



OPERATIONAL SAFETY INSTRUCTION

Version C Issued 31/07/2023

Cranes and Tall construction Equipment

Document Owner Airside Operations Co-ordinator Ref BRS-OSI-AW-002

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

All temporary high lifting equipment on and around the airport must be assessed to identify whether they are going to be a hazard to aircraft operations and/or interfere with navigation aids.

This OSI gives guidance on the application procedure which must be followed to obtain approval to operate a crane or high lifting equipment on or in the vicinity of the aerodrome.

2. REQUIREMENTS

2.1. Applicability

This OSI is applicable to those persons and crane operators who wish to use temporary crane and tall equipment onsite (Bristol Airport staff and contractors) and (for crane operations only) in the area surrounding the aerodrome. It is also applicable to Local Planning Authorities (LPAs) when cranes are a central part of planning applications or planning conditions.

2.2. Cranes: UK Regulation and General Applications

There are two distinctive notification methods used, to enable aerodromes to assess crane operations in the vicinity of aerodromes. One assessment may be carried out by the CAA, for cranes that are operating in the vicinity of aerodromes, which may have the potential to affect multiple airports/aviation sites. The other assessment is carried out directly by Bristol Airport for short-term crane and high-lifting activities within the aerodrome boundary.

Note that the CAA is currently **trailing** a crane notification process, known as ACOMS (Airspace Co-ordination and Obstacle Management Service) and planned crane operations should be notified to them with a minimum of 8 weeks' notice, as far as reasonably practicable. However, there is a clear understanding that this timeframe cannot always be met and there are options for exemption from this recommendation. [Crane notification | Civil Aviation Authority \(caa.co.uk\)](https://www.caa.co.uk) provides further guidance on this.

The CAA will assess the proposal and identify and notify affected parties, including Bristol Airport, if required. If Bristol Airport is notified by the CAA of a proposed crane operation, the proposal may be subject to a crane permit application, as detailed in section 3.

While the ACOMS system is still in trial phase, Bristol Airport requires for all applications to also be submitted directly, using the process detailed in section 3.

3. CRANE AND TALL EQUIPMENT PERMIT APPLICATIONS WITHIN THE BRISTOL AIRPORT BOUNDARY

The procedures detailed below must be followed to obtain safeguarding approval for the operation of temporary obstructions. Permanent obstructions will be assessed according to Aside Operations Procedure BRS-P-AOPS-008 Airport Safeguarding.

A crane and tall equipment permit application should be made where any one or a combination of the following criteria would apply:

- a) Use of a crane in any area within the airport boundary.
- b) Use of tall equipment which is planned to reach above any buildings immediately adjacent to the planned lifting location*. Tall equipment includes: piling rigs, concrete pumps, HIAB, cherry pickers, etc.
- c) Use of any tall equipment off the airport boundary, but abeam the extended centreline (for example to access approach lighting).

If there is any uncertainty as to whether a crane and tall equipment permit is required, contractors or the project manager should contact the Airside Operations Co-ordinator for further guidance.

* For clarity, if any tall equipment (excluding a crane), such as a HIAB, cherry picker or MEWP is required to operate immediately adjacent to a tall building, and will not be operating above the building height, then a crane and tall equipment permit will not be required. Note that if this work is airside, an airside work permit may still be required. All cranes shall require a crane and tall equipment permit, regardless of location.

Applicants must complete a Crane and Tall Equipment application form, BRS-F-AOPS-001, available to download from the Airside Ops webpage [Airside \(bristolairport.co.uk\)](http://Airside.bristolairport.co.uk). This form must be completed and submitted to opsteam@bristolairport.com for review and assessment, with a minimum of five working days before the planned commencement of crane operations.

This will allow sufficient time for the obstruction to be assessed and properly notified to the relevant parties. It should be advised however, that informal discussions about a proposed crane are strongly encouraged, in advance of five working days, to enable any mitigations to be employed without delaying the planned start date.

The applicant is responsible for fully completing section 1 of the form to ensure that the intended works can be accurately assessed against the potential for impact to operations. This includes providing the following key information:

- The exact location of the crane location, with six figure grid reference coordinates.
- The **maximum planned specific operating height** of the crane, jib or other relevant device in metres above ordnance datum, if possible, otherwise, above ground level.
- The radius of the jib.
- The operating times and schedule (days of the week).

Failure by the applicant to provide the minimum information stated above will result in the crane permit approval being delayed until the information is provided. It is not the responsibility of Bristol Airport Airside Operations to provide this information.

Once these details have been received, the application will be considered against all known safeguarding criteria (physical and technical), using a Geospatial Data Management System (GDMS). This will identify whether the Obstacle Limitation Surfaces are likely to be infringed by the lifting equipment. Assessment results and review of the location of the equipment shall determine whether the operation can proceed with or without restrictions. In addition, the location shall be cross-referenced in relation to the location of safeguarded zones surrounding critical aerodrome navigation equipment.

Airside Operations will approve the permit and complete section 2 of the form, which will contain any required operating restrictions on the crane work. There may be associated instructions (for example, liaison with operational departments before commencing work), which shall be clearly stated on the crane permit and which must be followed. Any deviation from these without prior agreement from Bristol Airport, may result in works being suspended or cancelled until adherence to agreed procedures can be demonstrated.

In addition to the standard requirements for the safe operation of a crane, any of the following restrictions may be placed by Bristol Airport on the operation of the crane/equipment:

- Restrictions on the operating height;
- The fitting of obstacle lights;
- Restrictions on operating times;
- Restrictions during Safeguarding, Low Cloud and/or Low Visibility;
- Restrictions subject to runway in use;
- Compilation of an operating log by the contractor, demonstrating adherence to daily operating height restrictions.

Applicants are responsible for ensuring that the crane operator adheres to any of these operational restrictions, and/or any specific restrictions associated with a particular lift.

4. URGENT WORKS

General requirements for emergency or short-notice work can be found within BRS-OSI-AW-003 Aerodrome Development and Maintenance.

If urgent work requiring tall equipment is required to be undertaken on aircraft on the apron, engineering companies and/or airlines must inform Airside Operations of the requirements.

The operational height of the lifting equipment and proposed location of the operation will be assessed against the regulations, and suitable control measures will be put in place to enable the work to be completed safely without adversely affecting the operation. All stakeholders will be informed directly.

5. FURTHER INFORMATION

Any enquiries regarding use of cranes and tall equipment should be addressed to opsteam@bristolairport.com.