



A37-WP/349
TE/170
1/10/10

ASSEMBLY — 37TH SESSION
TECHNICAL COMMISSION

**DRAFT TEXT FOR THE REPORT
ON
AGENDA ITEM 33**

The attached material on Agenda Item 33 is submitted for consideration by the Technical Commission.

Agenda Item 33: Halon replacement

33.1 The Commission reviewed A37-WP/67, presented by the Council, containing a progress report on the development of alternatives to halogenated hydrocarbon (halon) for use in civil aviation aircraft fire protection systems. The paper included a proposed Assembly resolution, to supersede Resolution A36-12 — *Halon replacement*, on continuing progress towards development of viable halon replacements in civil aviation fire extinguishing systems. The resolution featured progressive timeframes mandating halon replacement in civil aircraft lavatory, hand-held fire extinguishers and engine and auxiliary power unit (APU) fire extinguishing systems. The importance of further development of suitable halon replacement agents for the cargo compartment fire extinguishing suppression system was emphasized and States were encouraged to advise users of recycled halon to ensure that the halon in their possession conformed to a recognized international or State performance standard. Finally, the resolution invited States to inform ICAO of their halon reserves so that a report may be presented at the next ordinary session of the Assembly.

33.2 During the discussions, strong support was voiced for strict adherence to the timeframes specified in the draft Assembly resolution. In addition, the Commission called on States to inform ICAO regularly of their halon reserves.

33.3 An information paper (A37-WP/197) was provided by the International Coordinating Council of Aerospace Industries Associations (ICCAIA).

33.4 In view of the discussion, the Commission submits, for adoption by the Plenary, the following resolution:

Resolution 33/1: Halon replacement

Whereas halons contribute to climate change and are no longer being produced by international agreement because they are ozone-depleting chemicals, and have been used as fire-extinguishing agents in commercial transport aircraft for 45 years;

Recognizing that more needs to be done because the available halon supplies are dwindling and that the environmental community continues to be concerned that halon alternatives have not been developed for all fire extinguishing systems in civil aircraft;

Recognizing that the Minimum Performance Standard for each application of halon has been developed already by the International Aircraft Systems Fire Protection Working Group with participation by industry and regulatory authorities;

Recognizing that there are stringent aircraft-specific requirements for each application of halon that must be met before a replacement can be implemented;

Recognizing that the production and import/export of halon is prohibited by international agreement, thus halon is mainly available by recycling existing supplies. Thus recycling of halon gas needs to be

rigorously controlled to prevent the possibility of contaminated halon being supplied to the aviation industry.

Recognizing that any strategy must depend on alternatives that do not pose an unacceptable environmental or health risk as compared to the halons they are replacing; and

Recognizing that while halon alternatives for lavatories are available, and that progress has been made in the development of halon alternatives in hand-held fire extinguishers, more work is needed in the development of halon alternatives for cargo compartment and engine/auxiliary power unit fire extinguishing systems, and that regular reviews are necessary to evaluate and understand the implication of potential halon alternatives on the industry and the environment.

The Assembly:

1. *Agrees* with the urgency of the need to continue developing and implementing halon alternatives for civil aviation;
2. *Urges* States to intensify development of acceptable halon alternatives for fire extinguishing systems in cargo compartments and engine/auxiliary power units, and to continue work towards improving halon alternatives for hand-held fire extinguishers;
3. *Directs* the Council to establish a mandate for the replacement of halon:
 - In lavatory fire extinguishing systems used in aircraft produced after a specified date in the 2011 timeframe;
 - In hand-held fire extinguishers used in aircraft produced after a specified date in the 2016 timeframe; and
 - In engine and auxiliary power unit fire extinguishing systems used in aircraft for which application for type certification will be submitted after a specified date in the 2014 timeframe;
4. *Directs* the Council to conduct regular reviews of the status of potential halon alternatives to support the agreed upon implementation dates given the evolving situation regarding the suitability of potential halon alternative agents as they continue to be identified, tested, certified and implemented;
5. *Urges* States to advise their aircraft manufacturers, approved maintenance organizations, air operator's, chemical suppliers, and fire-extinguishing companies to verify the quality of halon in their possession or provided by suppliers through effective testing or certification to an international or State recognized quality standard. States are also urged to require that the quality systems of air operator's, approved maintenance organizations, and manufacturers provide a means for requesting from halon suppliers certification documentation attesting to the quality of halon to an established and recognized international standard;
6. *Encourages* ICAO to continue collaboration with the International Aircraft Systems Fire Protection Working Group and the United Nations Environment Programme's (UNEP) Ozone Secretariat through its Technology and Economic Assessment Panel's Halons Technical Options Committee on the topic of halon alternatives for civil aviation;

7. *Urges* States to inform ICAO regularly of their halon reserves, and directs the Secretary General to report the results to the Council. Further, the Council is directed to report on the status of halon reserves at the next Ordinary Session of the Assembly;
8. *Resolves* that the Council shall report to the next ordinary session of the Assembly on progress made developing halon alternatives for cargo compartments and engine/auxiliary power unit fire extinguishing systems as well as the status of halon alternatives for hand-held fire extinguishers; and
9. *Declares* that this resolution supersedes Resolution A36-12.

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