

**OPERATIONAL SAFETY INSTRUCTION**

Version C

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Aircraft Departure Procedure off Stand

Document Owner Airside Operations Co-ordinator

Ref BRS-OSI-GO-014

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 informs airlines and ground handling agents of the requirements with respect to the departure of an aircraft off stand. The instruction is not exhaustive, and airlines and handlers will wish to add and expand on the content, with their own supporting company operating procedures.

For the purpose of this instruction, the period covered by the departures process is from push-back to the aircraft manoeuvring on the taxiway system.

2. PUSH-BACK PROCEDURES

Detailed pushback procedures, safety precautions and the standard and non-standard pushback routes for each stand are in BRS-OSI-GO-017 Aircraft Pushback Procedures.

3. ENGINE-START ON STAND

Air starts and cross-bleed starts are a relatively infrequent occurrence and, in the majority of cases at Bristol, mainly apply to non-propeller aircraft. The process requires one live engine to feed air across to the other engine(s). This usually occurs when an Auxiliary Power Unit (APU) is unserviceable on the aircraft and unable to generate an air feed from the normal source.

3.1. Air Start Units

There may be occasions for an aircraft to start its engine(s) on stand prior to pushback. Often an Air Start Unit (ASU) will be used to feed air directly in to the first engine to allow this engine to start, or a GPU/FEGP used as an alternative to a defective APU. The starting of an engine on the stand will be permitted providing:

- Permission has been gained by the flight crew from Air Traffic Control (ATC), in advance of the engine start and the application of an ASU.
- Adequate controls are in place on any surrounding road systems that may be affected; consideration to opposing stands must also be made.

- The aircraft has its anti-collision lights illuminated.

Ground handling agents should have competent staff operating ASUs and robust procedures for their use.

It is the responsibility of the flight crew to inform the ground crew of their requirements in advance of start-up clearance from ATC. In turn, the flight crew must wait for the ground crew to approve the start-up sequence and access the suitable equipment and mitigate any risks.

ATC must be informed of the intention to start on stand – with or without an ASU.

Following the successful start of one engine, permission must then be gained from Air Traffic Control to allow the aircraft to begin pushing back. The aircraft must be pushed the shortest possible route (following the standard guidance markings) directly out on to the taxiway prior to the full start-up sequence or cross-bleed start. At this point of the operation, it is deemed as potentially unsafe for the aircraft to be pushed back into any of the cul-de-sacs in the standard manner whilst an engine is live. This is to prevent any potential damage to infrastructure, vehicles, equipment or injuries to personnel.

Although propeller aircraft are generally exempt from this procedure, care and consideration should be applied by the operatives involved in the pushback to ensure adequate controls are in place to safeguard personnel / infrastructure (e.g. ensuring props remain feathered whilst running) – especially on occasions where greater power is required to be applied to the engines. All Aircraft should be in their final stationary position before applying any substantial power to an engine start.

3.2. Cross-Bleed Starts

A cross-bleed start is the procedure that follows an air start. The air from the started engine is fed across to the second engine to allow the start sequence.

As the started engine needs to generate sufficient air to pass across (cross-bleed) to start the second engine, the power required to be generated is far higher than the recommended idle or low power that aircraft normally operate on the apron with.

To limit the potential risk to apron users, taxiway Zulu is the standard location for cross bleed starts to take place. However, cross-bleed starts may be approved in the cul-de-sac, following prior notification to and approval from Airside Operations. In these instances, Airside Operations will proceed to the cul-de-sac location to assess whether it is safe for the cross-bleed start to go ahead in the cul-de-sac, which will depend on activity on adjacent stands and the apron road system. Airside Operations may temporarily manage the traffic flow.

The flight crew shall call and inform ATC of their intention to perform the cross-bleed start once the location has been authorised by Airside Operations (if in a cul-de-sac).

Once the pushback team has received clearance and fully understand the intended routing, the pushback may be performed with the permission of ATC.

The ASU must be disconnected and stowed safely away from the aircraft, prior to the starting of the push.

The cross-bleed start must be performed in line with specific ground handling procedures which should ensure the pushback team are a safe distance away, prior to the engines' higher power settings being applied.

Cross-bleed starts may be approved on the south-side aprons, subject to prior notification and approval from Airside Operations. However, there may be an operational requirement for the procedure to take place on the manoeuvring area depending on aircraft type and surrounding aircraft.

4. DEPARTURES FROM SELF-MANOEUVRING STANDS

Aircraft departing from stands 9, 10, 28, 31 and 33 have the ability to self-manoeuvre off stand. It is the ground handling agent's responsibility to control road traffic using a wingwalker. This includes the roads at the rear and front of the stand.

5. POST-DEPARTURE INSPECTION

A post-departure inspection of the stand must be completed, to ensure that there is no Foreign Object Debris on the stand, that all vehicles and equipment is parked/positioned correctly in a designated equipment parking or storage area and that there are no spillages left on the stand. The responsibility for this inspection lies with the **Team Leader** or **Lead Agent**.

Should the above not be the case, then action must be taken by the handling agent to park/position equipment properly or report the status of the stand to Airside Operations. Faults should be reported to Bristol Motor Transport department.

6. GENERAL ENQUIRIES

Any enquiries should be addressed to Airside Operations on **01275 473705**.