



OPERATIONAL SAFETY INSTRUCTION

Version A

Issued 01/09/2020

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 winds – mean wind speed of 20kts and/or gusts of 28kts.
- b) Gale – mean wind speed of 34kts and/or gusts of 43kts.
- c) Ground and air frost – surface and air temperatures of zero or lower, and appropriate air conditions for frost formation.
- d) Thunderstorm warning level MODERATE – when thunderstorms are occurring within a 40km radius of Bristol Airport.
- e) Thunderstorm warning level HIGH – when thunderstorms are expected to affect Bristol Airport within 5nm within the next 15 minutes.
- f) Heavy rain – risk of seeing 15mm of more rain in a 12-hour period.
- g) Hail – pellets of frozen rain falling in showers.
- h) Freezing precipitation – liquid precipitation is likely to freeze when in contact with hard surfaces.

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
- c) Email distribution from the Airport Control Centre

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.

Loose items present a serious engine ingestion risk during strong winds. The potential impact on an aircraft, particularly during take-off and landing, is significant.

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 threat to aircraft damage.
- 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 reported to airside operations.
- c) All ground equipment and vehicles airside which are not in immediate use, must be parked in the areas provided, with the parking brake applied. Vulnerable equipment such as mobile steps should be faced into wind or in a sheltered position, 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 ULDs must be secured.
- g) All loose items in construction work sites must be secured or removed. Airside operations will inspect the locations of any work in progress.
- h) Ground operators should take extra care when towing aircraft and refer to the airline's ground operations manual for specific guidance.
- i) All aircraft must be chocked as appropriate to the wind conditions and in accordance with airline's ground operations manuals.
- j) 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.
- k) Each ground handling agent should consider the use of aircraft protection cones in accordance with their company procedures.
- l) Baggage trolleys must have their side curtains stowed to prevent air pockets from building up and blowing them across the ramp. Brakes must be applied if the trolleys are disconnected from a tug.

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 25kt gusts and above. Many airlines are happy to operate hold doors with a crosswind or out of wind, so long as the aircraft is pushed back to face into wind.

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) to agree suitable parking. This will be dependent on parameters including aircraft turnround 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 notify the ground handling agent, (either verbally or through the 20:20 system), 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. THUNDERSTORMS/HEAVY RAIN

Thunderstorms 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 on smooth surfaces
- c) Poor visibility
- d) Strong, gusty winds

- e) Interference with radio transmissions

When a thunderstorm warning is issued, the following actions must be taken by airside users:

- a) Consideration should be given to the strong wind warning requirements above.
- b) Operators should expect interruptions to refuelling operations and some ground handling activities whenever lightning is in the vicinity of the airfield.
- c) During or immediately after heavy rain, drivers should be aware that longer braking distances will be required and that paint markings may not be as visible.
- d) Staff observing any hazards such as flooding or damage to infrastructure should report this to airside operations without delay.
- e) Coaching operations may continue normally.
- f) If the thunderstorm is so severe that ground handling companies suspend marshalling duties, airside operations must be advised so that they can provide a follow-me and liaise with ATC.
- g) All companies should ensure that their risk assessments for operating in adverse weather are fit-for-purpose. These must be made available to airside operations upon request.
- h) Companies shall continually assess the weather conditions and determine when it is acceptable for their staff to resume airside work.

5. EXTREME TEMPERATURE

Winter weather brings extra hazards. 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.

6. GENERAL ENQUIRIES

Any enquiries regarding this Instruction should be addressed to the Airside Operations Department on **01275 473705 / 07712 792235** or airsideops@bristolairport.com.

Any enquiries regarding the Aerodrome Snow Plan should be addressed to the Airside Operations and Safety Manager on **01275 473704** or dan.jones@bristolairport.com.