



INTERNATIONAL CIVIL AVIATION ORGANIZATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
THIRTEENTH MEETING (APIRG/13)
(Sal, Cape Verde, 25-29 June 2001)

Agenda Item 4: Review of Reports of APIRG Sub-Groups and other Subsidiary bodies

4.3: Review of the Report of the Sixth Meeting of ATS/AIS/SAR Sub-Group (ATS/SG/6)

(Presented by the Secretariat)

SUMMARY

This paper presents the report of the Sixth Meeting of the ATS/AIS/SAR Sub-Group. The Sub-Group reviewed its terms of reference, work programme and applicable procedure. The Sub-Group reviewed the requirements in fields of Air Traffic Services, AIS/MAP and Search and Rescue fields aimed at meeting the current and future aircraft operational requirements. In carrying out the review the Sub-Group identified specific air navigation planning and implementation problems and made recommendations for appropriate remedial actions.

Action by APIRG is at paragraph 3

References:

ATS/AIS/SAR/SG/6 - Report
APIRG/12 - Report
AFI/7 RAN Meeting Report (Doc 9702)
APIRG Procedural Handbook

1. Introduction

1.1 The Sixth meeting of the ATS/AIS/SAR Sub-Group (ATS/AIS/SAR/SG/6) was convened by the International Civil Aviation Organization at the ICAO WACAF Office, Dakar from 8 to 12 May 2000. Copies of its report were distributed to members and AFI provider and user States. The meeting was attended by 57 experts from 14 member States and 3 international organisations, namely, ASECNA, IATA, IFATCA and 2 non-member organizations, namely Roberts FIR and Jeppesen.

1.2 It should be noted that the Sub-Group recorded its action in the form of draft Conclusions and draft Decisions. Apart from endorsement of the report, formal action is required by the APIRG on 50 draft Conclusions and 2 draft Decisions which are submitted for consideration in **Appendix _____** to this paper.

2. Discussions

2.1 Review of the ATS route network

2.1.1 The Sub-Group examined in detail the overall status of implementation of the basic ATS route network including RNAV routes contained in the ICAO AFI ANP (Doc 7474/27 Table ATS 1, Charts 2 and 3) in order to:

- a) identify additional route requirements;
- b) identify route segments requiring realignment;
- c) identify routes which can be deleted from the ANP;
- d) update "Notes" in the Table ATS 1;
- e) consider ATS interface routes with other Regions;
- f) identify the unimplemented routes and establish target date(s) for their implementation.

2.1.2 Having considered the above listed items the Sub-Group formulated draft Conclusions 6/1, 6/2, 6/3, 6/4, 6/5, 6/6 and 6/7. The Group will consider the material at Appendices **A**, **B** and **C**.

2.1.3 The Sub-Group reviewed a paper from IFALPA relating to the assignment of five letter name code designators for airway intersection points and formulated draft Conclusion 6/20.

2.2 Review of the implementation of the Area Control Service

2.2.1 The Sub-Group recalled various ICAO requirements and recommendations highlighting the need for the provision of Air Traffic Control Service; namely the Statement of Basic Operational Requirements and Planning Criteria - AFI Region. It noted that the AFI/7 RAN Meeting, in reviewing the status of implementation of Air Traffic Control Service in the AFI Region, under Recommendation 5/21, gave clear guidelines to States which were not able to ensure the provision of Area Control Service on a twenty-four hour basis to all flights operating within their respective FIRs.

2.2.2 The Sub-Group noted with concern that one of the most serious shortcomings in the region in the field of air navigation is the lack of implementation of Area Control Service. It was highlighted that poor communications facilities (ATS/DS, HF, VHF), unreliable navigational aids and inadequate number of controllers and training programmes were among the major contributing factors which prevented States from ensuring the provision of Air Traffic Control Service.

2.2.3 The Sub-Group recalled that APIRG/12 Rec.12/20 has set 1 January 2000 for the implementation of ATC service, however, as this date was not met by most States, it postponed the date to 17 April, 2001. While recognizing that the said recommendation was comprehensive enough, it was thought that there is really a need to speed up the implementation bearing in mind the fact that this recommendation was formulated in line with AFI/7 Rec 5/21. The Sub-Group formulated the draft Conclusion 5/8.

2.3 Navigation

2.3.1 The Sub- Group expressed the need for the ICAO Regional Offices concerned to follow up AFI/7 RAN meeting Rec 12/36 relating to the implementation of GPS.

2.4 Surveillance

2.4.1 The Sub-Group recalled the ATS requirement for Aeronautical Surveillance Plan for the AFI Region to be included in AFI Plan is adequately being pursued by the CNS/ATM Sub-Group. In view of the foregoing, the Sub-Group formulated draft conclusions 6/8, 6/9 and 6/10.

2.5 Review of the Report of the ACAS Task Force Meeting

2.5.1 The Sub-Group reviewed the report of the ACAS Task Force Meeting which was held in Nairobi, Kenya from 3 - 4 April 2000 pursuant to APIRG 12/Decision 12/1 and AFI/7 Rec 5/23 concerning the carriage and operation of the pressure-altitude reporting SSR Transponders and ACAS II effective 1 January 2000 and its application in AFI Region. The Sub-Group developed a draft AIC for use by States. In light of the difficulties experienced by the AFI States in meeting the effective date of 1 January 2000, the Sub-Group developed a strategy for implementation of ACAS in order to meet the deadline of 1 January 2003 so as to conform with the provision of Annex 6, Part 1 para. 6.18.1. It also considered the operating procedures in Doc 8168 (Vol.1 Part VIII, para.1.1.1) requiring pilots**** to operate SSR transponders. The Sub-Group considered for training by both Air Traffic controllers and Pilots on use of ACAS. The Sub-Group had completed its tasks in accordance with its terms of reference. Its existence was deemed no longer necessary. In view of the foregoing the Sub-Group developed the following draft conclusions:

Draft Conclusion 6/11:	ACAS II transition period and exemption process in the AFI Region
Draft Conclusion 6/12:	Carriage and operation of pressure-altitude reporting SSR Transponders
Draft Conclusion 6/13:	AIC on the use of SSR Transponders
Draft Conclusion 6/14:	Training of Pilots and Air Traffic Controllers on the use of ACAS
Draft Conclusion 6/15:	Publication of ACAS and SSR Transponder requirements in National Legislation
Draft Conclusion 6/16:	Publication of a Draft AIC on ACAS II Implementation
Draft Conclusion 6/17:	Procedures on the use of ACAS II and pressure-altitude reporting SSR Transponders

2.6 Review of the Report of the first meeting of Airspace Management Task Force meeting

2.6.1 The Sub-Group reviewed the first Report of the ASM Task Force meeting which was held in Nairobi, Kenya (9 - 10 April 2000) pursuant to APIRG/12 Decision 12/24.

2.6.2 Among the major issues covered were:

- a) Review of ATS Airspaces (ATS routes, TMA and CTR) organization.
- b) Implementation of WGS-84 coordinates.

- c) Establishment and identification of significant reporting points.
- d) Provision of Air Traffic Control on upper airspaces.
- e) Training of Air Traffic Controllers.
- f) Uniform application of ATS proficiency assessment and standard auditing procedures.
- g) Reduction of longitudinal separation.

2.6.3 The Sub-Group considered that the ASM Task Force had not fully completed its tasks, hence there was a need to its continuation. In view of the foregoing, the Sub-Group formulated the following draft conclusions 6/18, 6/19, 6/20, 6/21, 6/22, 6/23, 6/24, 6/25 and 6/26.

2.7 Review of the Report of the first meeting of the AIS Automation Task Force (AIS/TF/1)

2.7.1 The Sub-Group noted that in order to develop an AFI Region integrated and automated AIS System, the Task Force reviewed, as a first step, the status of implementation of ICAO requirements in the AIS/MAP field. The meeting was appraised of shortcomings and deficiencies which have been reported in the AFI Region and it emphasized that appropriate measures should be taken in order to eliminate them.

2.7.2 The meeting noted that pursuant to AFI/7 RAN Meeting Recommendation 12/39 concerning the development of a cohesive AFI Region Air Navigation Plan on AIS Automation, the Terms of Reference were to develop a cohesive, air navigation plan taking into account the provisions of the AFI ANP as well as the method of application provided in the associated FASID.

2.7.3 The major problems in the fields of AIS/MAP affecting the Region are summarized as follows:

Some States have not yet produced their AIPs using the new Format;

Some States do not update their AIPs regularly;

Some States do not follow the AIRAC cycle date in accordance with the provisions of Annex 15, Chapter 6 (Para. 6.1.1);

Some States do not follow the standard NOTAM Format indicated at Appendix 6 of Annex 15 for the issuance of NOTAM;

Most States have not produced the mandatory aeronautical charts in accordance with the provisions of Annex 11 chapter 4 (Para.4.1.3);

Need for training and qualification of AIS/MAP personnel;

Delays in the distribution of Aeronautical Information (AIP amendments, AIP Supplements, AICs etc.) and;

The non- implementation of WGS-84 coordinates.

2.7.4 The Sub-Group reviewed on the above requirement in the AIS/MAP fields and developed the following conclusions:

6/27, 6/28, 6/29, 6/30, 6/31, 6/32, 6/33, 6/34, 6/35, 6/36, 6/38, 6/39.

2.7.5 The Sub-Group considered that the AIS Task Force terms of reference were too many to be considered at only one meeting and therefore was of the opinion that the Task Force should continue to exist. The Sub-Group thus developed conclusion 6/37 for consideration by APIRG.

2.8 Review of the implementation of ICAO requirements in the Search and Rescue (SAR) field

2.8.1 The Sub-Group reviewed the status of implementation of all ICAO provisions relating to search and rescue services. It was noted with concern that most of these provisions have remained unimplemented and the meeting was of the view that States should be sensitized on the urgent need to take prompt action and, furthermore, sustained that assistance should be provided by ICAO in order to improve the provision of search and rescue services in the Region.

2.8.2 It was pointed out that major shortcomings exist in the following fields:

Need for co-operation between States in order to promote a more effective and economic utilization of SAR facilities;

Need for training of SAR personnel;

Need to carry out search and rescue exercises;

Need for the implementation of a local user terminal/ mission control centre (LUT/MCC) in the AFI Region, at locations that would take maximum advantage of satellite coverage to receive distress signals.

Need for publishing, in their respective AIPs ELT registration information which could be shared with other rescue co-ordination centres (RCCs) of other States;

Need for providing a SAR point of contact (SPOC)

Need for appropriate SAR Agreements and legislation.

2.8.3 The Sub-Group noted with appreciation that Algeria has implemented an MCC in Ouargla, in Southern Algeria and that States within the coverage area of the MCC wishing to receive COSPAS/SARSAT data should get in touch with the Secretariat of COSPAS SARSAT in London. The meeting also noted that the LUT/MCC station in South Africa has already been implemented at Cape Town.

2.8.4 The Sub-Group highlighted the need for ICAO to organize search and rescue seminars in the Region. To this effect, it was pointed out that one seminar was organized in Nigeria from 7 - 9 December 1999. The meeting agreed that ICAO should assist States through Special Implementation Projects (SIPs) and missions in order to promote the implementation of SAR provisions. The meeting was also concerned of lack of adequate facilities for aeronautical marine SAR. In this regard it was the opinion of the the meeting that

those States concerned should be urged to promote the existing ICAO/IMO protocols to specifically address these issues. Based on the foregoing, the Sub-Group formulated the following conclusion:

Draft Conclusion 6/40: Provision of Search and Rescue Services

That:

- a) **The Secretariat follows, through missions, the implementation of SAR provisions within the AFI Region and keeps the APIRG apprised of developments.**
- a) **States accord high priority for the implementation of ICAO provisions in respect of search and rescue services.**
- b) **ICAO assists States through Special Implementation Projects (SIPs) in order to promote the implementation of SAR provisions.**
- d) **States concerned in maritime SAR promote the existing ICAO/IMO protocols in order to enhance efficiency in the aeronautical maritime SAR.**

2.9 Consideration of the operational implications of the introduction of ICAO CNS/ATM System in the AFI Region.

2.9.1 The Sub-Group reviewed the ATM operational requirements in the AFI CNS/ATM Plan (Doc 003) Fifth Edition, January 2000. It noted that this Plan was adequate and only minor amendments to the AFI CNS/ATM Plan were necessary. The Sub-Group then concluded as follows:

Draft Conclusion 6/41: Amendment to the AFI CNS/ATM Plan, Doc.003 5th Edition.

That the CNS/ATM Sub-Group be requested to amend the AFI CNS/ATM Plan as follows :

- 1) **Amend** the target date for the implementation of RVSM from **2001** to **2002** in paragraph 2.1.4 of Doc. 003
- 2) Paragraph 2.2.1.6 **“add”** at the end of the paragraph, **“and the requirement for full VHF coverage”**.
- 3) Paragraph 2.2.2.1.1 **“add”** at the end of the sentence **“to be confirmed by AP IRG”**.
- 4) Paragraph 2.2.3.2.4 **“add”** at the end of the sentence **“to be confirmed by APIRG”**.
- 5) **Add** in areas relating to AR3 and AR9 by including **“ASMARA FIR”**
- 6) Appendix D under Angola **Add “Luanda TMA 1”** and Aerodrome **Add “Luanda aerodrome 1”** and **“Huambo Aerodrome 3”**.
- 7) Appendix D: Under Tunisia **amend** as follows **“Djerba TMA 2 “, and “Monastir TMA 1”**.

2.9.2 The Sub-Group was informed that IATA and ASECNA had not yet developed a criteria relating to the classification of aerodromes as requested by the CNS/ATM Sub-Group. The two members however confirmed that the criteria would be developed soon and that it would be submitted to the third meeting of the CNS/ATM Sub-Group for consideration.

2.9.3 The Sub-Group considered the need to have a Website established both at the ESAF and WACAF offices where information on shortcomings/deficiencies would be posted and accessed by States and industry.

2.9.4 The Sub-Group also considered that there was need to expedite and monitor the implementation of RVSM and RNAV in order to define a short and medium term implementation strategy.

2.9.5 In order to foster the early introduction of RNP 5 for RNAV routes for the North/South and East/West traffic in the AFI Region there was an urgent need to improve the VHF coverage in the FIRs of Algiers, Brazzaville, Dakar, Khartoum, Kinshasa, Luanda, Ndjamena, Niamey and Tripoli.

In view of the foregoing, the following conclusions were formulated :

Draft Conclusion 6/42: Establishment of Website in the ESAF and WACAF offices.

That a website be established at the ESAF and WACAF Offices to post information on shortcomings/deficiencies in the AFI States.

Draft Conclusion 6/43: Implementation of RNP and RVSM in the AFI Region.

That the Tasks relating to the implementation of RNP and RVSM in the AFI Region be assigned to the ASM/TF.

Draft Conclusion 6/44: Implementation of RNP/5 in the AFI Region

That VHF coverage be improved in the Algiers, Brazzaville Dakar, Khartoum, Kinshasa, Luanda, Ndjamena, Niamey and Tripoli FIRs to facilitate early introduction of RNP/5.

2.9.6 The Sub-Group recalled that there was a need to hold a meeting between Libya and all its adjacent States in order to address issues relating to the coordination procedures. It accordingly framed the following conclusion:

Draft Conclusion 6/45: Coordination meeting between Libya and adjacent States

That:

As a matter of urgency, a meeting be organized between Libya and adjacent States, under the aegis of ICAO, in order to address issues relating to ATS coordination procedures and communications.

Note: The said meeting was held in Chad on _____ 2000.

2.10 Consideration of specific air navigation planning and implementation problems and review of shortcomings and deficiencies in the Region. covering ATS/AIS/SAR fields

2.10.1 These are discussed under Agenda 5.3 WP/12.

2.11 Review of outstanding Conclusions and Decisions of APIRG, Decisions of the ATS/SG and future work programme of the ATS/SG

2.11.1 The Sub-Group reviewed its outstanding Conclusions and Decisions in the light of developments in order to keep them current and limit their number to a minimum consistent with the progress achieved in their implementation.

2.11.2 The Sub-Group took note of the fact that its Report on its fifth meeting had been endorsed by the APIRG/12 Meeting with minor amendments. It also noted that its Terms of Reference of work programme was amended to include, in particular, elements on Human Factors on ATS, AIS and SAR. There was no change proposed by the Sixth meeting of the Sub-Group on its terms of reference. These TORs appear at Appendix _____ to this working paper.

2.11.3 The APIRG is invited to:

- a) take note of the revised notes for Table ATS 1 at **Appendix** _____
- b) agree that _____ be the target date for implementation of non-implemented routes at **Appendix** _____
- c) agree that _____ be the target date for the implementation of ATS/DS circuits at **Appendix** _____ non-implemented routes at _____
- d) agree that _____ be the target date for the implementation of area control service.
- e) agree to the continuation of the ASM Task Force and its TORs be amended to include RVSM and RNP issues.
- f) agree to the continuation of AIS Automation Task Force.
- g) Agree to the establishment of a Human Factors Task Force with Terms of Reference at **Appendix** _____
- h) note the Report on the sixth meeting of the ATS/AIS/SAR Sub-Group.
- i) take action on the conclusions of the Sixth meeting of the ATS/AIS/SAR Sub-Group, as proposed in **Appendix** _____ and;
- j) note the future work programme of the ATS/AIS/SAR Sub-Group at Appendix _____

- END -