

18 NTSB Recommendation Summaries

Note: This section is a processed summary of the NTSB recommendations. The font, character size and style have been changed. In addition, typographical errors have been corrected where applicable. Typographical, spelling and grammatical errors of the hyperlinked pages have not been corrected.

Hyperlinks to the full NTSB-FAA correspondence are available for each summary below. The full NTSB-FAA correspondence may include further hyperlinks to Notice of Proposed Rule Making (NPRM), Federal Register notifications and finally the affected CFR.

There are three (3) summary letters associated with the recommendations

1. [A-83-047 to A-83-049 letter](#)
2. [A-83-070 to A-83-081 letter](#)
3. [A-84-076 to A-84-078 letter](#)

[A-83-047](#)

Issue date: 07/19/1983 Closed 11/17/1986 Acceptable Alternate Action

Issue an Airworthiness Directive

1. to require an immediate inspection of the lavatory flushing pump motor and the associated wiring harnesses between the timing components and the motor in the lavatories of transport category airplanes for evidence of moisture-induced corrosion or deteriorated insulation and to require that flushing pump motors or wiring harnesses which exhibit such conditions be replaced.
2. to establish appropriate periodic intervals for repetition of these inspections.

[A-83-048](#)

Issue date: 07/19/1983 Closed 11/17/1986 Acceptable Alternate Action

Establish, in conjunction with the flush pump motor, timer, and airframe manufacturers, a procedure which airline maintenance personnel could employ to verify that the electrical circuitry of lavatory flushing pump motors has been damaged by corrosion or other causes so as to produce excessive heat during motor operation.

[A-83-049](#)

Issue date: 07/19/1983 Closed 06/12/1984 Acceptable Action

Issue a Maintenance Alert Bulletin to require Principal Maintenance Inspectors to assure that airlines have an acceptable program

1. for the frequent removal of waste from all areas of the lavatory with particular attention to those enclosed areas in and around the waste receptacles, and
2. which gives sufficient emphases to areas susceptible to the accumulation of fluids in the vicinity of wire harnesses and other electrical components which can cause corrosion.

[A-83-070](#)

Issue date: 10/31/1983 Closed 01/15/1986 Acceptable Action

Expedite testing to establish standards for smoke or fire detectors for use in airplane lavatories for the early detection of fires independent of passenger or cabin attendant sensory perceptions and initiate rulemaking at the earliest possible date to require installation of the detectors on transport category airplanes.

[A-83-071](#)

Issue date: 10/31/1983 Closed 01/15/1986 Acceptable Alternate Action

Require the installation of automatic thermal discharge-type fire extinguishers effective in sensing and extinguishing fires in and adjacent to lavatory waste receptacles on transport category airplanes.

[A-83-072](#)

Issue date: 10/31/1983 Closed 01/15/1986 Acceptable Action

Require that the hand fire extinguishers carried aboard transport category airplanes to comply with 14 CFR 25.851(a) use a technologically advanced agent such as Halon extinguishant.

[A-83-073](#)

Issue date: 10/31/1983 Closed 06/02/1986 Acceptable Action

Evaluate the electrical circuit protection, including reduced circuit breaker rated values and integral component thermal protection devices, needed to eliminate the potential for overheating of the wiring and components in the lavatory flushing pump motor systems in transport category airplanes and issue Airworthiness Directives as required.

[A-83-074](#)

Issue date: 10/31/1983 Closed 10/13/1987 Acceptable Action

Require that Protective Breathing Equipment, including smoke goggles, currently carried aboard transport category airplanes to comply with 14 CFR 25.1439 and 14 CFR 121.337 which do not meet the minimum performance standard prescribed in Technical Standard Order (TSO) C99 or equivalent be replaced with equipment which meets the standards.

[A-83-075](#)

Issue date: 10/31/1983 Closed 10/13/1987 Acceptable Action

Amend 14 CFR 121.337 to prescribe a minimum number of Portable Protective Breathing Apparatus with full face masks which will be carried in the passenger compartment of transport category airplanes readily accessible to cabin attendants and flight deck crews.

[A-83-076](#)

Issue date: 10/31/1983 Closed 03/06/1995 Acceptable Action

Expedite the research at the Civil Aeromedical Institute necessary to develop the technology, equipment standards, and procedures to provide passengers with respiratory protection from toxic atmospheres during in-flight emergencies aboard transport category airplanes.

[A-83-077](#)

Issue date: 10/31/1983 Closed 03/12/1987 Acceptable Action

Evaluate and change as necessary the procedures contained in the FAA-Approved Airplane Flight Manuals (AFM) of transport category airplanes relating to the control and removal of smoke to assure that these procedures address a continuing smoke source and are explicit with regard to the presence of fire and the optimum use of cabin pressurization and air conditioning systems.

[A-83-078](#)

Issue date: 10/31/1983 Closed 10/27/1986 Acceptable Action

Expedite the rulemaking action to require at the earliest possible date that passenger seats with fire-blocking materials be installed in transport category airplanes.

[A-83-079](#)

Issue date: 10/31/1983 Closed 10/27/1986 Acceptable Action

Expedite the rulemaking action to require at the earliest possible date that cabin emergency lighting be installed for optimum effectiveness during passenger evacuation from smoke-filled cabins.

A-83-080

Issue date: 10/31/1983 Closed 09/12/19856 Acceptable Alternate Action

Require the installation of tactile aisle markers on overhead stowage bins and cabin floors or seats of all transport category aircraft which will help passengers to find their way to emergency exits in evacuations when visibility in the cabin is restricted or when the cabin atmosphere is toxic, requiring the passengers to remain close to the floor.

A-83-081

Issue date: 10/31/1983 Closed 07/28/1988 Acceptable Alternate Action

Require that the location of the tactile emergency exit indicators be depicted in the passenger briefing cards and included in the flight attendant oral briefings.

A-84-076

Issue date: 07/12/1984 Closed 05/12/1986 Unacceptable Action

Require that air carrier Principal Operations Inspectors review the training programs of their respective carriers and if necessary specify that they be amended to emphasize requirements:

- for flightcrews to take immediate and aggressive action to determine the source and severity of any reported cabin fire and to begin an emergency descent for landing or ditching if the source and severity of the fire are not positively and quickly determined or if immediate extinction is not assured.
- for flight attendants to recognize the urgency of informing flightcrews of the location, source, and severity of any fire or smoke within the cabin.
- for both flightcrews and flight attendants to be knowledgeable of the proper methods of aggressively attacking a cabin fire by including hands-on-training in the donning of Protective Breathing Equipment, the use of the fire axe to gain access to the source of the fire through interior panels which can be penetrated without risk to essential aircraft components, and the discharge of an appropriate hand fire extinguisher on an actual fire.

A-84-077

Issue date: 07/12/1984 Closed 05/12/1986 Unacceptable Action

Require that Airplane Flight Manuals, air carrier Flight Operations Manuals, and Flight Attendant Manuals be amended to include comprehensive discussions and illustrations showing the proper use of a fire axe and the locations in each model of aircraft operated where a fire axe can be used safely to gain access to a fire or smoke emission source.

A-84-078

Issue date: 07/12/1984

Closed 05/12/1986 Unacceptable Action

Require that those interior cabin panels of transport category airplanes, including panels of the lavatories and galleys, which can be safely penetrated with a fire axe be identified by an acceptable and standardized means.