h) Inmarsat Sat B, M and Mini M are some of the systems which support distress alerting and messaging using voice or telex. The newer systems are also capable of data transfer and even support slow scan TV.



A blue and white Coast Guard helicopter is shown in flight, hoisting two people from the sea. The helicopter has "COAST GUARD" written on its side. Below it, two people are suspended from a hoist. In the background, a white Coast Guard patrol boat is visible on the water. The scene is set against a clear blue sky and blue water.

# IMPORTANT NOTIFICATIONS



भारत सरकार / GOVERNMENT OF INDIA  
पोत परिवहन, मंत्रालय  
MINISTRY OF SHIPPING  
नौवाहन महानिदेशालय / DIRECTORATE GENERAL OF SHIPPING  
"बिटा बिल्डिंग" / "Beta Building"  
9वीं मंजिल, आय थिंक टेकनो कैंपस / 9<sup>th</sup> Floor, I Think Techno Campus  
कांजूरमार्ग (पूर्व) / Kanjurmarg (East)  
मुंबई / Mumbai - 400 042

टेलिफोन : 022-2575 2040-45  
फैक्स : 022-2575 2029 / 35  
E-mail : dgship-dgs@nic.in

Tele : 022-2575 2040-45  
Fax : 022-2575 2029/35  
Web : www.dgshipping.gov.in

F.No. 14-NT (5)/AIS/2004-II

Date: 19/08/2014

To,  
Indian National ship-owners' Association  
22, Maker Tower-F, 2<sup>nd</sup> Floor, Cuffe Parade,  
Mumbai- 400025

ICC Shipping Association  
Sciendia House, Basement  
N.M. Marg, Ballard Estate  
Mumbai-400038

**Sub:- EPIRB registration-reg.**

Sir,

Enclosed please find a copy of Fax message received from Coast Guard Headquarters, New Delhi, which is self-explanatory.

It is requested that in continuation with M.S, Notice NT/RADIO/01/2007 dated 7<sup>th</sup> Feb 2007, the ship-owners may be advised to check their vessels EPIRB registration certification for their correctness, and if required, necessary action may be initiated to rectify the discrepancies on urgent basis.

All MMDs and ROs are requested to verify the registration certificate for EPIRB also, while conducting survey on board or witnessing the servicing of EPIRB at approved service station.

Yours faithfully

(B. C. Sharma)  
Sr. Radio Surveyor

c.c: P.O., MMD Mumbai/Kolkatta/Chennai/Kandla/Kochi.  
c.c: S.I.C., MMD Haldia/Port Blair/Paradip/Visakhapatnam/Tuticorin/Mangalore/Goa/Jamnagar  
c.c: IRS/LRS/BV/DNV/ABS/GL/NKK/Korean register/RINA/Russian  
c.c: Coast Guard Headquarters, New Delhi-110 001.



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Web : www.dgshipping.gov.in

F.No. 85-NT (02)/2014-I

Date: 29.12.2014

To,  
Indian National ship-owners' Association,  
22, Maker Tower-F, 2<sup>nd</sup> Floor,  
Cuffe Parade  
Mumbai- 400025

ICC Shipping Association,  
Sciendia House, Basement, N.M. Marg, Ballard Estate,  
Mumbai-400038

**Sub: False alert from EPIRB of De-registered vessels**

Sir,

It has been brought to the notice of this Directorate that the false alerts have been received by the INMCC even after the vessel has been de-registered for re-sale/scrap.

Such false alerts not only cause inconvenience to the monitoring system, but divert resources for non-productive tasks. It may also hamper the availability of SAR resources for responding a real distress alert.

Considering the gravity of the situation it has been decided that any Indian vessel, which is going either for scrap or resale, the owner of the vessel shall submit an undertaking with documented proof, to registrar of the vessel, indicating all the EPIRBs of the vessel has been de-registered from INMCC and the equipments has been de-programmed/re-programmed/destroyed, so that the repeated instances of false alerts from EPIRBs are eliminated.

Further, it may be noted, even after taking such measure, if any such false EPIRB transmission is intercepted, then the owner of the vessel, who had sold the vessel, shall be held responsible and liable to meet the expenses incurred in responding such false alerts.

Yours faithfully

(B. C. Sharma)  
Sr. Radio Surveyor

- c.c: P.O., MMD Mumbai, Kolkatta, Chennai, Kandla & Kochi - for information and necessary action.  
c.c: SIC, MMD Jamnagar, Goa, Mangalore, Tuticorin, Port Blair, Paradip, Visakhapatnam & Haldia - for information and necessary action.  
c.c: Director General, Indian Coast Guard, New Delhi - for information.



## **Safe Waters**

An Indian Coast Guard Publication

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**For Search and Rescue Incident**

**CALL 1554**

**AT SEA : INMARSAT 'C' Code 43 (TOLL FREE)**

