



ASSEMBLY — 39TH SESSION

TECHNICAL COMMISSION

Agenda Item 35: Aviation safety and air navigation standardization

PORTABLE FIRE EXTINGUISHERS AND HALON REPLACEMENT

(Presented by the International Coordinating Council of Aerospace Industries Associations (ICCAIA), the International Air Transport Association (IATA) and the International Agricultural Aviation Centre (IAAC) and the International Business Aviation Council (IBAC))

EXECUTIVE SUMMARY

Annex 6 – *Operation of Aircraft* requires that as of 31 December 2016, all newly manufactured aircraft contain a halon replacement in portable fire extinguishers. The manufacturing industry has identified a halon alternative for use in portable fire extinguishers; however, this alternative is undergoing complex environmental approval processes in some manufacturing States. It is therefore likely that new aircraft will not be delivered to airlines with the halon replacement in accordance with the requirement in Annex 6. Several ICAO Member States have adopted regulations aligned with Annex 6.

To ensure that aircraft deliveries can continue without disruption and without unnecessary administrative and financial burden on States and the aviation industry, this paper proposes that the Assembly request the Council to immediately amend the current halon replacement Standards with a timeline feasible for implementation. The current halon replacement Standards for portable fire extinguishers is applicable to those aircraft for which the individual certificate of airworthiness is first issued on or after December 31, 2016. It is recommended that this applicability date be amended to December 31, 2018, to allow enough time for the agent to gain the necessary environment approvals, and to then be installed on newly manufactured aircraft.

Action: The Assembly is invited to:

- a) note that the applicability dates for Standards in Annex 6 – *Operation of Aircraft*, related to portable fire extinguishers, may not be met by Member States, regional regulatory authorities and industry but that an alternative agent has been identified and is currently undergoing complex environmental approval processes, and that it is therefore likely that new aircraft will not be delivered with the halon replacement; and
- b) requests the Council, as a matter of urgency, to amend the applicability date of the halon replacement agent Standards for portable fire extinguisher in Annex 6 to become applicable for aircraft for which the individual certificate of airworthiness is first issued on or after December 31, 2018.

¹ English, Arabic, Chinese, French, Russian and Spanish versions provided by ICCAIA.

<i>Strategic Objectives:</i>	This working paper relates to the Air Navigation Capacity and Efficiency Strategic Objective.
<i>Financial implications:</i>	No financial implications for ICAO Minimal financial implications for States
<i>References:</i>	A38-WP/36, TE/2 A39-WP/90, TE/19 ICAO Annex 6 – <i>Operation of Aircraft</i> Doc 10022, <i>Assembly Resolutions in Force</i> (as of 4 October 2013) Doc 7300, <i>Convention on International Civil Aviation</i>

1. INTRODUCTION

1.1 Annex 6 — *Operation of Aircraft*, Parts I, II and III state that “any extinguishing agent used in a portable fire extinguisher in an aeroplane/helicopter for which the individual certificate of airworthiness is first issued on or after 31 December 2016 shall:

- a) meet the applicable minimum performance requirements of the State of Registry; and
- b) not be of a type listed in the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer as it appears in the Eighth Edition of the Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer, Annex A, Group II.”

1.2 The identified halon alternative for portable fire extinguishers is undergoing complex environmental approval processes in some manufacturing States. It is therefore likely that new aircraft will not be delivered to operators with the halon replacement in accordance with the requirement in Annex 6. Several States have adopted regulations aligned with Annex 6.

1.3 Industry remains committed to working collaboratively to phase out the use of halon as the principal fire extinguishing agent in civil aviation. However, due to the degree of complexity in gaining both environmental and technical approval to produce and install a replacement agent for halon in the portable extinguisher, the timeline as currently prescribed in Annex 6 will likely not be met. The halon used in portable extinguishers is safe and effective, as long as it is maintained and recycled properly. Therefore, States can be assured that there is no safety risk in extending the current timeline.

1.4 As stated in Assembly Resolution 38-11: “a high degree of stability in SARPs shall be maintained to enable Member States to maintain stability in their national regulations. To this end, amendments shall be limited to those significant to safety, regularity, and efficiency.” In the case of halon replacement in portable fire extinguishers, it is strongly recommended that the halon replacement Standards be amended as not doing so would have a significant impact on the regularity and efficiency of the aviation system.

1.5 As the applicability date for the Standards is fast approaching, it is important to take urgent action. Therefore, it is recommended that the Assembly requests the Council, as a matter of urgency, to consider amending the applicability date of the aforementioned Annex 6 Standards to a date on or after 31 December 2018. This amendment should be done before these Standards become applicable.

2. **CONCLUSIONS**

2.1 In order to avoid unnecessary disruption and administrative and financial burden to States and the aviation industry, it is recommended that the Assembly requests the Council to amend the current Standards for halon replacement agent for portable fire extinguishers from their current applicability to aircraft for which the individual certificate of airworthiness is first issued on or after December 31, 2016, to instead be applicable to aircraft with the individual certificate of airworthiness first issued on or after December 31, 2018. Due to the urgency and as a result of the Assembly discussions on this issue, the Council may consider bypassing the consultation process to allow a rapid amendment process for the Standards' applicability date.

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