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## MARITIME SEARCH AND RESCUE OPERATIONS OF SRI LANKA: AIR DIPLOMACY FRAMEWORK AND WAY FORWARD

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### ABSTRACT

*The term air diplomacy first came into the limelight in the first half of the 20<sup>th</sup> century amidst the advent of air power. Air diplomacy is the employment of air power elements in support of the foreign policy of a country. The study explored how an air diplomacy framework could be incorporated into the air strategy to strengthen Maritime Search and Rescue (MSAR) engagements in Sri Lanka, which in turn would benefit in bolstering the tangible and non-tangible capabilities of the Sri Lanka Air Force (SLAF). The contemporary world has seen that regional/global air forces have been attempting to leverage air power in quest of protecting national interests and human capital beyond its seashores. However, it is observed that Sri Lanka has not been exploiting the air diplomacy to the fullest extent as done by other regional counterparts. The SLAF being the only air arm capable of providing aircraft assistance to air crash Search and Rescue (SAR) operations in Sri Lanka has a unique role to play whilst bearing a huge responsibility in aircraft Search and Rescue operations within the Colombo Search and Rescue Region (SRR). Thus, it is imperative to fill the critical gap between existing capabilities/capacities and structure of MSAR units within SLAF and integration with external maritime agencies locally/regionally to facilitate effective MSAR services within the SRR. Hence, the researcher has derived the conceptual framework on a par with the study objectives, which enables the finding of dependent and independent variables. This exploratory study resorts to the inductive approach and interpretivist research philosophy while conducted as a qualitative research. Eventually, the researcher developed an air diplomacy framework that could schematically be embedded into SLAF's air strategy. The study results indicated the development of a joint maritime-air architecture through an integrated system comprising all aerial and maritime stakeholders. Hence as a remedy smart, stretched re-fleeting of assets, formulation of joint/combined maritime-air command structure, multinational cooperation and conduct of joint training are recommended to address challenges pertaining to conducting effective and efficient MSAR operations in the future.*

**KEYWORDS:** Air Diplomacy, Integration, Maritime Search and Rescue (MSAR), Search & Rescue Region (SRR)

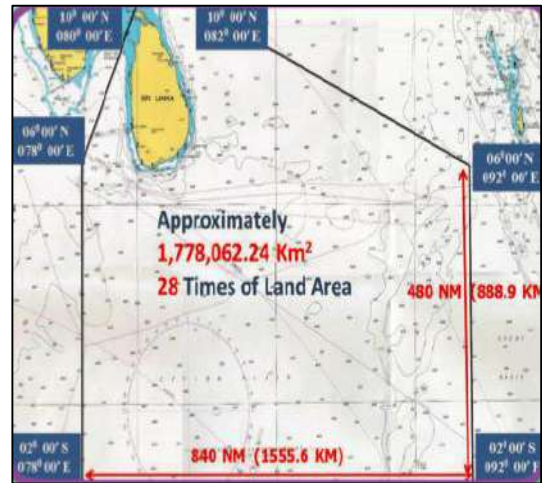
## 1. INTRODUCTION

Aviation has become an integral tool of modern globalization due to its unique ability to operate swiftly in the third dimension. Therefore, the contemporary world has seen highly dense airspaces full of aircraft across the world operating for various purposes. This has led to an increase in air crashes around the world over the years, where it demands highly skilled and trained personnel to rescue aircrew and personnel in distress in quest of saving lives and properties. Sri Lanka Air Force (SLAF) being the only air arm capable of providing aircraft assistance to aircraft Search and Rescue (SAR) operations in Sri Lanka has a unique role to play whilst bearing a huge responsibility in aircraft SAR operations within the Search and Rescue Region (SRR). Lespions (2012) underpinned that air diplomacy is the employment of air power in quest of the foreign policy aspirations of the country.

### Background of the Study

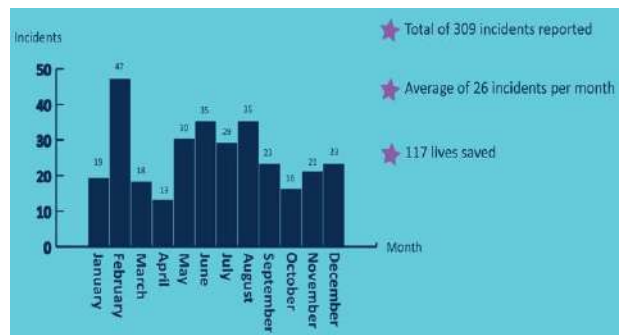
The International Civil Aviation Organisation (ICAO) established SAR divisions which laid the basis to launch well-coordinated and integrated Aeronautical Rescue Coordination Centres (ARCC) with the objective to swiftly react to any circumstances concerned with an aircraft accident (ICAO,1946). The SLAF forms an integral part of the ARCC which functions as a rescue unit within the Colombo Search and Rescue Region (CSRR) along with the Sri Lanka Army (SLA) and the Sri Lanka Navy (SLN). Within the SLAF, a dedicated response unit has been established with specially trained personnel and required rescue gears to provide swift rescue assistance during an air crash situation. At its inception, it was named the Jungle Rescue (JR) unit though subsequently changed to Disaster Assistance and Response Team (DART) in 2018 while giving a wider array of operations in addition to the air crash rescue operations.

The SAR units, demand a highly professional, skilful, and trained crew to attend in such circumstances without undue delay. Regional air forces do practice the same way where a dedicated



**Figure 1: Extensive maritime domain of Sri Lanka Source: Sri Lanka Navy (2020)**

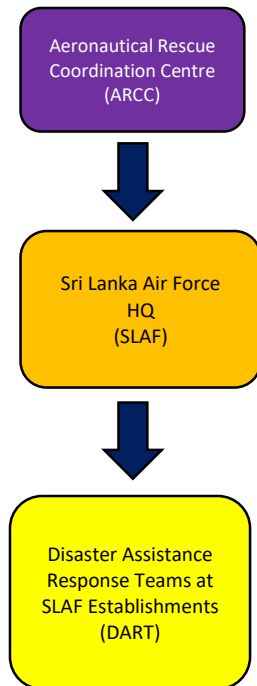
crew has been predetermined and made readily available at respective airfields under the direct control of the Air Traffic Control (ATC) units. In the recent past, CSRR saw several fatal aircraft accidents predominantly SLAF ones and a couple of minor ones from domestic operators, even though, fortunately, no civil international passenger aircraft had been involved in any accidents. Therefore, it is deemed necessary to be given insight to augment the capabilities and capacities required for attending SAR operations within an extensive maritime domain along with a proper operational framework embedded with a joint approach by responsible stakeholders.



**Figure 2: Reported maritime incidents that demanded MSAR services within CSRR during 2020 Source: Sri Lanka Navy (2021)**

Though air diplomacy is rising in popularity among regional and global Air Forces, proper insights have

not been given in the context of SLAF. Wijetunge and Wanasinghe (2021) have summarised that air diplomacy could be extended to bolster SLAF's potential as well as the country's foreign policy.



**Figure 3: SLAF as a SAR unit within the ARCC**  
Source: Author (2022)

### Statement of the Problem

The SAR services in Sri Lanka are systematized following Standard and Recommended Practices (SARPs). The overall responsibility for the administration and SAR operations within Colombo SRR lies with the Civil Aviation Authority of Sri Lanka (CAASL) (CAASL, 2020). The SAR Point of Contact (SPOC) is designated as the Colombo Aeronautical Rescue Co-ordination Centre (ARCC). SLAF being the only air arm capable of providing aircraft assistance, for aircraft SAR operations forms an integral part of the RCC as a SAR unit. Thus, SLAF requires to provide SAR assistance for civil/military aircraft within Colombo SRR and demands to be equipped with the required gears and skilled/trained personnel. Further, the SLAF is responsible for initiating and conducting SAR operations in respect of SLAF military aircraft besides being an integral part of

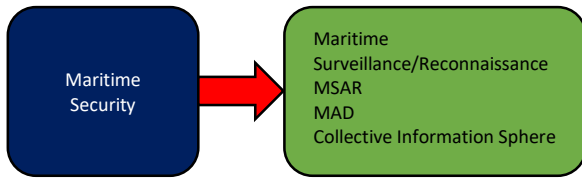
overall SAR operations of the country within the SRR. Thus, it is prudent to comprehend that SLAF has to be possessed with necessary rescue apparatus and a qualified workforce suited to engage in SAR within any part of the SRR.

According to the Aeronautical Information Publication (AIP, 2021), Sri Lanka's area of responsibility (AOR) extends nearly 800 nm towards the Eastern and Southeast edges of the SRR, which signified that SLAF needs to be equipped with the necessary capabilities and capacities for swift responding in such situations. With that backdrop, it was learned that operational readiness just does not suffice to cater to the necessities demanded by the ICAO to meet SAR objectives. Particularly, strategic reach is necessary for aircraft being engaged in SAR operations along with other communication and rescue gears. Thus, it is prudent to comprehend that SLAF is necessary to augment its potential because of engaging SAR operations within the SRR as the country has obliged for delivering a swift response. Hence, SLAF could be employed as an approach embedded with air diplomacy in quest of attaining the preceding objective.

Wijetunge and Wanasinghe (2021) recommended establishing a combined MSAR centre in Sri Lanka while identifying the strategic depth of the maritime domain concerned. Further, the present Commander of the Air Force, then Director Air Operations (DAO, 2018) underpinned the necessity of establishing a combined air task force hub in Mattala considering the geo-strategic location of the tiny Island. Thus, it is understood that establishing these strategic partnerships through an air diplomacy approach would certainly abet SLAF's endeavours in MSAR operations and seal the existing gaps which curtail SLAF's effective engagements in this regard.

Further, International Aeronautical and Maritime SAR (2013), underpinned that states have obliged to provide maritime SAR services on a round the clock basis within their respective AOR and the high seas. Wanasinghe and Wijetunge (2021) identified three

determinants, i.e. the location of the incident, weather, and the nature of distress that determined the engagement in maritime SAR by SLAF and SLN.



**Figure 4: MSAR within the maritime security spectrum** Source: Wijetunge and Wanasinghe (2021)

Besides, they have underscored that inadequate integration between air and naval elements and a dearth of air assets has largely become detrimental. Thus, SLAF’s presence in such situations is limited by these factors as well as being made ineffective owing to the absence of a well-coordinated mechanism between regional air and naval forces. Thus, air diplomacy could be outstretched to bridge these gaps effectively whilst enhancing regional stability as well.

With that backdrop, the study aimed to strengthen SLAF’s potential concerning MSAR operations through an air diplomacy framework and to explore the way forward by identifying challenges and threats.



**Figure 5: CSRR and adjacent SRRs** Source: Australian Maritime Safety Authority (2020)

**Research Questions**

What are the existing capabilities and capacities that SLAF possesses for engaging in MSAR operations?

What are the roles within the spectrum of air diplomacy which could be employed to MSAR?

What are the constraints and challenges being faced by SLAF in respect of MSAR operations?

What are the ways, means, and ends to design an air diplomacy framework in view of strengthening the SLAF’s MSAR operations?

**Research Objectives**

To examine the existing capabilities and capacities that SLAF possesses for engaging in MSAR operations.

To discern the roles within the spectrum of air diplomacy which could be employed in relation to MSAR.

To identify constraints and challenges being faced by SLAF in respect of MSAR operations.

To determine the ways means and ends to design an air diplomacy framework in view of strengthening the SLAF’s potential in MSAR.

**Significance of the Study**

The study would probably add knowledge to the prevailing literature and will help to bridge the gap between MSAR operations and employment of air diplomacy whilst being significant to developing an air diplomacy framework that could be incorporated into the SLAF’s air strategy. Thus, this would be the first kind of study in this field in Sri Lanka.

**Scope of the Study**

SAR operations have a wider array of roles that demand close integration of various agencies. However, the study has focussed only on MSAR

operations where a significant gap has been created regarding available capabilities as well as approaches. Besides, air diplomacy windows will be discussed which could be correlated to the MSAR context.

## 2. METHODOLOGY

This section discusses how the research methodology has been incorporated into the study. Further, it describes the study population, sampling technique, sample size, data collection methods, conceptual framework, and operationalisation. The qualitative study has used thematic analysis as the data analysis tool. Further, the research design of the study is as follows.

**Research Approach-** Inductive approach has been used to find solutions to the observed phenomenon.

**Research Choice-** The study resorts to a qualitative exploratory study.

**Research Philosophy-** The researcher has used interpretivism as the study philosophy to interpret the reasons and meanings of the observed phenomenon.

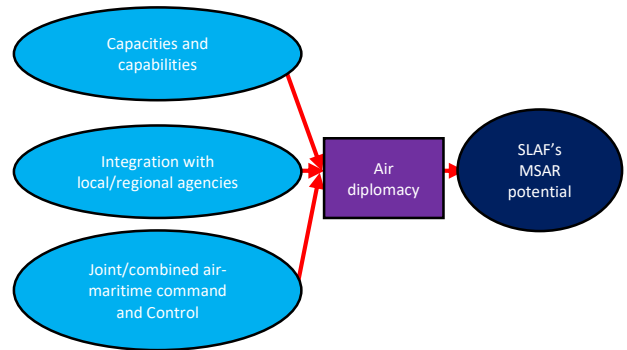
**Research Strategy-** The study encompassed grounded theory strategy to develop an air diplomacy framework for SLAF's air strategy.

**Time Horizon-** Cross-sectional time horizon employed.

**Technique and Procedure-** Data collection and analysis are the technique and procedure of the study.

### Conceptualisation

The conceptual framework of the study has been illustrated along with identified dependent and independent variables, which the researchers expect to explore through this study. The following conceptual framework has been developed in line with the four exploratory research objectives which aim to work as the blueprint of the study.



**Figure 6: Conceptual framework Source: Author (2022)**

## 3. RESULTS

The researcher derived four peculiar themes after coding interview data through the open coding technique. Besides, this section has been articulated on a par with preceding themes.

### SLAF's Capabilities and Capacities for MSAR

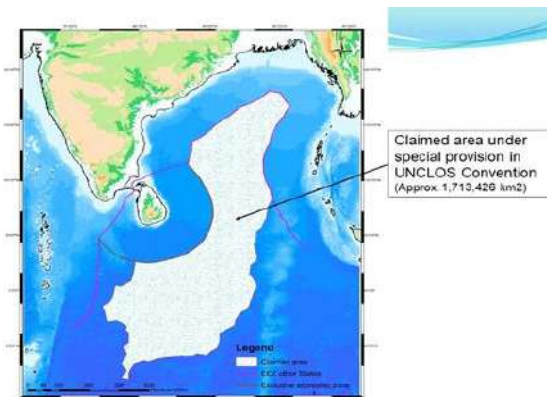
Weerasinghe (2021) underscored that SLAF has been designated as a SAR unit within the ARCC, the country's principal agency in respect of SAR. Maligaspe (2021) stressed that SLAF should be equipped with the required capabilities/capacities as well as a well-trained workforce to afford SAR operations. However, a respondent from SLAF explained that currently SLAF's capabilities and capacities have been limited and mainly capable of performing SAR operations within mainland and littorals. Moreover, Maligaspe (2021) highlighted the necessity of having an all-inclusive package with a holistic approach to engaging in SAR operations, particularly within the maritime domain. Thus, the researcher learned that SLAF has a pivotal role to play in SAR operations within the SRR. However, it was explored that existing capabilities/capacities are not sufficient to yield broader MSAR operations owing to limitations of the air assets as well as an inadequate dedicated ground crew. Therefore, it is deemed necessary to augment SLAF's capabilities and capacities in view of MSAR engagements.



**Table 1: SLAF’s helicopter capabilities and deployment for SAR operations Source: Sampath (2015)**

LOCATION	HELICOPTER TYPE	PERFORMANCES			TYPE OF SAR	CAPABILITIES OF AIRCRAFT			
		RANGE	SPD*	SAR EQUIPMENT		NVG	FLIR	AFCS	FLOATS
Ratmalana	MI 171	100 NM	200km/h	WINCH	RESCUE/MEDEVAC(01)	NO	NO	3 AXIS	NO
	Bell 212	70 NM	100 knots	01 WINCH & 01 BOWMAN KIT	RESCUE/MEDEVAC(01)	NO	NO	NO	NO
	Bell 412	80 NM	120 knots		RESCUE/MEDEVAC(01)	NO	NO	3 AXIS	YES
	Bell 412 EP	90 NM	120 knots			NO	NO	3 AXIS	NO
Anuradhapura	MI 171			NIL	ROPE	NO	NO	3 AXIS	
Hingurakgoda	MI 171			NIL	RESCUE ONLY	NO	NO	3 AXIS	NO
	Bell 212					YES	NO	NO	NO
KKS	Bell 212					NO	NO	NO	NO

The above table illustrates the existing capabilities of SLAF being kept on readiness for SAR operations. As enunciated in the United Nations Convention on Law of Seas (UNCLOS) Sri Lanka possesses an exclusive economic zone (EEZ) of 200 nm from its coastal bed which nearly accounts for 27 times her landmass.



**Figure 7: Existing EEZ and proposed claim Source: BCIS Signature Seminar on Blue Economy (2017)**

Thus, it was visible that none of the SLAF's rotary-wing aircraft has the required reach to operate on high seas. Even operating at extreme edges of the EEZ is also marginal mainly owing to the limited range of these machines. Besides, the non-availability of dedicated SAR equipment as well as a heli-deployment in the East and South East of the Island, also constituted critical

capability gaps in swift response for MSAR engagements towards the area concerned. Therefore, these implications underpinned the necessity of extended reach and restructuring the SAR deployments.

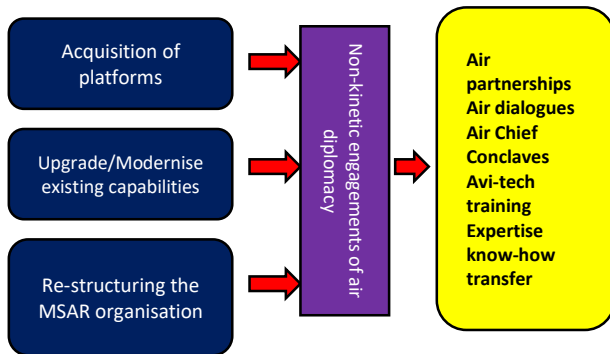
According to respondents from Bangladesh Air Force (BAF) and Pakistan Air Force (PAF) (2021), they do have dedicated rotary-wing platforms with the necessary apparatus to facilitate SAR services within their respective SRRs. Table 2, has illustrated these platforms and they are capable of all-weather, day/night operations. Thus, it is prudent to comprehend SLAF’s obligation to facilitate SAR services within AOR as well as the requirement to be possessed with required platforms/apparatus.

**Table 2: SAR platforms available in regional Air Forces Source: Author (2022)**

Type of Platform (a)	BAF	PAF
	(b)	(c)
	B-212	Alvert 3
	B-206	Mi-171
	AW 119	Augusta
AW 139	Z-9	
	Sea King	

**Air Diplomacy Framework to Bolster the MSAR Potential of the SLAF**

Cooke (2021) and Wijetunge and Wanasinghe (2021a, 2021b) summarized that incorporation of air diplomacy in the air strategy of small air forces would be bolstered by their capabilities and capacities. Particularly Wijetunge and Wanasinghe (2021a) underpinned that non-kinetic engagements of air diplomacy could be used as a tool in this regard. Thus, in view of this, SLAF needs modernization of the existing platforms, new acquisitions, upgraded and enhanced workforce competency which could be underscored as salient inevitabilities. Thus, based on these findings the researcher developed an air diplomacy framework to attain preceding necessities.



**Figure 8: Air diplomacy approach to bolster SLAF MASR capabilities and capacities**

Source: Author (2022)

Besides, Maligaspe (2021) recommended acquiring dedicated SAR platforms through a smart-stretched re-fleeting principally to MSAR engagements within the SRR. Hence, the researcher learned that air diplomacy could be abetted to have new acquisitions through air partnerships, air dialogues and air chief conclaves. Even despite having fiscal constraints, these endeavours would allow having a soothing backdrop to acquire new platforms. Further, developing skills and competency of the workforce engaged in SAR operations could be done through specialised training programmes obtained from friendly foreign Air Forces. Further, respondents revealed that the conduct of joint/combined SAR exercises is also vital in view of boosting pragmatic exposure of SAR personnel with a proper evaluation plan. Thus, establishing a dedicated SAR squadron with the assistance of air partnerships also could be accentuated, which could abet to boost SLAF’s potential in respect of MSAR operations. The researcher should underscore that small Air Forces necessary to enrich multinational corporation in order to prevail and to maintain the momentum in order to meet operational demands.

**Integrated mechanism Between Local/Regional Naval and Air Forces for MSAR Operations**

The researcher learned that promptly delivering MSAR services largely relies on effective integration. The integration must be bi-folded as joint and combined integration. Joint integration

would permit a collaborative exercise between local agencies whilst the latter would allow closely-knit regional agencies for engaging in MSAR operations. Wanasinghe and Wijetunge (2021) critically pointed out that currently aerial and naval elements are being inadequately integrated. Particularly, the post-conflict epoch saw these two elements working in isolation and facing difficulties in system/human integration. Maligaspe (2021) underscored that a very minimum number of joint maritime exercises have been conducted and recommended to study establishing a collective MSAR mechanism between SLN, Sri Lanka Coast Guard (SLCG) and CAASL. Further, the gradual shifting of operational focus and intent of the government has flagged the path to reduce the cohesion and relationship between the two entities.

Wanasinghe and Wijetunge (2021) have identified that SLAF needs effective integration with responsible maritime entities to form a maritime-air joint partnership. This partnership could act as a catalyst in the execution of MSAR. Execution of maritime air operations (MAO) such as intelligence, surveillance, reconnaissance (ISR), and SAR requires the establishment of joint maritime-air command and control (C2). Maligaspe (2021) clearly stated that SLAF has yet to induce an effective integration mechanism with external agencies within the country or outside. Owing to such, existing mechanisms tend to increase the reaction time of SLAF’s SAR elements to attend to distress location and accessibility to the crash site. According to respondents from the BAF and PAF (2021), it is underpinned that they have integrated SAR squadrons with external agencies through MOUs, particularly the Civil Aviation Authority (CAA). Thus, the researcher has explored the absence of such MOU or agreement invariably curtailing SLAF’s effectiveness in MSAR engagements. Firstly, establishing a joint maritime-air mechanism is necessary whilst secondly, a combined one with the collaboration of regional entities.

Sri Lanka’s geo-strategic location remains pivotal, as the Island is located equidistant from the African

and Australian continents. Present Commander of the Air Force then Director Air Operations Air Marshal Sudarshana Pathirana underscored Mattala airport as the ideal location to establish a ‘Combined Air Task Force Hub’ during the Colombo Air Symposium 2018. The researcher also explored that Jaffna, Trincomalee, Hambanthota and Katunayake too are equally significant since all geographic locations could act as connectivity hubs considering the air/land/sea connectivity, and strategic importance and depth. Further, Wijetunge and Wanasinghe (2021) opined to establish a regional MSAR centre in Sri Lanka considering the extensive maritime domain and congested sea and air traffic within the region. However, the researcher underscored that the domestic political consensus approach is also highly essential before establishing such military partnerships. Else wrong socio-politico manipulations could be propagated in view of attaining political compensation. Besides, the researcher explored that air diplomacy endeavours such as having a collective information sphere, regional air partnerships, and air dialogues are the salient ones that could be abetted to strengthen the combined approach.

**Table 3: Present agencies involved in the coordination of SAR operations Source: Wanasinghe and Wijetunge (2021)**

S/N	Organization	Assets
01	SLAF Central Air Ops Room	Maritime and SAR aircraft
02	SLN Head Quarters (HQ) Ops Room	Different types of vessels
03	SLCG Central Ops Room	Different types of vessels and equipment
04	Directorate of Military Intelligence (DMI)	Intelligence network
05	Maritime Rescue Coordinating Center (MRCC)	Link with merchant shipping and SLN
06	Director-General Merchant Shipping (DGMS)	Link with merchant shipping

Preceding table indicates the agencies that are involved in the coordination of SAR engagements in Sri Lanka. However, it was noted that these

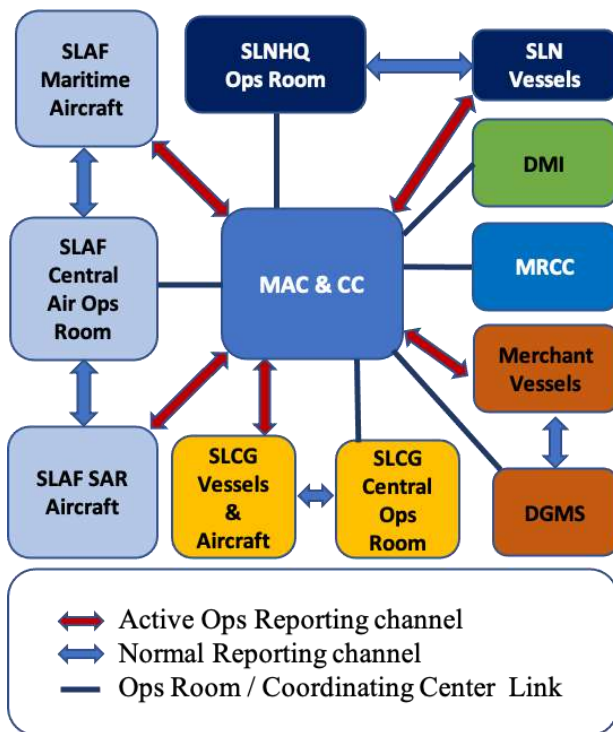
elements have been working in isolation rather than working in a closely knitted environment which demands a SAR event. Thus, the researcher explored that these elements should be integrated and a dedicated agency shall be established with necessary communication and other interoperable elements. Further, required legislative and institutional frameworks are also to be established whilst delegating authority to discharge operations.

### **Command and Control for MSAR**

Indian Air Force (IAF) ATC manual (2015) has indicated that centralized control of SAR operations is essential through respective Flight Information Centres (FIC)/Area Control Centres (ACC). An SLAF representative revealed in 2021 that such extent is not embedded within the SLAF or Sri Lankan context. Maligaspe (2021) illustrated the methods of air crash notification received by SLAF’s SAR units, which reflect the non-availability of centralized control. Besides, this has critically implicated on non-reception of precise instructions on SAR units or duplication of instructions which restricts the SAR unit’s effective employment in aircraft SAR operations. Thus, the researcher opined to establish unified command and control in view of alleviating/ceasing such circumstances on SLAF’s engagements related to aircraft SAR.

The maritime-air command could function through a Maritime-Air Command and Control Centre (MAC&CC), and this would further allow inducing a centralised C2 environment. Thus, MAO including MSAR can be performed under the direct command and control of this establishment which would strengthen the mechanism and circumvent duplication of events. The following entities can be linked with the MAC&CC for communication and coordination. The aerial and maritime platforms coming under these entities are indicated against them. Besides, it is prudent to comprehend that MAC&CC would be employed as the agency which would integrate with other regional SAR entities to respond swiftly in an event of maritime aircraft SAR.





**Figure 9: Conceptual structure for joint Maritime-Air command and control**  
**Source: Wanasinghe and Wijetunge (2021)**

The researcher found that air diplomacy could be acted as a catalyst for establishing either a combined maritime task force or a combined MSAR centre in Sri Lanka. Besides, this unique C2 platform must be integrated with regional ARCCs with the objective of availing a prompt information flow and dissemination of the same towards every tactical component within the organisation without undue delay.

#### 4. DISCUSSION

The respondent from the BAF (2021) stressed that communication challenges are the most common pitfall to be encountered during SAR operations. Besides, he underpinned that terrain and weather also pose operational constraints for Bell helicopter operations. New acquisitions of AW 119, and AW139 helicopters with advanced avionics do not have significant pitfalls for attending SAR ops either in adverse weather or mountainous areas for the BAF. However, Maligaspe (2021) has indicated

that apart from weather/terrain, SLAF platforms curtailing attendance on SAR operations extensively within the Colombo SRR due to lack of reach and non-availability of required capabilities.

The absence of an integrated mechanism on SAR in Sri Lanka with the involvement of external agencies is a serious concern that needs to be addressed. Further, the lack of joint exercises at frequent intervals has been limiting SLAF's exposure to attending large-scale aviation disasters where regional Air Forces have significantly improved. Albeit, it is deemed necessary to have a system and human interoperability with other external agencies, principally CAASL, SLN, SLA and SLCG. Further, Maligaspe (2021) and Wanasinghe and Wijetunge (2021) have stressed the requirement to upgrade the existing platforms as suited to the SAR context and to establish a dedicated SAR squadron in SLAF with the integration of external agencies.

Wijetunge and Wanasinghe (2021) capabilities/capacities, and the existing fleet are necessary to be modernised in accordance with the preceding objectives. Thus, it is imperative to augment surveillance and MSAR capabilities considering the strategic depth of the maritime domain.

According to Kainikara (2019), financial constraints are the most common pitfall that small Air Forces experience in the contemporary world. The prevailing pandemic has further deepened fiscal constraints as the country's economy has been severely contracted by -3% according to President Rajapaksa (2021). Thus, the researcher explored that acquisition of new platforms at this critical juncture would implicate socio-political criticisms against the government as well as the SLAF. Thus, in turn, the government would lose popular support while creating a political gain on opponents.

The researcher has identified the IOR power rivalry as the principal challenge before Sri Lanka in forms of geopolitical aspects. Emerging power competition between the Quad (USA, Australia, Japan and Australia) and China's Belt and Road

Initiative (BRI) have constituted a significant impact on the geopolitical sphere concerning Sri Lanka, despite the country adopting a neutral foreign policy. As indicated by Kainikara (2019), geopolitical concerns have serious implications in acquisition of new platforms and technological advancements for developing economies since the aviation technology is mainly within the purview of few developed economies.

Wijetunge and Wanasinghe (2021a), underscored that the domestic political consensus approach is also highly essential prior to establishing military partnerships. Thus, researcher also explored that wrong socio-political manipulations could be propagated in view of attaining political compensation by political entities in the opposition.

## **5. RECOMMENDATIONS**

It was identified that air power's core characteristics of speed, reach and height permit it to be employed to exert a state's soft power through air diplomacy. Consequent to the extensive study and discussion, the author makes the following recommendations in accordance with the study objectives and findings.

1. To establish air partnerships by the SLAF with regional Air Forces to facilitate an effective maritime SAR services within the Colombo SRR. The necessity of a common maritime SAR mechanism between regional air forces would be permitted to have a better mutual understanding as well as proper MOU between stakeholders within the Colombo SRR. Further, these kinds of partnerships should be encompassed collective MSAR engagements.

2. To establish a regional combined MSAR centre in Sri Lanka to facilitate MSAR services to aircraft/ships in distress conditions within the SRR/IOR.

Considering the geostrategic location of Sri Lanka and its strategic depth, the tiny Island is ideally suited to establish a regional MSAR centre through collaboration with regional Air and Naval Forces. Seeing the connectivity, the identified locations for

such a combined centre are Hambanthota, Trincomalee, Jaffna and Katunayake. Though considering the depth, reach and proximity to the extensive maritime domain, Hambanthota could be underpinned as the ideal location.

3. To establish a collective information sphere among regional Air Forces with the objective to obtain prompt information, and intelligence in relation to aircraft accidents. A common information-sharing mechanism among regional Air Forces within the IOR and adjacent seas is essential to take swift and prompt actions in order to circumvent unnecessary delays in engaging in MSAR. Absence of such a mechanism in the present context invariably curtails the swift participation of the Air Forces in the situation.

4. To induct a consensus political approach between the government and oppositions prior to establishing combined air partnerships in order to circumvent unnecessary socio-political manipulations.

A consensus approach is deemed necessary to circumvent socio-political implications against intended air diplomacy aspirations. The current socio-political environment saw numerous manipulations and adverse implications on political stability due to the absence of an agreed approach between the government and the opposition. Further, effective communication is essential between political leaders and the SLAF to convey/establish the right politico-air intents and its benefits to the public accurately while projecting the right image of the SLAF.

5. To bolster the capacities and capabilities of the SLAF concerned in MSAR operations.

The acquisition of new platforms and new technologies is a costly affair. However, attaining professional maritime-air capabilities consumes a considerably longer time even if the assets are procured. Hence, smart stretched re-fleeting and gradual acquisition of new technologies step by step would result in a better geared maritime-air force

with proper mass, mix and mobility to counter future maritime-air challenges in the long run without adding much financial pressure at once.

6. To formulate an integrated joint maritime-air command structure between responsible stakeholders in MSAR such as SLN, SLAF, CAASL, ARCC and the SLCG.

Formulation of such a structure is within the capacity of the relevant elements at present, and it would expand gradually with an air diplomacy approach. At present also certain integration is available among the maritime entities. Incorporating the aerial entity into the mix and configuring them to form up a structure as discussed above need a thorough and unpretentious discussion among these forces. The structure and the command are to be aimed to attain the maritime-air objectives effectively and efficiently in line with national objectives.

To conduct joint maritime-air exercises at frequent intervals. Carefully designed joint training can translate the theory into a reality. Across the globe, such joint training and exercises are a common practice to achieve, maintain and master the cohesion and understanding among conceptually different elements to achieve common objectives. Hence, continuous joint training and exercises involving all levels of professionals who will engage in future maritime-air operations would be an underlying component of developing the integrated maritime-air structure.

7. To obtain specialised training programmes from foreign Air Forces for SLAF personnel involved in SAR operations in view of bolstering their know-how to aircraft SAR.

These programmes would entail firefighting, sea rescue, jungle and land rescue, and participation in foreign combined SAR exercises.

8. To establish a dedicated SAR unit/squadron equipped with all necessary apparatus and qualified personnel in view of discharging effective and efficient SAR services within AOR.

9. To induct a consensus approach between external agencies within Sri Lanka and offshore in order to sign MOUs to yield quite efficient SAR services within the SRR.

## **6. CONCLUSION**

The advent of air power created a significant impact on warfare and the aviation industry which abetted to increase connectivity between regions/continents, due to its unique ability to operate swiftly in the third dimension. This study endeavoured to conceptualise an air diplomacy framework which could be incorporated into the air strategy while bolstering the capabilities and capacities of SLAF's MSAR endeavours. The study has identified that air diplomacy could be employed in the quest of MSAR engagements within the Colombo SRR in two spheres of kinetic and non-kinetic engagements. Eventually, the researchers underpinned that an effective air diplomacy framework would be integrated into the air strategy to bolster the SLAF's capabilities/capacities in relation to MSAR.

Failure to optimise the geostrategic benefit for the furtherance of the nation by responsible authorities, the oceanic region around the Island has become a loitering ground for state counterparts and regional stakeholders. Increasing the maritime-air capacity and capability with a clear intent to exploit the vast maritime zone around us would make the region safe and secure for legitimate operations, thus limiting the opportunity for illicit activities. By the time the authorities are ready to explore the marine heirloom, it would be safe and secure to do so in future.

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