

APRIL 2025

FLIGHT SAFETY NEWS LETTER / SAFETY BULLETIN

- **In Focus** - Precautions during Adverse Weather
- **Safety Journal** - Aviation Hazards During Pre-Monsoon
- **Meetings/Engagements** - SRBM (Safety Review Board Meeting) 1st Quarter 2025 conducted on 30th April 2025



For Flight Safety, kindly contact :-

Phone & Email ID :- 01125671574 & aasl.flightsafety@allianceair.in

For ERP, kindly Contact :-

Phone & Email ID:- 01125672289, 08800744303, 09871149284 & emergency.response@allianceair.in

NEWS LETTER/SAFETY
BULLETIN ISSUED, UNDER
THE PROVISION OF DGCA
CAR SECTION 5 SERIES F,
PART I – APPENDIX-D

IN FOCUS

Precautions during Adverse Weather

The following actions shall be taken during adverse weather/monsoon conditions from April to August:

- Secure the aircraft properly as per recommendations given by the aircraft manufacturer.
- Apply chokes on both sides of the wheel of the aircraft
- Avoid going near turboprop aircraft until it stops and propeller blades are secured by strap.
- Engage Jack Plates and chokes for making equipment stabilized on the apron.
- Look out for unsecured/unattended equipment on apron. Retrieve and secure them to their designated areas.
- All loose material should be removed from worksites around the aircraft like apron as loose material can act as FOD.

IN FOCUS

Precautions during Adverse Weather

- Step Ladders / GSEs be parked safely at the allocated space & properly secured.
- Avoid driving or walking in Apron during strong surface winds.
- Discontinue passenger boarding or disembarking by step ladders during strong surface winds.
- All garbage bins should be tied to hooks with the help of chains.
- Ensure serviceability of the brakes and beacon lights of all vehicles / equipment moving in Tarmac.

SAFETY JOURNAL

Aviation Hazards During Pre-Monsoon

The season of hot Indian summers or Pre-Monsoon has commenced in India. April to June every year, varying over different parts of the country. Triggered by the influx of warm moist air in association with the Western Disturbances this season is characterized by:

- Widespread dust haze and extremely high temperatures over North India.
- Heat islands over central and eastern parts of the country.
- Dust storms (*Andhi*) over western India
- Thunder-squalls (*Morwesters / Kalbaisakhis*) over eastern India.
- Land and sea breeze effect is more prominent over the coastal areas.
- With the increased influx of moist air, the frequency of thundershowers increases progressively in South India.
- Tropical cyclones form in the Indian seas threatening coastline on either side.

SAFETY JOURNAL

Aviation Hazards During Pre-Monsoon

The most dangerous aspect of pre-monsoon is that the season gets infested with far too many aviation weather hazards. Quite a few of these are the invisible ones which are also capable of striking without any notice. The paucity of preparation time leaves the air operations vulnerable to flight safety occurrences. Without fail these invisible hazards need to be catered for: (The following list is just an outline of the primary aviation hazards during pre-monsoon and is not exhaustive)

- **High Temperatures and Low pressure:** Surface temperature is the one of the most important and decisive factor for the performance of the aircraft. This becomes rather more significant for shorter runways during extreme temperatures and low atmospheric pressure, particularly over North India where dry conditions prevail. Miscalculations of density altitude, if any, may lead to an unsafe situation during take-off, approach and landing or go around.
- **Wind Shear:** Drop in surface pressure due to excessive heating may lead to strong and gusting winds closer to ground, resulting in low level wind shear. The phenomenon may also be experienced in case of dissipation of vertical clouds in the vicinity of aerodrome. Speed and direction of prevailing winds remain a critical factor for satisfactory and stabilised aircraft performance.

SAFETY JOURNAL

Aviation Hazards During Pre-Monsoon

- **Turbulence:** High temperatures do give rise to eddies and thermals in the lower levels, particularly over an uneven terrain. Weather in and around a thunderstorm is inherently turbulent, posing major threat to safe aircraft operations. Light to moderate turbulence has the capacity to cause discomfort or even injury to unstrapped passengers and crew. Severe turbulence may cause exceedance of aircraft structural limitations leading to structural failure.
- **Wake Turbulence:** Wake turbulence may pose significant threat to aircraft safety during any weather condition; however, it specially gets accentuated during the hot and dry atmospheric conditions of pre-Monsoon. It is more significant during critical stages of aircraft operation closer to ground surface where the preceding aircraft are at lower speeds with high flap setting and have significantly high vortex/wake generation.
- **Dust storms:** Convective weather cells in the absence of sufficient moisture do not develop into full grown CB/thunderstorms but cause severe dust storms, especially in the arid and semi-arid regions of north western part of the country. These are associated with widespread low visibility in addition to the hazards similar to Thunderstorms.

SAFETY JOURNAL

Aviation Hazards During Pre-Monsoon

- **Thunderstorms:** It is a very prominent pre monsoon weather phenomenon produced by strong convection currents. Thunderstorms are short lived and unpredictable by nature; primarily consisting of CB clouds which cause lightning flashes, thunder, squally winds, sharp showers, hail storms, tornadoes, water sprouts, microbursts etc. From aviation standpoint this is one of the most hazardous weather phenomenon and pose threats of lightning strike; extreme turbulence; severe icing; low level windshear; strong gusts and squalls; darkness and disorientation; structurally hazardous hail, etc

MEETINGS/ENGAGEMENTS

SRBM (Safety Review Board Meeting) 1st Quarter 2025 conducted on 30th April 2025



MEETINGS/ENGAGEMENTS

SRBM (Safety Review Board Meeting)
1st Quarter 2025 conducted on 30th April 2025



OUR FLEET

ATR 72-600

ATR 42-600

HAL Do-228





सादर/ Regards,

विकास शर्मा / Vikas Sharma

उड़ान संरक्षा प्रमुख / Chief of Flight Safety, Head-ERP

एलाइंस एअर / Alliance Air

NEWS LETTER/SAFETY
BULLETIN ISSUED, UNDER
THE PROVISION OF DGCA
CAR SECTION 5 SERIES F,
PART I – APPENDIX-D

FLIGHT SAFETY DEPARTMENT, AAAL