



**U.S. Department
of Transportation
Federal Aviation
Administration**

InFO

Information for Operators

InFO 17020
DATE: 12/18/17

Flight Standards Service
Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/info

An InFO contains valuable information for operators that should help them meet certain administrative, regulatory, or operational requirements with relatively low urgency or impact on safety.

Subject: Portable In-Flight Entertainment (IFE) Systems

Purpose: This InFO provides Title 14 of the Code of Federal Regulations (14 CFR) Parts 91 Subpart K, 121, 125 and 135 aircraft operators with clarifications on existing Federal Aviation Administration (FAA) regulations, policy and guidance covering portable IFE systems.

Background: In October 2013, the FAA issued new guidance and an assessment tool to assist aircraft operators in determining whether they can safely expand the use of passenger portable electronic devices (PED) during flight. This new guidance was developed based on recommendations contained in the final report produced by the PED aviation rulemaking committee (ARC) dated September 30, 2013. The guidance includes:

- FAA InFO 13010 - *Expanding Use of Passenger Portable Electronic Devices (PED)*,
- InFO 13010SUP - *FAA Aid to Operators for the Expanded Use of Passenger PEDs*, and
- (AC) 91.21-1 – *Use of Portable Electronic Devices Aboard Aircraft*.

One application of popular interest is portable IFE systems, or commonly known as “suitcase IFE” and “walk-on wireless IFE”.

Discussion: If the IFE system is portable and not installed in or connected to the airplane for electrical power, then the portable IFE system is regulated by 14 CFR part 91 § 91.21, part 121, § 121.306, part 125 § 125.206, and part 135 § 135.144.

If the portable IFE system is not connected to the aircraft for power or signals, then the system would need self-contained power, such as batteries, and wireless communication capability. If the portable IFE system includes wireless communication capability, then the aircraft operator is responsible for verifying, validating and demonstrating that the wireless system and the passenger PEDs using the wireless system does not interfere with navigation or communication systems of the aircraft. The guidance in FAA InFO 13010 may be used to support this demonstration.

If the portable IFE system remains onboard (e.g., in a luggage compartment or overhead bin) and the system is charged through a connection to an aircraft electrical power source, then the means of charging needs to be an approved installation. If the portable IFE system is not connected to an aircraft electrical

power source, then the operator should develop a procedure to charge the battery while the aircraft is on the ground.

The portable IFE system should not contain any hazardous materials subject to the Pipeline and Hazardous Materials Administration's (PHMSA) [Hazardous Materials Regulations \(HMR\)](#) except as provided for in the exceptions for crewmembers and passengers in 49 CFR 175.10 for batteries used to power electronic devices when operator approval is not required. However, if the portable IFE system battery requires operator approval or is not subject to the exception in 49 CFR 175.10, then transportation of the battery must comply with the HMR in 49 CFR parts 171 through 180. In this case the FAA recommends the aircraft operator demonstrate the portable IFE battery meets the minimum performance requirements of an installed aircraft battery (e.g., Technical Standard Order - C179a).

The FAA reminds aircraft operators of the risks associated with batteries in portable electronic devices. The FAA recommends aircraft operators implement crew member training and procedures following the guidance in AC 120-80A – *In-flight Fires* and Safety Alert for Operators (SAFO) 09013 – *Fighting Fires Caused By Lithium Type Batteries in Portable electronic Devices*.

Recommended Action: Aircraft operators should review this guidance when considering the use of portable IFE on their aircraft.

Additional Information: Additional information for PED use allowance can be found by clicking on the following links:

- ARC Report: http://www.faa.gov/about/initiatives/ped/media/PED_ARC_FINAL_REPORT.pdf
- Guidance on the expanded use of PED: <http://www.faa.gov/about/initiatives/ped/>
- ICAO Doc 9284, Technical Instructions for the Safe Transport of Dangerous Goods by Air: <http://www.icao.int/Pages/default.aspx>.
- IATA Lithium Batteries Risk Mitigation Guidance for Operators IATA and the IATA Lithium Battery Toolkit: <http://www.iata.org/whatwedo/cargo/dgr/Pages/lithium-batteries.aspx>
- FAA AC 91.21-1C “Use of Portable Electronic Devices Aboard Aircraft”: <http://rgl.faa.gov/>
- FAA AC 120-80A “In-Flight Fires”: <http://rgl.faa.gov/>
- FAA SAFO 09013 “Fighting Fires Caused By Lithium Type Batteries in Portable Electronic Devices”: https://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo/all_safos/media/2009/SAFO09013.pdf

Contact: Questions or comments regarding this InFO should be directed to the Aircraft Maintenance Division, AFS-300, telephone (202) 267-1675.