



INTERNATIONAL CIVIL AVIATION ORGANIZATION
AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
FOURTEENTH MEETING (APIRG/14)
(Yaoundé, Cameroon, 23 – 27 June 2003)

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

4.1: Review of the report of the fifth meeting of the Aerodrome Operational Planning Sub-Group (AOP/SG/5)

(Presented by the Secretariat)

SUMMARY

This paper presents the report of the fifth meeting of the Aerodrome Operational Planning Sub-Group. The Sub-Group received and reviewed the follow-up action taken on the APIRG/13 meeting Conclusions and Decisions approved by Council. It reviewed the list of deficiencies in the AOP field and held lengthy discussions on the concerns of the Council with regard to the slow progress of elimination of these deficiencies in some States. The positive steps taken by some managers of autonomous civil aviation authorities was noted. In addition, the meeting reviewed the status of aerodrome installations and services provided at international aerodromes with particular emphasis on rescue and fire fighting, bird hazard control and reduction and aerodrome emergency planning. The meeting also reviewed the progress so far made by States towards the requirement in Annex 14 Vol. I with respect to aerodromes certification. It also received and reviewed the report of the New Larger Aircraft Task Force.

Action by APIRG/14 Meeting appears in paragraph 6.

References:

AFI/7 RAN Meeting Report Doc. 9702
Doc AFI FASID
APIRG/13 Report
AOP/SG/5 Report

1. Introduction

1.1 The fifth meeting of the Aerodrome Operational Planning Sub-group (AOP/SG) held in Dakar, Senegal from 26 – 28 March 2003, was attended by 25 participants from 10 States and 2 member international organizations.

2. Follow-up action on APIRG/13 Meeting Conclusions and Decisions concerning aerodrome installations and services

2.1 General

2.1.1 The AOP/SG/5 Meeting reviewed the APIRG/13 Meeting Conclusions and Decisions related to the progress and status of implementation of aerodromes services in the AFI Region. The Meeting acknowledged that non-implementation of these facilities and services have a serious impact to the safety of operations. The concerns of the ICAO Council on the lack of noticeable progress in the reduction or total removal of deficiencies in the AOP field in the AFI Region was emphasized.

2.2 Bird Hazard control and reduction

2.2.1 APIRG/13 Meeting having noted the substantial efforts that States were making in developing and maintaining bird hazard reduction measures that were proving to be effective was of the view that the success being witnessed was as a result of the awareness created through the many ICAO workshops that had been held. APIRG/13 therefore developed a Conclusion 13/1 that required ICAO to continue holding more workshop and to request States to host them so as to allow other agencies and individuals involved to participate. The Meeting noted that in the spirit of this Conclusion, both the ICAO ESAF and WACAF Offices had held such workshops. The Meeting acknowledged the efforts by ICAO in the awareness creating through these workshops and registered its appreciation to those States that had hosted the workshops. Nevertheless, the meeting was of the view that such efforts should continue. The meeting therefore reaffirmed the relevance of both the AFI/7 RAN Conclusion 4/1 and the APIRG/13 Conclusion 13/1.

2.2.2 The Meeting while reviewing the various recommendations made at the workshops, the AFI/7 RAN Meeting Conclusion 4/7 and the recommendation in Annex 14, Volume I, on the subject raised the following observations:

- a) At some airports, bird hazard committee participation was delegated to junior and/or inexperienced staff making it ineffective;
- b) At some airports, the reporting of bird strikes was left to the airline involved and these mostly reported only the serious strikes and in many cases they report to their home State;
- c) At some airports, there was no sufficient involvement of neighbourhood communities;
- d) At some airports, control methods were being implemented without prior in-depth ornithological studies.

2.2.3 The meeting further developed the following draft conclusion:

DRAFT CONCLUSION 14/.....

THAT:

- i) **STATES FACING BIRD HAZARD PROBLEM SHOULD CONDUCT ENVIRONMENTAL AND ORNITHOLOGICAL STUDIES IN ORDER TO ENSURE THE DISPERSAL AND CONTROL METHODS SELECTED ARE APPROPRIATE, EFFICIENT AND COST EFFECTIVE.**
- ii) **THAT AIRCRAFT OPERATORS SHOULD BE ENCOURAGED TO REPORT ALL BIRD STRIKES TO THE AIRPORT OPERATOR.**

2.3 Impact of New Larger Aeroplanes (NLA) on aerodromes in the AFI Region

2.3.1 Following the approval by Council of the APIRG/13 Conclusion 13/2, the first meeting of the Task Force (TF) was held at Dakar, Senegal 23 – 25 March 2003. The Sub-Group Meeting therefore received and reviewed the report of the NLA/TF.

2.3.2 The Sub-Group noted that the A380 is due to enter commercial operation in the first quarter of 2006. A survey conducted by the ESAF and WACAF offices indicated that so far only St. Denis (Reunion), Johannesburg and Cape Town (South Africa) have definite indications of receiving the NLA in 2006. The Sub-Group was of the view that the survey was probably not conclusive and that a few more should be carried out in order to obtain a true picture. IATA should be requested to assist in this regard and the airlines urged to cooperate accordingly.

2.3.3 The Sub-Group noted that due to the design of the tyre arrangement, the NLAs should not require any pavement strength higher than the ICAO Code 4E. Nevertheless drainage culverts and bridges would require strengthening. However, in order to fully meet requirements of Code 4F aeroplanes, runways at existing airports would have to be widened from the current 45m to 60m. Because of the physical dimensions of the aircraft whose wingspan is 15m wider, the overall length 2m more and the weight a colossal 160t heavier than the B747-400, existing airports expected to receive these aircraft have to re-evaluate the operational procedures. ICAO Annex 14, Volume I provides the standards and recommended practices that are required to be implemented for these NLAs or Code “F” aeroplanes. The A380 manufacturer has posted a preliminary issue of the “A380 Aeroplane Characteristics for Airport Planning” on its website (www.airbus.com) that could be consulted.

2.3.4 On the impact of NLAs on RFF requirements, the Sub-Group noted that ICAO has already introduced a CAT 10 for aerodromes expected to receive Code F aeroplanes. Nevertheless, it was acknowledged that in view of the higher passenger capacity (about 600 passengers), bearing in mind that the major objective of an emergency operation is to save lives, there was need to consider significant review of the rescue facilities and tools and the complementary training of RFF personnel to intervene effectively on the two decks loaded in full length.

2.3.5 With regard to the associated emergency plans, the Sub-Group noted that at airports expected to receive these airplanes, the existing aerodrome emergency plans would have to be reviewed bearing in mind the higher passenger capacity and therefore casualty

volumes. This was necessary to ensure the responding agencies are made aware of the extra resource requirements.

2.3.6 The Sub-Group also noted that since current recovery kits were designed for the Code E aeroplanes, suitable disabled removal equipments would have to be investigated.

2.3.7 Due to the higher passenger capacity, the facilitation in the terminal building would require review. This would include both the landside and airside facilities. Airport access, landside car parks, check-in areas, baggage handling and processing systems, waiting areas, boarding and arrival concourses, police and security checks etc., would require review in order to maintain acceptable levels of service.

2.3.8 The capacities of the various ground handling equipment including push-back equipment, aerobridges, passenger ladders, apron buses, fuel loading facilities, aircraft cleaning facilities etc., would have to be reviewed.

2.3.9 Consequently the AOP/SG adopted the following draft conclusions:-

DRAFT CONCLUSIONS:

THAT:

1. **STATES, ASSISTED BY ICAO, SHOULD CARRY OUT A SURVEY OF THE AIRLINES REQUIREMENT IN ORDER TO IDENTIFY WHICH AIRPORTS ARE EXPECTED TO RECEIVE OPERATIONS OF NLA_s IN THE MEDIUM AND LONG TERM. IATA SHOULD BE REQUESTED TO SUPPORT AND ASSIST STATES IN THIS REGARD.**
2. **STATES PLANNING FOR NEW AIRPORTS SHOULD WHEREVER POSSIBLE ACQUIRE SUFFICIENT LAND FOR CODE 4F CONSIDERATIONS AND DEVELOP MEDIUM AND LONG TERM MASTER PLANS ACCORDINGLY.**
3. **STATES CONTINUE TO MONITOR DEVELOPMENTS IN THIS MATTER IN ORDER TO BE AWARE OF THE APPROPRIATE STANDARDS AND RECOMMENDED PRACTICES AS DEVELOPED AND APPROVED BY ICAO FOR IMPLEMENTATION.**
4. **STATES SHOULD BEGIN TO PLAN FOR APPROPRIATE TRAINING OF RFFS PERSONNEL TO MEET NLA REQUIREMENTS.**
5. **AIRPORTS IDENTIFIED TO BE CONSIDERED FOR OPERATION OF THE NLA SHOULD EVALUATE THEIR INFRASTRUCTURE, SERVICES AND HUMAN RESOURCES TO DETERMINE WHAT ACTIONS NEED TO BE TAKEN TO PREPARE THEM FOR THESE OPERATIONS.**

6. STATES PLANNING DEVELOPMENT OF NEW AIRPORTS SHOULD CONSIDER CONSTRUCTION OF SOME FACILITIES REQUIRED FOR CODE F AERODROMES IN THE FIRST PHASE (CULVERTS, BRIDGES, PAVEMENT FOUNDATIONS) IN ORDER TO AVOID DEMOLITIONS AND ASSOCIATED IMPACT AT A LATER DATE.

2.4 Human Factors in the AOP field

2.4.1 APIRG/13 discussed at length the issue of human factors in the AOP field. It emphasized that in spite of the recent technological advancements, interaction of humans with technology was still indispensable. Consequently, APIRG/13 developed a Conclusion 13/3 which required States to allocate sufficient resources for training and retraining of staff and to formulate appropriate policies on the management of personnel that ensures the retention of the trained staff.

2.4.2 The meeting was informed that on its part ICAO has continued to promote the establishment of autonomous civil aviation authorities after elaborate feasibility studies. This was because ICAO had noted that where such authorities had been established the management had been sufficiently empowered to develop through their management boards elaborated staff development and motivation programmes that have resulted to not only performance enhancement but also improvement of efficiency, job satisfaction and better remunerations.

2.4.3 Nevertheless the meeting was of the view that ICAO should in the promotion of the establishment of autonomous authorities emphasize that for better results, in addition to management autonomy, the authorities should have financial autonomy.

2.5 Aerodromes emergency planning (AEP)

2.5.1 The meeting received a summary of the status of implementation of this requirement in the AFI Region. This summary showed that although the subject of AEP had been on the AOP/SG agenda as far back as its first meeting in 1991 and on the APIRG agenda before that several States had not fully complied with this requirement. A recent ICAO survey had indicated that the status with States was varied as follows:

- a) Some States had no plan at all (a “draft” plan that remained unapproved for a long time was considered not to be a plan).
- b) Some States had plans which were not regularly updated (effectively becoming a “no plan” status).
- c) Some States had plans which were not well coordinated with the other responding agencies (unless agencies understand their role, little assistance can be expected).
- d) Some States do not allocate appropriate resources for maintenance and management of the plan. (Review, publication and amendment require resources).
- e) Some States have plans that are not tested: (without testing the integrity of the plan remains doubtful).

2.5.2 APIRG/13 Meeting reaffirmed the APIRG/12 Conclusion which in addition to re-emphasising the Annex 14, Volume I requirement on establishment of AEPs, the conduct of partial and full scale exercises and keeping the plans under constant review, required ICAO to assist States in the process of developing of the plans and to hold workshops on the subject.

2.5.3 On its part ICAO continues to offer assistance on request. When the resources required are substantial, the request is channelled through the ICAO Technical Cooperation Bureau. Further, ICAO continues to hold workshops in the subject at appropriate intervals.

2.5.4 The meeting was reminded that with the coming into effect of the new requirement for aerodromes certifications in November 2003, development of the AEP becomes a prerequisite for the consideration for certification. Consequently, the meeting urged States to give this matter priority in their plans towards the certification process.

2.5.5 The meeting took note of the announcement by Ghana that it had acquired the disabled aircraft removal kit for a B747 type aircraft and encouraged other States to make use of it when required.

2.5.6 The meeting therefore developed the following draft conclusion:-

DRAFT CONCLUSION:

THAT STATES SHOULD DESIGNATE AN APPROPRIATE NATIONAL COORDINATOR FOR THE AIRPORT EMERGENCY PLAN WHOSE RESPONSIBILITY ASSISTED BY A SMALL COMMITTEE SHALL BE TO ENSURE REGULAR UPDATING AND TIMELY TESTING OF THE EMERGENCY PLANS.

2.6 Rescue and fire fighting (RFF)

2.6.1 The Sub-Group noted Amendment 4 to Annex 14, Volume I, which introduced and updated a certain number of specifications relating to rescue and fire fighting including new specifications on rescue and fire fighting in difficult environment, new specifications on water replenishment, deletion of the references to halons and to carbon dioxide as complementary agents and revised specifications on response time. The meeting was also reminded that as from 1st January 2000, the aerodrome RFFF category could be lowered only by one category as per Annex 14, Volume I, Standard 9.2.2.

2.6.2 The Sub-Group noted that some international aerodromes still have a level of protection lower than that required. This deficiency is mostly due to the lack of financial resources, in particular for small airports receiving some large aircraft, but where the level of traffic remains relatively low. Moreover, there are some cases where the RFF vehicles remain broken down for long periods of time or function with reduced performances, thus lowering the level of protection.

2.6.3 The issue of rescue in difficult environment, in particular for aerodromes located close to great stretches of water or swampy areas, was discussed and the lack of adequate equipment and trained personnel to operate in these areas was emphasized. In view of the high cost involved, the meeting suggested that those airports where such equipment is not available, should arrange mutual agreement with equipped agencies such as Coast-guards or even communities familiar with the specific environment such as fishermen.

2.6.4 On the issue of training, the meeting was informed by Ghana and ASECNA that new training facilities were available at Accra airport and at the ASECNA Regional Fire Fighting Training School (ERSI), Douala, Cameroon for live fire exercise. Regional Offices also continue to assist States, directly during missions and through correspondence or by organizing regional workshops like that programmed in Ghana from 28 July to 1st August 2003.

2.6.5 After lengthy discussions on new specifications related to response time, the meeting stressed the need for the fire fighting vehicles to be maintained in good operating conditions and it was recalled as indicated in the Airport Service Manual, Part I, that for some airports, satellite fire stations or pre-positioning of fire vehicles close to movement areas might be necessary to meet the response time.

2.6.6 In the light of the above considerations, the meeting re-affirmed the of relevancy AFI/7 RAN meeting Conclusion 4/6 and developed the following draft conclusion:

DRAFT CONCLUSION 14/-----

THAT STATES SHOULD ENSURE THAT AIRPORTS CLOSE TO LARGE BODIES OF WATER OR SWAMPY AREAS ARE PROVIDED WITH APPROPRIATE RESCUE AND FIRE FIGHTING EQUIPMENT AND ADEQUATELY TRAINED PERSONNEL IF NECESSARY, BY CONCLUDING MUTUAL AGREEMENTS WITH SPECIALIZED AGENCIES.

3. Review of deficiencies in the AOP field

3.1 The meeting was informed on the changes adopted by the Council on the uniform methodology for the identification, assessing and reporting of deficiencies of air navigation systems, notably on the format of the list of deficiencies where the terms “shortcomings and deficiencies have been replaced by the single term “deficiencies”. The Sub-Group was also informed of the Secretariat’s work done to record the deficiencies by State rather than by deficiency following the discussions at APIRG/13.

3.2 The Sub-Group noted the efforts made by the Secretariat, through the various sources available to keep the list up-to-date. It also encouraged the Secretariat to continue the provisions taken to ensure the States validate the deficiencies raised on their territories by different sources other than ICAO. The Sub-Group outlined the need for States to systematically inform the Secretariat on corrective actions taken and reply to letters sent by the Secretariat for validation of deficiencies identified on their territories so that the list can be kept updated and reliable.

3.3 The Sub-Group noted with satisfaction the efforts made by some States to eliminate certain deficiencies in spite of the scarcity of resources and agreed that these efforts must be continued and encouraged. Nevertheless, the Sub-Group was informed of the concern expressed by the Air Navigation Commission and the Council about persistent deficiencies, in particular those impairing safety. Among the reasons identified by the meeting was the lack of financial resources for some States, the lack of financial autonomy for some States in spite of having created autonomous entities and inadequate approach in implementing some corrective actions. After lengthy discussions, it also appeared evident

that some States were not giving the necessary priority to the elimination of some major efficiencies due to lack of awareness. Therefore, the need to increase awareness of the highest authorities was highlighted. The meeting was of the view that this could be obtained through the briefing of these authorities during missions to States by the Secretariat or through State letters to States concerned explaining the possible consequences if the deficiencies were not eliminated and urging those States to develop an action plan for corrective actions to facilitate follow-up action.

3.4 The meeting therefore reaffirmed the relevance of its APIRG/12 Conclusions 12/56 and 12/57 and further developed the following draft Conclusion:-

DRAFT CONCLUSION

THAT WHEN AUTONOMOUS AUTHORITIES ARE ESTABLISHED, GOVERNMENTS SHOULD ENSURE THAT THEY ARE VESTED WITH MANAGEMENT, FINANCIAL AND DECISION-MAKING AUTONOMY IN ORDER TO FACILITATE ALLOCATION AND FAST MOBILIZATION OF RESOURCES FOR THE ELIMINATION OF AIR NAVIGATION SYSTEMS DEFICIENCIES.

4. Aerodrome Certification

4.1 The Sub-Group discussed the requirement in Annex 14, Volume I related to Aerodrome Certification bearing in mind the cut-off date of 27 November 2003. The Sub-Group also reviewed the guidelines provided by ICAO in the Manual of Certification of Aerodromes, Doc. 9774 for uniform implementation of the Standard.

4.2 It is expected that States need to enact basic legislation that will provide for the requirement for the certification of aerodromes. Such regulations should identify the regulatory authority and vest it with the necessary powers to enforce compliance. The requirement for certification should apply equally to government operated State-owned aerodromes and to airports operated by others.

4.3 As a prerequisite to the application for aerodrome certification, an aerodrome manual should be prepared by the operator and approved by the regulatory authority. The Doc. 9774 Manual of certification of aerodromes contains in Appendix 1 guidelines on the structure of the Aerodromes Manual. The information contained in the Aerodrome Manual should effectively demonstrate that the aerodrome conforms to the certification standards and practices and that there are no apparent shortcomings which could adversely affect the safety of aircraft operations. It should enable the CAA to assess the suitability of the aerodrome for the operations proposed and to judge the applicant's fitness to hold a certificate.

4.4 The Sub-Group was informed that the ICAO Regional offices of WACAF and ESAF intended to hold workshops specifically dedicated to this subject in May and July 2003 respectively. In addition, the ESAF office will discuss the issue of aerodromes certification during the meeting of Heads of the Civil Aviation and Airports Authorities scheduled to be held for 25 – 26 August 2003.

4.5 The Sub-Group identified the need to provide appropriate training to personnel who would be involved in the certification process in particular the inspectors and the auditors

and the meeting was of the view that in order to ensure uniformity this training should be in accordance to ICAO training programme.

4.6 The Sub-Group therefore made the following draft conclusions:

DRAFT CONCLUSION 5/..

THAT:

- i) **ICAO ORGANIZE WORKSHOPS IN ORDER TO SENSITIZE THE STATES OF THE REGION, IN PARTICULAR ON THE NEED FOR QUICK DEVELOPMENT OF AN APPROPRIATE REGULATORY FRAMEWORK AND PROVIDE THE REGULATORY BODY RESPONSIBLE FOR AERODROME CERTIFICATION WITH A SUITABLE ORGANIZATIONAL STRUCTURE AND QUALIFIED HUMAN RESOURCES TO CARRY OUT THE FUNCTIONS OF CERTIFICATION.**
- ii) **STATES WHICH HAVE NOT DONE SO TAKE APPROPRIATE MEASURES TO DEVELOP AN ACTION PLAN TOWARDS ACHIEVING THE IMPLEMENTATION OF THE REQUIREMENT FOR AERODROMES CERTIFICATION IN ACCORDANCE TO PARA. 1.3 OF ANNEX 14, VOLUME 1.**
- iii) **STATES SHOULD DEVELOP A TRAINING PROGRAMME FOR ADEQUATE AERODROMES CERTIFICATION INSPECTORS AND AUDITORS.**

5. Facilities and services implementation Document (FASID) for AFI region – Part III – AOP

5.1 The meeting reviewed the draft Basic Air Navigation Plan (ANP) and Facilities and Services Implementation Document for AFI region – Part III – AOP, developed by APIRG/13.

5.2 The meeting was appraised on new development of the CNS Table which will provide input to GNSS column of Table AOP.

6. Action by the APIRG/14 Meeting

6.1 The APIRG/14 Meeting is invited to review the report of the AOP/SG/5 Meeting and the draft Conclusions thereof, for adoption.
