



International Civil Aviation Organization

**The Twenty-Second Meeting of the APANPIRG ATM/AIS/SAR Sub-Group
(ATM/AIS/SAR/SG/22)**

Bangkok, Thailand, 25 – 29 June 2012

**Agenda Item 5: Provision of ATM/AIS/SAR in the Asia/Pacific Region, including associated
CNS matters**

SEARCH AND RESCUE MATTERS

(Presented by the United States of America)

SUMMARY

The ICAO Bangkok Regional Office sent out the State letter AP129/11 (ATM) dated 27 September 2011 noting the lack of discussion at APANPIRG/21 related to Search and Rescue (SAR) matters. The three attachments to the letter revealed gaps in SAR which could benefit from such discussion. This paper seeks to provide a basis for continued development of possible solutions to fill in these gaps.

Strategic Objectives:

A: *Safety – Enhance global civil aviation safety*

Global Plan Initiatives:

- GPI-9 Situational awareness
- GPI-16 Decision support systems and alerting systems
- GPI-22 Communication infrastructure

1. INTRODUCTION

1.1 The ICAO Bangkok Regional Office sent out the State letter AP129/11 (ATM) dated 27 September 2011 noting the lack of discussion at APANPIRG/21 related to Search and Rescue (SAR) matters. The provision of SAR services is often a matter that States do not fully appreciate until disaster occurs. The three attachments to the letter document the known SAR gaps. These gaps are also common in other ICAO regions, and, there are typically good and bad reasons for the gaps. The ICAO Bangkok Regional Office has done a commendable job of keeping these attachments available for updating at its APANPIRG sessions. Discussion among the States should be encouraged to find ways to make progress in filling in these gaps pertaining to *Annex 12 – Search and Rescue*.

1.2 While all three attachments to the letter provide good insight, the third one, the SAR Capability Matrix Table is of particular value. This matrix table, created by the ICAO Bangkok Regional Office, is gaining usage in other parts of the world and provides a powerful one-page document for a SAR manager to present to senior government officials so as to sustain or improve SAR capability. It is possible that many of the identified gaps could be filled in by some basic national or regional steps. It is better to have some SAR capability (and other arrangements in place) rather than wait to have all the resources to then create the perfect SAR system.

2. DISCUSSION

2.1 A common mistake made by States in developing or improving SAR capability is to think that it needs to all done at once or that the system must perform perfectly. Another misunderstanding is to think that a State must provide all the SAR response capability itself. Such thinking could result in no progress at all. It may be more productive to think of a long-term effort with small steps. The goal would be to make progress and to sustain it. This could start with low-cost effort. There may some solutions with minimal cost, such as a SAR library, but all solutions will require some commitment and effort on the part of the government to provide a basic SAR service.

2.2 The process to begin filling in the SAR gaps does not have to focus on only the SAR Capability Matrix, but the Matrix does provide a useful beginning focal point. All States have valuable experience and views which would benefit all of the other States in this matter. Using the Matrix simply as an initial guide, discussion points could include ideas such as:

- a) SAR committee: Would States benefit from having a short model charter to serve as an example of which national authorities should be on the committee, what the duties or expectations are, etc?
- b) Agreements: Letters of agreement (or arrangement) may have different legal interpretation between States – the United States, for example, sees this as requiring approval by our State Department whereas other countries see this as a simple “handshake” or less formal letter between aeronautical authorities. This could slow the process but should not prevent agreements from being signed.
- c) Agreements: A maritime SAR arrangement is being completed among 22 Asia-Pacific island states, countries and territories. Many of these 22 are also listed on the SAR Capability Matrix. Could the maritime SAR arrangement serve the role as an aeronautical SAR agreement? If not, should the national aeronautical authority work with its maritime SAR counterpart to make this a combined aeronautical and maritime SAR arrangement or agreement?
- d) Agreements with discussion on Rescue Coordination Center (RCC)/SAR region: Could a developing SAR State consider having its aerodrome emergency plan serve as the basis for its national SAR service and then arrange through a regional SAR agreement for a developed SAR State to provide the more extensive long range or long duration SAR capability, especially beyond it territorial sea?
- e) SAR Library: ICAO provides a limited number of copies of SAR-related documents free to all States, including *Annex 12* to the Convention as well as the *International Aeronautical and Maritime SAR (IAMSAR) Manual*. Such documents should be placed in the SAR library for the SAR service to use. Many other documents are free but can become a problem in finding and also keeping a current edition. One solution may be for such documents to be posted on a web site by a developed SAR State for all States to use. If a State has difficulty in having web access then it could arrange periodic distribution of copies by other means from a State.

- f) Cospas-Sarsat Distress Alerts: This has two concerns: (1) receiving the distress alert; and (2) registering distress beacons in your country. Cospas-Sarsat has flexibility on providing solutions. Regarding actual alerts, key here is for a State to either acknowledge receipt of the alert or have arrangements for another State to help in that purpose. For distress beacon registration, Cospas-Sarsat has an international beacon registration database which might be able to solve many national problems. These and other problems might have simple solutions for a State to implement if it brings them forward for discussion.
- g) No input by some States: Can the Regional Office or another State assist in providing the information for some of the entries? For example, some States are within a larger SAR region of another State or are next to another State which typically provides assistance for SAR response. Is there a way for the Matrix to show that arrangements may be in place but that the State has not submitted that data for reasons such as not being able to attend APANPIRG sessions?
- h) Can sub-regionalized SAR service resolve many of these SAR gaps? Some areas could have SAR arrangements for one State to take overall lead for a SAR sub-region which includes other States within that sub-region. The lead State would provide overall SAR coordination and SAR services but would also be supported by the other States within the sub-region.
- i) Other ideas from the States.

2.3 As basic steps are taken to fill in gaps in SAR capability it is hoped that momentum builds to sustain that effort and improve the overall capability of the SAR system throughout the Asia-Pacific region.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and,
- b) encourage States to discuss and submit concepts to future APANPIRG sessions on how gaps in the SAR Capability Matrix may be addressed.

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