



# Safe Waters

NEWSLETTER

On Maritime Safety and Security

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SEARCH AND RESCUE BOARD



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



Maritime Search and Rescue (M-SAR) continues to remain a challenging task. Search and Rescue services need to respond to every situation with utmost alacrity displaying professional acumen and exercising full coordination with other support agencies. Given the multiplicity of stakeholders, this calls for best SAR practices, efficient on-ground coordination and enhanced integration with the global SAR system. To enhance effective coordination between Maritime Rescue Coordination Centres (MRCCs) of other maritime nations, five separate SAR communication exercises were conducted by Indian MRCCs with Rescue Coordination Centres (RCCs) of Myanmar, Sri Lanka, Japan, Philippines and Thailand during the preceding six months. Knowledge of personnel manning Rescue Coordination Centres is the key to effective coordination in a Search and Rescue operation. To improve the knowledge of MRCC/RCC operators, second biannual training capsule was conducted at Civil Aviation Training Centre, Allahabad in Sep 2013. Further, to check the efficacy of COSPAS-SARSAT system and capabilities of maritime and aeronautical distress response management systems, distress beacon exercise was conducted in Apr 13, in coordination with INMCC, Bangalore and other resource agencies. The successful rescue of crew and subsequent handling of incident involving 'MV MOL Comfort', which broke into two portions in Western Arabian Sea, in Jun 2013 are indicators of effective coordination amongst resource agencies. I am confident that the same momentum will be carried forward, in order to establish a more effective and efficient SAR regime in Indian Search and Rescue Region (ISRR).

In order to ensure safer seas in adjacent Search and Rescue Regions (SRR), an efficient SAR mechanism /organisation is essential. Towards this, training of Search and Rescue personnel from Sri Lanka and Maldives has been planned by Indian Coast Guard in March 2014. Besides training of SAR personnel, Indian Coast Guard has also been engaged in rendering technical and other assistance to Sri Lanka for setting up MRCC at Colombo.

The enthusiastic response elicited from all member organisations during the 12<sup>th</sup> National SAR Board Meeting is indicative of the fact that the issue of maritime SAR is being accorded the priority, it deserves. The Indian Coast Guard is planning to conduct the 6<sup>th</sup> National Level Maritime SAR exercise involving foreign observers during March/April 2014. Active participation of all the National Search and Rescue Board (NMSARB) members is solicited so as to strengthen the SAR mechanism and to further the professional bonding. The exercise will validate the procedures for seamless exchange of information and sharing of operational concepts when responding to Search and Rescue incidents at sea. I am confident that our combined efforts will ensure safer seas.

“VAYAM RAKSHAMAH”

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

New Delhi  
18 Nov 13

The rising importance of the Indian Ocean Region due to globalisation and its effect on maritime transportation has seen an increase in merchant ships movement in the ISRR. The efforts by the merchant ships, fishing boat and other resource agencies have resulted in rescue of many lives in distress, through coordination by Maritime Rescue Coordination Centres.

The sustained efforts of NMSAR Board has resulted in conduct of the 2<sup>nd</sup> biannual training capsule for MRCC/RCC Operators at Civil Aviation Training Centre, Allahabad from 25-27 Sep 13 in co-ordination with Airport Authority of India and Indian Mission Control Centre, Bangalore. The XII<sup>th</sup> Meeting of the NMSAR Board was held at Mumbai on 08 Aug 13, which highlighted the importance of coordinated efforts for providing effective Search and Rescue cover for the mariners and fishers in distress at sea.

Through these columns, I express my heartiest gratitude to the resource agencies for whole hearted support being extended. I am convinced that the cooperation will continue to be comprehensive with the professional relationship established over the period.

Further, I look forward for feedback and suggestions from esteemed NMSAR Board Members to improve upon SAR Mechanism in ISRR.



(Pintu Bag)  
Commandant (JG)  
Dy Director (SAR & CS)

### **CONTENTS**

XII National Maritime Search and Rescue (NMSAR) Board Meeting	... 3-5
SAR News	... 5-14
Medical Evacuation	... 14-16
SAR Training	... 16-16
Articles on Maritime Safety and Security	... 16-19

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## **XII NATIONAL MARITIME SEARCH AND RESCUE (NMSAR) BOARD MEETING AT MUMBAI ON 08 AUG 13**

The XII Meeting of the National Maritime Search and Rescue (NMSAR) Board was held at Coast Guard Regional Headquarters (West), Mumbai on 08 Aug 13. The meeting commenced with inaugural address by the Chairman, National Maritime Search and Rescue Board (NMSARB), Vice Admiral Anurag G Thapliyal, AVSM, Director General Indian Coast Guard (DGICG), followed by report on Search and Rescue Activities addressed by the agencies for the year 2012-13 by Director (SAR), CGHQ. Mr NK Shrivastava, Manager, INMCC Bangalore delivered a presentation of "Working Group-Technical" on policy decisions on various technical issues related to VHF Network, Communication Centres, Distress Alert Transmitters (DATs) and Satellite Aided SAR etc. Captain Deepak Kapoor, DDG(Tech), DG Shipping, presented a report of "Working Group-Legal" for policy decisions on issues related to Safety and Seaworthiness, Provisioning of Basic Life Saving Equipments, etc.

The Chairman highlighted various initiatives



*XII NMSAR Board Meeting at Mumbai on 08 Aug 13*

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, 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 the issues such as sinking of Mechanised Sailing Vessels (MSVs) in fair weather conditions, 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 positively for efforts of search and rescue missions at sea, which had helped in saving precious lives at sea. The Chairman expressed his deepest gratitude to all NMSAR Board Members for providing their valuable comments which enabled revision of "National SAR Plan 2003". Whilst commending the coordination efforts of Airport Authority of India for successful conduct of the first refresher course for RCC/MRCC Operators on Search and Rescue at CATC, Allahabad in Jan 13, the Chairman requested AAI for continued cooperation for undertaking this biannual refresher course till the operationalisation of Indian Coast Guard Academy.

The 'ICG SAR Award for Fisherman' was awarded to Fishing Boat '**Man Mandir**' for saving six lives in distress. The award was received by Shri Rameshlal Ramji Solanki, the tandel of the fishing boat '**Man Mandir**'.



*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 to the Commanding Officer, **ICGS C-150**, for saving 14 lives in three different rescue operations off Kerala coast. '**MV Pacific Skipper**' was awarded the 'ICG SAR Award for Merchant Vessel' in recognition of its efforts for rescuing 18 lives. The award was received by the Officer-in Charge, MRCC (Chennai) on behalf of '**MV Pacific Skipper**'.



*Commanding Officer, ICGS C-150 receiveing Essar SAR Award*

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 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**

### **Rescue of Distressed Fishing Boat 'Kasturi Selva'**

At about 0950 h on 07 Apr 13, Maritime Rescue Coordination Centre (MRCC), Chennai received an information from Superintendent of Police, Coastal Security Group, Nagapattinam, intimating about fishing boat 'Kasturi Selva' (Reg. No.TN/02/ MFB/ 005), which along with 08 crew onboard was reported adrift in position 61 n miles East of Krishnapatnam, due engine breakdown.

Upon receipt of information,Coast Guard Ship "ICGS Priyadarshini" which was on EEZ patrol was diverted for Search and Rescue operation. Simultaneously, Coast Guard Dornier aircraft was tasked from Chennai for sea-air coordinated search. Coast Guard Dornier aircraft located the fishing boat 'Kasturi Selva' adrift in position 42 n miles East of Krishnapatnam. Meanwhile, another Coast Guard Ship 'ICGS Rajkamal' was deployed from Chennai for SAR operation. ICG Ship 'ICGS Rajkamal' arrived at datum at about 0315 h on 08 Apr 13. The distressed boat was subsequently towed by the ICG ship till off Krishnapatnam, where the distressed boat along with rescued crew was handed over to

Coastal Security Group, Krishnapatnam at about 1430 hrs on 08 Apr 13, for further towing the distressed boat along with crew to Krishnapatnam fisheries harbour.

### **Assistance to adrift Fishing Boat 'Srinivasa Shiva Durga'**

At about 2230 h on 12 Apr 13, Indian Coast Guard Station, Kakinada, received an information from fisheries department, Kakinada intimating about fishing boat 'Srinivasa Shiva Durga' (Reg No. FML 224) which along with 07 crew onboard was reportedly adrift in position 27 n miles South East of Kakinada due engine failure. The boat had ventured out to sea at about 1430 h on 11 Apr 13 and had reportedly developed engine breakdown at about 1800 h on 11 Apr 13.



*Fishing boat Srinivasa Shiva Durga with boat crew*

Upon receipt of information, Coast Guard Ship "ICGS Samudra Paheredar" which was on EEZ patrol, was diverted and Coast Guard Interceptor Boat 'ICGS C-151' was deployed from Kakinada to Search and locate the distressed boat. At about 0930 h on 13 Apr 13, the distressed boat was located by ICG ships in position 30 n miles East of Kakinada. All the seven crew of the distressed boat were provided with food and water by ICG Ships. Subsequently, the distressed boat was towed by the

Coast Guard Interceptor Boat 'ICGS C-151' to Kakinada harbour and was later handed over to boat owner by 1500 hrs on 13 Apr 13, in presence of fisheries authorities.

### Rescue of Crew of MSV C Kuruppa Muthamanan

At about 1700 h on 30 Apr 13, Maritime Rescue Coordination Centre (MRCC), Mumbai received an information from Port Officer, Old Mangalore Port intimating about sinking of "MSV C Kuruppa Muthamanan" in position 10 n miles South West of New Mangalore.

The Mechanised Sailing Vessel (MSV) had departed Old Mangalore Port at about 1130 h on 30 Apr 13 and was destined for Kalpeni Island in Lakshadweep. At about 1430 h on 30 Apr 13 whilst on passage, the ill fated MSV had developed an underwater hole which led to flooding and its subsequent sinking. All the five crew of the MSV abandoned the vessel prior to its sinking and were rescued by a fishing boat operating in area, which subsequently brought the crew of the sunken MSV to Old Mangalore Port PM 30 Apr 13.

### Assistance to overdue boat 'MFV Rosita'

At about 1800 h on 05 Jun 13, Coast Guard Regional Headquarters (A&N) received an information from Headquarters Andaman and Nicobar Command (HQANC), Port Blair intimating about the Mechanised Fishing Boat (MFB) 'Rosita', which was reported overdue since PM 05 Jun 13. The boat with 03 crew onboard, had ventured out to sea for fishing on AM 05 Jun 13 from Chiriyatapu (11 n miles South of Port Blair).

Upon receipt of information, ICGS Durgabai Deshmukh which was on EEZ patrol, was diverted to search and locate the overdue boat. The boat

was located by ICG Ship at about 0930 h on 06 Jun 13 and was reported adrift in position 11 n miles East of Port Blair due engine failure. Food and water was provided to the distressed fishermen and thereafter the boat was towed to Port Blair harbour by ICG Ship. The boat along with 03 crew was subsequently handed over to the local Police PM 06 Jun 13.

### Assistance to FB Banadurga

On 19 Jun 13, ICGS Rajkiran whilst on EEZ patrol received a VHF call from fishing boat 'Banadurga', which was reported adrift due engine breakdown. The crew of distressed fishing boat also informed that defect on the engine could not be rectified by them and the boat had strayed into Bangladesh waters. The ICG Ship located the distressed fishing boat in position 05 n miles across provincial Indo-Bangladesh International Maritime Boundary Line (IMBL). The disabled boat was initially towed by ICG Ship and brought to Indian water.



*FB Banadurga under tow by ICGS Rajkiran*

Thereafter, the defect on the engine of the distressed boat was rectified by the technical staff of ICG Ship. Subsequently, the fishing boat 'Banadurga' proceeded towards Kakdwip harbour, its base port.

## Rescue of Crew: MV Asian Express

At about 0245 h on 12 Jun 13, Coast Guard Headquarters received an information from IHQ/MoD(Navy) intimating about a vessel 'MV Asian Express', which was adrift in position 82 n miles South of Kavaratti Island at about 1220 h on 11 Jun 13 due to engine failure. The cargo vessel 'MV Asian Express' was on passage from Karachi to Male and the information about its engine failure was passed on VHF to INS Sukanya, which was enroute to Port Victoria, Seychelles from Kochi. The vessel also intimated that it was unable to contact her agent at Maldives due failure of satellite communication. INS Sukanya relayed the message to MoD IHQ (Navy), which in turn informed Coast Guard Headquarters.



*MV Asian Express sinking off Minicoy on 12 Jun 13*

On receipt of information, MRCC, Mumbai contacted MRCC, Male to appraise the owner of the vessel about the situation. Meanwhile, ICGS Varuna on EEZ patrol was diverted to monitor MV Asian Express and render necessary assistance. ICG Dornier aircraft was also launched from Kochi at 1130 h on 12 Jun 13 for sea-air coordinated search. ICGS Varuna arrived in the area at about 1515 h on 12 Jun 13. Heavy weather, poor visibility and rough seas were prevailing in the area due



*MV Asian Express: Rescue of crew by ICG Ship*

onset of South-west monsoon. On arrival at datum, ICGS Varuna established communication with the distressed vessel over VHF and it was ascertained that the vessel was adrift since 2330 h on 10 Jun 13 due to engine failure. The vessel also reported ingress of sea water due crack in the ship's hull below waterline and the ship's crew were not able to contain the flooding as the vessel had insufficient de-flooding arrangements onboard and had only one submersible pump onboard. At about 1645 h on 12 Jun 13, the crew of 'MV Asian Express' informed ICGS Varuna, about their intention to abandon the sinking vessel. All the 22 crew from MV Asian Express were rescued by ICGS Varuna using lifeboats.



*Rescued crew of MV Asian Express*

MV Asian Express subsequently sank at about 0530 h on 13 Jun 13 in position 52 n miles North East of Minicoy. ICGS Varuna with rescued crew of 'MV Asian Express' entered Kochi on AM 14 Jun 13.

All the rescued crew were subsequently handed over to the Immigration Department Kochi on 14 Jun 13.

### **Rescue of Crew: MV MOL Comfort**

At about 1100 h on 17 Jun 13, Maritime Rescue Coordination Centre (MRCC), Mumbai received a request from the owner of vessel 'MV MOL Comfort', for immediate assistance to the vessel which was 900 n miles West of New Mangalore (inside Yemen Search and Rescue Region). The vessel, whilst enroute from Singapore to Jeddah, was experiencing flooding onboard due crack in her hull and the crew were planning to abandon ship.



*MV Mol Comfort breaking into two parts*

Upon receipt of the information, MRCC (Mumbai) passed the information to MRCC (Yemen) and also assumed Search and Rescue coordination till MRCC (Yemen) could assume SAR coordination. MRCC (Mumbai) established communication with ships in the area and it was ascertained that a

Germany flagged vessel 'MV Yantian Express', was nearest to the incident location. 'MV Yantian Express' reported sighting of 'MV Mol Comfort' sinking and two life rafts along with one life boat in vicinity. On request from MRCC (Mumbai), 'MV Yantian Express' rescued all crew of 'MV MOL Comfort' from the life rafts/lifeboat. Thereafter, MV Yantian Express resumed her voyage to Colombo and arrived Colombo on AM 20 Jun 13, where the rescued crew were handed over to authorities in Colombo.

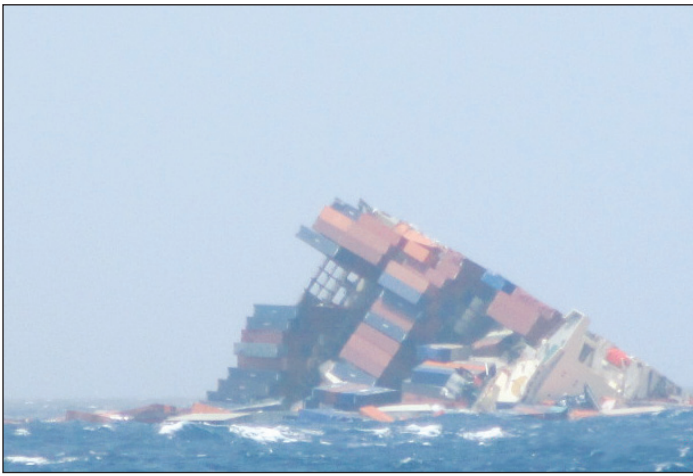
Navarea IX coordinator (Pakistan) was requested to issue NAVAREA warning to alert vessels transiting through the area. Subsequently, on PM 17 Jun 13, M/s MOL Ship Management, Singapore further intimated MRCC (MB) that the vessel 'MV MOL Comfort' had broken in two parts and both parts were reported to be adrift along with the containers scattered in the area.

M/s MOL Ship Management was requested to salvage drifting derelicts as due to the prevailing ocean currents and weather conditions, the derelicts were likely to have drifted on to west coast of India.

The movement of the forward and aft portion of 'MV MOL Comfort' was monitored by deployment of Indian Coast Guard Ship 'ICGS Vaibhav' and Indian Naval Ship 'INS Tarkash' respectively.

A NAVAREA VIII warning was also promulgated to alert shipping traffics about drifting derelicts. Meanwhile, M/s SMIT Salvors, Singapore and also hired four tugs to salvage floating derelicts. On PM 27 Jun 13, the aft part sank in position 420 n miles west of Mormugoa in approx depth of 4000 metres. The forward portion of the broken ship was planned to be towed by hired tugs to Sohar, Oman.





*Sinking of Aft portion of MV MOL Comfort*

On AM 06 Jul 13, the master of SCI tug Urja, which was engaged in towing the forward portion of the derelict vessel, reported fire on the wreck since 0600 h on 06 Jul 13. The same was also reported by ICG Dornier on routine EEZ surveillance AM 06 Jul 13. The two tugs 'Capricorn' and 'Zakher Emperor' accompanying the tow were unable to contain the fire due extreme weather condition prevailing in the area.

Subsequently, on request from M/s MOL Ship Management, Singapore Indian Coast Guard Ship 'ICGS Samudra Prahari' which was on EEZ patrol, was diverted for rendering assistance in firefighting. The ICG ship on arrival on scene, at early hours on 08 Jul 13, rendered fire fighting assistance resulting in extinguishing almost 70% of fire in the forward



*Fire Fighting by ICG Ship*



*Medical Evacuation by ICG Gemini*

portion of the derelict vessel.

Meanwhile, at about 1245 h on 09 Jul 13, SCI tug Urja requested ICGS Samudra Prahari for evacuation of its Chief Engineer, who had sustained an injury resulting in the individual's right hand middle finger being severed and requiring urgent medical assistance. Since the patient could not be evacuated immediately as the weather on scene was not conducive for transfer of patient to ICG Ship, medical advice was provided by the medical officer of ICGS Samudra Prahari over MMB channel. Subsequently, at about 1000 h on 10 Jul 13, the patient was evacuated by using ICG Ship's Gemini craft in most adverse sea conditions. Requisite medical treatment was provided to the patient onboard ICG ship including preservation of separated finger.



*Medical care by ICG Medical Officer*

Subsequently, post dousing of fire onboard forward portion of the derelict, ICG Ship departed area on PM 10 Jul 13 with the injured crew of SCI tug 'Urja'. At about 0030 h on 11 Jul 13, the forward portion of 'MV MOL Comfort' sank in position 427 n miles North-West of Mumbai, within Pakistan Search and Rescue Region in a approximate depth of 3000 metres. ICGS Samudra Prahari along with injured crew of SCI tug 'Urja' entered Mumbai harbour on PM 11 Jul 13.



*Coast Guard Ship towing FB Al Husaini*

### Rescue of Fishing Boat 'AL Husaini'

At about 2110 h on 20 Jun 13, Maritime Rescue Sub Centre (MRSC), Kochi received an information from the master of Iranian Fishing Boat 'AL Husaini' from position 160 n miles West of Agatti Island, Lakshadweep, intimating that the fishing boat has been adrift for last 30 days due non-availability of fuel onboard.

On receipt of information, Indian Coast Guard Ship 'ICGS Varuna' on EEZ patrol was diverted at about 2300 h on 20 Jun 13, to provide Search and Rescue assistance to the distressed boat. Two ICG Dornier aircraft sorties were undertaken on 21 Jun 13, for sea-air coordinated search for the distressed fishing boat. 'ICGS Varuna' on arrived in the area at about 0645 h on 22 Jun 13,

provided assistance to the distressed fishing boat.

Thereafter, ICGS Varuna towed the distressed fishing boat and arrived off Kochi AM 25 Jun 13. Subsequently, the disabled Iranian fishing boat was berthed in Kochi harbour and post defect rectification sailed out from Kochi for Iran on 02 Aug 13.



*Rescued crew of FB Al Husaini*



*Fishing Boat Al Husaini located by ICG Ship and aircraft*

### Assistance to adrift Fishing Boat 'Siyamala'

At about 1500 h on 02 Jul 13, Indian Coast Guard Station, Pudducherry received an information from owner of fishing boat 'Siyamala' intimating that the boat along with 05 crew onboard was adrift in position 44 n miles East of Karaikal, since 1300 h on 02 Jul 13, due engine breakdown.

Upon receipt of information, Indian Coast Guard Ship 'ICGS Rajkamal' on EEZ patrol was diverted and ICG Dornier aircraft was tasked at about 1730 h for sea-air coordinated search for the distressed boat. ICGS Rajkamal arrived at datum at about 0400 h on 03 Jul 13 and located the adrift fishing boat. Subsequently, the disabled fishing boat was towed by ICG ship to Karaikal and was handed over to Assistant Director Fisheries, Karaikal on PM 03 Jul 13.

### Assistance to Supply Boat 'Konark-II'

At about 1330 h on 20 Jul 13, Indian Coast Guard Station, Kakinada received an information from Marine Police, Odalarevu (East Godavari District) intimating about supply boat 'Konark-II' which was reported missing with 05 crew onboard from position off Yanam, since AM 19 Jul 13.



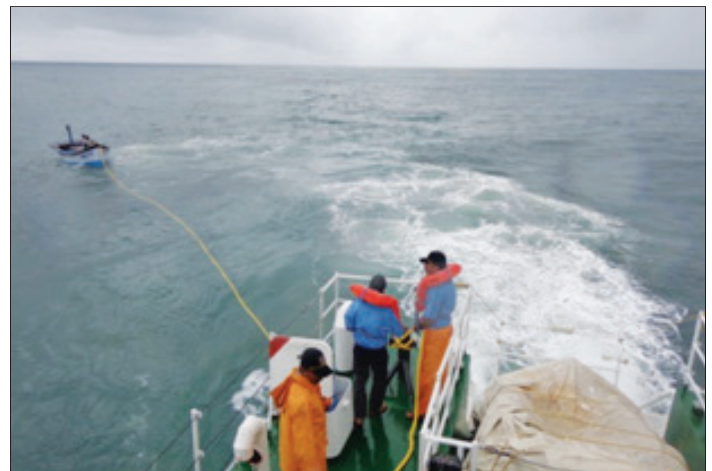
*Disabled Supply Boat "Konark-II"*

Upon receipt of information, Indian Coast Guard Ship 'ICGS Gangadevi' which was on EEZ patrol was diverted to search and locate the missing supply boat. ICG Dornier aircraft was tasked twice at 1000 h and 1510 h on 21 Jul 13 for sea-air coordinated search. In the meantime, another Indian Coast Guard Ship 'ICGS Priyadarshini' was also diverted on PM 21 Jul 13 to augment the search efforts.

ICG Dornier aircraft located the missing supply boat in position 35 n miles South East of Vishakhapatnam and vectored ICG Ship 'ICGS Priyadarashini' to the position of the distressed supply boat. During interrogation, it was established that the supply boat was adrift for 03 days due machinery breakdown. Subsequently, the disabled supply boat 'Konark-II' was taken under tow by ICG ship and brought to Vishakhapatnam at about 1400 h on 22 Jul 13.

### Rescue of Fishing Boat 'Najiya'

On 23 Jul 13, Indian Coast Guard District Headquarters-12 at Kavaratti received an information from Superintendent of Police, Kavaratti intimating about overdue of a fishing boat 'Najiya' since AM 23 Jul 13. Fishing Boat 'Najiya' with 02 crew onboard was reported to have ventured out for fishing along from Androth Island at about 0500 h on 23 Jul 13.



*ICG Ship towing IFB Najiya*

Upon receipt of information, ICG Dornier aircraft was tasked from Kochi on 24, 25 and 26 Jul 13 to search and locate the missing boat. In the mean time International Safety Net (ISN) message was activated by MRCC (Mumbai) on 25 and 26 Jul 13 to alert vessels transiting through the

area. At about 1545 h on 26 Jul 13 vessel 'MV Morning Glory-5' located the fishing boat with 02 crew onboard in position 15.5 n miles South West of Ponnani, Kerala. Subsequently, ICG Dornier was tasked from Kochi at about 1715 h on 26 Jul 13, which located the missing fishing boat in position 15 n miles South West of Ponnani, Kerala. Thereafter, Indian Coast Guard Ship 'ICGS Lakshmibai' was deployed from Kochi for rendering assistance. ICG Dornier aircraft was tasked again at about 2330 h on 26 Jul 13 which vectored 'ICGS Lakshmibai' to distressed fishing boat. At about 0030 h on 27 Jul 13, ICGS Lakshmibai embarked both survivors onboard and the disabled boat was taken under tow.

Subsequently, Indian Coast Guard Interceptor Boat 'ICGS C-144' was deployed from Beypore at about 0530 h on 27 Jul 13, to take over the survivors and tow from ICGS Lakshmibai. Thereafter, the Interceptor Boat 'ICGS C-144' entered Beypore and handed over the distressed boat along with 02 crew, to the representative of Lakshadweep Administration.

### **Assistance to Capsized Fishing Boat 'Vishav Fishery'**

At about 1100 h on 30 Jul 13, Maritime Rescue Sub Centre (MRSC), Goa received information from Assistant Director (Fisheries), Goa intimating about the fishing boat 'Vishav Fishery' with 11 crew which had reportedly capsized off Betul (30 n miles South of Goa) at about 1030 h on 30 Jul 13. Three crew of the boat were intimated to have swam ashore safely and remaining 08 crew were reported to be missing.

Immediately upon receipt of information, Indian Coast Guard helicopter was tasked from Goa to search and rescue the missing fishermen.

ICG helicopter rescued 03 fishermen and remaining 05 fishermen were rescued by another fishing boat operating in area.



*ICG Helo rescued 03 Fisherman*

### **Rescue of Fishermen off Mobor Beach, Goa**

At about 1110 h on 30 July 2013, Indian Coast Guard Air Enclave (ICGAE) at Goa received a distress message from Maritime Rescue Sub Centre (MRSC), Goa intimating about a canoe with 08 crew which had reportedly capsized off Mobor beach, Goa. Immediately upon receipt of



*Rescue Operation in progress*

information, Indian Coast Guard Helicopter was launched from Goa in marginal weather conditions. The ICG helicopter on arrival at datum sighted 08 fishermen floating over sea holding on to fishing net. Initially 03 survivors were winched up

by ICG helicopter, one by one and were dropped at Mobor beach, where medical services were already alerted.

Thereafter, the ICG Helicopter also assisted life guards in determining the position of the remaining survivors for rescue by using water scooters.

### [Assistance to adrift Fishing Boat off Goa](#)

At about 1600 h on 01 Sep 13, Indian Coast Guard Ship 'ICGS Samudra Prahari' whilst on EEZ patrol, sighted one fishing boat 'Sri Sagara' adrift in position 40 n miles North West of Panjim. The boat had ventured into sea on 25 Aug 13 with 15 crew onboard and was adrift view engine failure since 29 Aug 13.

The technical team of the Indian Coast Guard Ship 'ICG Samudra Prahari' boarded the distressed boat for defect rectification. However the defect on the engine of the boat could not be rectified by the technical team of ICG Ship view non availability of spares onboard the fishing boat. The ICG Ship was requested for towing assistance till Goa, by the Master of the fishing boat so as to undertake further defect rectification at Goa. Subsequently, the fishing boat was towed till Goa anchorage and the boat was subsequently handed over to the owner on AM 02 Sep 13.

### [Rescue of 11 crew of Fishing Boat 'Arpuda Matha'](#)

At about 2230 h on 13 Sep 13, Coast Guard District Headquarters, No.-4, Kochi received a telephonic message from vessel 'MT Aquarius Wing' intimating about receipt of a VHF communication informing about sinking of fishing boat 'Arpuda Matha' with 11 crew in position 30 n miles North East of Kadmat Island, Lakshadweep.

Upon receipt of information, the vessel was requested to proceed to the datum and rescue distressed fishermen. Accordingly, 'MT Aquarius Wing' arrived at datum and rescued all 11 distressed



*ICG Helo rescued 11 fishermen*

fishermen. Thereafter, MT Aquarius Wing was advised to proceed towards Kochi with rescued fishermen for disembarkation off Kochi. Accordingly, Interceptor Boat of Indian Coast Guard 'ICGS C-134' was deployed on AM 14 Sep 13 from Kochi for taking over rescued fishermen from vessel 'MT Aquarius Wing'. However due to rough sea conditions and prevalent severe inclement weather, 'ICGS C-134' could not proceed beyond fairway buoy off Kochi harbour. Vessel 'MT Aquarius Wing' also was restricted from closing less than 22 n miles from Coast, view draught restrictions.

Subsequently, ICG helicopter was tasked from Kochi at about 1510 h on 14 Sep 13 for air lifting of rescued fishermen from 'MT Aquarius Wing' to Naval Air Station Garuda, Kochi. Airlifting of 11 rescued fishermen was completed by ICG Helo by 1700 h on 14 Sep 13. Thereafter, all rescued fishermen were provided with logistics support and handed over to police by night, on 14 Sep 13.

## Flood Relief, Gujarat

On 26 Sep 13 Coast Guard Regional Headquarters(NW), Gandhi Nagar received requests from District Collectors, Porbandar and Jamnagar, for Indian Coast Guard assistance to civil administration towards rescue / evacuation of local populace from flood hits areas of Kutiyana village (45 KM East of Porbandar) and Jodiya village (85 KM North East of Jamnagar) respectively. Coast Guard District Headquarters No.-1, Porbandar dispatched an ICG rescue team to the flood affected area with first light on 27 Sep 13. ICG Advanced light Helicopter (ALH) was launched for aerial reccee of the flood affected area. The ALH reported that the majority of the village was flooded and villagers were stranded at various places. The ICG Rescue team established a drop zone at a highway passing through Kutiyana Village. A total of 09 personnel including 03 children and 01 lady were air lifted / rescued from the flooded area, by the ICG ALH.



*ICG ALH winched up survivors*

Another rescue team was dispatched by ICGS Vadinar to Jodiya village (approximately 100 Km from Vadinar). On arrival at village, the ICG rescue team observed that a river passing close to Jodiya



*Rescue of Flood affected people*

village was over flowing and had flooded the entire area. At about 0600 h on 27 Sep 13, ICG Rescue team rescued 35 people from water locked area near Jodiya Village.

At 0630 h on 27 Sep 13, the ICG team proceeded to another area surrounded by Aji River and its tributary. Subsequently, the ICG team was joined by National Disaster Relief Foundation (NDRF) personnel, Air force and Army personnel. A total of 93 villagers including 35 children and 40 ladies were rescued in joint operation.

The rescue operations were terminated on PM 27 Sep 13 and a total of 244 people was rescued in the entire coordinated operation.

## **MEDICAL EVACUATION**

### MV Caribbean Galaxy

At about 1900 h on 13 Apr 13, Coast Guard Region (West), Mumbai received an information from MV Caribbean Galaxy, intimating about requirement of medical evacuation of one crew who has suffered a Heart attack. The vessel was in position 19.5 n miles West of Beypore, Kerala.

Upon receipt of the information, Indian Coast Guard Interceptor Craft 'IC -116' was deployed from Beypore at about 2045 h to evacuate the patient. IC-116 arrived in area at about 2115 h and evacuated the patient. The patient was brought to Beypore and was handed over to the local agent for further treatment. Later, the patient was admitted to Govt Hospital, Kozhikod for further medical care.



*Medical Evacuation from MV Caribbean Galaxy*

### **MV River Globe**

At about 0030 h on 30 Apr 13, Maritime Rescue Coordination Centre (MRCC), Mumbai received an information from Master of vessel 'MV River Globe',



*Medical Evacuation from MV River Globe*

intimating about medical emergency onboard where in One crew had slipped from ladder while working

and was severely injured. The vessel was reported in position 19 n miles South of Veraval, Gujarat.

Upon receipt of information, Coast Guard Interceptor Boat 'ICGS C-153' was deployed from Veraval, for medical evacuation.

The Indian Coast Guard Interceptor Boat 'ICGS C-153' effected rendezvous with the vessel 'MV River Globe' and evacuated the patient at about 0700 h on 30 Apr 13. Subsequently, patient was brought to Veraval and admitted in Govt. Hospital, Veraval for further treatment.

### **MV Vishva Vijay**

At about 0200 h on 24 May 13, Maritime Rescue Coordination Centre (MRCC), Chennai received an information from Netherlands Coast Guard, intimating about medical emergency onboard "MV Vishva Vijay" which was in position 50 n miles North West of Sagar Island, wherein Master of the vessel was suffering from severe chest pain.



*Medical Evacuation from MV Vishva Vijay*

Upon receipt of information, Indian Coast Guard Air cushion vessel (ACV) H-182 was deployed from Haldia for medical evacuation. The patient was evacuated by ICG ACV and was brought to Haldia

at 0940 h. Thereafter patient was shifted to Govt. Hospital, Haldia for further treatment.

### MV Kurobe

At about 1930 h on 26 Sep 13, Maritime Rescue Coordination Centre (MRCC), Mumbai received an information from master of motor vessel “MV Kurobe” requesting for medical evacuation of two crew, who were reportedly injured whilst working onboard. The ship was in position 320 n miles South West of Mumbai at the time of incident.



*Medical Evacuation from MV Kurobe*

Upon receipt of the information, MRCC, Mumbai advised master of “MV Kurobe” to head towards Mumbai and CG helicopter was kept stand by for medical evacuation. At 1330 h on 27 Sep 13, ICG helicopter was tasked from Mumbai for medical evacuation. ICG helo evacuated one injured crew at 1520 h and handed over to local agent for further medical management. The other injured crew was pronounced dead by ICG Medical Officer who had accompanied rescue team and body was subsequently brought to Mumbai using tug arranged by local agent.

## **SAR TRAINING**

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

The National Maritime Search and Rescue Board (NMSARB) conducted second refresher course on Search and Rescue for MRCC/RCC operators at Civil Aviation Training Centre (CATC), Allahabad from 25-27 Sep 13. 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 operation. During the course, the participants also shared their experience, which resulted in enhancing inter-agency coordination between operators of RCCs and MRCCs. All participants of the SAR Course expressed their strong views on the utility of the refresher course.

## **ARTICLES ON MARITIME SAFETY AND SECURITY**

### SATELLITE AIDED SEARCH AND RESCUE SYSTEM IN INDIA

#### COSPAS-SARSAT System

The COSPAS-SARSAT is an international satellite system for search and rescue consisting of a constellation of satellites (both in polar and geostationary orbits) and a network of ground stations. This system provides distress alert and location information to respective Search and Rescue (SAR) authorities for maritime, aviation and land users in distress. The USA, Canada and France jointly developed a system, called SARSAT in the seventies, using National Oceanic and Atmospheric



Administration (NOAA) satellites. The Russians also developed similar system, known as COSPAS. One of the characteristics of these satellites in low polar orbits is that it could view the entire globe, twice every twelve hours. With the formalization of the COSPAS-SARSAT Program in November 1979, inter-operability between the two systems was established.

The COSPAS-SARSAT Programme, as of Oct 2012, was comprised of 4 Parties to the COSPAS-SARSAT Agreement, 26 Ground Segment Providers, 11 User States and 2 Participating Organisations (total 43 participating agencies/states). As on date, there are 9,50,000 **Distress Beacons Worldwide** (Operating on 406 MHz frequency). The ground system consists of 30 Mission Control Centres (MCCs), 58 Low Earth Orbit Local User Terminals (LEOLUTs) and 20 Geo-stationary Local User Terminals (GEOLUTs). From Sept 1982 to Dec 2011, the COSPAS-SARSAT System has supported the rescue of almost 30,713 persons in about 8,387 SAR events globally. Since 1990 till Dec 2012, the Indian Mission Control Centre (INMCC), supported the rescue of 1,917 persons in 75 real distress calls.

## Indian System

Over past 22 years of operations, Indian Space Research Organisation (ISRO) has built and operationalised ground and space systems to provide COSPAS-SARSAT SAR services to national and global community.

Indian ground system consists of **2 LEOLUTs** (one each at Bangalore and Lucknow), **1 GEOLUT** (at Bangalore) and an **INMCC** (at Bangalore) supported by ISTRAC/ ISRO. The Low Earth Orbit Search and Rescue (LEOSAR) system was commissioned during 1989-90, and Indian Geo-stationary Search and Rescue (GEOSAR) System in 1992. ISRO also provides a Geo-stationary space segment for detection of 406 MHz distress signals. Currently **INSAT-3A** is operational, and **INSAT-3D** is due for launch.

The entire system at INMCC is automatic without manual intervention at any stage having redundancy built-in for critical systems, to avoid any kind of human delays. In addition to this, INMCC being a part of international COSPAS-SARSAT System receives distress alerts detected by external Mission Control Centres (MCCs) from Indian registered beacons as well as all other beacons detected in INMCC service area. INMCC provides alerting services to seven neighbouring countries as per COSPAS-SARSAT data distribution policy. These countries are **Bangladesh, Bhutan, Maldives, Nepal, Srilanka, Tanzania and Seychelles**.

ISRO is planning to build ground system for upcoming COSPAS-SARSAT System based on Medium Earth Orbiting (MEO) satellites (GPS, GLONASS, Galileo) known as **MEOSAR** system, which is expected to be fully operational by 2016-



*INMCC Bangalore*

18. Preliminary experiments have already started towards this development.

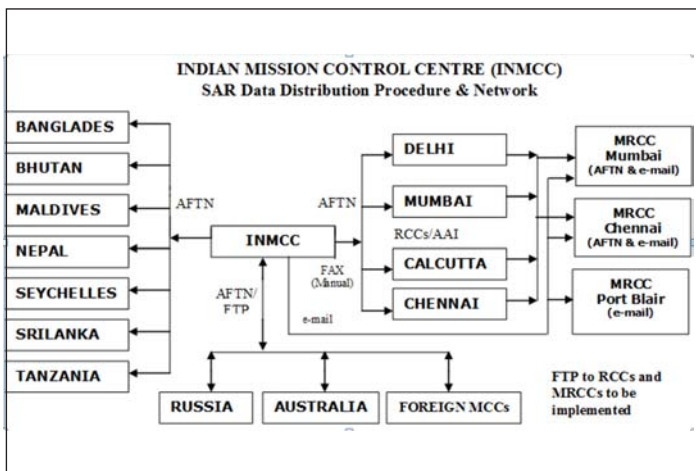
### **Relay Mechanism of Distress Alerts**

After a distress beacon is activated, it is picked-up by Geo and LEO satellites and relayed to all ground stations (known as LUTs) globally in real-time or later as the satellite passes over different LUTs. For Geo satellites, the distress alarm is provided to rescue agencies within 10 minutes from its activation. Here the main limitation is that the location information will not be available if the beacon is non-GPS, but the user identification along with the alert information will be available. For detection by Low Earth Orbiting satellites, the distress unit may have to wait maximum of 200 minutes (as per the current satellite constellation as on March 2013) near equator for a satellite to pass over distress area. Even without GPS, the system provides distress location using Doppler principle. Once the beacon is detected, a distress message is transmitted to nearest Rescue Coordination Centre (RCC/MRCC/SPOC) for initiating SAR action. The RCC/MRCC thereafter looks for registration information available at “INMCC Online Beacon Registration Database”. The alert is then investigated for its authenticity to initiate appropriate SAR action. If the beacon is not registered, rescue authorities may have to spend a lot of time to find owner/user information mainly through coordination with Indian regulatory authorities and sometimes through public database available on Internet. For all Indian beacons, detected outside Indian Search and Rescue Region, MRCCs/RCCs/INMCC will provide the owner contact information, if available in the database to external SAR agencies/MCC concerned. For all inadvertent beacon activations from ships, aircraft or person, RCCs/MRCCs warn/caution the users to avoid such

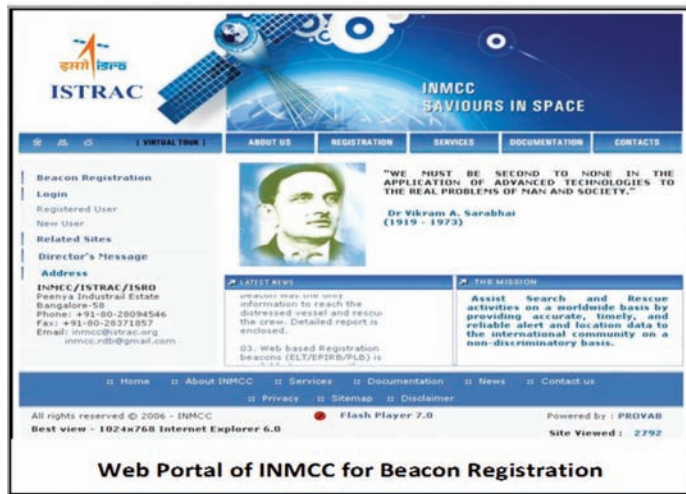
happening in future and to take extreme care while maintaining and handling lifesaving equipment. DG Shipping and Director General Civil Aviation (DGCA) are also informed for taking necessary action against those repeatedly transmitting false alarms. Once alert is detected at INMCC, it is passed on to RCCs/MRCCs within 4 minutes (max). In addition to this, INMCC being a part of international COSPAS-SARSAT system receives distress alerts detected by external MCCs from Indian beacons as well as all other beacons detected in INMCC service area. Once the investigation of the alert is completed, the concerned RCC/MRCC sends an action close-out report to INMCC for compilation of alert statistics. In case of any urgent requirement regarding alert data or information update during SAR mission operations, INMCC may be contacted.

### **INMCC Data Distribution Procedure**

The Indian Mission Control Centre is connected with 04 national Aeronautical Rescue Coordination Centres (ARCCs) of the Airports Authority of India located at Chennai, Mumbai, Delhi and Kolkata, 03 Maritime Rescue Coordination Centres (MRCCs) of India Coast Guard located at Chennai, Mumbai, and Port Blair and 07 Search and Rescue Points of Contacts (SPOCs) of Nepal, Bhutan, Bangladesh, Maldives, Srilanka, Tanzania and Seychelles through Aeronautical Fixed Telecommunication Network (AFTN) backed with email. The Indian MCC automatically detects and transmits any distress alert received from the areas covered under these ARCCs, MRCCs and SPOCs to the respective designated points of contact. The alerts detected outside Indian service area are passed on to Russian and Australian Mission Control Centres for further distribution to respective SPOCs.



beacons can sometimes be accidentally activated through bracket failure or if washed overboard during heavy seas. However, most accidental activations are the result of user errors.



## False Alarms

The majority of Emergency Locator Transmitters (ELTs) and Emergency Position Indicating Radio Beacons (EPIRBs) alerts are false alerts (inadvertent activation of Cospas-Sarsat beacons). As far as 406 MHz beacons are concerned, approximately 07 false alarms are received for every actual emergency. Additionally, four out of five 406 MHz false alarms are resolved with phone calls. **“False alerts have a negative impact on search and rescue resources worldwide. They tie up people and equipment/resources that would otherwise be available to respond to a real distress call...”**. The false alerts are costly to pursue and put search and rescue personnel/crews at possible risk in adverse environments. ELTs and EPIRBs are highly sensitive electronic devices designed to automatically activate and transmit a signal under pre-determined conditions. For ELTs, this occurs when sensors in the beacon detect the shock of a plane crash. EPIRBs, on the other hand, are activated when the beacon is immersed in water as a result of a ship sinking, or tossed overboard by the user during a distress situation. They can also get triggered accidentally in non-distress situations. In the case of ELTs, inadvertent activations can be caused by extreme turbulence or hard landings. With EPIRBs,

Be especially careful not to activate the beacon when checking battery power or doing beacon self-testing. While removing the beacon for maintenance or shipping, switch off the beacon power and remove the battery.

## Action after Inadvertent Activation of a Distress Beacon

In case of accidental activation, turn off the beacon immediately, then contact any RCC/MRCC or nearest SAR authorities to inform that the false alert was transmitted and should be cancelled by providing beacon’s fifteen-character identification code. You can also send an email to SAR e-group id: [indiasar@istrac.org](mailto:indiasar@istrac.org). It is a violation of international regulations to intentionally transmit a false alert. Doing so could result in fines. Repeated false alerts, although not intentional, could also result in penalties.



## **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)**

