Agenda Item 5: Asia/Pacific Regional SAR Plan

ASIA/PACIFIC REGIONAL SAR PLAN

(Presented by the Secretariat)

SUMMARY

This paper presents information on the development of an Asia/Pacific Search and Rescue (SAR) Plan, as required by the APSAR/TF Terms of Reference.

This paper relates to –

Strategic Objectives:

A: Safety – Enhance global civil aviation safety

Global Plan Initiatives:

Not Applicable

1. INTRODUCTION

1.1 According to the Terms of Reference, the APSAR/TF was expected to deliver a plan within two years of establishment for enhancement of SAR capability within the Asia/Pacific Region, including enhancement of SAR services with neighboring States.

2. DISCUSSION

Asia/Pacific Regional SAR Plan

2.1 In order to make recommendations for the improvement of SAR systems, the APSAR/TF is expected to:

- review the current status of SAR preparedness of Asia and Pacific Region States and State SAR arrangements;
- monitor outcomes from relevant forums for issues that may affect the Asia/Pacific Region;
- analyse SAR contingency procedures from other ICAO Regions; and
- identify areas where SAR planning and preparedness requires improvement in terms of compliance with Annex 12, the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR) and accepted best practice.
2.2 The analysis of the information and subsequent recommendations are expected to be incorporated into an Asia/Pacific Regional SAR Plan for submission to APANPIRG/26, due to be held in 2015. This would allow three annual meetings of the APSAR/TF, or more if the meetings were held more frequently.

Asia/Pacific Regional Air Navigation Plan

2.3 Planning material germane to regional SAR services is contained in Part VII, Volume 1 of the Asia and Pacific Regions Air Navigation Plan (Basic Air Navigation Plan, Doc 9673, Appendix A). Much of this material appears to be superfluous, considering the Standards and Recommended Practices (SARPs) contained within Annex 12, and the three volumes of the IAMSAR.

2.4 In addition, Table SAR 1 in the Facilities and Services Implementation Document (FASID, Volume II of Doc 9673) theoretically provides planning information such as required rescue facilities. However this material does not appear to be up-to-date as the Regional Office has had no updates except one from Pakistan in three years. In any case the value of the material appears to be very limited as the FASID cover page contains the statement that the material is ‘Not to be used for operational purposes’.

2.5 In this regard, it is noted that Annex 15 Appendix 1, page APP 1-8) requires that State Aeronautical Information Publications (AIP) provide information in:

- GEN 3.6.1 on the agency responsible for providing SAR services;
- GEN 3.6.2 on the area of SAR responsibility where SAR services are provided;
- GEN 3.6.3 on the type of SAR services and facilities provided including indications where SAR aerial coverage is dependent upon significant deployment of aircraft;
- GEN 3.6.4 on SAR agreements;
- GEN 3.6.5 on the conditions of SAR facility and service availability; and
- GEN 3.6.6 on SAR procedures and signals used.

2.6 Thus it should be determined what the relevance is of SAR material contained within the Regional Air Navigation Plan, and update this as required.

2.7 The status of the SAR material within Doc 9673 and whether it can be contained within the Asia/Pacific Regional SAR Plan should be discussed, as any regional-specific planning material that fits between the SARPs/IAMSAR and the State AIP information should be a single, accessible and relevant resource.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper;
b) agree on a review mechanism to ensure that material from Annex 12 and the IAMSAR are not duplicated by Doc 9673;
c) discuss mechanisms for the development of the Asia/Pacific Regional SAR Plan; and
d) discuss any relevant matters as appropriate.

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Appendix A: BANP

Part VII

SEARCH AND RESCUE (SAR) SERVICES

INTRODUCTION

1. This part of the Asia and Pacific (ASIA/PAC) Basic Air Navigation Plan contains elements of the existing planning system and introduces the basic planning principles, operational requirements and planning criteria related to search and rescue (SAR) services as developed for the ASIA/PAC regions.

2. As a complement to the Statement of Basic Operational Requirements and Planning Criteria (BORPC) set out in Part I, Part VII constitutes the stable guidance material considered to be the minimum necessary for effective planning of SAR facilities and services in the ASIA/PAC regions. A detailed description/list of the facilities and/or services to be provided by States in order to fulfil the requirements of the plan is contained in the ASIA/PAC Facilities and Services Implementation Document (FASID). During the transition and pending full implementation of the future communications, navigation and surveillance/air traffic management (CNS/ATM) system, it is expected that the existing requirements will gradually be replaced by new CNS/ATM-related requirements.

3. The Standards, Recommended Practices and Procedures to be applied and related guidance material are contained in:
   a) Annex 12 — Search and Rescue;
   b) Regional Supplementary Procedures (Doc 7030); and

4. Background information of importance in the understanding and effective application of this part of the plan is contained in the Report of the Third Asia/Pacific Regional Air Navigation Meeting (Doc 9614, ASIA/PAC/3 (1993)) on Agenda Item 7.

5. A regional air navigation (RAN) meeting recommendation shown in brackets below a heading indicates the origin of all paragraphs following that heading. A RAN meeting recommendation shown in brackets below a paragraph indicates the origin of that particular paragraph.

PLAN FOR SEARCH AND RESCUE REGIONS (SRRs)

[ASIA/PAC/3, Rec. 7/21]

6. The plan for search and rescue regions (SRRs) is shown on Chart SAR 1.

SEARCH AND RESCUE SERVICES

Organization and facilities

7. The list of SAR facilities shown in Table SAR 1 of the FASID constitutes the plan for SAR facilities in the ASIA/PAC regions.

[ASIA/PAC/3, Rec. 7/22]

Note 1.— Rescue sub-centres (RSCs) are not shown except when located in a State different from that in which the relevant rescue coordination centre (RCC) is located.

Note 2.— Facilities listed are the minimum required for SAR purposes and it is recognized that many States have facilities available in addition to those listed.

Note 3.— Facilities listed need not be used exclusively for SAR operations but may be suitably equipped aircraft or ships also used for other missions that can be made available for SAR operations at short notice.

Note 4.— The type of facility listed must be readily available for SAR within its intended area of operation either directly or on a "redeployment" basis.

8. States within the region should establish and/or maintain RCCs or RSCs on a 24-hour basis and ensure continual availability of SAR facilities listed in Table SAR 1 of the FASID.

[ASIA/PAC/3, Rec. 7/23]
Coordination with maritime SAR authorities and the International Maritime Organization

9. To ensure compatibility between aeronautical and maritime SRRs, aeronautical SAR authorities in States should maintain close liaison with their maritime counterparts and the International Maritime Organization.

[ASIA/PAC/3, Rec. 7/3]

Continuous provision of SAR facilities

10. States, when necessary, should take urgent action to ensure the continuous provision of SAR facilities in accordance with the regional air navigation plans.

[ASIA/PAC/3, Rec. 7/6]

Capacity of rescue units and associated facilities

[ASIA/PAC/3, Rec. 7/5]

11. States should:
   a) take due account of the large size and passenger-carrying capacity of commercial aircraft operating within their area of responsibility, and of the possibility of aircraft ditching in water near airports, in planning for SAR and emergency care facilities; and
   b) be encouraged to provide and use for SAR, wherever practicable, helicopters equipped with suitable winching equipment.

Satellite-aided SAR

[ASIA/PAC/3, Rec. 7/7]

12. States should:
   a) take appropriate action to reduce the number of false alarms on 121.5/243 MHz caused by inadvertent activation of emergency transmitters and eliminate unauthorized use of those frequencies;
   b) encourage the early introduction of emergency locator transmitters (ELTs) transmitting on 406 MHz and establish a register of such ELTs;
   c) make available information on how ELT registration information can be obtained rapidly by RCCs of other States; and
   d) provide to ICAO a SAR point of contact (SPOC) for inclusion in Table SAR 1 of the FASID.

SAR escort service

[ASIA/PAC/3, Rec. 7/24]

13. States should provide SAR escort service to aircraft in difficulties.

Assistance in establishing SAR services

[ASIA/PAC/3, Rec. 7/11]

14. States requesting assistance in establishing or improving SAR services should first endeavour to satisfy the following basic requirements:
   a) a RCC/RSC location (which could be an air traffic control (ATC) unit);
   b) a designated RCC chief, knowledgeable in ATC and trained in the planning of searches and the coordination of SAR missions;
   c) personnel to be trained to serve as SAR mission coordinators;
   d) adequate staff for 24-hour operation of the RCC; and
   e) appropriate RCC material and equipment.

Communications between aircraft and ships

[ASIA/PAC/3, Rec. 7/12 a)]

15. States should develop procedures to be included in the detailed SAR plans which enable civil aircraft and SAR aircraft to enter rapidly into communications with ships when necessary.

SEARCH AND RESCUE OPERATIONS

Communications for survivors

[ASIA/PAC/3, Rec. 7/13]

16. States should encourage operators to carry means for survivors to communicate with aircraft on 121.5 MHz.
Ship reporting systems

17. States should:

a) through their maritime authorities, encourage ships to participate in an appropriate ship reporting system for SAR; and

b) record information on the position of ships at sea and disseminate such information to SAR authorities of other States requesting it, to facilitate response to cases of distress.

[ASIA/PAC/3, Rec. 7/16 a) and b)]

18. RCC and RSC plans of operation should provide guidance on how information from available ship reporting systems can be obtained.

[ASIA/PAC/3, Rec. 7/16 c)]

Note.— The Automatic Mutual-assistance Vessel Rescue (AMVER) system is a worldwide ship reporting system for SAR, operated by the United States Coast Guard. Any RCC can obtain information about ships in the vicinity of a distress by contacting any RCC of the United States Coast Guard.

SAR exercises

[ASIA/PAC/3, Rec. 7/17]

19. States which introduce a SAR organization, handle relatively few actual SAR cases or need to coordinate SAR operations with neighbouring States, should use SAR exercises to improve proficiency and procedures.

Note.— Exercises may be conducted on three levels: communications exercises; coordination exercises (without involving SAR units); and field exercises (involving actual SAR unit deployment).

SAR training

[ASIA/PAC/3, Rec. 7/18]

20. States should be encouraged to:

a) arrange for regular high-quality SAR training for its RCC personnel, nationally or regionally, as part of its aeronautical training or maritime SAR schools;

b) grant scholarships to SAR personnel as necessary to enable them to attend a SAR training course; and

c) make use of the ICAO TRAINAIR course development methodology to assist in the production of standardized training packages in the field of SAR.

Note.— The ICAO TRAINAIR programme provides for an effective means of analysing and determining skills required, creates training objectives by setting standards for job performance and produces material-dependent courseware.

COOPERATION BETWEEN STATES

[ASIA/PAC/3, Rec. 7/9]

21. To promote greater efficiency and economy in the provision and use of available SAR facilities, States providing SAR services in adjacent SRRs should enter into formal arrangements for mutual assistance in order to:

a) help meet and exceed the minimum requirements specified in Table SAR 1 of the FASID at minimal cost;

b) ensure full SRR coverage;

c) provide for technical and operational SAR cooperation and coordination;

d) establish common SAR procedures, where practicable;

e) conduct joint training and exercises, as appropriate, to maximize proficiency; and

f) promote effective liaison between air traffic services and RCC personnel within and between the States involved.

Note.— SAR agreements are particularly important for border areas where concerns for sovereignty and saving lives must be balanced, high seas areas, and inhospitable areas where rapid response is essential to successful SAR operations.
STATE PROCESSES

TO IMPROVE THE SAR SYSTEM

[ASIA/PAC/3, Rec. 7/15]

22. States, when undertaking the continued improvement in the provision of SAR services, should consider the following:

a) the establishment of a national SAR coordinating committee to improve inter-agency cooperation, information exchange and development of national SAR policies and procedures;

b) nationally or in cooperation with neighbouring States, development of:

1) SAR manuals;

2) SAR plans and agreements for cooperation, coordination and the effective use of all available SAR resources;

3) RCC/RSC plans of operation and other operational documents;

4) SAR training capability, especially for search planners, SAR mission coordinators and on-scene commanders; and

5) organizational and operational working relationships;

and

c) effective use of relevant international documents.