



ICAO

International Civil Aviation Organization

Tenth Meeting of the ICAO Asia/Pacific Search and Rescue Workgroup (APSAR/WG/10)

Siem Reap, Cambodia, 27 – 30 May 2025

Agenda Item 4: Asia/Pacific and Inter-regional SAR Planning, Coordination and Cooperation

SEARCH AND RESCUE SYSTEM OF PAKISTAN

(Presented by Pakistan)

SUMMARY

This paper presents a brief update on aeronautical Search and Rescue (SAR) system of Pakistan including the ongoing works for its improvement and training program. To enhance the capability of the SAR System, frequent trainings and exercises are conducted with stakeholders.

1. INTRODUCTION

1.1 The Government of Pakistan, within its territorial land, waters and over the high seas, where the responsibility for the provision of Air Traffic Services has been delegated to Pakistan under Regional Air Navigation Agreements, is committed to render search and rescue services to all aircraft and facilitate immediate rescue of its occupants when they are in need of such assistance. Establishing a completely independent and self-contained SAR organization would be cost prohibitive for Pakistan Airports Authority (PAA) therefore, the SAR facilities available with different public and private organizations have been effectively harnessed to share the responsibility in accordance with the provisions of Annex 12 supplemented by IAMSAR Manual Volumes I, II and III, to achieve the objectives of SAR.

2. DISCUSSION

Legislation

2.1 In Pakistan, the responsibility for the provision of SAR services to aircraft as per ICAO SARPs has been vested into PAA through a notification of the Gazette of Pakistan S.R.O. 961 (1) /94 and under Rule 4 read with 76 and 77 of Civil Aviation Rules 1994 and PAA Act 2023.

Area of Responsibility

2.2 The Pakistan airspace is divided into two Flight Information Regions (FIRs) by the parallel of latitude of 30-degree North, namely Karachi and Lahore FIRs. These two FIRs cover the territorial limits of Pakistan and also the airspace over high seas where responsibility for the provision of Air Traffic Services has been delegated to Pakistan. Two Search and Rescue Regions (SRRs) coincident with FIRs have been established for effective provision of SAR services to air traffic in Pakistan. One Rescue Coordination Centre (RCC) has been established in each SRR with one additional Rescue Sub-Centre (RSC) established at Islamabad International Airport. The RSC Islamabad acts as sub-ordinate unit to Lahore RCC to complement the RCC in the event of a SAR operation as per the provisions of

operation SAR Plan of Lahore RCC. Moreover, all PAA airports have been declared as Ground SAR Units.



SAR MOUs with Stakeholders

2.3 As per the guidelines provided by ICAO Asia/Pacific Regional Office, Pakistan Airports Authority has signed MOUs with following major SAR stakeholders:

- a) Pakistan Army.
- b) Pakistan Air Force.
- c) Pakistan Navy.
- d) Pakistan Maritime Security Agency (PMSA).
- e) Khyber Pakhtunkhwa Police.
- f) Sindh Police.
- g) Baluchistan Police.
- h) Punjab Police.
- i) Pakistan Coast Guards.
- j) Pakistan Disaster Management Authority Sindh.
- k) Space and Upper Atmosphere Research Commission.
- l) Princely Jets (Pvt) Ltd (General Aviation).

2.4 The case for signing of SAR Letter of Agreement (LOA) with neighboring States is under process with Government of Pakistan.

Joint SAR Exercises

2.5 Joint SAR exercises, aimed towards SAR capacity enhancement of state and to strengthen cooperation, have been conducted. PAA RCCs participated in following SAR exercises in this regard:

- a) Search and Rescue and Oil Spill exercise (BARACUDA-XII) conducted by Pakistan Maritime Security Agency (*PMSA) in January 2024.
**Note. PMSA has been declared as maritime SAR unit responsible for the provision of SAR services beyond the coastline of Pakistan.*
- b) Karachi and Lahore RCCs are quarterly conducting Communication and Coordination exercises with the relevant SAR stakeholders as per ICAO recommendations.
- c) Annual Airport Full Scale Emergency Exercise at major international airports (Karachi, Lahore and Islamabad).

2.6 Frequent briefing/training sessions have been conducted in RCCs and RSC for the awareness of Air Traffic Controllers and of RCC/RSC officials regarding SAR system of Pakistan. Tabletop SAR Exercises were also carried out.

Pool of Air Traffic Controllers

2.7 A pool of adequately trained Air Traffic Controllers has been created to address any emergency situation and to compliment RCCs and RSC in the event of SAR operation.

SAR Training

2.8 Training aspect in SAR has been given due importance by PAA. The SAR courses have been designed in accordance with SARPs and conducted on a regular basis following a prescribed training plan. Participants of SAR courses are invited from all national stakeholders including armed / civil armed forces, public, private sector, private aircraft operator training schools etc. Besides the studies, visits to other SAR units and table top exercises are part of the basic SAR courses. Having interaction between the civil and military personal (major stakeholders) is an added advantage of such courses.

SAR Organization

2.9 The SAR organization of PAA is as follows:

- a) Secretary Aviation Division Govt of Pakistan.
- b) Director General PAA.
- c) Additional Director General PAA.
- d) Deputy Director General (ANS).
- e) Director Operations.
- f) Additional Director Search and Rescue.
- g) Chief Rescue Coordinators of RCC Karachi, RCC Lahore and RSC Islamabad.
- h) Officer In-charge RCC/RSC.

Administrative Single Point Of Contact (ASPOCS)

2.10 Mr. Altaf Hussain, Additional Director SAR, HQPAA, Terminal-1 Jinnah Int'l Airport Karachi, Pakistan – Postal code-75200.

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Search and Rescue Point of Contact (Karachi RCC)

2.11 Ms. Alina Benjamin, SAR Mission Coordinator Karachi RCC, Near Pehalwan Goth, Area Control Center Radar Building, Karachi, Pakistan– Postal code-75200

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Search and Rescue Point Of Contact (Lahore RCC)

2.12 Ms. Iffat Seemab, SAR Mission Coordinator, Lahore RCC, Area Control Center Radar Building, Allama Iqbal Int'l Airport, Lahore, Pakistan

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Search and Rescue Point of Contact (Islamabad RSC)

2.13 Mr. Aqleem Anjum Shinwari SAR Mission Coordinator, RSC Islamabad, New Islamabad Int'l Airport Islamabad

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Evaluation of SAR Performance Indicators

2.14 The latest copy of SAR Performance Indicators is provided in **Attachment A**.

Document System

2.15 The legal documents:

- a) Rule 76, 77 and 78 of Civil Aviation Rules 1994;
- b) ANO-002-DRAN Air Traffic Services (ICAO Annex 11);
- c) ANO-003-DRAN Rules of the Air (ICAO Annex 2);
- d) ANO-005-DRAN Search and Rescue (ICAO Annex 12);
- e) PLN-001-ARAN-6.0 National SAR Plan;
- f) RCC Karachi and RCC Lahore Plan of Operations;
- g) IAMSAR Manuals;
- h) ICAO Doc 7030 – Regional Supplementary Procedures;

- i) ICAO Doc 4444 – Procedure for Air Navigation Services - Air Traffic Management (PANS-ATM);
- j) ICAO Annex 13 – Aircraft Accident and Incident Investigation.

COSPAS-SARSAT System

2.16 Pakistan is a member of the International COSPAS-SARSAT Program. Local User Terminal and Mission Control Centre located at SUPARCO HQs Karachi provides information to RCCs and RSC and covers whole airspace of Pakistan SAR Regions (SRRs).

2.17 Both RCCs (Karachi and Lahore) and RSC (Islamabad) are equipped with COSPAS-SARSAT system which is in operation on H24 basis. Operation Room of Maritime Security Agency responsible for SAR over the territorial waters and high sea area under delegation to Pakistan, is also equipped with COSPAS-SARSAT system.

2.18 COSPAS-SARSAT systems of Karachi and Lahore RCCs have been declared as alternates to each other. In case of non-availability of Satellite Aid System in both RCCs, COSPAS-SARSAT system of Islamabad RSC will serve as the main system for both the SRRs until availability of COSPAS-SARSAT systems at respective RCC.

Communication Facilities

2.19 RCCs Karachi, Lahore and Islamabad RSC are interconnected via hotlines. A reliable communication network exists between RCCs and other PAA units as well as with appropriate organizations to ensure effective co-ordination during SAR operation. Furthermore, Karachi and Lahore RCCs are provided with satellite telecommunication facility.

On Going Works

2.20 The draft SAR LOAs with Oman, Iran and China are under process for the approval of the Government of Pakistan. Meanwhile the SAR Bilateral Arrangement between Karachi ACC and Muscat ACC is in the final stages of signing.

2.21 To cater Mass Rescue Operations, MoU with the National Disaster Management Authority of Pakistan and PAA is under process.

2.22 SoP for initial response to ADT has been issued by the RCCs and subscription to LADR has also been obtained whereas Area Control Centers are in process of obtaining subscription to LADR and OPS Control Directory.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper.

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REGIONAL SAR PLAN MONITORING AND REPORTING FORM

SAR PERFORMANCE INDICATORS

Following is a bank of indicators based on the Asia/Pacific Plan's performance improvement section (which should be read in conjunction with these questions), that can be used to assess whether an administration is either compliant or not and to internally evaluate their implementation status of the Asia/Pacific SAR Plan.

Please indicate implementation status with either 0% (not implemented), or partial implementation may be indicated (e.g. 10%, 20%, 30%, 50%, etc) or 100% (fully implemented).

1. Enacted legislation that incorporates or is aligned to applicable international Conventions	100%
2. Unless delegated, established an entity that provides H24, SAR services within its area of responsibility/SRR	100%
3. Established a national SAR committee	100%
4. Empowered SAR Mission Coordinators with the authority to adequately carry out their responsibilities	100%
5. Established an Administrative Single Point of Contact for SAR (ASPOCS) for non-urgent, administrative matters	100%
6. Conducted studies to integrate aviation and maritime SAR, and as far as practicable, civil and military activities	100%
7. Conducted studies to align, as far as practicable, aeronautical and maritime SRRs, and SRRs and FIRs	100%
8. Established a single State SAR Plan	100%
9. Established aerodrome emergency plans that provide for co-operation and co-ordination with RCCs	100%
10. Established SAR agreements with States having adjoining SRRs or FIRs	0%
11. Provided up to date cross-border information on SAR capability to adjoining States	0%
12. Pre-arranged procedures for cross-border SAR responses	60%
13. Established RCC plans for response to Mass Rescue Operations (MROs) integrated with national disaster plans	60%
14. Established operational plans and procedures for SRUs, provision of support, communication and reporting	100%
15. Established SAR Alerting procedures which are tested, integrated and include civil/military protocols	100%
(new) 16. Establishment of arrangements to conduct SAR operations at the same time as the accident investigation authority needs to conduct search & recovery operations (in accordance to Annex 13)	30%
17. Provided a fully equipped RCC of sufficient size with adequate provision for operational positions and human factors	100%
18. Provided adequate supervisory ATC resources to allow timely SAR alerts and information to RCCs	100%
19. Provided sufficient RCC staffing	100%
20. Provided a sufficient number of trained specialist RCC officers including SMCs and A/SMCs	100%
21. Availability of a pool of RCC support staff who are familiar with RCC operations, but not trained as coordinators	100%
22. Developed SAR personnel position descriptions detailing responsibilities and eligibility criteria	100%
23. Developed a comprehensive training programme that includes SAR training for SAR Coordinators and SRU staff	100%
24. Facilitated RCC staff to be proficient in the English language	100%
25. Facilitated a programme of regular liaison visits between relevant RCCs, ATC units and airline operating centres	100%

26. Established additional oceanic SAR capability as far as practicable to ensure a timely and adequate SAR response	100%
27. Established sufficient SRU capabilities (crews, availability, military assets, communications, authority, etc.)	100%
28. Established procedures and necessary infrastructure to coordinate distress beacon alert responses	100%
29. Established a reliable distress beacon registration system	100%
30. Planned and prepared for the implementation of next generation beacons	100%
31. Established an appropriate nationwide means of disposal for old distress beacons	100%
32. Established contingency facilities, or procedures for the temporary delegation of SAR to another body or State	100%
33. Established a centralised information source publishing all AIP information required on SAR	100%
34. Established an Internet-based SAR information sharing system	100%
35. Established systems for the maximum practicable cooperation between State entities for information when required	100%
36. Developed and maintained a current, comprehensive electronic list of State SAR Facilities, SAR Equipment, and SRUs	50%
37. Established an Internet-based SAR Library, or cooperate by contributing to an Internet-based Asia/Pacific resource	100%
38. Provided each RCC and SAR Authority with ready access to a current copy of SAR reference documents	100%
39. Conducted regular SAREX to test and evaluate coordination procedures, data and information sharing and SAR responses	100%
40. Implemented SAR System Improvement and Assessment measures, including Safety Management and QA systems	60%
41. Conducted an annual or more frequent analysis of their current State SAR system to identify specific gaps in capability	60%
42. Conducted SAR promotional programs	100%
Overall implementation Status (of 42)	89%