



OPERATIONAL SAFETY INSTRUCTION

Version B

Issued 10/01/2023

Adverse Weather

Issued By Airside Operations and Safety Manager

Ref BRS-OSI-WX-003

It is the responsibility of all employers to ensure that relevant OSIs are brought to the attention of their staff. However, individuals remain responsible for their own actions and those who are in any doubt should consult their Supervisor or Manager.

1. INTRODUCTION

This instruction sets out the precautions to be taken by members of the airside community before and during adverse weather conditions. The purpose of these precautions is for the protection of aircraft and the safety of staff working airside.

It is expected that all airside business partners produce their own procedures to support the contents of this instruction.

2. COMMUNICATION OF WEATHER WARNINGS

A weather warning will be issued by the Met Office when the conditions are, or are expected to be:

- a) Strong Wind (mean wind speed of 20kts and/or gusts of 28kts)
- b) Gale (mean wind speed of 34kts and/or gusts of 43kts)
- c) Frost (Ground Frost, Air Frost, Ground and Air Frost)
- d) Snow
- e) Fog (including Freezing Fog)
- f) Thunderstorm (including Thunderstorm and Hail, Thunderstorm and Squall, Squall, Thunderstorm and Hail and Squall)
- g) Hail
- h) Freezing Precipitation (liquid precipitation freezing in contact with hard surfaces)
- i) Temperature Inversion (an increase in air temperature of 10°C or more in the lowest 1000ft)

Bristol Airport will communicate weather warnings to the airside community via the following methods:

- a) Daily operational briefings chaired by the Airport Duty Manager
- b) Airport Community App notifications
- c) Email distribution from the Airport Control Centre (ACC)
- d) Phone call (specific events only)

3. STRONG WINDS

Strong winds can cause unsecured items to be moved in an uncontrolled and dangerous manner. This can lead to the possibility of significant damage being caused to aircraft on stands or taxiways. The normal expectations for control of FOD become even more important in strong or gale force wind conditions.

When a strong wind warning has been issued, the following actions must be taken by airside users:

- a) All loose items should be removed or safely stowed. Plastic bags, waste and sheeting are a particular concern.
- b) All covers on waste containers should be secured, including any skips which are in use at the time. Any containers which are full and may lose materials should not be used and are to be reported to Airside Operations.
- c) All ground equipment and vehicles must have the parking brake applied and chocked if applicable. Steps should be faced into wind with stabilisers deployed.
- d) High-lift vehicles and passenger steps must be lowered when not in use.
- e) Equipment in use on a stand must be secured with parking brakes applied. Equipment without parking brakes should be chocked.
- f) All loose items in construction work sites must be secured or removed. Airside Operations will inspect the locations of any work in progress.
- g) Ground operators should take extra care when towing aircraft and refer to the airline's ground operations manual for specific guidance.
- h) Additional chocks shall be used on parked aircraft in accordance with airline and airport ground operations manuals.
- i) Aircraft waste and equipment, such as bagged cabin waste, headsets, and catering equipment, must be taken immediately from the aircraft to a bin or vehicle and not placed on the ground.
- j) Baggage trolleys must have their side curtains stowed to prevent a 'sail' effect and blowing across the ramp.
- k) Take extra care when opening and closing hold doors.

When a gale warning has been issued, the following additional actions must be considered:

- a) Airport Duty Manager to host a planning meeting with all stakeholders, and further bronze meetings as required throughout the event.
- b) Airside Operations to instigate 'into-wind' parking arrangements on the ramp – see Appendix A for options depending on wind direction – these are for guidance only and will usually be very dynamic and depend on the season and time of day.
- c) Ground handling tasks shall be restricted in accordance with airline Ground Handling Manuals or the equipment limitations, as a guide:
 - a. Use rear steps only when aircraft are parked into wind
 - b. Cease all ground operations when the wind exceeds 50kts
 - c. Aircraft cabin and hold doors must remain closed when wind exceeds 60kts

3.1. Aircraft Parking

Aircraft should be appropriately secured, by using additional chocks, and/or setting of aircraft parking brakes, and/or the tie-down of the aircraft. Aircraft doors should be closed and secured, as appropriate.

When requested by the airline, aircraft should be positioned into wind and control surfaces locked, if necessary. Light aircraft and turboprop aircraft should be parked into wind when forecasts indicate 15kts gusting upwards.

Larger jet aircraft may be parked into wind at the airline/operator's request, usually when winds are 40kt gusts and above. Aircraft will be marshalled by Airside Operations or the handling agent (after a briefing with Airside Operations). A follow-me will be provided where resource allows.

In the event of airlines requesting to be parked into wind, an off-stand parking arrangement will be adopted. Airside Operations will liaise with the Control Centre (RMS) and advise on parking positions. This will be dependent on parameters including aircraft turnaround duration, wind speed and direction (present and forecast), aircraft type, other planned movements, and aircraft servicing requirements.

On occasion, to enable the aircraft to be parked into wind, an arriving aircraft may need to be stopped by a marshaller on a taxiway and have a tow bar and tug attached, to enable them to be pushed onto their allocated stand/parking location. This may be adopted (for example) when an aircraft is to be parked facing south on stands 1-3. After liaison with Airside Operations, RMS will verbally notify the ground handling agent of the allocated off-stand parking position. Airside Operations will advise ATC of any planned off-stand parking. If any of the ground handling team need to enter the manoeuvring area, they must obtain permission from ATC via radio prior to crossing the apron boundary. If this communication cannot be achieved, the ground handler should request for airside operations to be in attendance and to contact ATC on their behalf.

Some airlines may wish to park on stand to disembark passengers and offload baggage, before then requesting to be relocated/pushed back into an off-stand parking position. This shall be managed by the applicable ground handling agent, who shall liaise with RMS and Airside Operations.

4. ELECTRICAL STORMS

Electrical storms can cause significant disruption to operating schedules and represent a hazard to safe airside operations due to the potential for:

- a) Lightning bolts striking aircraft, vehicles, buildings, or personnel
- b) Increased braking distances
- c) Poor visibility
- d) Strong, gusting winds

- e) Interference with radio transmissions

4.1. Implementation of Restrictions

1. ATC will phone the ACC and make an 'all stations' broadcast ("this is an electrical storm alert timed at...") on UHF Ch.1 when electrical storm activity is observed within an estimated five miles (9km) of the airfield, from the ATC Visual Control Room (VCR).
2. ATC will phone refuelling companies (North Air, Centreline, Bristol and Wessex)
3. The ACC will issue a Community App and email (Panoptech) alert, and phone ground handling agents (on their checklist), to inform that ramp operations are suspended.
4. Airside Operations will monitor the ramp for compliance.

4.2. Restrictions

- a) Suspend loading and unloading of aircraft
- b) Suspend boarding and disembarkation of passengers
- c) Suspend all refuelling activities
- d) Cease all ramp operations requiring personnel to be out in the open
- e) Cease use of headset communication by ground crew with the flight deck (no aircraft engine starts will occur)
- f) Personnel to stay sheltered inside closed buildings or vehicles
- g) Suspend construction, maintenance, and engineering work in open areas

4.3. Continuation of Aircraft Movements

Aircraft movements may continue at the discretion of ATC and the flight crew. No pushbacks will be permitted. No marshallers will be available. Arriving aircraft will be provided with a follow-me by Airside Operations to park (without marshaller) and shut down on a remote push and hold stand (9, 10, 28, 31, 33). Any extra aircraft will be held on the taxiway until ramp operations and marshalling have resumed.

4.4. Cancellation of Restrictions

Electrical storm restrictions will be lifted when:

1. The Met Office UK Observations Map, monitored by the ACC, shows no lightning strikes have occurred within five miles for > 10 minutes (see Appendix B).
2. Prior to lifting restrictions, the ACC will check with ATC whether any electrical storm activity has been observed from the VCR within the last 10 minutes.

The ACC will issue Community App and email alerts, and phone ATC, Airside Operations, and all ground handling agents to inform that “restrictions are cancelled, no electrical storm activity has been observed within the previous 10 minutes”. At this point, ramp operations can resume (at companies’ discretion).

Restrictions will be reimplemented if further electrical storm activity is observed within five miles.

5. EXTREME TEMPERATURE

During extreme cold periods where ice or snow is a risk, or is present, airside users should comply with the requirements of BRS-OSI-WX-001 Winter Hazards and the Aerodrome Snow Plan.

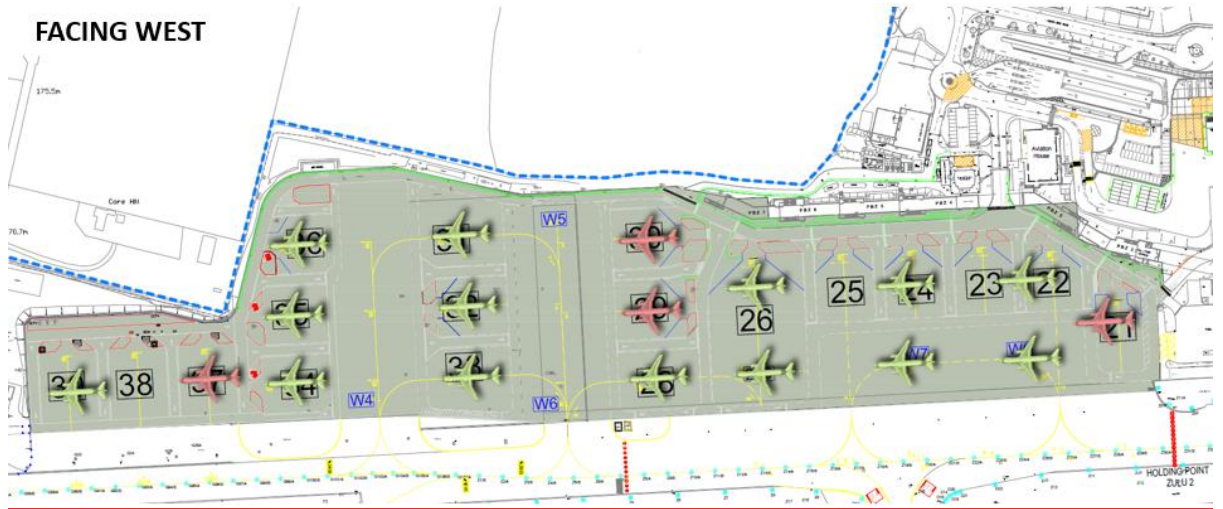
During periods of extreme heat, some asphalt surfaces can soften, making them at increased risk of damage from the weight of aircraft. In hot temperatures, normally above 30°C, some asphalt aircraft stands and taxi-lanes may be closed by Airside Operations. Airside Operations will inform the Airport Control Centre and ATC of the duration and scope of the restrictions.

6. GENERAL ENQUIRIES

Any enquiries regarding this Instruction should be addressed to the Airside Operations Department on **07712 792235** or airsideops@bristolairport.com.

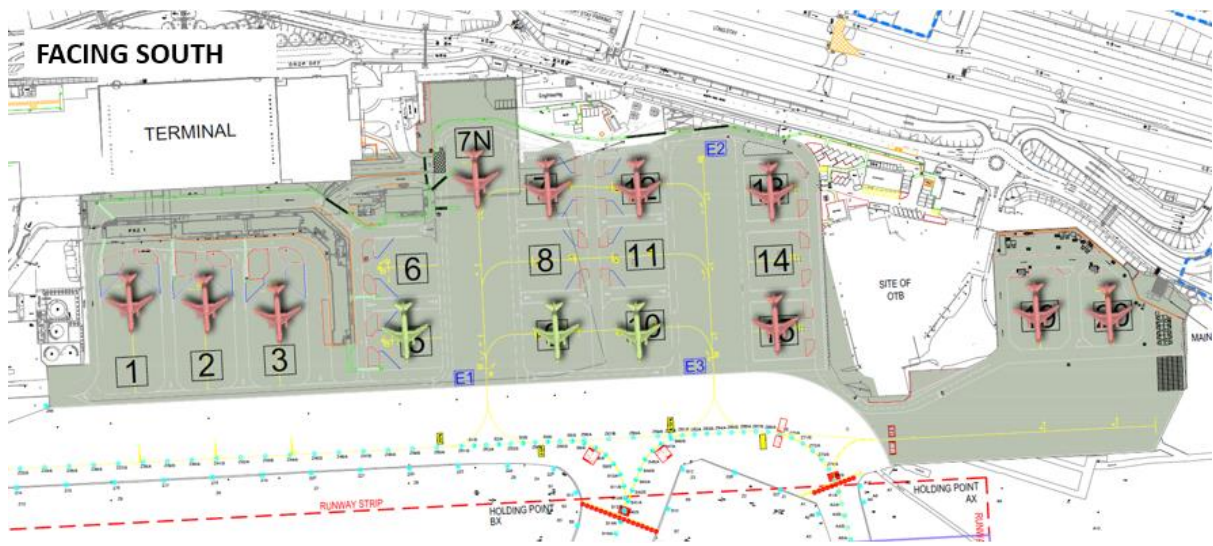
Any enquiries regarding the Aerodrome Snow Plan should be addressed to the Airside Operations Duty Manager AODM@bristolairport.com.

APPENDIX A 'INTO-WIND' PARKING CHARTS









APPENDIX B FIVE MILE RADIUS OF BRISTOL AIRPORT

