

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
SOUTH AMERICAN REGIONAL OFFICE**

**INFORMAL MEETING ON SEARCH AND RESCUE SERVICES FOR THE SAM REGION
(SAM 90/03 SAR)**

(Lima, Peru, 8 to 12 September 2003)

Agenda Item 1: Evaluation of the SAR Service in the SAM Region

**a) Review of the status of compliance of CAR/SAM/3 RAN Meetings
Recommendations and Conclusions (Buenos Aires, Argentina, 1999).**

(Presented by the Secretariat)

Summary

The object of this working paper is that the Meeting proceed to review by the SAM States those recommendations related to SAR, formulated by the CAR/SAM/3 RAN Meeting and that are applicable to the concerned area.

References

- Report of the CAR/SAM/3 RAN Meeting
- Regional Navigation Plan – Volumes I and II
- International Aeronautical and Maritime Search and Rescue Manual.
(IAMSAR – Doc.9731)
- Annex 11 – Air Traffic Services
- Annex 12 – Search and Rescue

1. Background

1.1 ICAO held the Third CAR/SAM RAN Meeting (CAR/SAM/3 RAN) in Buenos Aires, Argentina, in October 1999. At this Meeting, the ATM Committee dealt with agenda item 6, matters related with search and rescue.

2. Analysis

Recommendations of the CAR/SAM/3 RAN Meeting

2.1 It was understood that the minimum search and rescue facilities were those appearing in FASID Table SAR-1, and therefore it was agreed through **Recommendation 6/2** that this Table was the plan for SAR facilities in the CAR/SAM Regions, and that States should endeavor to ensure the service 24 hours a day (*this matter is dealt with in WP/3*).

2.2 In acknowledging that in some cases the maritime SAR regions, established by the International Maritime Organization (IMO) were not coincident with those of ICAO, it was understood through **Recommendation 6/3** that a close liaison should be maintained with the counterpart personnel of the maritime service and with the IMO, with a view to maximizing compatibility with between aviation and maritime regions, and even consider the possibility to establish joint rescue coordination centres.

2.3 With respect to the COSPAS-SARSAT system, the meeting considered that the problems generated by the high level of false alarms of distress beacons operating on 121.5 MHz and 243 MHz due to involuntary activation, and as a result, search and rescue services were often not being used efficiently. **Recommendation 6/4** establishes that the States should take measures to reduce to the number of false alarms, encourages the carriage of ELTs transmitting 406 MHz, establishes an ELT register and provide ICAO with a SAR point of contact (SPOC) (*this matter is dealt with under agenda item 5*).

2.4 Under ideal conditions, all distress alerts must be used in conjunction with identification information and position. Automatic messages previously formatted shall satisfy the regulation of the format and the equipment generating the message shall be registered with an appropriate SAR data provider (SDP). These processes should be associated to complete and accurate databases, which should be available round the clock (24 hours).

2.5 The Meeting noted that it was not always clear as to which type of entity was the SDP, in a State and that it was important that the RCC would know how to quickly obtain the data whenever required. As a result, the meeting formulated **Recommendation 6/5** requesting States presenting ICAO information on service data providers for its inclusion in FASID Table SAR-1.

2.6 It was acknowledged that a total coverage of CAR/SAM Regions could be achieved utilizing ELT operating at 406MHz and 121,5MHz for homing purposes, and that regulations of *Annex 6, Part I, II and III* on compulsory regulation that all aircraft be equipped with ELT, starting 1 January 2005, be implemented in November 1999. In considering that optimum performance of the COSPAS-SARSAT system, with an accurate and effective detection and location was provided on 406MHz frequency, Recommendation 6/6 establishing that all aircraft must carry ELT in accordance with Annex 6, was formulated.

2.7 It was noted that in many cases the required response time for SAR facilities were either not adequate or that information about response time was not available to the RCC. Recognizing the time criticality in urgent situations the meeting agreed in formulating Recommendation 6/7, which encourages States to adopt measures to ensure that the RCC operating plans contain provisions to obtain rapid response times and that the RCCs have readily available the required response times of primary search and rescue facilities.

2.8 It was noted that many States of the Region entrusted their SAR operations to military authorities and considering that other organizations were involved in these operations, an effective coordination among all concerned means should be ensured. Also, joint training exercises, agreements on response times of SAR facilities and methods and procedures for rapid and reliable communications, should be taken into account. In this connection, **Recommendation 6/8** was formulated.

2.9 The meeting also recognized that RCC and RSC personnel (rescue sub-centres) performed particularly important duties, which demanded formal training, aimed at achieving and maintaining an appropriate level of competence. Through **Recommendation 6/9** the meeting agreed on requesting ICAO to study the SAR requirements on human resources planning and training.

2.10 In the same line of events, **Recommendation 6/10** was issued, requesting the ICAO TRAINAIR programme to invite its members to develop standardized training packages for SAR personnel (*matter dealt with under Agenda Item 4*).

2.11 Based on the establishment of a Central American SRR, to cover the needs of six States, the meeting formulated **Recommendation 6/11** urging States that in order to provide a more efficient search and rescue service and reduce its costs, the creation of joint facilities be studied.

2.12 Finally, the meeting analyzed several aspects related with the SAR area, which enabled through **Recommendation 6/12** the establishment of certain basic dispositions for search and rescue services.

Review of recommendations of previous RAN meetings

2.13 The meeting reviewed recommendations issued in previous RAN meetings and recognized the validity of **CAR/SAM/2 Recommendation 7/12**, which indicates that States shall take the appropriate measures, whenever feasible, to carry out joint SAR exercises with other States and operators, at regular intervals and if possible once a year. In addition, that observers interested in participate be invited and fellowships be granted to SAR personnel to enable them to attend training courses.

3. Action suggested

3.1 The Meeting is invited to take note of the information presented in this working paper and consider that:

- a) States that have not done so as of this date and to the extent possible, adopt Recommendations from the SAR Area of CAR/SAM/2 and CAR/SAM/3 RAN meetings that have been already analyzed;
- b) Those States in the a) above-mentioned condition, maintain informed the South American Regional Office on the progress achieved in this respect; and
- c) For follow-up purposes of the referred recommendations, the format presented in **Appendix A** should be duly filled.

SAM 90/03 SAR
WP/2

A-1

APPENDIX A**CAR/SAM/3 RAN MEETING**

(Buenos Aires, Argentina, 1999)

EFFECTIVE RECOMMENDATIONS SEARCH AND RESCUE AREA**CAR/SAM/3 Meeting****Recommendation 6/2 – Search and rescue facilities**

That:

- a) the list of search and rescue (SAR) facilities as contained in Table SAR-1 in Part VII – Search and Rescue, of the Facilities and Services Implementation Document (FASID) at the Appendix to the Report on Agenda Item 6, constitute the plan for SAR facilities for the CAR/SAM Regions; and
- b) States establish and/or maintain the appropriate RCCs listed in Table SAR-1 and ensure the availability of services and facilities on a 24-hour basis.

CAR/SAM/3 Meeting**Recommendation 6/3 – Coordination with maritime SAR authorities and IMO**

That, to ensure compatibility between aeronautical and maritime search and rescue regions (SRRs), aeronautical SAR authorities in States maintain close liaison with their maritime counterparts and the International Maritime Organization (IMO), and consider the possibility of establishing joint aeronautical/maritime rescue coordination centres or equivalent arrangements.

CAR/SAM/3 Meeting

Recommendation 6/4 – Satellite-aided search and rescue

That States:

- a) take appropriate action to reduce the number of false alarms on 121.5 MHz caused by inadvertent activation of emergency locator transmitters and eliminate unauthorized use of those frequencies;
- b) encourage the carriage of ELTs transmitting on 406 MHz by all aircraft;
- c) establish a register of ELTs and make available information as to how ELT registration information can be obtained rapidly by rescue coordination centres (RCCs) of other States; and
- d) provide ICAO with a SAR point of contact (SPOC) for inclusion in Table SAR 1 of the respective air navigation plan.

CAR/SAM/3 Meeting

Recommendation 6/5 – Search and rescue data provider

That States provide to ICAO information on the search and rescue data provider for inclusion in Table SAR 1 of the Facilities and Services Implementation Document (FASID) part of the air navigation plan.

CAR/SAM/3 Meeting

Recommendation 6/6 – Carriage of 406 MHz ELTs

That, to achieve the early implementation in the CAR/SAM Regions of future global mandatory provisions, all aircraft required to carry emergency locator transmitters (ELTs) in accordance with Annex 6, carry automatic ELTs operating on 406 MHz, and on 121.5 MHz for homing.

CAR/SAM/3 Meeting

Recommendation 6/7 – Required response times for search and rescue facilities

That States take measures to ensure that the operating plans of rescue coordination centres (RCC) contain provisions for rapid response times, and that RCCs have readily available the required response times of primary search and rescue facilities.

CAR/SAM/3 Meeting

Recommendation 6/8 – Coordination with military and other authorities

That:

- a) States which rely on military authorities or other sources for the provision of SAR facilities ensure that adequate arrangements are in place for the coordination of SAR activities between all entities involved; and
- b) States consider the establishment of SAR Committees as recommended in the *International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual*.

CAR/SAM/3 Meeting

Recommendation 6/9 – Human resource planning and training of rescue coordination centre and rescue sub-centre personnel

That ICAO be requested to consider SAR requirements, including English language proficiency requirements, in its work on human resource planning and training.

CAR/SAM/3 Meeting

Recommendation 6/10 – Development of search and rescue (SAR) training material

That ICAO's TRAINAIR Programme be requested to invite its members to develop Standardized Training Packages (STP) for SAR personnel using the International Aeronautical and Maritime Search and Rescue Manual as its primary reference document.

CAR/SAM/3 Meeting

Recommendation 6/11 – Cooperation between States and establishment of joint search and rescue facilities

That States, in order to provide a more efficient search and rescue (SAR) service and to reduce the costs associated with providing SAR facilities, consider establishing joint facilities where possible.

CAR/SAM/3 Meeting

Recommendation 6/12 – Basic provisions for search and rescue services

That States take the steps necessary and practicable to ensure the availability of effective aeronautical SAR services throughout the CAR/SAM Regions as follows:

- a) identify aeronautical SAR authorities in legislation and high-level national SAR plans, and make provisions to support those authorities as necessary;
- b) adopt and implement, to the fullest extent practicable, the guidance material contained in the three-volume *International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)* for establishing effective domestic and regional services for aeronautical search and rescue;
- c) establish domestic and international SAR agreements where such agreements may improve SAR services and to coordinate efforts among entities that provide or support SAR services;
- d) ensure that a robust communications network, which takes into account any technologies commonly used by aircraft and RCCs, is in place to receive a voice or data distress alert from an aircraft via terrestrial and satellite systems that major coordination of the SAR response;
- e) ensure that RCCs know how to obtain data, as appropriate, from the AMVER ship reporting system to identify ships at sea that can provide assistance to aircraft and persons in distress;
- f) ensure that civil aviation authorities arrange with the appropriate national maritime authorities in order to encourage ships to voluntarily participate in the AMVER system; and
- g) ensure that all RCC personnel have an effective working knowledge of the English language.

CAR/SAM/2 Meeting

Joint SAR training and/or exercises

[CAR/SAM/2, Rec 7/12]

That States:

- a) when considered feasible, make arrangements for joint SAR exercises between their SAR units and those of other States and with operators at regular intervals and, if possible, at least once a year;
- b) invite observers from other interested States and organizations to participate in such exercises; and
- c) grant fellowships to SAR personnel to enable them to attend training courses in this field, after provision of adequate information from interested States to ICAO concerning the type of training to be received.

**FOLLOW-UP OF CAR/SAM/3 RAN RECOMMENDATIONS
 –SAR AREA**

STATE	RECOMMENDATION												REMARKS	
	6/2	6/3	6/4	6/5	6/6	6/7	6/8	6/9	6/10	6/11	6/12	7/12		
ARGENTINA														
BOLIVIA														
BRAZIL														
CHILE														
COLOMBIA														
ECUADOR														
FRENCH GUIANA														
GUYANA														
PANAMA														
PARAGUAY														
PERU														
SURINAME														
URUGUAY														
VENEZUELA														

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- Accomplished : place **YES** in the corresponding box.
- In execution: place **O/G** (on going) and indicate under “remarks” the estimated deadline.
- Not complied: place **NO** in the corresponding box and if such were the case, make comments in the remarks column.