

CPL / ATPL STUDY NOTES



CHAPTER 8 · AIR REGULATIONS

Procedures for Aerodrome Control Service

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§1 · Functions of Aerodrome Control Towers

☐ CORE PURPOSE (REGULATORY STATEMENT)

Aerodrome control towers shall issue **information and clearances** to aircraft under their control to achieve a **safe, orderly and expeditious flow of air traffic** on and in the vicinity of an aerodrome with the object of **preventing collision(s)**.

Collisions to be Prevented — Five Categories

ITEM	DESCRIPTION
A	Aircraft flying within the designated area of responsibility of the control tower, including the aerodrome traffic circuits
B	Aircraft operating on the manoeuvring area
C	Aircraft landing and taking off
D	Aircraft and vehicles operating on the manoeuvring area
E	Aircraft on the manoeuvring area and obstructions on that area

● CONTINUOUS WATCH OBLIGATION

Aerodrome controllers shall maintain a **continuous watch** on all flight operations on and in the vicinity of an aerodrome as well as vehicles and personnel on the manoeuvring area.

- Watch maintained by **visual observation**
- In low visibility — augmented by an **ATS surveillance system** (when available)
- Traffic controlled in accordance with procedures herein **and all applicable TLIs** (Temporary Local Instructions) of the concerned airport
- If other aerodromes exist within a control zone — **traffic circuits must be coordinated** to avoid conflict

Working Positions within an Aerodrome Control Tower

POSITION	PRIMARY RESPONSIBILITY
Aerodrome Controller	Operations on the runway and aircraft flying within the area of responsibility of the aerodrome control tower
Ground Controller	Traffic on the manoeuvring area — excluding runways
Clearance Delivery Position	Delivery of start-up and ATC clearance to departing IFR flights

💡 PARALLEL RUNWAY OPERATIONS

Where **parallel or near-parallel runways** are used for simultaneous operations, individual aerodrome controllers should be responsible for operations on **each of the runways**.

§2 · Alerting Service Provided by Aerodrome Control Towers

Aerodrome control towers are responsible for alerting the **rescue and fire fighting services** whenever:

- a** An **aircraft accident** has occurred on or in the vicinity of the aerodrome
- b** Information is received that the **safety of an aircraft** which is or will come under the jurisdiction of the aerodrome control tower **may have or has been impaired**
- c** Requested by the flight crew
- d** When otherwise **deemed necessary or desirable**

§3 · Procedure for Start-Up & Assignment of Flight Level to Departing Aircraft

PRE-CLEARANCE OBLIGATIONS ON THE PILOT

- 1** Before asking for startup or push-back clearance — pilot must ensure the **step ladder / Aerobridge has been removed** and **doors are closed**.
- 2** Pilot shall intimate **total number of persons on board** (including crew) and **security check completed** to aerodrome control tower when requesting start-up clearance.
- 3** **Sequence of departure** determined & intimated based on taxiing sequence and sequence at holding point — except where deviation is made to facilitate a **VIP aircraft** or change of order for **traffic reasons**.

⚠ REGULATORY DELAYS – KNOW THESE!

- **Delays may be expected** for the second aircraft to push-back when it is parked adjacent to another aircraft being pushed-back.
- Delay in take-off due to **restrictions in the ATC clearance** and over-flights or the appropriate ATS authority.
- Delay when proceeding on the **same track/level**, or climbing through the level, or to climb at a **higher rate of climb** behind a preceding traffic to establish the prescribed separation.
- A departing aircraft requesting the **same cruising level as an over-flying aircraft** may have to accept an **alternate level** or delay its departure to establish prescribed separation.

§4 · Take-Off and Landing

ABSOLUTE RULES – NO EXCEPTIONS

- The **pilot-in-command shall not take-off or land** without a clearance from the appropriate **ATC unit**.
- The pilot-in-command shall **not run-up on the runway in use** unless **authorised by Aerodrome Control**.

ENGINE RUN-UPS – WHERE THEY CAN BE DONE

Engine run-ups in the **holding pan** or **runway holding position** clear of the runway in use may be carried out — subject to **approval by Aerodrome Control**.

Minimum Runway Occupancy Procedures

To increase runway capacity it is essential to **minimise the runway occupancy time**. Follow these procedures:

- 1 Cockpit checks should be completed prior to lineup.** Any checks requiring completion on the runway should be kept to the **minimum required**.
- 2** Pilots must be able to **commence the take-off run immediately** after take-off clearance is issued.
- 3** Pilots **not able to comply** must **notify ATC prior to commencement of taxi**.
- 4** Pilots of arriving aircraft are reminded that **rapid exits from the landing runway** enable ATC to apply minimum spacing on final approach — achieving **maximum runway utilisation**.

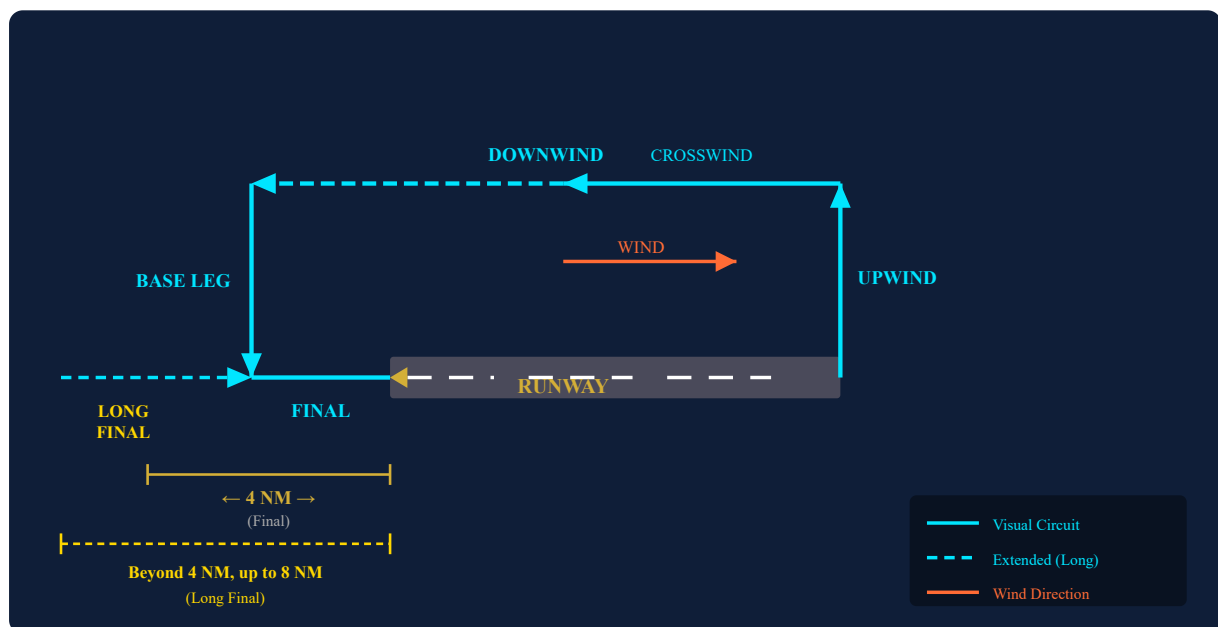
INDIAN AIRSPACE-SPECIFIC PROHIBITIONS

- **Cruise Climb is NOT permitted** in Indian Flight Information Regions.
- **Transonic and Supersonic phases of flight are NOT permitted** over Indian airspace.

§5 · Designated Positions in the Aerodrome Traffic & Taxi Circuits

The positions of aircraft in the traffic and taxi circuits are the positions where the aircraft normally receive aerodrome control tower clearances. Where practicable, **all clearances should be issued without waiting for the aircraft to initiate the call.**

VISUAL TRAFFIC CIRCUIT DIAGRAM (DOC 4444 / AIP INDIA)



§6 · Taxi Clearance

WHAT TAXI CLEARANCES MUST CONTAIN

- Concise instructions and adequate information to assist the flight crew to follow the **correct taxi routes**
- To **avoid collision** with other aircraft or objects
- To minimise the potential for the aircraft **inadvertently entering an active runway**

RUNWAY CROSSING RULE

When a taxi clearance contains a **taxi limit beyond a runway**, it shall contain an **explicit clearance to cross** or an **instruction to hold short** of that runway.

§7 · Taxiing on a Runway-in-Use

- a** Aircraft may be permitted to taxi on the runway-in-use for the purpose of **expediting air traffic**, provided **no delay or risk** to other aircraft will result.
- b** If the control tower is unable to determine (visually or via ATS surveillance) that a vacating/crossing aircraft has cleared the runway — aircraft shall be **requested to report when it has vacated**. Report made when the **entire aircraft is beyond the relevant runway-holding position**.
- c** Pilot who requires to **back-track the runway for departure** must notify ATC **prior to commencement of taxi**.
- d** Unless prior permission has been obtained from ATC, the **Pilot-in-Command shall not hold on the runway-in-use**.
- e** **Only one aircraft** will be cleared to land on the runway-in-use at any one time — **except formation flight by military aircraft**.

§8 · Use of Runway-Holding Positions

HOLDING DISTANCE RULES

- a.** Except as provided in (b) below, aircraft shall not be held **closer to a runway-in-use than at a runway-holding position**.
- b.** Aircraft shall **NOT be permitted to line up and hold on the approach end** of a runway-in-use whenever another aircraft is effecting a landing — until the landing aircraft has **passed the point of intended holding**.

RUNWAY HOLDING POSITION — MINIMUM DISTANCES



RUNWAY LENGTH

MINIMUM DISTANCE FROM RUNWAY EDGE

≥ 900 M

50 metres from runway edge

< 900 M

30 metres from runway edge

SECTION 4 · INFORMATION TO AIRCRAFT BY AERODROME CONTROL TOWERS

§9 · Aerodrome & Meteorological Information (Pre-Taxi)

☐ WHEN IS THIS INFORMATION PROVIDED?

Prior to **taxiing for take-off**, aircraft shall be advised of the following elements of information — in the order listed — with the exception of elements already known to the aircraft.

#	ELEMENT OF INFORMATION
a	The runway to be used
b	The surface wind direction and speed , including significant variations
c	The QNH altimeter setting and, either on a regular basis or if requested — the QFE altimeter setting
d	The air temperature for the runway — in the case of turbine-engine aircraft
e	The visibility representative of the direction of take-off and initial climb, if less than 10 km , or — when applicable — the RVR value(s) for the runway to be used
f	The correct time

§10 · Information Prior to Take-Off

Prior to take-off, aircraft shall be advised of:

- a Any **significant changes** in the surface wind direction and speed, the air temperature, and the visibility or RVR value(s)
- b **Significant meteorological conditions** in the take-off and climb-out area — except when it is known the aircraft has already received the information

NOTE – SIGNIFICANT MET CONDITIONS INCLUDE:

Cumulonimbus or thunderstorm, moderate or severe turbulence, wind shear, hail, moderate or severe icing, severe squall line, freezing precipitation, severe mountain waves, sand storm, dust storm, blowing snow, tornado or waterspout — in the take-off and climb-out area.

PRE-TRAFFIC-CIRCUIT / APPROACH INFORMATION

Prior to entering the traffic circuit or commencing approach to land, aircraft shall be provided:

#	ELEMENT
a	Runway to be used
b	Surface wind direction and speed, including significant variations
c	QNH altimeter setting and, if requested, QFE altimeter setting

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§11 · Runway Incursion or Obstructed Runway

If the aerodrome controller observes — after a take-off or landing clearance has been issued — any obstruction on the runway likely to impair safety (runway incursion by aircraft/vehicle, animals, birds), the following actions shall be taken:

a In **ALL** cases: Inform the aircraft concerned of the obstruction and its **location on the runway**

b Cancel the **take-off clearance** for an aircraft which has **not started to roll**

c Instruct a landing aircraft to go around

☐ ESSENTIAL LOCAL TRAFFIC INFORMATION

Essential local traffic shall be considered to consist of any **aircraft, vehicle or personnel on or near the manoeuvring area** or traffic operating in the vicinity of the aerodrome, which **may constitute a hazard** to the aircraft concerned.

§12 · Uncertainty of Position on the Manoeuvring Area

PILOT ACTION – POSITION UNCERTAINTY (NOT ON RUNWAY)

A pilot in doubt as to the position of the aircraft with respect to the manoeuvring area shall immediately:

- a. Stop the aircraft**
- b. Simultaneously notify the appropriate ATS unit** of the circumstances (including the last known position)

PILOT ACTION – RECOGNISES AIRCRAFT IS ON A RUNWAY

If a pilot recognises the aircraft is on a runway (while uncertain of position), the pilot shall immediately:

- a. Notify the appropriate ATS unit** of circumstances (including last known position)
- b. If able to locate a nearby suitable taxiway — vacate the runway as expeditiously as possible**, unless otherwise instructed by the ATS unit
- c. Stop the aircraft**

VEHICLE DRIVER – POSITION UNCERTAINTY

A vehicle driver in doubt as to position on the manoeuvring area shall immediately:

- a. **Notify the appropriate ATS unit** of circumstances (including last known position)
- b. Unless otherwise instructed — **vacate the landing area, taxiway, or other part of the manoeuvring area** to a safe distance as expeditiously as possible
- c. **Stop the vehicle**

CONTROLLER ACTION – LOST/UNCERTAIN AIRCRAFT OR VEHICLE

In the event the aerodrome controller becomes aware of an aircraft or vehicle that is lost or uncertain of its position, appropriate action shall be taken **immediately** to safeguard operations and assist the aircraft or vehicle to determine its position.

§13 · Wake Turbulence and Jet Blast Hazard

CONTROLLER OBLIGATIONS

- Aerodrome controllers shall, when applicable, **apply the wake turbulence separation minima specified**.
- Whenever the responsibility for wake turbulence avoidance rests with the pilot-in-command — aerodrome controllers shall, to the extent practicable, **advise aircraft of the expected occurrence of hazards** caused by turbulent wake.

§14 · Condition of the Movement Area and Related Facilities

Information on the condition of the movement area and operational status of related facilities shall be provided to arriving and departing aircraft particularly in respect of:

CONDITION TYPE

- a Construction or maintenance work on, or immediately adjacent to the movement area
- b Rough or broken surfaces on a runway, taxiway or apron — whether marked or not
- c Water, snow, slush, ice or frost on a runway, taxiway or apron
- d Anti-icing or de-icing liquid chemicals or other contaminant on a runway, taxiway or apron
- e Snow banks or drifts adjacent to a runway, taxiway or apron
- f Other temporary hazards — including parked aircraft
- g Failure or irregular operation of part or all of the aerodrome visual aids
- h Failure of normal or secondary power supply

SECTION 5 · PRIORITY & SPECIAL TRAFFIC

§15 · Control of Other Than Aircraft Traffic

Entry to the Manoeuvring Area

☐ AUTHORITY

The movement of persons or vehicles (including towed aircraft) on the manoeuvring area of an aerodrome shall be **controlled by the aerodrome control tower** as necessary to avoid hazard to them or to aircraft landing, taxiing or taking off.

LOW VISIBILITY PROCEDURES – RESTRICTIONS ON MANOEUVRING AREA

- a. Persons and vehicles operating on the manoeuvring area shall be **restricted to the essential minimum**, and particular regard shall be given to the requirements to **protect the ILS sensitive area(s)** when Category II or Category IIIA precision instrument operations are in progress.
- b. Vehicles shall remain at **safe distance from taxiing aircraft**.

Priority on the Manoeuvring Area

● EMERGENCY PRIORITY

Emergency vehicles proceeding to the assistance of an aircraft in distress shall be afforded priority over all other surface movement traffic.

💡 LIGHT SIGNAL – EMERGENCY / NO RADIO CONDITIONS

In emergency conditions or if radio signals are not observed, the signal given hereunder shall be used for runways or taxiways equipped with a lighting system:

Flashing runway lights → Meaning: **Vacate the runway or taxiway and observe the tower for light signal**

§16 · Priority Rules for Aircraft Operations

The following general rules determine the **order of priority of aircraft operations**:

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1 Emergency Landing (Compelling)

Aircraft known/believed to be in emergency compelling it to land without delay — e.g. engine failure, acute fuel shortage, total communication failure

2 Military Fighter Flights

Invariably experience fuel shortage if not per planned ops. Ground time limitations — departures accommodated without delay

3 Live Scramble

An aircraft engaged in a live scramble

4 Medical / MEDEVAC

Aircraft carrying sick/injured persons requiring urgent medical attention or carrying out approved medical evacuation

5 VVIP Aircraft

Aircraft carrying VVIP as laid down in procedures for their handling

6 Search & Rescue

Aircraft proceeding on Search and Rescue missions

7 Military Large Formation

Military flight carrying out large integrated formations in military exercises

8 Urgent Military Ops (RPA)

Aircraft/RPA in approved urgent operational military commitment coordinated with appropriate ATC Centres

9 Large Scale Weather Deviations

Aircraft on large scale weather deviations

10 Adverse Condition Diversions

Aircraft landing at alternate aerodromes after diversion due adverse operational or weather conditions at intended destination

§17 · Suspension of Visual Flight Rules Operations

☐ WHO CAN SUSPEND VFR?

Any or all VFR operations on and in the vicinity of an aerodrome may be suspended by any of the following — whenever safety requires such action:

- a. The **approach control unit or the appropriate ACC**
- b. The **aerodrome control tower**
- c. The **appropriate ATS authority**

All such suspensions of VFR operations shall be accomplished through or notified to the **aerodrome control tower**.

PROCEDURES WHEN VFR OPERATIONS ARE SUSPENDED

The following procedures shall be observed by the aerodrome control tower:

- a** Hold all VFR departures
- b** Recall all local flights operating under VFR or obtain approval for **special VFR operations**
- c** Notify the approach control unit or **ACC** as appropriate of the action taken
- d** Notify all operators or their designated representatives of the reason for taking such action — if necessary or requested

SECTION 6 · TRAFFIC CIRCUIT & CLEARANCES

§18 · Control of Traffic in the Traffic Circuit

Entry of Traffic Circuit

● WHEN IS ENTRY CLEARANCE ISSUED?

The clearance to enter the traffic circuit should be issued to an aircraft whenever it is desired that the aircraft approach the landing area in accordance with current traffic circuits but traffic conditions do **not yet allow a landing clearance to be issued**.

Depending on circumstances and traffic conditions, an aircraft may be cleared to **join at any position** in the traffic circuit.

An arriving aircraft executing an **instrument approach** shall normally be cleared to **land straight in** unless visual manoeuvring to the landing runway is required.

§19 · Order of Priority for Arriving and Departing

Aircraft

⚠ FUNDAMENTAL PRIORITY RULE

An aircraft **landing or in the final stages of an approach to land** shall normally have **priority** over an aircraft intending to depart from the same or an intersecting runway.

§20 · Control of Departing Aircraft

Departure Sequence

● DEPARTURE SEQUENCING RULE

Departures shall normally be cleared in the **order in which they are ready for take-off**, except that deviations may be made from this order to **facilitate the maximum number of departures with the least average delay**.

Separation of Departing Aircraft

⚠ WHEN MAY NEXT DEPARTURE COMMENCE?

A departing aircraft will **not normally** be permitted to commence take-off until:

- The **preceding departing aircraft has crossed the end of the runway-in-use**, OR
- The preceding departing aircraft has **started a turn**, OR
- All **preceding landing aircraft are clear of the runway-in-use**

Take-Off Clearance

● WHEN CAN TAKE-OFF CLEARANCE BE ISSUED?

Take-off clearance may be issued to an aircraft when there is **reasonable assurance that the separation will exist** when the aircraft commences take-off.

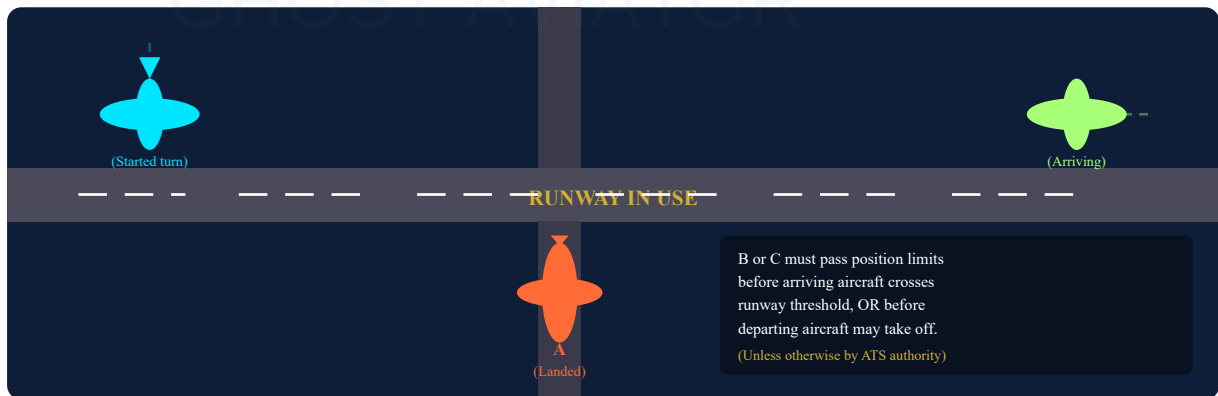
💡 IMMEDIATE TAKE-OFF CLEARANCE

In the interest of expediting traffic, a clearance for **immediate take-off** may be issued to an aircraft **before it enters the runway**. On acceptance of such clearance — the aircraft shall **taxi out to the runway and take off in one continuous movement**.

💡 TAKE-OFF CLEARANCE — RUNWAY DESIGNATOR

To reduce the potential for misunderstanding — the take-off clearance **shall include the designator of the departure runway**.

🚧 DEPARTURE / ARRIVAL SEPARATION — POSITION LIMITS (DOC 4444)



§21 · Control of Arriving Aircraft

Separation on the Same Runway

⚠️ WHEN MAY LANDING AIRCRAFT CROSS THRESHOLD?

A landing aircraft will **not normally be permitted to cross the runway threshold** on its final approach until:

- The **preceding departing aircraft has crossed the end of the runway-in-use**, OR
- Has **started a turn**, OR
- All **preceding landing aircraft are clear of the runway-in-use**

Clearance to Land

● WHEN IS LANDING CLEARANCE ISSUED?

- An aircraft may be cleared to land when there is **reasonable assurance that the separation will exist** when the aircraft crosses the runway threshold.
- A clearance to land shall **not be issued** until a preceding landing aircraft has **crossed the runway threshold**.
- The landing clearance shall include the **designator of the landing runway** — to reduce the potential for misunderstanding.

SECTION 7 · LOW VISIBILITY, LIGHTING & WIND SHEAR

§22 · Procedures for Low Visibility Operations

⚠ CONTROL OF SURFACE TRAFFIC IN LOW VISIBILITY

In conditions where **low visibility procedures are in operation**:

- Persons and vehicles operating on the manoeuvring area shall be **restricted to the essential minimum**
- Particular regard shall be given to protecting the **ILS sensitive area(s)** when **Category II or Category IIIA** precision instrument operations are in progress

§23 · Aeronautical Ground Lights

□ WHAT IS RUNWAY LIGHTING?

Runway lighting includes: **edge lights, threshold lights, centre line lights, end lights, touchdown zone lights, and wing bar lights.**

When Aeronautical Ground Lights Shall Be Operated

#	CONDITION
a	During the time from sunset to sunrise
b	From sunrise to sunset when visibility is 5,000 m or less in India
c	When requested by pilot
d	At any other time when their use — based on meteorological conditions — is considered desirable for the safety of air traffic

💡 LIGHTS MAY BE TURNED OFF — WHEN?

Lights on and in the vicinity of aerodromes not intended for en-route navigation purposes may be turned off, if:

- No likelihood of either **regular or emergency operation** exists, AND
- They can be **again brought into operation at least one hour before** the expected arrival of an aircraft

VARIABLE INTENSITY LIGHTS

At aerodromes equipped with lights of variable intensity — a **table of intensity settings** based on conditions of visibility and ambient light should be provided for ATC guidance. When requested by an aircraft, further adjustment of intensity **shall be made whenever possible**.

💡 VISUAL APPROACH SLOPE INDICATOR (VASI) LIGHTS

The lights of a visual approach slope indicator system shall be operated during the **hours of daylight as well as of darkness and irrespective of the visibility conditions** when the associated runway is being used.

Runway Lighting Rules

⚠️ RUNWAY LIGHTING SHALL NOT BE OPERATED UNLESS:

Runway lighting shall not be operated if that runway is **not in use for landing, take-off or taxiing purposes**, unless required for **runway inspections or maintenance**.

LIGHTING AFTER TAKE-OFF — NOT OPERATED CONTINUOUSLY

AERODROME TYPE	RULE
With ATC service + centrally controlled lights	Lights of one runway shall remain lighted after take-off as long as considered necessary for the return of the aircraft due to an emergency occurring during or immediately after take-off
Without ATC service OR without centrally controlled lights	Lights of one runway shall remain lighted until such time as would normally be required to reactivate the lights in likelihood of the departing aircraft returning for an emergency landing, and in any case not less than fifteen minutes after take-off

§24 · Wind Shear Advisories

□ DEFINITION OF WIND SHEAR

Wind shear is a **sustained change in the wind velocity along the aircraft flight path**, which occurs significantly faster than the aircraft can accelerate or decelerate. It can occur at any level, but it is '**low level wind shear**' occurring from the surface to a height of approximately **1,500 feet**, which can cause problems of sufficient magnitude to affect the control of aircraft in **departure or final approach phases of flight**.

● WIND SHEAR REPORTING PROCEDURE

- Whenever a pilot reports wind shear conditions to ATC — the information shall be **passed to subsequent arriving and departing aircraft** until either:
 - Confirmation is received that the condition **no longer exists**, OR
 - Wind shear information has been **included in ATIS** and the flight crew reports receipt of the appropriate ATIS designator
- Reports on wind shear from aircraft should be **passed to the Meteorological office**.

Designation of Hot Spot

HOT SPOT

The aerodrome operator shall whenever necessary designate a **location or several locations on the movement area** of the aerodrome as **hot spot(s)**. The hot spot(s) shall be charted in accordance with **Annex 4**.

§25 · Coefficient of Friction

CONTEXT

The table below was developed from friction data collected only in **compacted snow and ice** — and should not be taken as absolute values applicable in all conditions. Surface condition information (including estimated surface friction) must be provided for **each third of a runway**. The "first part" always means the **first third of the runway as seen in the direction of landing**.

MEASURED COEFFICIENT (M)	ESTIMATED SURFACE FRICTION	CODE
0.40 and above	GOOD	5
0.39 to 0.36	MEDIUM TO GOOD	4
0.35 to 0.30	MEDIUM	3
0.29 to 0.26	MEDIUM TO POOR	2
0.25 and below	POOR	1

KEY EXAM POINT — RUNWAY SEGMENTS

The runway is divided into **thirds (1/3 segments)** for reporting surface condition. When giving landing information, sections are referred to as **first, second, or third part of the runway**. The **first part always means the first third of the runway as seen in the direction of landing**.

§26 · DGCA Exam Questions — Chapter 8

ABOUT THIS SECTION

These 12 questions are taken directly from the DGCA examination bank for this chapter. Correct answers are highlighted in green with detailed regulatory explanations.

Q1 When instructed by ATC to hold short of Runway, pilot should stop:

A) With nose gear on hold line

✓ B) So that no part of the A/c extends beyond hold line

C) So that the Flt Deck Area of A/c is even with the hold line

EXPLANATION

When instructed to hold short, the **entire aircraft** must remain clear — no part should extend beyond the hold line. The nose gear being on the hold line or the flight deck being level with it would mean parts of the aircraft are beyond it.

Q2 The following aircraft will be given priority to land:

A) An aircraft with VVIP on board

✓ B) An aircraft with critical shortage of fuel

C) A scheduled aircraft

EXPLANATION

An aircraft with a **critical shortage of fuel** is in a compelling emergency — this is Priority 1 in the priority rules. A VVIP aircraft is Priority 5. A scheduled aircraft has no special priority.

Q3 Apron is an area on aerodrome where following activities take place:

A) Loading/unloading of passengers, mail and cargo only

B) Parking of aircraft only

✓ C) Loading/unloading of passengers, mail and cargo, fueling, parking or maintenance

 EXPLANATION

The apron is a defined area where aircraft stand for purposes of loading/unloading passengers, mail, cargo, fuelling, parking, or maintenance — i.e. all ground handling activities.

Q4 For safety reasons, a person should remain away from a jet engine by at least:

A) 100'

✓ B) 200'

C) 300'

 EXPLANATION

The jet blast hazard zone — persons should remain at least **200 feet** away from operating jet engines for safety. This relates to the wake turbulence and jet blast hazard provisions.

Q5 Movement area of an aerodrome constitutes the following:

A) Area including runways/taxiways excluding apron

B) Area excluding taxiways but including runways and apron

✓ C) Area including runways / taxiways / aprons

 EXPLANATION

The **Movement Area** = Manoeuvring area (runways + taxiways) + Apron. It is the total area used for aircraft surface movements.

Q6 The manoeuvring area of an airport is that area:

A) Normally referred to as the ramp or apron

✓ B) Used for taxiing, taking off and landing

C) Used when taxiing to and from the parking area

 EXPLANATION

The **Manoeuvring Area** = Runways + Taxiways (excluding apron). It is the portion of an aerodrome used for take-off, landing and taxiing — but NOT the apron/ramp.

Q7 An Aircraft shall report "long final" when it is at _____ from the approach end of the rwy:

✓ A) 8 NMs

B) 4 NMs

C) 1 NMs

 EXPLANATION

As per the visual circuit diagram in this chapter — **Long Final** is defined as the position **beyond 4 NM, up to 8 NM** from the approach end of the runway. An aircraft at 8 NMs would report "long final".

Q8 What defines a controlled aerodrome?

A) It must be located within a CTR

✓ B) It must have a control tower giving an ATC service

C) It must have a control tower and be in a CTR

 EXPLANATION

A controlled aerodrome is one where an ATC service is provided to aerodrome traffic — which requires a **control tower providing ATC service**. It does not necessarily have to be located within a CTR.

Q9 Aerodrome traffic is considered to be:

✓ A) Aircraft on the movement area and flying in the vicinity

B) Aircraft on the manoeuvring area and flying in the vicinity

C) Aircraft on the movement area only

 EXPLANATION

Aerodrome traffic includes all aircraft on the **movement area** (runways + taxiways + apron) AND aircraft **flying in the vicinity** of the aerodrome (including traffic circuits).

Q10 Aircraft shall not be held closer to a runway-in-use:

✓ A) Than at a runway-holding position

B) Than at runway edge

C) Than at 40 m from the runway edge

 EXPLANATION

Aircraft shall not be held closer to a runway-in-use than at a **runway-holding position**. The distances (50m or 30m) are from the runway edge to the holding position, not the holding limit itself.

Q11 Friction Co-efficient due to snow — in how many segments is runway divided based on friction level?

A) 1/2

✓ B) 1/3

C) 1/4

 EXPLANATION

The runway is divided into **thirds (1/3 segments)** for surface condition reporting. Information is provided for each third — referred to as first, second, or third part of the runway.

Q12 Runway friction coefficient 0.20 means estimated surface friction:

A) Good

B) Medium to Good

✓ C) Poor

 EXPLANATION

A coefficient of **0.25 and below = POOR (Code 1)**. Since 0.20 is below 0.25, it is in the **POOR** category. This is the most dangerous friction level — extreme braking degradation on contaminated runways.

Quick Answer Key

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
B	B	C	B	C	B	A	B	A	A	B	C

Ghost Aviator

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Chapter 8 • Procedures for Aerodrome Control Service • Doc 4444, AIP India • Pages 199–214
For educational purposes only. Always refer to current DGCA AIPs and official publications.

GHOST AVIATOR