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ASSEMBLY — 32ND SESSION

EXECUTIVE COMMITTEE

Agenda Item 18: Shortcomings and deficiencies in the air navigation field

SHORTCOMINGS AND DEFICIENCIES IN THE AIR NAVIGATION FIELD

SUMMARY

In March 1997, the Council approved an outline action plan to address safety-related shortcomings and deficiencies in the air navigation field. A comprehensive action plan was then developed which will subsequently form part of the Global Aviation Safety Plan (GASP). The objective of the action plan is to address shortcomings and deficiencies in the air navigation field and to facilitate implementation by States of the required facilities and services. This paper presents the action plan.

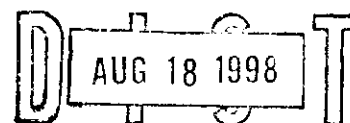
REFERENCES

Doc 9662, *Assembly Resolutions in Force* (as of 4 October 1995)

1. INTRODUCTION

1.1 In accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300), Contracting States undertake, insofar as they may find practicable, to provide in their territory, air navigation facilities and services necessary to facilitate international air navigation. Regional air navigation plans set forth the requirements for facilities and services for international civil aviation. Moreover, these facilities and services should comply with relevant ICAO Standards and Recommended Practices (SARPs). It is recognized that any serious shortcomings in the implementation of regional air navigation plans may affect the safety, regularity and efficiency of international air operations, and should, therefore, be eliminated as quickly as practicable.

1.2 While implementation of the facilities and services required for international civil aviation is the responsibility of States, there is also a role for the Council and planning and implementation regional groups (PIRGs) in this regard, as reflected in Appendix M to Assembly Resolution A31-5: Consolidated statement of continuing policies and associated practices related specifically to air navigation. As indicated in Associated Practices Nos. 3 and 5, the Council should arrange for the monitoring of the status of implementation of such regional air navigation plans and, when appropriate, for measures to be taken to facilitate elimination of serious shortcomings in their implementation. Article 69 of the Convention refers to consultations with States directly concerned and



other States affected, with a view to finding means by which the situation may be remedied and that Council may make recommendations, while Article 70 addresses arrangements for giving effect to such recommendations and the financing of the costs thereof.

2. BACKGROUND

2.1 On 12, 13 and 14 March 1997, the Council reviewed a report presented by the Air Navigation Commission (ANC), including an outline action plan to address safety-related shortcomings and deficiencies in the air navigation field. The Council approved, in principle, the outline action plan and requested the Secretary General to develop a comprehensive action plan to be considered by the ANC for recommendation to the Council.

2.2 On 17 June 1997, the Air Navigation Commission, in reviewing selected Recommendations and Conclusions of the Seventh Africa-Indian Ocean (AFI) Regional Air Navigation (RAN) Meeting (AFI/7) related to air navigation shortcomings and deficiencies, noted that the Secretariat was developing a common methodology for use by all PIRGs for collecting, assessing, tracking and reporting shortcomings and deficiencies of the air navigation systems in their respective regions. This action was in accordance with previous deliberations in the Commission and with the first meeting of the ALLPIRG/Advisory Group (ALLPIRG/1), Conclusion 1/8. The methodology will be used by the PIRGs and the Commission will monitor its implementation.

3. ACTION PLAN

3.1 On 11 and 13 March 1998, the Council discussed a report of the Air Navigation Commission containing a comprehensive action plan. The Council noted the plan with the comment that it would form part of the Global Aviation Safety Plan (GASP) under the development by the Air Navigation Commission. The action plan on shortcomings and deficiencies identifies the need for close co-operation between provider States, user States, airspace users, PIRGs, governing bodies of ICAO and the Secretariat, at both global and regional levels.

3.2 The objective of the action plan to address shortcomings and deficiencies in the air navigation field is to facilitate implementation by States of the required facilities and services. The development and approval of such an action plan in itself is not considered to be sufficient, as a continuous updating, monitoring and execution of actions identified in the plan will be required. As such, the comprehensive action plan should be seen as a long-term on-going programme, requiring adequate resources to be allocated.

3.3 A dedicated on-going programme to eliminate shortcomings in the air navigation field would require the continuous support services of the Secretariat. These services would require support to co-ordinate the programme itself and the work involved when requests were received from States or groups of States for assistance in developing solutions to shortcomings, and also to review the solutions proposed. Further support would consist of organizing the implementation of identified solutions. ICAO staff, either regular and/or recruited on an *ad hoc* consultative basis, would assist States with regard to the financial aspects of implementing a solution, including establishing the proper means of cost recovery. Quality control would also need to be carried out by regular ICAO Headquarters staff, who would need to be involved in cases where States would request ICAO to provide administrative services.

3.4 The action plan shown in the appendix includes activities grouped in four categories as follows:

- 1) improving collection of information;
- 2) improving safety analysis of reported problems;
- 3) identify technical corrective actions; and
- 4) identify financial and organizational corrective measures.

3.5 It should be noted that the action plan requires a multidisciplinary approach calling for inputs from both the air navigation as well as the air transport major programmes of the budget. Some of the activities under Category 1 - Improving collection of information, are already being addressed such as standardized reporting by PIRGs, integrate users' reports and identify and list specific shortcomings and deficiencies, using the uniform methodology. Also, the PIRGs are identifying remedies to shortcomings and deficiencies. With regard to the activities under Category 4 - Financial and organizational corrective actions, most of the required policy and practical guidance already exists and remains under regular review. Consequently, the thrust of activities under this category will be to assist States in implementing this guidance adapted as required to the particular circumstances in each instance. Some actions can be completed by a specified date while other actions are of an on-going nature and involve recurrent reviews. An executive summary and overview of the action plan is in the appendix to this paper.

4. ACTION BY THE ASSEMBLY

4.1 The Assembly is invited to note this report and to provide further guidance, as required.

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APPENDIX

DRAFT ACTION PLAN TO ADDRESS SHORTCOMINGS AND DEFICIENCIES IN THE AIR NAVIGATION FIELD

Executive summary

The action plan to address shortcomings and deficiencies in the air navigation field is part of the ICAO Global Aviation Safety Plan (GASP) currently under development by the Air Navigation Commission. Other elements of GASP include the Safety Oversight Programme and the development of a standardized safety data collection, analysis and dissemination network.

Considering the significant impact that incomplete or non-implementation of the facilities and services associated with regional air navigation plans (ANPs) could have on safety, the planning and implementation regional groups (PIRGs), together with the ICAO regional offices, exert considerable effort in fostering the implementation of ANPs. The draft action plan therefore addresses shortcomings and deficiencies in the implementation of regional ANPs.

While implementation of the facilities and services required for international civil aviation is the responsibility of States, the Council has a role in monitoring the status of implementation of regional air navigation plans that specify the facilities and services required. When appropriate, the Council should arrange for measures to be taken to facilitate elimination of serious shortcomings in their implementation. As these facilities and services should comply with ICAO SARPs, the continuous monitoring of differences to Standards filed by States is of great importance. In accordance with Article 38 of the Convention, Contracting States are required to notify ICAO of any differences between their national regulations and practices and the International Standards. Contracting States are also invited to extend such notification to the Recommended Practices. The provisions of Annex 15 require that States publish differences through the Aeronautical Information Services, while the Council is required to make immediate notification of differences to other States.

The objective of the action plan to address shortcomings and deficiencies in the air navigation field is to facilitate implementation by States of the required facilities and services.

The action plan includes activities grouped in four categories as follows:

Improving collection of information

In order for action to be taken to improve a situation, specific hazardous conditions must be known so that improvements can be made. Reporting of incidents must therefore be encouraged and collection of information concerning shortcomings and deficiencies must be thorough and complete. Collected data must be analyzed and information gained while the lessons learned must be distributed quickly and efficiently to those who are in a position to effect changes. Air navigation infrastructure shortcomings and deficiencies must also be identified and assessed. Work on this part of the action plan will lead to, among other things,

new provisions and guidance material on non-punitive reporting procedures and the compilation of critical data on safety-related shortcomings and deficiencies.

Improving safety analysis of reported problems

Because the different types of reports on accidents, incidents, safety deficiencies and shortcomings address a variety of safety-related issues and originate from reporters in different operational environments, the information contained in the reports varies substantially. Standardized evaluation criteria is therefore essential in order to facilitate proper analysis of the data. Work on this part of the action plan will be aimed at the development of standard evaluation criteria, prioritization of safety deficiencies by regions, identification of causes and proposals for remedial actions.

Identify technical corrective actions

A periodic review of safety deficiencies should identify areas in which improvements are required. For each safety deficiency, one or more remedies should be determined based on proposals received from users, PIRGs, or as developed by the Secretariat. Over the longer term, it is expected that CNS/ATM systems will effectively remedy many safety problems. In addition to the technical aspects of improving safety, civil aviation also depends on the continued availability of an adequate number of properly trained personnel to operate the system safely. Work on this part of the action plan will be toward the continuous development of proposals for remedial action, both long and short term, and also on a continuous review of the Standards, Recommended Practices and guidance material related to personnel training.

Identify financial and organizational corrective measures

Obstacles to overcoming shortcomings and deficiencies are not so much technical as they are generally financial and organizational in nature. Consequently, emphasis will need to be given to the multifaceted approach required to address such issues. One priority item is to improve financial management at the national level; this includes providing guidance on setting up accounting systems that provide all the data required to establish the cost basis for charges for airports and air navigation services, and also providing the information needed for the charges revenues to be distributed to those entities actually providing the facilities for which the charges are levied. On the organizational side, improvement at the national level involves identifying impediments to implementation that are of an organizational nature and developing proposals with regard to the organizational structures under which airports and/or air navigation services could be operated most effectively, including private involvement. Co-operative ventures between States, such as joint financing arrangements, international operating agencies, and joint charges collection agencies, have proven to be particularly effective measures, notably in the implementation of high capacity solutions such as major CNS/ATM systems components. Work will consequently also be aimed at assisting States in identifying instances where co-operative ventures are an effective solution and assisting in establishing such ventures. Work will, moreover, be devoted to assisting States in identifying the benefits solutions to shortcomings and deficiencies may bring to specific users or user groups, relaying this information to them, and seeking and consolidating financial contributions from them to implement the solutions.

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Many activities in these categories are already being undertaken on a routine basis. The action plan identifies the need for close co-operation between provider States, user States, airspace users, planning and implementation regional groups, governing bodies of ICAO and the Secretariat, at both global and regional levels. While some action items can be completed by a specified date, other actions are of an on-going nature and involve recurrent reviews. Details concerning each action item include a description, output/product, action by ICAO (Headquarters and regional offices), timescale, resource requirements and progress made.

ACTION PLAN OVERVIEW

Category 1. Improve collection of information

- Item 1.1 Establish non-punitive reporting mechanisms
- Item 1.2 Standardize reporting by PIRGs
- Item 1.3 Draw from incident and accident investigations
- Item 1.4 Integrate users' reports
- Item 1.5 Identify and list specific shortcomings and deficiencies
- Item 1.6 Development of ICAO provisions in connection with the potential expansion of the safety oversight programme to include all safety sensitive areas of air navigation services

Category 2. Improve safety analysis of reported problems

- Item 2.1 Standardize evaluation criteria
- Item 2.2 Bring serious cases to the attention of the ANC without delay
- Item 2.3 Make a periodic co-ordinated global review of safety-related shortcomings and deficiencies

Category 3. Apply technical and operational corrective actions

- Item 3.1 Determine types of remedies
- Item 3.2 Implement short-term technical remedies
- Item 3.3 Long-term technical remedies (e.g. CNS/ATM systems)
- Item 3.4 Facilitate training

Category 4. Financial and organizational corrective actions

- Item 4.1 Consolidate financial commitments and arrangements
- Item 4.2 Improve financial management at the State level
- Item 4.3 Improve organizational structure at the State level
- Item 4.4 Promote and facilitate co-operation between States, including co-operative approaches to air traffic management