



सत्यमेव जयते

GOVERNMENT OF INDIA

**OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION**  
TECHNICAL CENTRE, OPP. SAFADRJUNG AIRPORT, NEW DELHI

**CIVIL AVIATION REQUIREMENTS**  
**SECTION 5- AIR SAFETY**  
**SERIES 'X' PART I**  
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**EFFECTIVE: FORTHWITH**

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Subject: Safety Hazard-Use of Mobile/Cellular Telephones inside the flight

**1. INTRODUCTION**

- 1.1. Portable electronic devices (PEDs) carried on board airplane by crew members, passengers or as part of the cargo are not included in the approved aircraft configuration. They may not meet the stringent electromagnetic emission standards imposed on certified airborne equipment. Many of these portable electronic devices have shown significant radio frequency emissions in excess of allowable levels within the frequency band of aircraft communication and navigation systems. The aircraft manufacturers had therefore, recommended that any passenger electronic device, which intentionally transmits radio signals should be prohibited for use by passengers at all times while on board the airplane. These intentionally transmitting portable electronic devices include laptops, tablets, smartphones, smartwatches, e-readers, point of sale device, radio transceivers, etc. The other type of passenger carry on portable electronic devices, which are not intentional transmitter of radio signals are portable voice records, video recorder, electronic entertainment devices, electric shavers, etc.
- 1.2. With the advancement in technologies and research on usage of mobile phones in air, regulators including Federal Aviation Administration (FAA) and European Union Aviation Safety Agency (EASA) have determined that airlines can safely allow use of Portable Electronic Devices (PEDs) by passengers during all phases of flight in flight/airplane mode. The use of these devices during flight is as per implementation guidance provided by them. The usage is also supported by inputs from airlines, aircraft

manufacturers, travelling public, pilots, cabin crew and mobile technology companies.

- 1.3. Ministry of Communications (Department of Telecommunications) vide their Gazette notification dated 14.12.2018, notified Flight and Maritime Connectivity Rules-2018 for grant and regulation of authorisation for in Flight and Maritime Connectivity. %a Flight and Maritime Connectivity or IFMC+ means the establishment, maintenance and working of telegraph to provide wireless voice or data or both type of telegraph messages in aircraft. This allows the use of internet services through Wi-Fi in aircraft, which will be made available when electronic devices are permitted to be used only in airplane mode within or above India or Indian territorial waters.
- 1.4. This Civil Aviation Requirements provides the requirements for the usage of intentionally/non-intentionally transmitting portable electronic devices (PEDs) during all phases of flight.
- 1.5. In order to ensure safety of aircraft operation in flight, this Civil Aviation Requirement is issued under the provisions of Rule 29B read in conjunction with Rule 133A of the Aircraft Rules, 1937.

## 2. APPLICABILITY

- 2.1 This Civil Aviation Requirement is applicable to all persons on board all Indian Civil Registered aircraft and to all Indian operators engaged in scheduled, non-scheduled and private operations.

## 3. REQUIREMENTS

- 3.1 No person shall use any electronic device, which intentionally transmits radio signals like mobile/cellular phones, amateur radio transceivers, etc. at all times while on board an aircraft for the purpose of flight.
- 3.2 Portable Electronic devices(PEDs), intentionally transmitting radio signals like laptops, tablets, smartphones, smartwatches, e-readers, or point of sale device, if carried on board, shall be kept in non-transmitting mode (commonly referred to as Flight/Airplane Mode).
- 3.3 Notwithstanding anything contained in para 3.1, on the instruction of Pilot in Command (PIC) of the aircraft, use of internet services through WiFi by PEDs in non-transmitting mode shall be permitted subject to following conditions:
  - a) The aircraft shall have the approval from Directorate General of Civil Aviation (DGCA) for use of internet facilities through WiFi on-board the aircraft.
  - b) The aircraft operator shall ensure that the IFMC service provide is approved by Department of Telecommunication, India for provision of these services during flight.
  - c) The internet service through WiFi on-board the aircraft shall be available at minimum height of 3000 meters or 10000 Feet\$ above departure/arrival airfield elevation.

- d) Internet services through Wi-Fi in aircraft shall be made available when Portable electronic devices are used only in Flight/airplane mode.
  - e) Restriction as contained in aircraft certification document/ Aircraft Flight Manual or equivalent documents with regards to use of PEDs in different aircraft zone or to a particular transmitting technology.
  - f) The Pilot in Command may, for any reason and during any phase of flight, require deactivation and stowage of PEDs.
- 3.4 The operator shall identify the safety hazards and manage the associated risks for the use of internet services through WiFi by PEDs. The risk assessment should include hazards associated with:
- i. PEDs in different aircraft zones;
  - ii. PED use during various phases of flight;
  - iii. PED use during turbulence;
  - iv. Improperly stowed PEDs;
  - v. Impeded or slowed evacuations;
  - vi. Passenger non-compliance, e.g. not deactivating transmitting functions, not switching off PEDs or not stowing PEDs properly;
  - vii. Disruptive passengers; and
  - viii. Battery fire.
- 3.5 Passenger carry on electronic devices, which are not intentional transmitter of radio signals such as portable voice records, electronic entertainment devices, electric shavers, etc., if carried on board, shall not be used by any person, as announced by the cabin crew, inside the aircraft during taxi, take-off, climb out, descent, final approach and landing phases of flight. This shall not apply to medical electronic devices such as pace makers, hearing aids.
- 3.6 All operators shall by suitable means address passengers on board their aircraft emphasizing the above mentioned prohibition regarding the use of mobile/cellular phones and other carry on electronic devices inside the aircraft in transmitting mode and non-transmitting mode prior to commencement of the flight highlighting safety aspect including handling and stowage of PEDs by the passengers.
- 3.7 Cabin crew, besides their other duties, during the flight shall keep a watch on the passengers to ensure compliance of the above prohibitory requirements.
- 3.8 Any violation of these requirements during the flight should be brought to the notice of the Commander by the cabin crew and recorded in the flight report book for subsequent action by the operator against the defaulting person.
- 3.9 All operators shall include contents of this Civil Aviation Requirement in their company policy document and other operational documents like Operations Manual, Cabin Crew Manual, Passenger Briefing Card, etc. for compliance by their concerned personnel.
- 3.10 All operators shall report PED events related to suspected or confirmed PED interference, smoke or fire caused by PED to DGCA (Kind Attn: DAS Hqrs.).

They shall also evaluate their aircraft as being transmitting PED resistant.

#### 4 GUIDELINES FOR CREW TRAINING

All operators shall develop training program for crew on the following aspects:

- PEDs, if any, that cannot be used on board.
- Situation where PEDs are to be switched-off/on/kept in non-transmitting mode.
- Use of internet facilities through Wifi on-board the aircraft including the conditions under which the PIC require deactivation of the services.
- Stowage of PEDs during take-off and landing.
- Applicability on type of aircraft.
- Update on PEDs policy of the operator.
- Procedure for handling PED interference normal, abnormal and during emergency.
- Procedures to recognize, respond and report suspected PEDs interference.
- Cabin crew responsibilities and procedures concerning use of PEDs.
- CRM and workload issues.

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