



GOVERNMENT OF INDIA

OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION
TECHNICAL CENTRE, OPP. SAFDARJUNG AIRPORT, NEW DELHI – 110003

CIVIL AVIATION REQUIREMENTS
SECTION 8 – AIRCRAFT OPERATIONS
SERIES 'F', PART III
ISSUE I, 3RD SEPTEMBER 2013

Rev 1 EFFECTIVE: 1st DECEMBER 2016

File No. AV-22024/19/2016-FSD

**SUBJECT: SUPERVISED TAKE OFF AND LANDING REQUIREMENTS
FOR SCHEDULED AND NON-SCHEDULED OPERATORS
HAVING AEROPLANES WITH AUW EXCEEDING 5700 KGS**

1. Introduction

ICAO Annex 6 – Operation of Aircraft Part I contains standard and recommended practices (SARPs) for operation of commercial air transport which covers flight crew requirements. The Annex requires operators to establish and maintain approved flight training programmes which ensures that all flight crew members are adequately trained and qualified to perform their assigned duties and also stipulates recent experience in take offs and landing by flight crew. The Pilot-in-command (PIC) is solely vested with the responsibility of the safety of aircraft and passengers. In order to afford co-pilots opportunity to acquire vital experience in handling the aircraft during critical phases of take-off and landing it is necessary to specify the conditions under which the co-pilot may be authorized to effect take-off and landing under direct supervision of the PIC. This CAR supersedes AIC 6 of 2011.

2. Applicability

- 2.1 This CAR is applicable to scheduled and non-scheduled operators with aeroplane weight exceeding 5700 kg.

- 2.2 This CAR lays down the requirements for the conduct of supervised take off and landing and is applicable to a PIC giving the co-pilot on RHS an opportunity to handle the aeroplane.

Note: This CAR is not applicable to the PIC as trainer, permitting take off and landing by the co-pilot undergoing PIC upgrade training from LHS.

- 2.3 This CAR is issued under the provisions of Rule 29C and Rule 133A of the Aircraft Rules, 1937.

2.4

3. Eligibility requirements

- 3.1 PIC. The PIC who permits a co-pilot to effect take-off and landing shall have;

- (a) Minimum flying experience – 3000 hours.
- (b) Minimum command experience – 1000 hours.
- (c) Minimum PIC experience on type – 300 hours.
- (d) Blameworthy free accident/incident record for preceding 3 years.
- (e) Recent flying experience of 10 hours in preceding 90 days.
- (f) Been suitably trained and assessed for supervised take-off and landing in a level C/CG/D/DG simulator by the operator.

- 3.2 Co-pilot. The co-pilot who effects takeoff and landing shall have;

- (a) Been suitably trained and assessed for supervised take-off and landing in a level C/CG/D/DG simulator by the operator.
- (b) Completed type rating syllabus including base training/ZFTT simulator session as applicable.

4. Procedure

- 4.1 Designated Examiners, Examiners, Type Rating Instructors, Instructors, Line Training Captains and Check Pilots may authorize a Co-pilot to effect take-off and landing during all flights subject to general requirements of Para 6.

- 4.2 Pilots, other than the Designated Examiners, Examiners, Type Rating Instructors, Instructors, Line Training Captains and Check Pilots who are eligible for supervised take-off and landing as mentioned in Para 3.1 above, may authorize Co-pilots to effect take-off and landing once the co- pilot has been cleared for unsupervised line flying duties.

Note: Unsupervised line flying duties refer to flights after co-pilot release for line flying with pilots other than examiners/instructors/check pilots

- 4.3 The PIC has sole responsibility for safety and shall take over controls at any stage of supervised take-off and landing to ensure this by announcing "I have controls". The co-pilot will acknowledge by announcing "You have controls" and will continue to fly the aircraft safely till a positive control input is made by the PIC.

5. **Responsibility**

- 5.1 **Operator.** The operator shall ensure that;

- (a) The Operations Manual contains instructions, requirements and the procedure laid down for supervised take-off and landing consistent with this circular.
- (b) Pilots are suitably trained and assessed for supervised take-off and landing in a level C/CG/D/DG simulator.
- (c) List of pilots authorized for supervised take-off and landing is maintained and disseminated to all concerned.
- (d) List of aerodromes authorized for supervised take-off and landing is maintained and disseminated to all concerned.
- (e) Responsibility and duties of PIC and co-pilot for conduct of reject take-off and go-around manoeuvres are specified for both cases when the co-pilot occupies the RHS during co-pilot line flying/training/checks and LHS during PIC upgrade training/checks.
- (f) Method of handing and taking over controls between the PIC and co-pilot is specified.

- 5.2 **Pilot-in-command.** The PIC shall ensure that;

- (a) The aircraft is established on the correct approach profile by 1000 feet above the aerodrome elevation. He shall also ensure that the aircraft is stabilized during approach at the correct approach speed and aligned with the runway centerline and maintain a rate of descent within the specified limits for the type of aircraft and approach being made
- (b) Due consideration shall be given to the aircraft serviceability status and factors such as snags carried forward under minimum equipment list that affect take-off and landing handling or performance.
- (c) The co-pilot is adequately briefed for take-off and landing.

- 5.3 **Co-pilot.** The co-pilot shall ensure that;

- (a) Adequate briefing for take-off and landing has been done.

- (b) The PIC is advised without delay of any circumstance that may adversely affect take-off or landing conducted by the co-pilot.

6. General requirements

6.1 Supervised take-off and landing shall not be permitted;

- (a) During an emergency/precautionary landing.
- (b) During actual monsoon/adverse weather conditions.
- (c) In Category C aerodromes.
- (d) When the LDA is less than $ALD \times 1.15$ plus margin of 1000 feet.
- (e) When the runway surface is wet.

6.2 The meteorological minima for supervised take-off and landing shall be;

- (a) Visibility - 500 m higher than applicable minima.
- (b) Cloud base - 200 ft above MDA/DA.
- (c) Cross/tail wind component - maximum 10 kts.

Director General Civil Aviation

Draft