2019 Annual Report



MRCC - COLOMBO

MARITIME RESCUE CO-ORDINATION CENTRE - COLOMBO

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MARITIME RESCUE COORDINATION CENTRE COLOMBO ANNUAL REPORT 2019

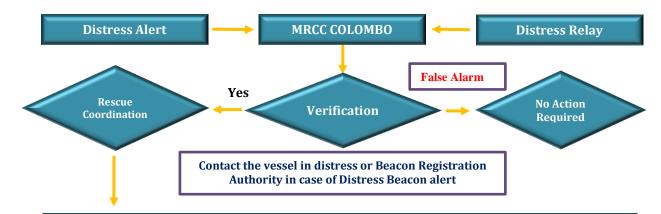
MRCC Colombo in Brief

- 1. On 10th April 2014, Sri Lanka Navy (SLN) became the national authority responsible for the conduct of Maritime Search And Rescue (SAR) operations in Sri Lanka's SAR region. Maritime Rescue Coordination Centre (MRCC) Colombo is manned round the clock by trained staff at Naval Head Quarters under the Director Naval Operations (DNO) to assist vessels in distress by all possible means.
- 2. At the process of coordinating maritime disaster incidents, Air Rescue Coordination Centre (ARCC), Department of Fisheries and Aquatic Resources (DFAR), Colombo Radio and adjacent Rescue Coordination Centres (RCC) acting as alerting posts whilst the SLN, Sri Lanka Air Force (SLAF) and Sri Lanka Coast Guard (SLCG) perform as major SAR facility providers. SLN and SLCG provide the service of maritime SAR facilities whilst SLAF provide aeronautical SAR facilities. MRCC Colombo being functioned under SLN, 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.
- 3. During the year 2019, 263 distress incidents were reported to MRCC-Colombo and all the incidents have been handled swiftly by the staff with proven standard operation procedures. Among 263 incidents, 229 were reported by the Sri Lankan Fishing Vessels (SLFV) and 25 by the Merchant Vessels (MV) sharing 87% and 10% respectively whilst foreign fishing, pleasure and military vessels and Aircraft share the rest of 3%. Strenuous effort made by the MRCC Colombo was rewarded with saving lives of 103 seafarers in 2019.

Operation Procedure of MRCC Colombo

- 4. On receipt of distress alert to MRCC, following procedure is adopted to ensure prompt and precise response to the distress incidents. Collaborative operations with adjacent MRCCs have synergized the effort made by the MRCC Colombo.
- 5. 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 Operations room. Up on verification, best course of action will be triggered ensuring safety of the life at sea.
- 6. 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 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.
- 7. Records are maintained with sequence of events and the feedbacks from the survivors to improve future SAR operations. Repots are generated monthly and annually and disseminated among entities involving/ assisting SAR operations.

8. Operation procedure of the MRCC Colombo is scrutinized at figure I below.



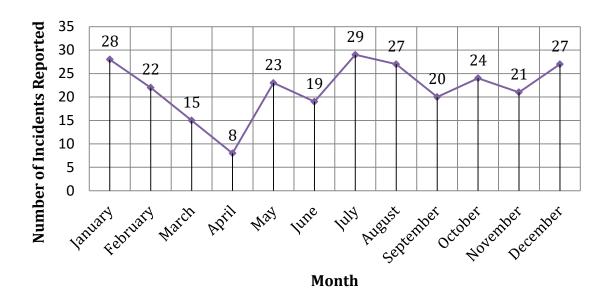
- Obtain details of ships operating in area by multiple tools available
- Inform vessels operating nearby the unit in distress through E- Broadcast system
- Inform SLN and SLCG units operating in area
- Alert SLN, SLCG and SLAF for necessary SAR assistance
- Inform DFAR to alert Sri Lanka fishing fleet operating nearby the unit in distress
- Dispatch Rescue units for assistance
- Inform NAVAREA VIII Coordinator to initiate relevant broadcasts
- Inform adjacent RCCs
- Coordinate Search and Rescue operation
- Update SAR units on developments and meteorological data
- Obtain assistance of RCCs at adjacent rescue regions if required
- Maintain sequence of events recorded at MRCC

Figure - I: Action Plan of MRCC Operations

- 9. <u>Logs/ Registers Maintained at MRCC Colombo</u>. Following logs are maintained at the MRCC Colombo.
 - a. MRCC Register List of incidents reported to MRCC Colombo.
 - b. MRCC Log Detailed report on incidents reported.

OVERVIEW OF YEAR 2019

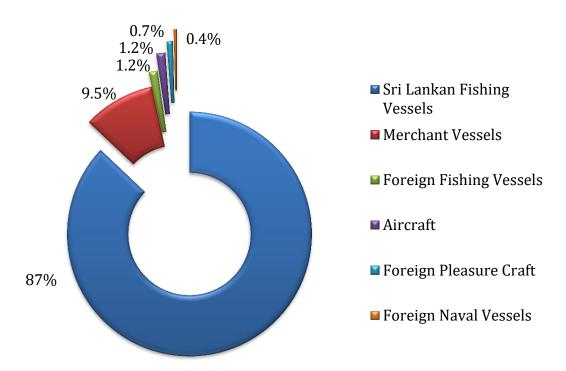
10. <u>Number of Distress Incidents Reported to MRCC Colombo</u>. During the year 2019, MRCC Colombo received 263 incidents with an average of 22 incidents per month. Graphical presentation of the No. of distress incidents reported per month in 2019 is placed at graph I and pictorial appearance is available as Figure II.



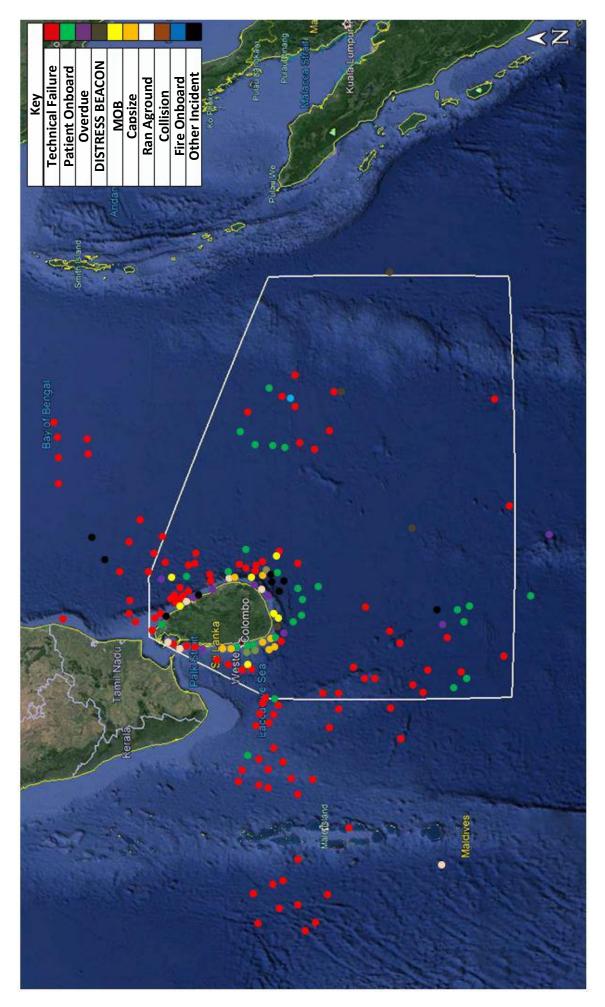
Graph - I: Number of Distress Incidents Reported per Month During 2019

11. **Types of Platforms Reported in Distress**. Categorization of 263 distress incidents reported to the MRCC Colombo in 2019 based on the type of platform indicated below and graphically presented by graph II. Figure II below illustrate the distribution of incidents reported in 2019.

a.	Sri Lankan Fishing Vessels	-	229
b.	Merchant Vessels	-	25
C.	Foreign Fishing Vessels	-	3
d.	Air Craft	-	3 (Emergency Locator Beacon Alerts)
e.	Foreign Pleasure Craft	-	2
f.	Foreign Naval vessels	_	1

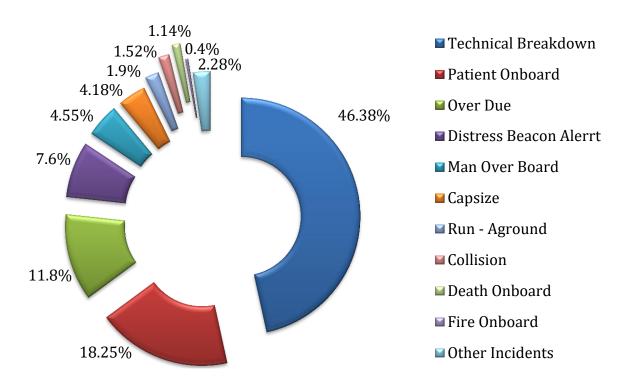


Graph-II: Types of Platforms Reported in Distress in 2019



- 12. According to the reports of DFAR, approximately 5000 Sri Lankan Multiday fishing vessels are sailing in high seas, hence it is obvious that 87% of distress incidents are liable to be happened within the Sri Lankan fishing folk.
- 13. **Types of Incidents Reported during Year 2019**. Types of incidents reported to the MRCC Colombo in 2019 have been listed below and graphically presented at graph III.

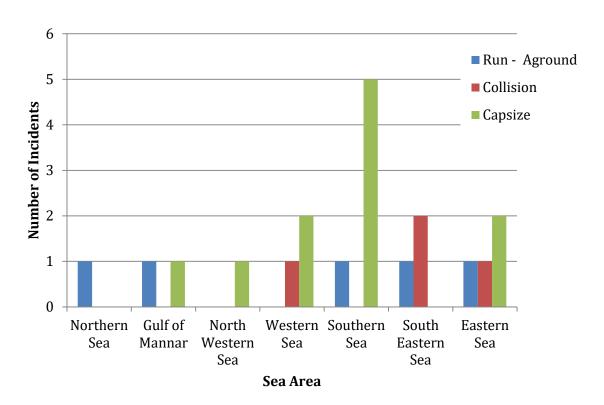
a.	Fishing vessels drifting due to technical Breakdown	- 122
b.	Patients onboard and required medical assistance	- 48
c.	Fishing vessels ceased communication or overdue	- 31
d.	Alerts Generated by Distress Beacons	- 20
e.	Man Over Board	- 12
f.	Capsizing of vessels	- 10
g.	Vessel run - aground	- 05
h.	Collision	- 04
j.	Death of a crew member	- 03
k	Fire on board	- 01
l.	Other incidents	- 06



Graph -III: Types of Incidents Reported During 2019

14. 46.38 % of the distress incidents reported to MRCC Colombo were pertaining to the technical breakdowns of Sri Lankan fishing vessels. MRCC Colombo coordinated those in different capacities, which vary from securing and towing assistance to technical assistance with spares support from the Sri Lanka Navy.

15. Incidents of collision, run - aground and capsizing of vessels were reported to the MRCC Colombo from all around the country in year 2019. With 8 incidents reported which accounted for 40%, Southern sea become most disaster prone area with respect to above categories. Graph IV presents the data comparison of year 2019. 3 ran aground vessels and one capsized vessel were abandoned later with development of the incidents. Figure II illustrates the pictorial distribution of above incidents in 2019.



Graph IV: Area wise Distribution of Vessels Ran Aground, Collided and Capsized in 2019

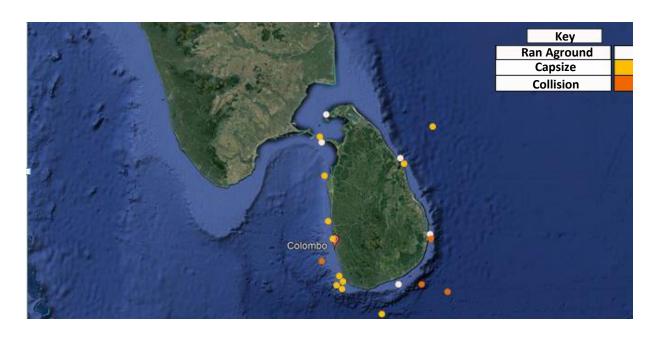


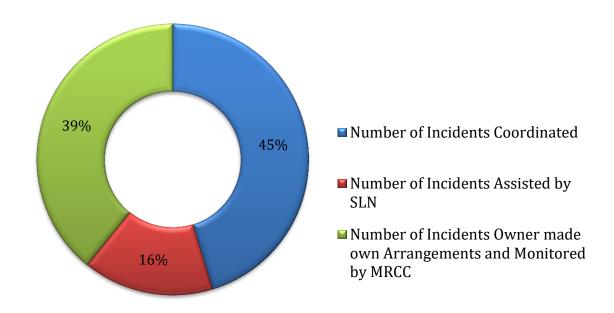
Figure- III: Vessels Running Aground, Collided and Capsized in 2019

Actions initiated by the MRCC Colombo

16. <u>Actions initiated against Distress Alerts Reported</u>. Actions initiated by the MRCC Colombo on receipt of distress alerts are depicted at table I and graphically presented by the Graph V.

Table- I: Actions Initiated by MRCC Colombo in 2019

Sr.	Month	Incidents	Incidents	Incidents	Incidents owner	No. of
		Reported	assisted	Coordinated	made Own	Lives
			by SLN		Arrangements and	Saved
					Monitored by MRCC	
01	January	28	05	05	18	10
02	February	22	03	11	08	05
03	March	15	04	09	02	02
04	April	08	01	06	01	01
05	May	23	04	14	05	52
06	June	19	05	06	08	03
07	July	29	02	09	18	02
08	August	27	09	10	08	13
09	September	20	03	08	09	07
10	October	24	01	16	07	01
11	November	21		10	11	-
12	December	27	04	15	08	07
Tota	al	263	41	119	103	103



Graph - V: Action initiated by MRCC Colombo in 2019

17. Through verification, it was proved that for 103 incidents reported to the MRCC Colombo, were not required to be assisted directly as lives of the seafarers were not in danger, crew onboard being in a position to rectify the technical breakdowns or the owner of vessel in distress being able to arrange towing by another nearby fishing vessel. In such incidents, owners of distressed fishing vessels were provided with real time details of fishing vessels operating in same area with the help of MDA tools available at MRCC Colombo and Naval

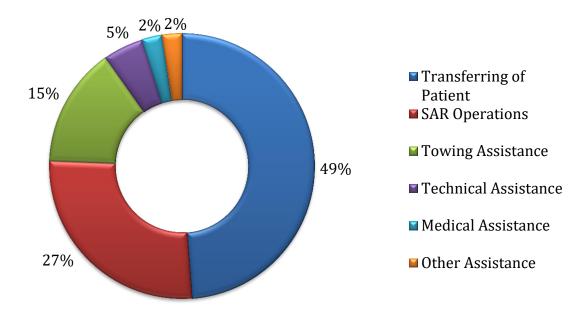
operations room. At the same time, MRCC Colombo with the assistance of SLN monitored all such incidents until the defect rectified or vessel towed to the harbour.

- 18. 119 incidents reported to MRCC Colombo which share 45% of the total were coordinated in liaison with NAVAREA VIII Coordinator and relevant MRCCs, through which the assistance of foreign State owned maritime assets and MVs operating in respective areas were secured as SAR assistance.
- 19. MRCC Colombo was able to secure the direct assistance of SLN by deploying naval assets at various capacities in 41 incidents which accounted for 16% of incidents reported during 2019, ensuring the serenity for the seafarers at Sri Lanka's SAR region. Nature of assistances provided by the SLN is tabled below.

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

Nature of Assistances Provided by Sri Lanka Navy	Number of Incidents
Medical Evacuation	20
Search Operation for Man Over Board	11
Towing Assistance	06
Technical Assistance	02
Medical Assistance	01
Other Assistance	01
Total	41

- 20. 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 on being transferred to the harbour.
- 21. Units engaged in surveillance patrol and the units at naval harbours were directed by the SLN to conduct these SAR operations. Limited platforms available with SLN were utilized for these operations in such a way, where maximum number of distressed out at sea were promptly served. Graph VI illustrate summery of the nature of assistances provided by SLN utilizing naval assets at the request of MRCC Colombo.

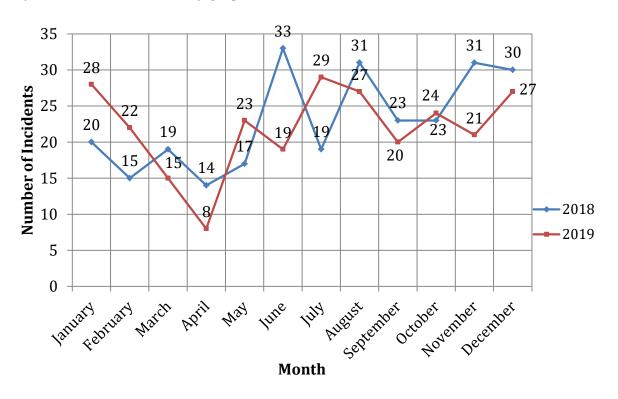


<u>Graph - VI: Nature of Assistance Provided by the Sri Lanka Navy</u>

22. <u>Details of 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 Air Rescue Coordination Centre (ARCC) Katunayaka for providing required assistance. Staff at MRCC Colombo verifies the distress alert directly from the subjected platform or by contacting relevant authorities as per operational instructions. 20 alerts generated by such beacons were received by the MRCC Colombo in 2019 and all of them found to be false or generated during the exercises.

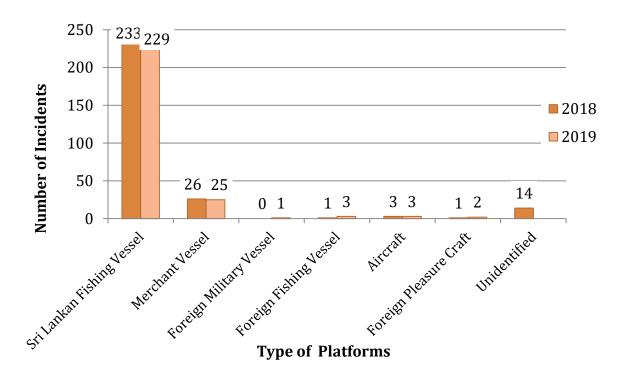
Comprehensive Analysis with Comparison to Year 2018.

23. 22 incidents per month in 2019 marked slight decrease over the 23 incidents reported per month in 2018. Comparison of the incidents reported at MRCC Colombo in 2018 and 2019 in monthly basis is demonstrated by graph VII.



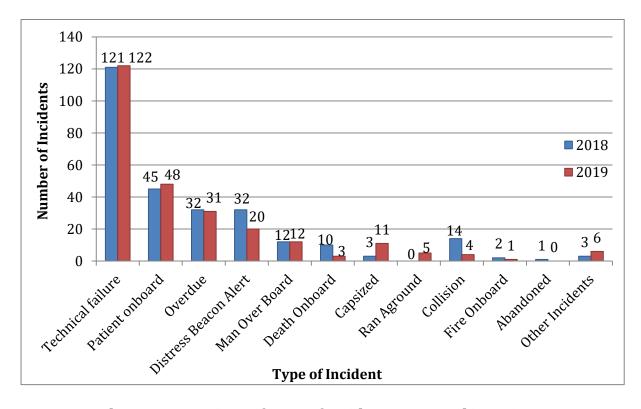
Graph - VII: Comparison of Incidents Reported to MRCC in Monthly basis

24. Total 263 incidents reported in distress during the year 2019 marked a marginal decrease of 12 incidents compared to 2018. Further, similar trend in the types of platforms in distress with minimal deviations were also identified. Comparing to 2018, Sri Lankan fishing vessels and Merchant vessels reported in distress have decreased by 4 and 1 numbers respectively in 2019. Foreign military vessels, foreign fishing vessels and pleasure craft in distress have increased by 1, 2 and 1 numbers respectively in 2019 whilst the number of Aircrafts reported in distress remained same. Comparison of the platforms reported in distress is demonstrated by the graph VIII.



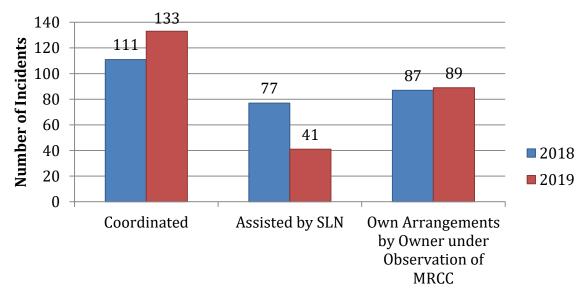
<u>Graph - VIII: Comparison of Platforms Reported in Distress</u>

25. Analysis of incidents reported to the MRCC Colombo in year 2018 and 2019 revealed similar tendency at numerous categories with marginal deviations. Reports on technical failure, patient onboard, capsizing and ran aground of vessels have increased by 1, 3, 8 and 5 numbers respectively in 2019. Incidents of overdue vessels, Alerts generated by Distress Beacons, death onboard, collision, fire onboard and abandoning ship have decreased by 1, 12, 7, 10, 1 and 1 numbers respectively in 2019 whilst the Man Over Board incidents remained same.



Graph - IX: Comparison of Type of Incidents Reported in 2019

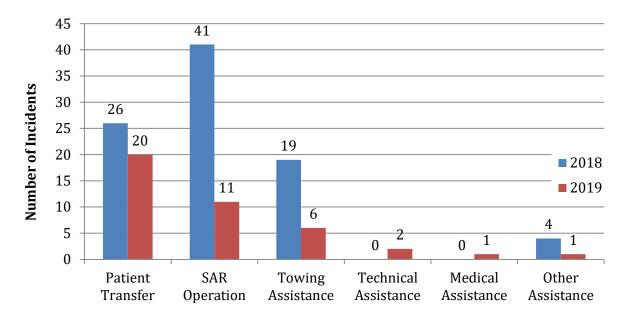
- 26. Significant decline of EPIRB alerts by 37.5%, fire onboard by 50%, collision by 71.4% and death onboard by 90% were discovered in the year 2019. However, capsizing of vessels and vessel ran aground in 2019 marked alarming inclination of 366.6% and 500% compared to year 2018 and all such incidents were related to the Sri Lankan fishing vessels. Graph IX denotes the comparison based on the types of incidents reported to MRCC Colombo.
- 27. Compared to 2018, incidents coordinated by MRCC and incidents which the owner has initiated own arrangements have increased in 2019 by 22 and 02 numbers respectively. Numbers of incidents assisted by the SLN have decreased by 16 numbers in 2019 marking 47% of reduction.



Actions Initiated by MRCC Colombo

Graph - X: Comparison of Actions Initiated by MRCC

- 28. Transfer of patients, SAR operations and towing assistance marked a declination of 23%, 73.1% and 68.4% respectively in 2019. SLN provided technical assistance twice and medical assistance once in 2019. Incidents at which SLN provided direct assistance are graphically demonstrated by graph XI.
- 29. MRCC activities resulted saving of 103 lives in 2019, which is a reduction by 77.9% comparing with 2018. Cost sustained by the SLN for assisting the distressed at sea in 2019 have reduced by Rs. 213,249,482.84 compared to 2018. Comparison of the lives saved and cost incurred by SLN for assisting distress incidents in monthly basis is demonstrated at table III.



Types of Assistance Provided by SLN

Graph - XI: Comparison of Incidents Assisted by SLN

<u>Table- III: Comparison of Lives Saved and Cost Incurred by SLN for Assisting Distress Incidents in Monthly Basis</u>

Sr.	Month	Incidents Assisted by SLN		Lives Saved		Cost Incurred (Rs.)	
		2018	2019	2018	2019	2018	2019
01	January	16	05	39	10	18,355,353.16	1,850,095.34
02	February	12	03	23	05	1,487,095.23	503,501.91
03	March	14	04	43	02	30,950,410.64	820,087.37
04	April	10	01	37	01	9,729,864.67	47,162.19
05	May	08	04	21	52	-	333,375.79
06	June	21	05	38	03	45,086,673.31	2,512,246.62
07	July	80	02	29	02	35,037,455.37	6,858,658.75
08	August	18	09	40	13	41,987,021.99	5,874,047.91
09	September	14	03	45	07	26,770,300.37	6,017,631.22
10	October	11	01	51	01	13,056,239.16	1,266,311.51
11	November	15	-	52	-	18,399,852.54	-
12	December	10	04	48	07	418,510.45	1,946,175.44
Tota	al	157	41	466	103	241,278,776.89	28,029,294.05

Conclusion

- 30. Being an Island nation functioning a fishing fleet of more than 5000 ocean going multi day trawlers and nearly 32700 minor vessels operating in coastal waters obliged Sri Lanka to maintain a proper mechanism to look after the safety of native mariners. Attraction of recreational vessels and growing sea borne activities in Sri Lankan waters complicate the situation further. Availability of one of the busiest trade route at the Southern tip of the country and operating a deep draught hub port at Colombo, maintain a considerable merchant traffic at the responsible waters throughout the year.
- 31. Sri Lanka being a signatory government of 1974 SOLAS convention obliged her to implement numerous measures to ensure the safety of lives within her SAR region. Acknowledging the responsibilities, a 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 (MRCC), 01 Maritime Rescue Sub Centre (MRSC) and 07 sub stations covering the entire coast of Sri Lanka. Figure III illustrate the planned establishment of MRCC network.

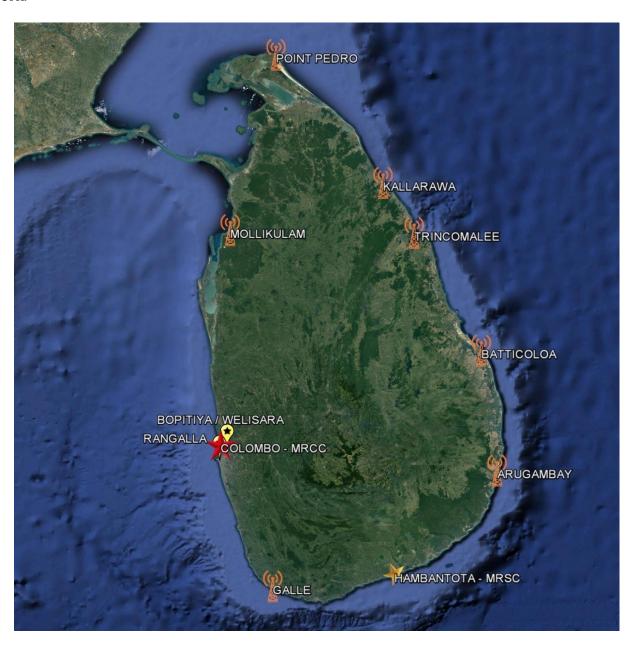


Figure- IV: Proposed Sites of MRCC Network