# 2020 Annual Report



# MARITIME RESCUE CO-ORDINATION CENTRE - COLOMBO

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#### MARITIME RESCUE COORDINATION CENTRE COLOMBO ANNUAL REPORT 2020

# MRCC Colombo in Brief

 Geo-strategic location of Sri Lanka is situated in the middle of the Indian Ocean, approx 17 NM from the Indian Intercontinental. Traffic Separation Scheme which is approx.
NM from Dondra light. It is the busiest and the biggest sea route joining East-West, transferring trade and other essential goods.

2. Sri Lanka Navy (SLN) became the national responsible authority for the conducting of Maritime Search and Rescue (SAR) operations around Sri Lanka's SAR region from 10<sup>th</sup> April 2014. Maritime Rescue Coordination Centre (MRCC) Colombo is monitoring and manned around the clock by qualified and trained staff at the Naval Headquarters under the Director Naval Operations (DNO). The main purpose is to assist distress vessels by all possible means.

3. For better coordination at the distress occurred in a vessel/ Aircraft, Air Rescue Coordination Centre (ARCC), Department of Fisheries and Aquatic Resources (DFAR), Colombo Radio (Presently at the same location at MRCC Colombo) and adjacent Rescue Coordination Centre (RCC) acting as the alerting posts. SLN, Sri Lanka Air Force (SLAF) and Sri Lanka Coast Guard (SLCG) perform as major SAR facility providers. Maritime SAR facilities provide by SLN and SLCG whilst SLAF provide aeronautical SAR facilities. The most resourceful maritime arm of the country is an added advantage at MRCC operations in several capacities ranging from access to Maritime Domain Awareness (MDA) tools to timely deployment of SAR facilities.

4. During the year 2020, 309 distressed incidents were reported to MRCC Colombo and all the incidents have been handled swiftly by the staff with proven standard operation procedures. Among 309 incidents 228 were reported by the Sri Lankan Fishing Vessels (SLFV) and 46 by the Merchant Vessels (MV). It is 73.8% and 14.8% respectively whilst sharing others 11.4% with foreign fishing, pleasure, military and Aircraft. The strenuous effect made by the MRCC Colombo was rewarded with the saving of the lives of 117 seafarers in 2020.

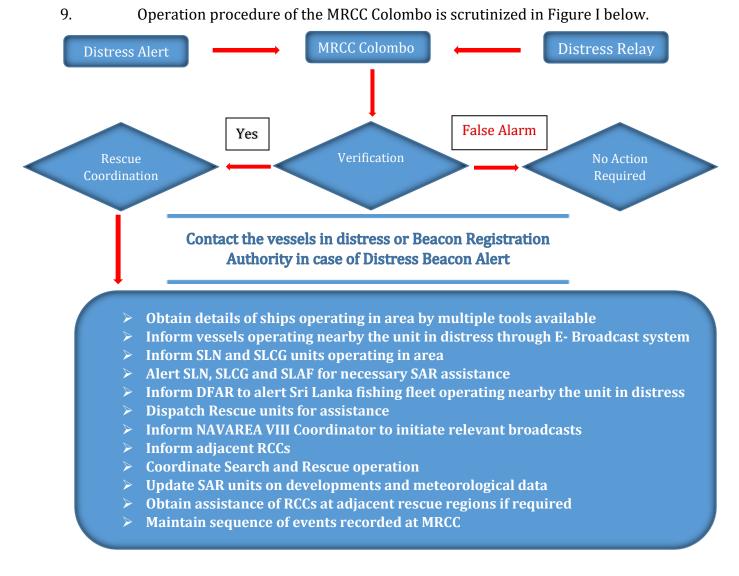
# **Operation Procedure of MRCC Colombo**

5. On receipt of distress alert to MRCC Colombo, the following procedure is adopted to ensure a prompt and precise response to the distress incidents. Collaborative operations with adjacent MRCCs have synergized the effort made by the MRCC Colombo.

6. As the initial step, each incident reporting to MRCC Colombo is recorded in a log sheet which will be the checklist for the MRCC Operations. All necessary details related to the maritime distress will be collected and all possible means to coordinate SAR operation will be considered at the MRCC Colombo Operations room. Upon verification, the best course of action will be triggered ensuring the safety of life at sea.

7. With continuous monitoring of the situation, updates of the locations relating to distress vessels will be shared with adjacent MRCCs and the E-Broadcast facility will be utilized to inform MVs operating in the same area to obtain possible SAR assistance. Derived information including meteorological details pertaining to the interested sea area will be shared with the SAR units to strengthen the SAR operation.

8. Records are maintained with the sequence of events and the feedback from the survivors to improve future SAR operations. Reports are generated monthly and annually and disseminated among entities involving/ assisting SAR operations.



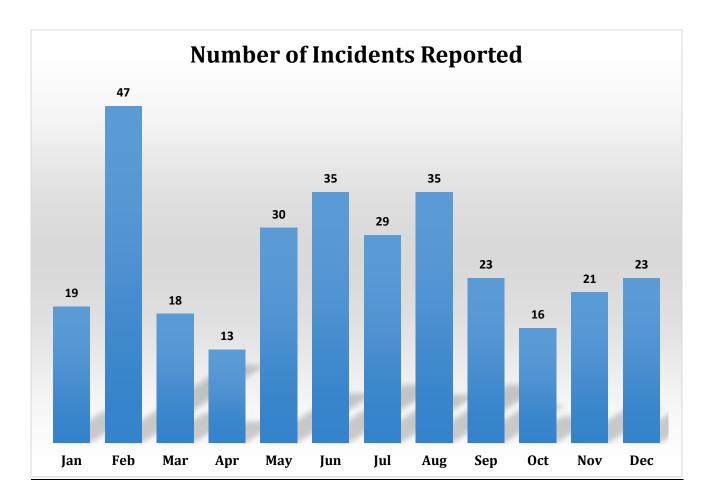
# Figure - I: Action Plan of MRCC Operations

10. **Log/ Registers Maintained at MRCC Colombo.** The undermentioned logs and registers are maintained by the MRCC Colombo.

a.	MRCC Register -	List of incidents reported to MRCC Colombo.
b.	MRCC Log -	Detailed report on the incident reported.
C.	MRCC Daily Records -	Daily update of all events until the completion of
		SAR operation.

#### **OVERVIEW OF the YEAR 2020**

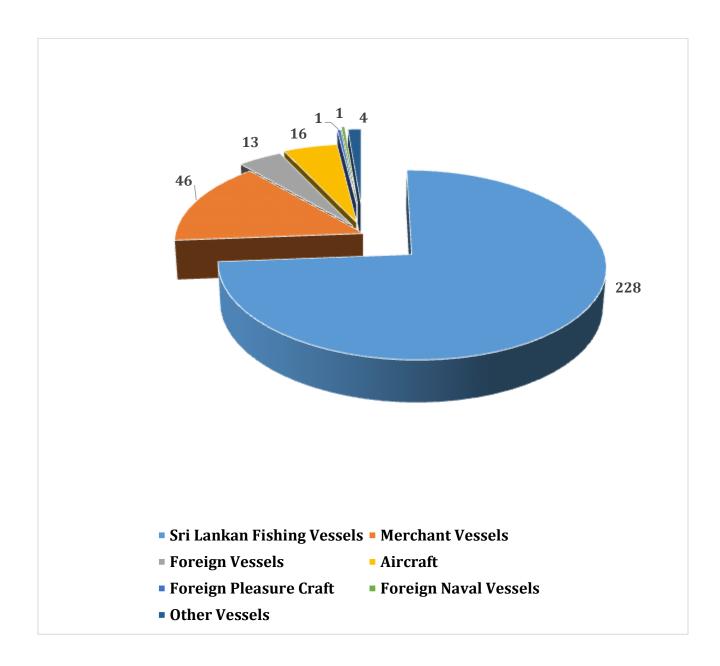
11. **Number of Distress Incidents Reported to MRCC Colombo.** During the year 2020, MRCC Colombo received 309 incidents with an average of 26 incidents per month. A graphic presentation of the number of distress incidents reported per month in 2020 is placed in Graph I and pictorial appearance are available in Figure II.



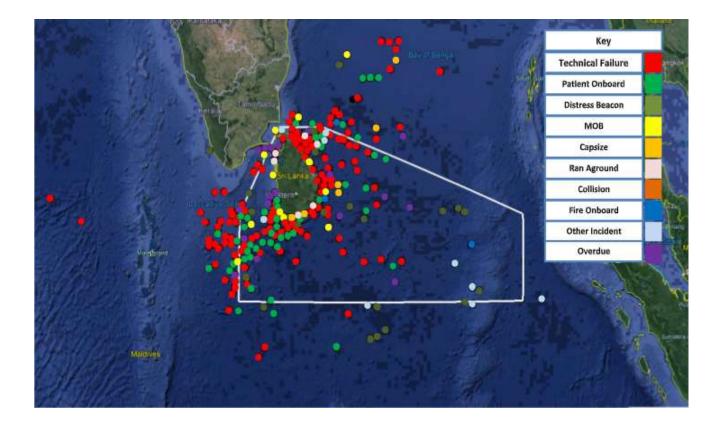
#### <u>Graph – I: Number of Distress Incidents Reported per Month During 2020</u>

12. **Types of Platforms Reported in Distress**. Categorization of 309 distress incidents reported to the MRCC Colombo in 2020 based on the type of platform indicated below and graphically presented by Graph II. Figure II below illustrate the distribution of incidents reported in 2020.

a.	Sri Lankan Fishing Vessels	-	228
b.	Merchant Vessels	-	46
C.	Foreign Fishing Vessels	-	13
d.	Aircraft	-	16 (Emergency Locator Beacon Alerts)
e.	Foreign Pleasure Craft	-	1
f.	Foreign Naval vessels	-	1
g.	Other Vessels	-	4



**Graph- II: Types of Platforms Reported in Distress 2020** 

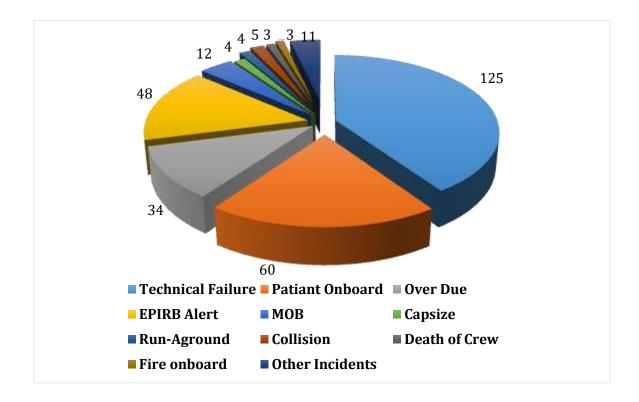


# Figure - II: Nature of Distress Reported in 2020

13. According to the reports of DFAR, approximately 5200 Sri Lankan Multiday fishing vessels are sailing in high seas, hence it is obvious that 73.79% of distress incidents are to happen within the Sri Lankan fishing vessels. It is observed that the decline of distress incidents compare to 2019.

14. **Types of Incidents Reported during the Year 2020**. Types of incidents reported to the MRCC Colombo in 2020 has been listed below and graphically presented in Graph III.

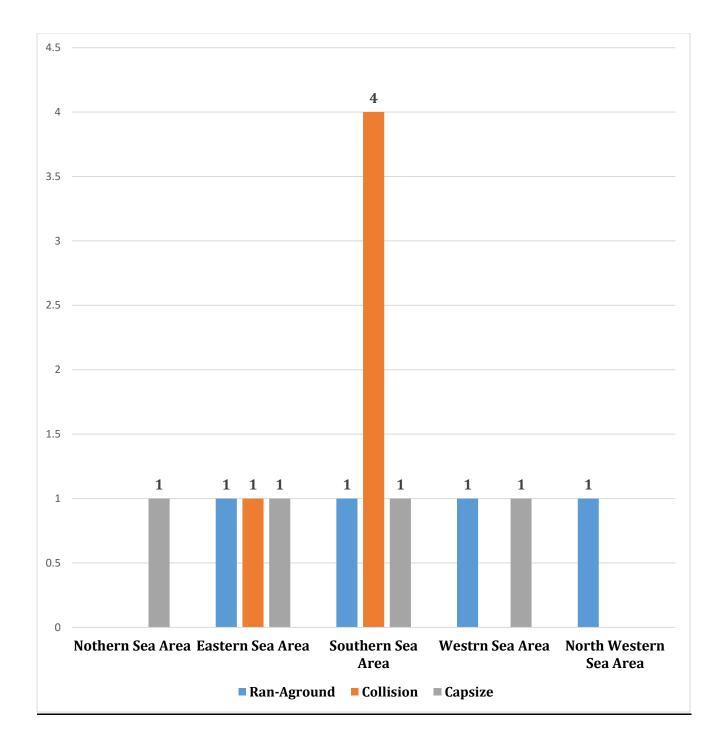
a.	Fishing vessels drifting due to technical breakdown	-	125
b.	Patients onboard and required medical assistance	-	60
с.	Fishing vessels ceased communication or overdue	-	34
d.	Alerts generated by Distress Beacons	-	48
e.	Man Over Board	-	12
f.	Capsizing of vessels	-	4
g.	Vessel run – aground	-	4
h.	Collision	-	5
j.	Death of a crew member	-	3
К	Fire on board	-	3
l.	Other incidents	-	11



# **Graph- III: Types of Incidents Reported in Distress in 2020**

15. 40.77% of distress incidents reported to MRCC Colombo were relevant to the technical breakdowns of Sri Lankan fishing vessels. MRCC Colombo coordinated those in different capacities, which vary from securing, towing and technical assistance with spares support from the Sri Lanka Navy.

16. Total 13 incidents of the collision, run - aground and capsizing of vessels were reported to the MRCC Colombo from around the country in the year 2020, out of 6 incidents reported which accounted for 46%, Southern sea becomes the most disaster-prone area comparing to the above categories. Graph IV presents the data comparison for the year 2020. 04 run - aground vessels and 04 capsized vessels were abandoned later with the development of the incidents. Figure II illustrates the pictorial distribution of the above incidents in 2020.



#### **NUMBER OF INCIDENTS IN SEA AREAS**

<u>Graph IV: Area wise Distribution of Vessels Run - Aground, Collided and Capsized in</u> <u>2020</u>

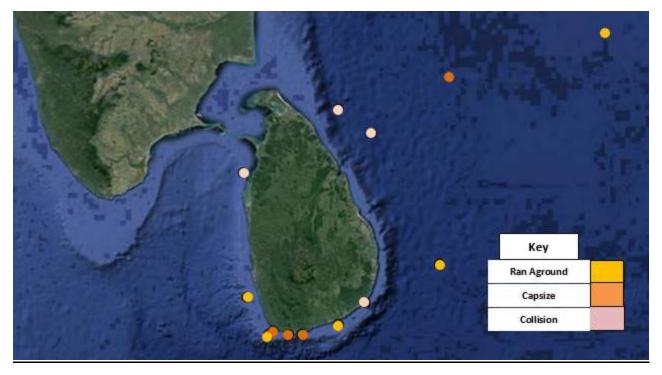


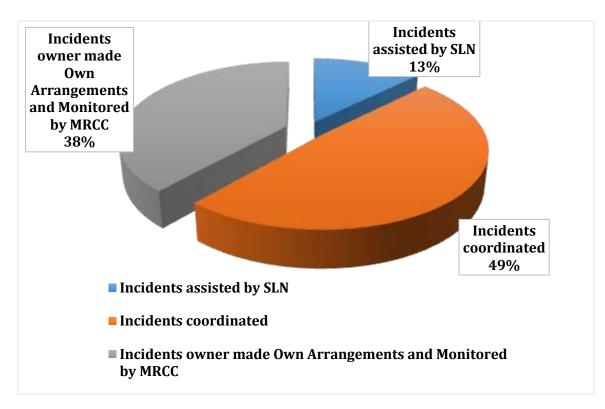
Figure- III: Vessels Ran Aground, Collided and Capsized in 2020

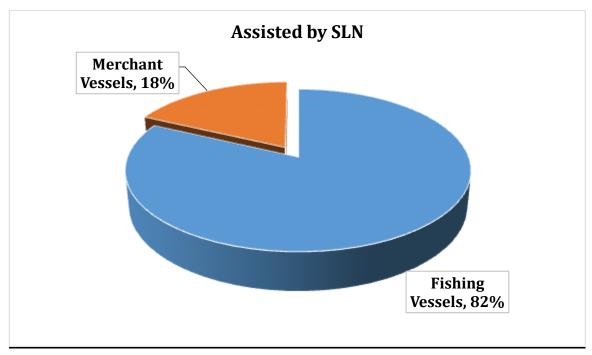
# Actions initiated by the MRCC Colombo

17. **Actions initiated against Distress Alerts Reported**. Actions initiated by the MRCC Colombo on receipt of distress alerts are depicted in Table I and graphically presented by Graph V.

Sr.	Month	Incidents	Incidents	Incidents	Incidents owner made Own	No. of
		Reported	assisted	Coordinated	Coordinated Arrangements and Monitored	
			by SLN		by MRCC	Saved
01	January	19	06	09	04	15
02	February	47	02	19	26	01
03	March	18	02	06	10	05
04	April	13	-	08	05	-
05	Мау	30	06	17	07	22
06	June	35	03	14	18	04
07	July	29	04	16	09	01
08	August	34	07	13	14	30
09	September	24	02	11	11	23
10	October	16	02	10	04	06
11	November	21	04	13	04	10
12	December	23	01	15	07	-
Tota	l	309	39	151	119	117

# Table- I: Actions Initiated by MRCC Colombo in 2020





Graph - V: Action initiated by MRCC Colombo in 2020

# Graph - VI: Incidents Assisted by SLN

18. Through the verifications were proved that 117 incidents reported to the MRCC Colombo, were not required to be assisted directly as lives of the seafarers were not in danger, the crew onboard being in a position to rectify the technical breakdowns/ defects or the owner of the vessel in distress being able to arrange to tow by another nearby fishing vessel or sending another fishing vessel to tow. In such incidents, the owners of distressed fishing vessels were provided with real-time details of fishing vessels operating in the same area with the help of MDA tools available at MRCC Colombo and area

operations rooms. At the same time, MRCC Colombo with the assistance of the Sri Lanka Navy monitored all such incidents until the defect rectified or the vessel towed safely to the harbour. The success rate of MRCC for the year 2020 was 99.14%. Only one death occurred after reporting distress to the MRCC Colombo.

19. 151 incidents reported to MRCC Colombo which shares 49% of the total were coordinated in liaison with the NAVAREA VIII Coordinator, observed a significant increase of coordinated incidents compare with the 2019 and relevant MRCCs, through which the assistance of foreign State-owned maritime assets and MVs operating in respective areas were secured as SAR assistance.

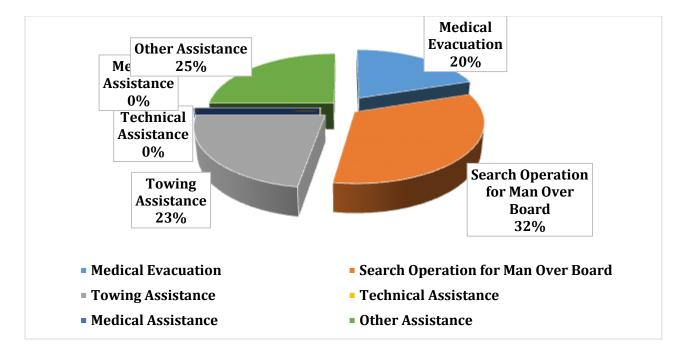
20. MRCC Colombo was able to secure the direct assistance of SLN by deploying naval assets at various capacities in 39 incidents which accounted for 13% of incidents reported during 2020, ensuring the serenity for the seafarers at Sri Lanka's SAR region. The nature of assistance provided by the SLN is tabled below.

Nature of Assistance Provided by Sri Lanka Navy	Number of Incidents
Medical Evacuation	08
Search Operation for Man Over Board	13
Towing Assistance	09
Technical Assistance	00
Medical Assistance	00
Other Assistance	10
Total	40

# Table- II: Nature of Assistance Provided by Sri Lanka Navy

21. 20 out of 41 incidents in which MRCC Colombo secured the assistance of SLN were for Medical Evacuations (MEDEVAC) sharing 48.7%. Expeditious respond of SLN on such incidents continued until the transfer of patients to the hospital or being transferred to the harbour.

22. Units engaged in surveillance patrol and the units at naval harbours were directed to conduct these SAR operations. Limited platforms available with SLN were utilized for these operations effectively and efficiently, where the maximum number of distressed out at sea were promptly served. Graph VII illustrate the summary of the nature of assistances provided by SLN utilizing naval assets at the requests of MRCC Colombo.

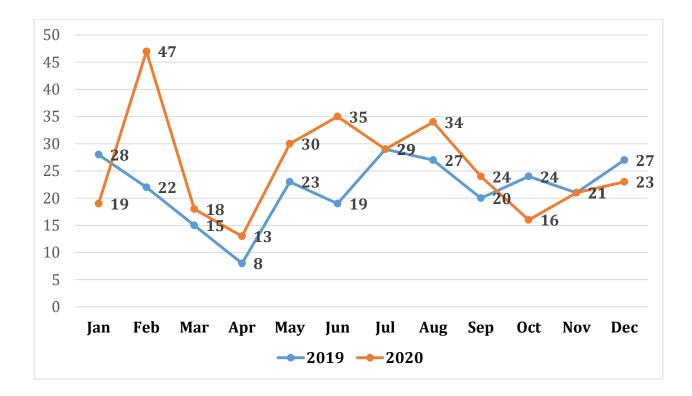


<u>Graph – VII: Nature of Assistance Provided by the Sri Lanka Navy</u>

23. <u>Alerts Generated by Distress Beacons</u>. Distress alerts generated by Distress Beacons (Emergency Position Indicating Radio Beacon, Emergency Location Transponder and Personal Locator Beacon) were relayed to the MRCC Colombo by the ARCC Colombo for providing the required assistance. Staff at MRCC Colombo verifies the distress alert directly from the subjected platform or by contacting relevant authorities via emails and through voice as per operational instructions. 48 alerts generated by such beacons were received by the MRCC Colombo in 2020 and all of them found to be false or generated during the exercises.

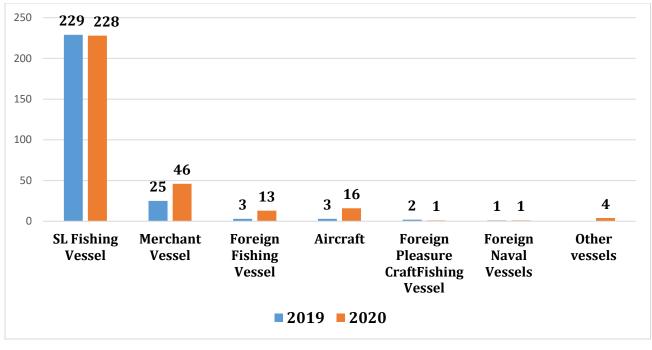
# Comprehensive Analysis with Comparison to the Year 2020.

24. 26 incidents per month in 2020 marked a comparatively higher (28%) than the 22 incidents reported per month in 2019. Comparison of the incidents reported at MRCC Colombo in 2019 and 2020 on monthly basis is demonstrated by Graph VIII.



#### <u>Graph – VIII: Comparison of Incidents Reported to MRCC monthly</u>

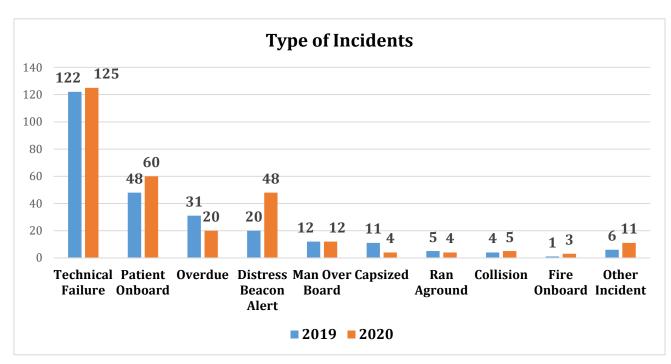
25. Total 263 incidents reported in distress during the year 2020 marked a marginal decrease of 12 incidents compared to 2019. Further, a similar trend in the types of platforms in distress with minimal deviations was also identified. Comparing to 2019, Sri Lankan fishing vessels and Merchant vessels reported in distress have decreased by 4 and 1 numbers respectively in 2020. Foreign military vessels, foreign fishing vessels and pleasure craft in distress have increased by 1, 2 and 1 numbers respectively in 2020 whilst the number of Aircraft reported in distress remained the same. Comparison of the platforms reported in distress is demonstrated by Graph IX.



**Type of Platforms** 

# Graph – IX: Comparison of Platforms Reported in Distress

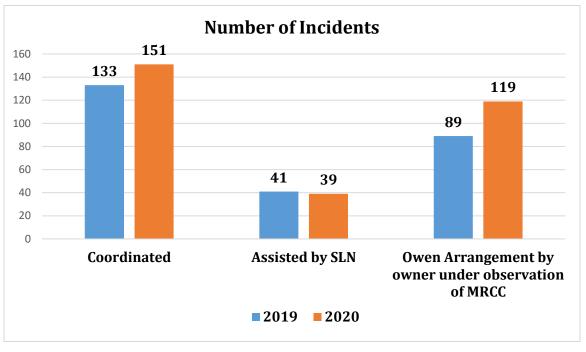
26. Analysis of incidents reported to the MRCC Colombo in the year 2019 and 2020 revealed a similar tendency at numerous categories with marginal deviations. Reports on a technical failure, patient onboard, Distress Beacons, collision, a fire onboard and other incidents and of vessels have increased by 3, 12, 28, 1, 2 and 5 numbers respectively in 2019. Incidents of capsizing ran aground and overdue vessels have decreased by 7, 1 and 11 numbers respectively in 2020 whilst the Man Over Board and death onboard incidents remained the same. Comparison of Type of Incidents Reported in 2020 by Graph X.



#### <u>Graph – X: Comparison of Type of Incidents Reported in 2020</u>

27. Significant increase of EPIRB alerts by 140%, a fire onboard by 200%, collision by 25%, patient onboard by 25%, technical failure by 2.45% and other incidents by 83.33% were discovered in the year 2020. However, declining of capsizing of vessels by 63.63%, ran aground by 20% and vessel overdue by 35.48%. Man Over Board and the death onboard remains the same as relevant to both years all such incidents were related to the Sri Lankan fishing vessels. Graph X denotes the comparison based on the types of incidents reported to MRCC Colombo.

28. Compared to 2019, incidents coordinated by MRCC and incidents in which the owner has initiated own arrangements have increased in 2020 by 18 and 30 numbers respectively. The numbers of incidents assisted by the SLN have decreased by 02 numbers in 2020. Comparison of Actions Initiated by MRCC Graph XI.

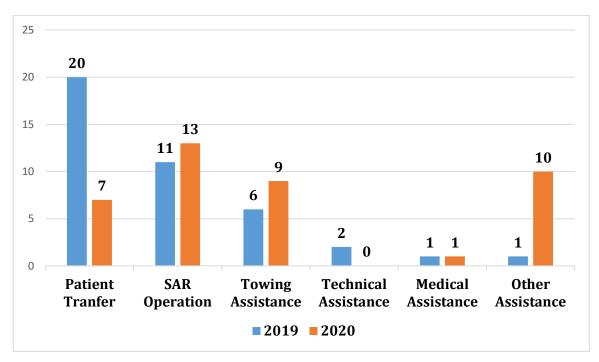


# **Actions Initiated by MRCC Colombo**

# **Graph – XI: Comparison of Actions Initiated by MRCC**

29. Transfer of patients and Technical assistance marked a declination of 65% and 200% respectively in 2020. SAR Operation, Towing Assistance and Other Assistance marked an increase of 18%, 50% and 1000% respectively in 2020. Medical Assistance provided remain as same as 1 in both year 2019 and 2020. Incidents at which SLN provided direct assistance are graphically demonstrated by Graph XII.

30. MRCC activities resulted in the saving of 117 lives in 2020, which is increased by 3.9% compared with 2019. The cost sustained by the SLN for assisting the distressed at sea in 2020 has increased by Rs. 259,187,799.82 compared to 2019. Comparison of the lives saved and the cost incurred by SLN for assisting distress incidents on monthly basis is demonstrated in Table III.



#### **Graph – XII: Types of Assistance Provided by Sri Lanka Navy**

Table- III: Comparison of Lives Saved and Cost Incurred	hv SLN for
<u>Table III. Comparison of Lives Saveu and Cost mean cu</u>	DV JEN IUI

	Assisting Distress incluents in Montiny Dusis						
Sr.	Month	Incidents Assisted by SLN		Lives Saved		d Cost Incurred (Rs.)	
		2019	2020	2019	2020	2019	2020
01	January	05	6	10	15	1,850,095.34	1,237,215.15
02	February	03	2	05	1	503,501.91	1,052,201.73
03	March	04	2	02	5	820,087.37	60,655.63
04	April	01	-	01	-	47,162.19	-
05	May	04	6	52	22	333,375.79	519,237.89
06	June	05	3	03	4	2,512,246.62	21,944.89
07	July	02	4	02	1	6,858,658.75	6,353,376.18
08	August	09	7	13	30	5,874,047.91	5,172,106.92
09	September	03	2	07	23	6,017,631.22	271,026,177.98
10	October	01	2	01	6	1,266,311.51	1,346,843.85
11	November	-	4	-	10	-	361,353.75
12	December	04	1	07	-	1,946,175.44	65,979.90
	Total	41	39	103	117	28,029,294.05	287,217,093.87

#### **Assisting Distress Incidents in Monthly Basis**

# Special Remarks

31. Explosion on board MT 'New Diamond' (IMO 9191424) carrying 270,000 Ton of Crude Oil, off the South-eastern coast of Sri Lanka was relayed by MT 'Helen M' to the MRCC Colombo at 0805 hrs on 03<sup>rd</sup> September 2020. Assuming the SAR Mission Coordination, MRCC Colombo instructed MT 'Helen M' to assist the vessel in distress as feasible and directed Sri Lanka Navy Ships (SLNS) Sayura and Ranarisi for the rescue mission. MT 'Helen M' recovered 19 crew members abandoned the ship whilst SLNS Ranarisi evacuated the critically injured 3<sup>rd</sup> Engineer and SLNS Sayura rescued the master. Pumpman remained on board until the situation onboard MT 'New Diamond' become aggravated with several explosions on board.

32. Fire was completely extinguished with the joint effort by the Navies, Coast Guards and Air force of Sri Lanka and India with the SMIT Salvage Pte Ltd. After re-establishing watertight integrity of the vessel, towing of stricken VLCC MT 'NEW DIAMOND' was commenced at 1700 hrs on 01<sup>st</sup> October 20 by the Ocean-going Tug 'BOKA Expedition' (IMO No. 9258943). The convoy was escorted by SLNS Sindurala and SLNS Samudura up to the Western border of SLSRR and handed over to MRCC Mumbai on 04<sup>th</sup> October 2020 and casualty ship MT New Diamond reached UAE port Khor Fakkan on 09<sup>th</sup> November 2020.

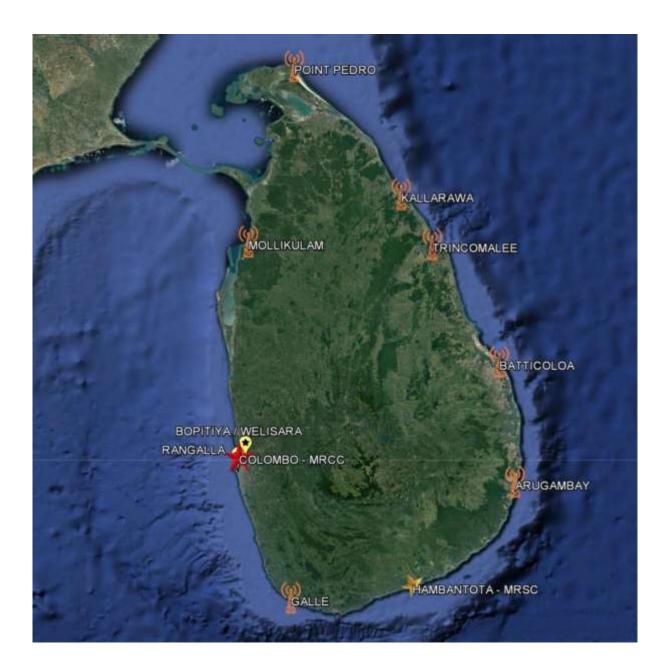
# <u>Conclusion</u>

33. Sri Lanka Navy became the national responsible authority for the conducting of Maritime Search and Rescue operations around Sri Lanka's SAR region since 10<sup>th</sup> April 2014 which is 27 times of its landmass. Maritime Rescue Coordination Centre Colombo is monitoring and manned round the clock by qualified and trained staff at the Naval Headquarters under the Director of Naval Operations. The main purpose is to assist distress vessels by all possible means.

34. 309 numbers of incidents reported during the year 2020 and all incidents have been handled swiftly by MRCC Colombo. 190 numbers of incidents were assisted and coordinated by the Sri Lanka Navy. The strenuous effort made by the MRCC Colombo saving the lives of 117 seafarers during the year 2020. The success rate for the year 2020 was 99.14%. 48 numbers EPIRB alerts were reported to MRCC Colombo during the year 2020 and all of the alerts were either false alerts or alerts generated during the exercises. The number of platforms reported in distress during the year 2020 has increased by 46 incidents compared to the year 2019. 22 monthly average incidents were reported to MRCC Colombo in 2019 and 26 in the Year 2020.

35. Every incident reporting to MRCC Colombo is either handled with support from the Sri Lanka Navy by dispatching naval platforms to render assistance or handled with coordination of the NAVAREA VIII Coordinator by the staff of MRCC Colombo with proven standard operating procedures.

36. The process is ongoing to upgrade the SAR coordinating mechanism of Sri Lanka which is to be established a network of 01 Maritime Rescue Coordinating Centre, 01 Maritime Rescue Sub Centre and 07 substations covering the entire coastal area of Sri Lanka. Figure IV illustrate the planned establishment of the MRCC network.



# Figure IV: The planned establishment of MRCC network