

FAA. The review results indicate that potential unsafe conditions exist on some IFE systems installed on various transport category airplanes. These conditions can be summarized as:

- Electrical bus(es) supplying power to the IFE system cannot be deenergized when necessary without removing power from systems that may be required for continued safe flight and landing.
- Power cannot be removed from the IFE system when required without pulling IFE system circuit breakers (*i.e.*, there is no switch dedicated to the IFE system or combination of systems for the purpose of removing power).
- Installation of the IFE system has affected crew (flight crew and/or cabin crew) procedures, but the procedures have not been properly revised.

FAA's Determination

As part of its review of IFE systems, the FAA has determined that an unsafe condition exists on Boeing Model 767–300 series airplanes modified by STC ST01869AT–D. The passenger entertainment system (PES) on these airplanes is connected to an electrical bus that cannot be deactivated without also removing power from airplane systems necessary for safe flight and landing. There is no other means to remove power from the PES. Additionally, the airplane manufacturer's published flight crew and cabin crew emergency procedures do not advise the flight crew and cabin crew that power cannot be removed from the PES. This condition, if not corrected, could result in inability to remove power from the PES during a non-normal or emergency situation, and consequent inability to control smoke or

fumes in the airplane flight deck or cabin.

Explanation of Relevant Service Information

The FAA has reviewed and approved TIMCO Service Bulletin TSB–767–23–005, Revision J, dated August 29, 2001; as revised by TIMCO Engineering Change Orders TSB–767–23–005, Revision J, K1, dated September 10, 2001; K2, dated September 18, 2001; and K3, dated September 28, 2001. That service bulletin describes procedures for modifying the PES by installing two new relays and additional wiring so that the power switch located in the flight compartment can be used to remove power completely from the PES. The service documents also describe procedures for installing a switch guard on the power switch for the PES. Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.

The FAA also has reviewed and approved TIMCO Airplane Flight Manual Supplement for Boeing B767–300, TIM–AFM–01034, Revision A, dated October 12, 2001, which revises the procedures under the heading “Electrical Smoke or Fire” in the “Emergency Procedures” section of the AFM to provide instructions for the cabin crew to remove power from the PES in an emergency.

Explanation of Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design that may be registered in the United States at some time in the future, this AD is being issued to ensure that

the airplane crew is able to remove electrical power from the PES when necessary and is advised of appropriate procedures for such action. Inability to remove power from the PES during a non-normal or emergency situation could result in inability to control smoke or fumes in the airplane flight deck or cabin. This AD requires accomplishment of the actions specified in the service bulletin described previously. This AD also would require revising procedures to be followed in the event of smoke or fire in the airplane, as contained under the heading “Electrical Smoke or Fire” in the “Emergency Procedures” section of the AFM. Accomplishment of these actions is intended to adequately address the identified unsafe condition.

In developing an appropriate compliance time for this action, the FAA considered not only the degree of urgency associated with addressing the subject unsafe condition, but the amount of time necessary to accomplish the proposed actions, and the practical aspect of accomplishing the proposed actions within an interval of time that parallels normal scheduled maintenance for the affected operators. In consideration of these factors, the FAA has determined that 18 months after the effective date of this AD represents an appropriate interval of time allowable wherein an acceptable level of safety can be maintained.

Other Relevant Rulemaking

The FAA has previously issued several ADs that address unsafe conditions and require corrective actions similar to those that will be required by this AD. These other ADs, and the airplane models and STCs to which they apply, are as follows:

Model/Series	STC Number	AD Reference
Airbus A340–211	ST0902AC–D	AD 2001–18–01, amendment 39–12427 (66 FR 46939, September 10, 2001)
Boeing 737–300	ST00171SE	AD 2001–14–10, amendment 39–12321 (66 FR 36455, July 12, 2001)
Boeing 737–700	ST09100AC–D	AD 2001–14–12, amendment 39–12323 (66 FR 36452, July 12, 2001)
	ST09104AC–D	
	ST09105AC–D	
	ST09106AC–D	
Boeing 747–100 and –200	SA8622SW	AD 2001–14–11, amendment 39–12322 (66 FR 36453, July 12, 2001)
Boeing 747–100 and –200	ST00196SE	AD 2001–16–19, amendment 39–12388 (66 FR 43068, August 17, 2001)
Boeing 747–400	SA8843SW	AD 2001–14–15, amendment 12326 (66 FR 36447, July 12, 2001)
Boeing 747SP	ST09097AC–D	AD 2001–14–14, amendment 39–12325 (66 FR 36449, July 12, 2001)
Boeing 757–200	SA1727GL	AD 2001–14–01, amendment 39–12311 (66 FR 36149, July 11, 2001)
Boeing 767–200	SA4998NM	AD 2001–16–21, amendment 39–12390 (66 FR 43072, August 17, 2001)