

### **ASSEMBLY — 35TH SESSION**

### REPORT OF THE TECHNICAL COMMISSION FOR THE GENERAL SECTION OF ITS REPORT AND ON AGENDA ITEMS 24, 24.1, 24.2, 24.3, 25 AND 26

(Presented by the Chairman of the Technical Commission)

The attached report on the General Section of its Report and Agenda Items 24, 24.1, 24.2, 24.3, 25 and 26 has been approved by the Technical Commission. Resolutions 24/1 and 24/2 are recommended for adoption by the Plenary.

Note.— After removal of this covering sheet, this paper should be inserted in the appropriate place in the report folder.

### REPORT OF THE TECHNICAL COMMISSION TO THE ASSEMBLY

#### General

- 1. The Technical Commission held five meetings between 1 and 6 October 2004.
- 2. Mr. H. Preza (Angola) was elected Chairman at the Fourth Plenary Meeting of the Assembly. The Commission, at its second meeting, elected as First Vice-Chairman Mr. E. Sánchez Ara (Argentina), on a nomination by Australia. It elected as Second Vice-Chairman Mr. M. Al-Alawi (Saudi Arabia), on a nomination by Singapore.
- 3. Representatives from 173 Contracting States and 31 Observer Delegations attended one or more meetings of the Commission.
- 4. The Secretary of the Commission was Mr. W.R. Voss, Director of the Air Navigation Bureau. Mr. M.C.F. Heijl, Deputy Director, Air Navigation Bureau, acted as Deputy Secretary. The Assistant Secretary was Ms. J. Bacon. The Commission was also assisted by:
  - Mr. A. Rao, Chief, Aerodromes, Air Routes and Ground Aids (AGA) Section
  - Mr. C.E. Frostell, Chief, Accident Investigation and Prevention (AIG) Section
  - Mr. A. Pavlović, Chief, Aeronautical Information and Charts (AIS/MAP) Section
  - Mr. V. Galotti, Chief, Air Traffic Management (ATM) Section
  - Mr. V. Iatsouk, Acting Chief, Communications, Navigation and Surveillance (CNS) Section
  - Dr. C. Curdt-Christiansen, Chief, Aviation Medicine (MED) Section
  - Dr. O. Turpeinen, Chief, Meteorology (MET) Section
  - Mr. G. W. Herpst, Chief, Operations/Airworthiness (OPS/AIR) Section
  - Mr. P. Lamy, Chief, Personnel Licensing and Training (PEL/TRG) Section
  - Mr. H. Belai, Chief, Safety Oversight Audit (SOA) Section

and other members of the Secretariat.

#### Agenda and working arrangements

5. The Assembly had agreed to the suspension of minutes for the Technical Commission of the 35th Session of the Assembly.

6. The following agenda items were considered by the Commission:

Agenda Item 7: Annual Reports of the Council to the Assembly for 2001, 2002 and

2003

Agenda Item 8: Programme Budget for 2005, 2006, 2007

Agenda Item 22: Development of an up-to-date consolidated statement of ICAO

continuing policies related to air navigation

Agenda Item 23: Consolidated statement of continuing ICAO policies and practices

related to communications, navigation, and surveillance/air traffic

management (CNS/ATM) systems

Agenda Item 24: ICAO Global Aviation Safety Plan (GASP)

24.1: Protection of sources and free flow of safety information

24.2: Progress of the ICAO programme for the prevention of controlled

flight into terrain (CFIT)
24.3: Flight safety enhancement programme

Agenda Item 25: A global design code for aircraft

Agenda Item 26: Assembly Resolutions to be consolidated or to be declared no longer

in force

7. The documents and working papers associated with the work of the Commission are listed by agenda item in the appendix to this report.

8. The action taken by the Commission in respect of each item is reported on separately in the paragraphs which follow. The material is arranged according to the numerical sequence of the agenda items considered by the Commission.

# LIST OF DOCUMENTS AND WORKING PAPERS ASSOCIATED WITH THE WORK OF THE TECHNICAL COMMISSION

### List of documents

Document	Title
Doc 9790	Assembly Resolutions in Force (as of 5 October 2001)
Doc 9786	Annual Report of the Council — 2001
Doc 9814	Annual Report of the Council — 2002
Doc 9826 and Supplement	Annual Report of the Council — 2003

### List of working papers

Item		Working Paper		Draft text	
No.	Subject	No.	Presented by	for the report	Report
7	Annual Reports of the Council to the Assembly for 2001, 2002 and 2003	A35-WP/128 A35-WP/129	Netherlands, on behalf of the European Community and its member States	A35-WP/281	A35-WP/324
8	Programme Budget for 2005, 2006, 2007	A35-WP/20 Corr. No. 1 (E, F, S, R, A) Corr. No. 2 Add. No. 1		A35-WP/281	A35-WP/324
22	Development of an up-to-date consolidated statement of ICAO continuing policies related to air navigation	A35-WP/8, Corr. (R) A35-WP/109 A35-WP/114 A35-WP/142, Revised A35-WP/193 A35-WP/221	United States Russian Federation ITF South Africa ASECNA	A35-WP/304	A35-WP/330

Item		Working Paper		Draft text	
No.	Subject	No.	Presented by	for the report	Report
23	Consolidated	A35-WP/8, Corr. (R)		A35-WP/304	A35-WP/330
	statement of	A35-WP/134	France		
	continuing ICAO	A35-WP/158	ECAC		
	policies and	A35-WP/161	Republic of Korea		
	practices related to	A35-WP/162	Republic of Korea		
	communications,	A35-WP/163	Republic of Korea		
	navigation, and	A35-WP/164	Republic of Korea		
	surveillance/air	A35-WP/194 &	LACAC		
	traffic management	Corr. No. 1			
	(CNS/ATM)	A35-WP/195 &	LACAC		
	systems	Corr. No. 1			
		A35-WP/198	ITF		
		A35-WP/203	Egypt		
		A35-WP/220	ECAC		
		A35-WP/240	Iran (Islamic Republic of)		
		A35-WP/254	China		
		A35-WP/255	Colombia		
		A35-WP/256	Colombia		
		A35-WP/274	United States		
		A35-WP/321	Bahrain on behalf of ACAC		
24	ICAO Global	A35-WP/51		A35-WP/305	A35-WP/339
21	Aviation Safety	A35-WP/116	Russian Federation	1133 1117303	1133 (11733)
	Plan (GASP)	A35-WP/144	France		
	1 min (0/101)	A35-WP/157	ECAC		
		A35-WP/165	IFALPA		
		A35-WP/192	IATA		
		A35-WP/239	Iran (Islamic Republic		
			of)		
24.1	Protection of	A35-WP/52		A35-WP/305	A35-WP/339
	sources and free	A35-WP/91	Australia		
	flow of safety	A35-WP/92	Unites States		
	information	A35-WP/105	IAC		
		A35-WP/152	ACI		
		A35-WP/228	France		
		A35-WP/260	Brazil		
24.2	Progress of the	A35-WP/59		A35-WP/305	A35-WP/339
	ICAO programme	A35-WP/108	IAC		
	for the prevention	A35-WP/191	Republic of Korea		
	of controlled flight into terrain (CFIT)	A35-WP/243	Italy		

Item No.	Subject	No.	orking Paper Presented by	Draft text for the report	Report
24.3	Flight safety enhancement programme	A35-WP/60 & Corr. (A) A35-WP/204	Pakistan	A35-WP/305	A35-WP/339
25	A global design code for aircraft	A35-WP/61 A35-WP/69 A35-WP/53 A35-WP/267	IATA United States, EASA, JAA Iran (Islamic Republic of)	A35-WP/305	A35-WP/339
26	Assembly Resolutions to be consolidated or to be declared no longer in force	A35-WP/33		A35-WP/305	A35-WP/339
	General Section of TE Report			A35-WP/306	A35-WP/339

#### Agenda Item 24: ICAO Global Aviation Safety Plan (GASP)

### 24:1 Progress report on GASP

- 24:1.1 The Commission reviewed A35-WP/51, containing a progress report on the development of GASP which was submitted in accordance with Assembly Resolution A33-16. The Commission considered that the action by the Assembly should include the most significant items listed in paragraph 3.6.1 of the revised GASP document (2004) attached to WP/51. Accordingly, the Commission took the following action:
  - a) noted the progress report on the ICAO Global Aviation Safety Plan (GASP) contained in A35-WP/51 and the updated version of the GASP document attached;
  - b) noted that the most significant safety issues that had been identified through an analysis of recent accident trends were CFIT, loss of control and technical failure; and
  - c) urged States to support ICAO's efforts in accomplishing GASP objectives and tasks.
- During discussion of A35-WP/116 (Russian Federation) concerning the use of flight recorder data, a view was expressed that the rapid development of software to manage Flight Data Analysis (FDA) programmes could make a requirement for ICAO to develop a model for such programmes premature. Another view was expressed that lowering the mass limits for aircraft required to operate such programmes would have an economic impact. In the light of the discussion on the subject, the Commission agreed:
  - a) that ICAO develop guidance material for Flight Data Analysis (FDA) programmes, taking into account that such programmes shall be non-punitive; and
  - b) ICAO examine the feasibility of lowering the mass limit for aircraft to be required to be covered by FDA programmes.
- 24:1.3 In the discussion of A35-WP/144 (France), on the taking into account of the evolution of specifications concerning flight data recording systems, the Secretary, while supporting the effectiveness of flight recorders for accident investigation purposes, indicated that a lack of resources had resulted in the Flight Recorder Panel being dormant in recent years, but that recruitment activity underway should make it possible to address this issue in the near future. A delegate explained that considerable work had already been done by industry groups on new flight recorder specifications. In view of the long lead time required for new flight recorder provisions, it was considered important that work start on this task as soon as possible.
- 24:1.4 In view of the discussion, the Commission submits, for adoption by the Plenary, the following resolution.

### RESOLUTION FRAMED BY THE TECHNICAL COMMISSION AND RECOMMENDED FOR ADOPTION BY THE ASSEMBLY

#### Resolution 24/1

# Taking due account of the evolution of specifications concerning flight data recording systems

Considering that the primary objective of the Organization is to ensure the safety of international civil aviation worldwide;

Considering that the establishment of international Standards contributes to this objective;

Recognizing the importance for safety of flight data recorders; and

Recognizing the need to develop specifications for these systems;

The Assembly:

- 1. *Directs* the Council to resume work on flight recorders as soon as possible using appropriate means and to give priority to problems arising from the search and recovery of these systems, obsolescence, the insufficient number of recorded parameters, and the need to prescribe image recording of the cockpit; and
- 2. *Requests* the Council to report to the next session of the Assembly on the implementation of the present resolution.
- 24:1.5 The meeting was presented with A35-WP/157 by the European Civil Aviation Conference which proposed that ICAO should establish a standardized global model for the implementation of safety management systems and that informal focus groups could be useful resources for development of recommendations toward the achievement of global harmonization in the development of ICAO provisions for the uniform application of ATM safety management. The Commission recalled Recommendations 2/1 and 2/2 of the Eleventh Air Navigation Conference which addressed the need for establishment of a framework for system safety and implementation of ATS safety management programmes respectively, noting that ICAO was pursuing the work required through several panels of the Air Navigation Commission and the Secretariat. It was also noted that the Secretariat had established an internal project team to pursue harmonization of ICAO provisions related to safety management. The Commission agreed that ICAO should make recommendations for the achievement of global harmonization in the uniform application of ICAO provisions for ATM safety management and that informal regional and interregional groups should be encouraged to carry out complementary work, the results of which may prove valuable to ICAO in its work. It was also agreed that, as the work of ICAO and such informal groups matured, it would be appropriate to convene a global meeting to adopt a standardized safety management model for States to use in the implementation of safety management systems.

- 24:1.6 The meeting was presented with A35-WP/165 by IFALPA, which expressed the views that flight level assignment procedures should be harmonized, and urged world-wide adoption of the Table of Cruising Levels contained an ICAO Annex 2 — Rules of the Air, Appendix 3. The Commission recalled that the Eleventh Air Navigation Conference had addressed the issue noting, particularly, the difficulties encountered at the interface between airspaces where different units of measurement were used and that some States used metric tables of cruising levels that were different from the ICAO table contained in Annex 2. It was noted that the conference had agreed to a recommendation (4/9) encouraging States to apply a common cruising level structure in accordance with the tables of cruising levels expressed in metres or feet, as outlined in Annex 2, and that ICAO had already taken action to inform States of the recommendation. The Commission was also informed that the Air Navigation Commission, when reviewing Recommendation 4/10 of the Eleventh Air Navigation Conference, which encouraged ICAO to continue to study the common cruising levels structure, had decided that no further action should be taken, as there was no significant safety concern that would justify continuing efforts. The Commission agreed to the importance of the issue and that it would be in the best interests of safety and efficiency if all States applied a common cruising level structure in accordance with the tables of cruising levels expressed in metres or feet, as outlined in Annex 2. With respect to the need to move toward a single unit of altitude measurement, the Commission recognized that this remained a long-term objective of ICAO, but that no progress could be expected in the foreseeable future. In view of potential related safety aspects, the Commission felt that the matter should be further pursued when circumstances permit.
- 24:1.7 In the discussion of A35-WP/192 (IATA) concerning safety data collection and sharing, it was explained that reference to incident reports included reports from flight crew, cabin crew and other possible reporters. While recognizing that the Council would need to consider resource issues, the Commission agreed to direct the Council to:
  - a) develop provisions for the exchange of safety information derived from incident data amongst safety organizations, that ameliorate concerns over confidentiality and punitive action; and
  - b) expand the safety data management scope of ICAO so that incident and contributing factor trend analysis is used proactively to understand and better manage threats to aviation operational safety.
- 24:1.8 The Commission noted A35-WP/239 by Islamic Republic of Iran on "Weight and balance provisions and data in accident and incident reports and ADREP summaries".

\_\_\_\_\_\_

Agenda Item 24: ICAO Global Aviation Safety Plan (GASP)

24.1: Protection of sources and free flow of safety information

#### 24.1:1 Protection of sources and free flow of safety information

24.1:1.1 The Commission considered A35-WP/52, which presented a draft Assembly Resolution on the protection of voluntarily submitted safety-related information. It was recalled that a number of initiatives within the international civil aviation community had attempted to address the protection of sources of safety information, including information from accident and incident investigations and safety data collection systems, from inappropriate use. Efforts to ensure the protection of safety information must strike a very delicate balance of interests between the need to protect safety information, and the responsibility to administer justice. During the discussion, a view was expressed that it was important to protect not only information from safety data collection systems, but also all other safety information. A view was also expressed that it was important to distinguish between the levels of protection to be afforded, i.e. not all safety information could be afforded the same degree of protection. Another view was expressed underlining the sensitive nature of the issue and supporting the balanced approach contained in A35-WP/52.

24.1:1.2 In light of the discussion, the Commission agreed to submit, for adoption by the Plenary the following resolution:

# RESOLUTION FRAMED BY THE TECHNICAL COMMISSION AND RECOMMENDED FOR ADOPTION BY THE ASSEMBLY

#### Resolution 24/2

# Protecting information from safety data collection and processing systems in order to improve aviation safety

Whereas the primary objective of the Organization continues to be that of ensuring the safety of international civil aviation worldwide;

*Recognizing* the importance of the free communication of safety information amongst the stakeholders of the aviation system;

*Recognizing* that the protection of safety information from inappropriate use is essential to ensure the continued availability of all relevant safety information, to enable proper and timely preventive actions to be taken:

*Concerned* by a trend for safety information to be used for disciplinary and enforcement actions, and to be admitted as evidence in judicial proceedings;

*Mindful* that the use of safety information for other than safety-related purposes may inhibit the provision of such information, with an adverse effect on aviation safety;

Considering that a balance needs to be struck between the need for the protection of safety information and the need for the proper administration of justice;

*Recognizing* that technological advances have made possible new safety data collection, processing and exchange systems, resulting in multiple sources of safety information that are essential in order to improve aviation safety;

*Noting* that existing international laws, as well as national laws and regulations in many States may not adequately address the manner in which safety information is protected from inappropriate use;

#### The Assembly:

- 1. *Instructs* the Council to develop appropriate legal guidance that will assist States to enact national laws and regulations to protect information from all relevant safety data collection and processing systems, while allowing for the proper administration of justice in the State;
- 2. *Urges* all Contracting States to examine their existing legislation and adjust as necessary, or enact laws and regulations to protect information from all relevant safety data collection and processing systems based, to the extent possible, on the legal guidance developed by ICAO; and
- 3. *Instructs* the Council to provide a progress report to the next ordinary Session of the Assembly on this matter.
- 24.1:1.3 The meeting considered A35-WP/228 presented by France, which reviewed the difficulties underlying the protection of safety data, collected within or outside the framework of accident investigations. The meeting noted that WP/228 stressed that the various safety data collection systems available to the industry form a coherent whole and, as such, the information extracted from these various sources must be protected in a global manner. The meeting also noted that WP/228 proposed that the draft Assembly resolution contained in WP/52 should be understood to protect all sources of safety data, including those that are the subject of provisions in Annexes.
- 24.1:1.4 Considering that the Executive Committee had examined most of A35-WP/152, the Technical Commission was invited to examine the section on safety management systems and conclusions, as well as action paragraph 14 c). Based on the discussion, the Commission agreed that States should be invited to adopt regulatory provisions obliging aircraft operators and handling agents to report all incidents and accidents occurring at airports in the State (including on apron areas) to the appropriate authorities, including the airport operators concerned.
- 24.1:1.5 The Commission noted WPs 91, 92, 105 and 260.

\_\_\_\_\_

- **Agenda Item 24:** ICAO Global Aviation Safety Plan (GASP)
  - **24.2:** Progress of the ICAO programme for the prevention of controlled flight into terrain (CFIT)

## 24.2:1 Progress of the ICAO programme for the prevention of controlled flight into terrain (CFIT)

- 24.2:1.1 The Secretary introduced A35-WP/59 which indicated that from 1992 to 2003, there was a significant decrease in the number of CFIT fatal accidents. The Commission expressed continuing support for the ICAO programme for the prevention of controlled flight into terrain (CFIT), which was believed to be a significant contributor to the reduction in the worldwide accident rate.
- 24.2:1.2 In addition, the Commission noted with interest the information contained in A35-WP/108 which outlined the analysis performed by the Interstate Aviation Committee and the actions taken to prevent controlled flight into terrain. Commenting on the analysis of errors made by air traffic controllers as presented in A35-WP/108, IFATCA indicated that those methods of operation by licenced air traffic controllers were unacceptable and indicated that the relevant authorities must take immediate additional remedial action to correct the deficiencies.
- 24.2:1.3 In A35-WP/243, Italy expressed its views concerning development of further technical Standards and Procedures related to approaches with vertical guidance (APV) and invited the Assembly to task the Organization to develop Standards and guidance material to support APV operations.
- 24.2:1.4 The Secretary indicated that the technical work programme of the organization in the air navigation field already contained the development of Standards and guidance material to support approaches with vertical guidance (APV). The Commission requested the Organization to accelerate the development of such Standards and guidance material with a view to its completion within two years.
- 24.2:1.5 One State informed the Commission that, with a view to reducing CFIT, to complement the installation of ground proximity warning systems on board aircraft, it had undertaken to deploy minimum safe altitude warning (MSAW) systems at all major airports. The State also intended to publish APV procedures based on satellite systems with ground-based augmentation in order to provide accurate vertical guidance.
- 24.2:1.6 On the basis of the discussion, the Commission agreed to urge States to implement CFIT prevention-related provisions, particularly those related to the equipage of ground proximity warning system (GPWS) having a forward-looking terrain avoidance function, the MSAW system at airports, the design and implementation of APV and the provision of electronic terrain and obstacle data.
- 24.2:1.7 The Commission noted the information provided by the Republic of Korea in A35-WP/191 which presented successful results obtained from Flight Operations Quality Assurance (FOQA) programmes, thus preventing CFIT through the use of stabilized approaches.

\_\_\_\_\_

# Agenda Item 24: ICAO Global Aviation Safety Plan (GASP) 24.3: Flight safety enhancement programme

#### 24.3:1 Flight safety enhancement programme

- 24.3:1.1 The Secretary introduced A35-WP/60 which presented the concept, objectives and main elements of the Flight Safety Enhancement Programme. FSEP was designed to provide generic examples of technical procedures for civil aviation administration inspectors, and to facilitate exchange of information in relation to identified deficiencies and assistance available for their resolution.
- 24.3:1.2 The Commission expressed appreciation and support for the Flight Safety Enhancement Programme.
- 24.3:1.3 The Commission, noting the information provided in A35-WP/60, requested the Council to present a progress report to the next ordinary Session of the Assembly.
- 24.3:1.4 The Commission noted the information provided by Pakistan in A35-WP/204 in relation to the challenges faced by States in their efforts to enhance safety oversight.

\_\_\_\_\_

### Agenda Item 25: A global design code for aircraft

- The Technical Commission reviewed A35-WP/61, presented by the ICAO Secretariat, regarding progress on the implementation of Resolution A33-11: A global design for aircraft. The Commission noted that the United States/Europe International Aviation Safety Conference, held from 7 to 11 June 2004 in Philadelphia (USA), had confirmed that the single worldwide code initiative had been suspended indefinitely and endorsed ICAO's intention to monitor and support the harmonization process.
- Also reviewed was A35-WP/69, presented by the International Air Transport Association regarding the industry overview on the implementation of Assembly Resolution A33-11. The Commission noted the views of the industry on the need to prioritize and continue global harmonization activities.
- A35-WP/267, presented by the Islamic Republic of Iran, concerned the importance of joint efforts of major States of Design and Construction in the of establishment of a globally harmonized design and construction code, type and production certification processes. The Commission noted the need for an internationally coordinated approach as well as ICAO participation in the harmonization.
- The Technical Commission noted A35-WP/53, by the United States, the European Aviation Safety Agency (EASA) and the Joint Aviation Authorities (JAA), regarding the initiative of a global design code for aircraft, aimed at a single certification. The International Working Group chartered by the Federal Aviation Administration (FAA) and JAA had completed its work towards a global design code for aircraft and that the Group had determined that most national airworthiness and certification standards were based on, or were similar to, the United States Federal Aviation Regulations (FARs) and European Joint Aviation Regulations (JARs). Given the transition activities taking place in Europe where EASA specified certification requirements, and the fact that the participating aviation authorities could not resource new work because of other pressing safety-related issues, work on a single certification process had been suspended indefinitely. Contracting States were encouraged to use the FARs/JARs by reference as their design code for aircraft.
- 25:5 The Commission noted that substantial harmonization work between the FAA, JAA, and EASA had been completed and a level of maturity had been reached. The Commission recognized the need for an internationally coordinated approach to, as well as ICAO participation in, the harmonization work. It was also recognized that FARs/JARs were de facto standards and most, but not all States could use FARs/JARs and EASA regulations by reference. However, these regulations were not the only means to achieve safety requirements. The Commission recognized that detailed regulations, in keeping with its proposals for amended ICAO policy concerning detailed technical specifications (paragraph 22:4 of the Report on Agenda Item 22 refers), may be linked to SARPs as means of compliance, but should not be contained in Annexes. Therefore, it was agreed that, rather than pursuing a global design code, there was a need to focus on a common certification process. It was recognized that industry would greatly benefit from such a common certification processes. Furthermore, there was a need for common essential requirements, recognized worldwide, as a basis for a common certification process, and ICAO should review Annex 8 — Airworthiness of Aircraft requirements accordingly. In this context, the Commission noted that revisions to the Airworthiness Manual (Doc 9760) due in 2006 would address type and production certification processes.

- 25:6 The Commission also noted that, regardless of the harmonization of airworthiness codes, local differences in operational requirements may result in differences in aircraft design.
- 25:7 Based on the foregoing, the Commission agreed that the Assembly should encourage States to:
  - a) identify, prioritize and deliver to other Contracting States and to ICAO harmonization items from their design code which are sufficiently mature for promulgation;
  - b) based on their requirements and certification processes, provide ICAO with common essential requirements that could be reflected in Annex 8 and/or guidance material as appropriate as a basis for a common certification process; and
  - c) invite greater participation in the harmonization process by the manufacturing industry and airspace users.

\_\_\_\_\_\_

### Agenda Item 26: Assembly Resolutions to be consolidated or to be declared no longer in force

26:1 The Plenary had referred Appendix B of A35-WP/33 on Assembly Resolutions to be consolidated or to be declared no longer in force to the Technical Commission, which agreed with the Council's recommendations that Resolution A22-14 concerning technical and economic problems related to the introduction into commercial service of supersonic aircraft be declared no longer in force.