

AOP 12 –

Control of Works

in Progress

Document Control

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1 SECTION 1 - Control of Works in Progress

1.1 Aims and Objectives

1.1.1 General

All construction or maintenance work airside (including the terminal and airside buildings), particularly on the movement area, or work potentially affecting aerodrome operations whether being conducted internally or by contractors, must be approved by a competent representative from LBA prior to commencement. LBA must ensure appropriate measures are put in place to monitor the safety of the aerodrome and aircraft operations during aerodrome works such that timely corrective action is taken when necessary to assure continued safe operations. LBA ensures these requirements are met by requiring Operational Works Instructions (OWIs) be completed and signed off prior to any works commencing.

LBA must ensure the works site is returned to operational use in a safe and timely manner by ensuring:

- the works site is cleared of personnel, vehicles, and plant in a safe and timely manner;
- The works-affected area is inspected for operational serviceability in accordance with the hand-back procedures;
- relevant authorities or organisations are notified of the restoration of aerodrome serviceability

1.1.2 Marking & Lighting of unserviceable areas

LBA must ensure that:

- Bad Ground Markers are displayed whenever any portion of a taxiway, apron, or holding bay is unfit for the movement of aircraft but it is still possible for aircraft to bypass the area safely
- On a movement area used at night or in LVPs, Glimms should be used. NOTE

Consideration should be given to using the 'caps' on glimms when in LVPs to ensure they remain illuminated.

- Glimms & Bad Ground Markers must be placed at intervals sufficiently close so as to delineate the unserviceable area.

When lights are used to mark temporary unserviceable areas at night or during reduced visibility conditions, these lights should mark the most potentially dangerous extremities of the area. A minimum of four such lights could be used, except where the area is triangular in shape where a minimum of three lights may be employed. The number of lights may be increased when the area is large or of unusual configuration. At least one light should be installed for each 7.5 m of peripheral distance of the area.

1.1.3 Operational Works Instructions

Operational Works Instructions (OWIs) must be completed for **any** construction or significant maintenance works conducted on site, irrespective of whether the work is conducted internally or by a third party. The OWI must always be paired with a risk assessment conducted in accordance with the Change Management procedure outlined in Section 3 of this document, and signed off at the appropriate level.

If operational procedures are to be temporarily changed an accompanying Temporary Airport Operational Instruction (TAOI) will be issued.

1.2 **Minor Works**

The below list must be complied with to ensure safe operations are maintained during minor works:

- No work can take place on the movement area without the knowledge and approval of LBA via the OWI process.
- Permitted times of work must be strictly followed
- All individuals taking part in the work are briefed in detail on, the precise areas in which work may be done, the routes to be followed to and from the working area, the R/T procedures to be used, the safety precautions to be observed, the maintenance of a listening watch and the use of look-outs and the reporting procedure to be followed on completion of work.
- The lights of taxiways leading into working areas should be permanently 'off'.
- Personnel should be briefed for possible hazards whilst working on aerodromes, in particular the jet blast problem and noise.
- Where work is conducted on or traverse aircraft pavement areas, these areas should be inspected thoroughly before they are opened again for aircraft use, with particular attention to the presence of debris and the general cleanliness of the surface.

At the conclusion of work, the works supervisor, LBA representative, or other appropriate staff, should inspect the working area to ensure that it has been left in a satisfactory condition.

NB: A reminder that some works may require prior approval from the competent authority in accordance with ADR.OR.B.040.

1.3 Major Works

- Before the commencement of any substantial work on the movement area, a liaison group comprising representatives from the aerodrome operator, air traffic services if applicable, and subcontractors' agents should be established. The group should meet, as often as considered necessary, to review progress, and consider the need for any change in working practices to meet operational requirements.
- As far as practicable, working areas should be blocked off from the active parts of the movement area by the erection of physical barriers.
- Consideration should be given to the marking and lighting of barriers.
- If work is of prolonged duration, a constant watch is required to ensure that the marking and lighting of obstacles and unserviceable areas does not degrade below acceptable limits.
- The effect of tall cranes on ILS and radar, in conjunction with those responsible for electronic landing aids and steps taken to reduce limitations to the minimum, should be considered.

1.4 Additional Requirements for Contractors

The Airport Company has produced an extensive Change Management and WIP Process that is controlled by the Compliance department and administrated by the Engineering Department. Any works to be undertaken in the airside areas must follow the instructions outlined in that document. The list below provides a summary of areas to be considered;

- Contractors Requirements and Supplementary Information
- Operation Procedures and Requirements
- Health and Safety
- Site Services
- Environmental Requirements

Prior to any planned works, the airport company will satisfy itself that the contractor undertaking the works has met the requirements. This will be done at a number of pre-contract meetings and subsequently through the internal project team comprising a number of key stakeholders from the airport management team. The team will meet in sufficient time to plan the works and ensure the contractor management team is aware of the expectations of the airport company.

1.4.1 Contractor Briefings

All personnel employed on the project must attend a contractor briefing ahead of any access to the airside areas. This will be conducted by the LBA responsible manager for the contractor or the designated site safety officer contracted by LBA or for the main contractor where approved by LBA. This briefing will include:

- Relevant safety induction programmes to cover health and safety and airside safety awareness
- Project management structure and lines of responsibility
- Project specific hazards that may be unique to the airside nature of works

- Welfare arrangements
- The general layout of the aerodrome including airside access points
- The available works timings including the vacation of any works areas ahead of aircraft movements.
- The location and limits of the work area(s) and the location and limits of contractor's site(s).
- Site discipline and waste management to prevent foreign object debris (FOD)
- Information on the special safety requirements for aircraft operations in the vicinity of works and the methods of control available on the Manoeuvring Area, including RTF procedures (if appropriate).
- Methods of control and access to works sites within the Manoeuvring Area including arrangements for crossing taxiways and runways.
- Storage/parking area.
- The methods and equipment to be used for protecting, marking and lighting the boundaries of works sites. The protection of normal aerodrome operations in the vicinity of the site.
- Lighting of works areas to avoid distractions to aircraft operations
- Any environmental obligations

The Airport Company Control of Contractors Procedures provide all the relevant guidelines and should be read in conjunction with this instruction for those planning any such projects.

2 SECTION 2 - Crane Operations

2.1 General

The operation of cranes in the vicinity of an aerodrome may have a direct impact on the safety of aircraft and aviation. The legislation that controls such activities is the Air Navigation Order 2005 (ANO) The operators of cranes must refer to British Standard Institute Code of Practice for the Safe Use of Cranes (BS 7121). Part 1, paragraph 9.3.3 of BS 7121 refers to Crane Control in the Vicinity of Aerodromes. In addition the Airport Operators Association (AOA) in partnership with the Health and Safety Executive (HSE) have issued a guidance leaflet entitled 'Cranes and Planes, A Guide to Procedures for Operation of Cranes in Vicinity of Aerodromes'.

2.2 Safety Requirements

In order to co-ordinate the safe operation of cranes in the vicinity of aerodromes any proposed crane operation within 6 kilometres of an aerodrome, at heights of 10 metres above ground level or that of the surrounding structures or trees, is to consult the aerodrome manager. In close proximity to or on an airport these heights may be lower.

2.3 Location and Permission

Crane operators and/or developers should contact the Aerodrome Operator at least one month in advance of any proposed crane operation to find out if there are any limitations or regulatory procedures that may apply to the proposed crane operation. In a minority of circumstances it may be necessary to approach the Civil Aviation Authority (CAA). In these cases it may be necessary for the applicant to develop and co-ordinate a suitable safety case for the proposed operation.

To obtain permission from the Aerodrome Operator to operate a crane within 6 kms of the aerodrome, the following information will be required to be provided by the crane operator at the earliest opportunity, and in any case not later than 3 working days before the proposed

operation is due to commence. These details should be provided to the AOU who may be contacted on 0113 391 3231.

2.3.1 Details to be submitted

- The precise location of the crane operation provided as an eight figure Ordnance Survey grid reference together with the elevation of the ground in metres “Above Ordnance Datum” (AOD) at that location. Please note that on some Ordnance Survey maps AOD is displayed as “Above Mean Sea Level” (AMSL).
- The maximum elevation of the crane “Above Ground Level” (AGL) in metres.
- The type of crane or construction equipment to be used e.g. Tower, Mobile.
- The radius in metres of the jib or boom of a fixed crane.
- The area of operation of a mobile crane.
- The dates and times of the operation.
- The applicants name, address and contact details (including telephone, fax number and email address where available).
- Contact details for the crane whilst operating (e.g. mobile telephone number for the crane driver or ‘on site’ supervisor).

Once these details have been considered by the Airport Company it will be determined whether the crane operation can proceed and whether any restrictions need to be applied. Restrictions may include items such as:

- The fitting of red obstacle lights.
- Restrictions on operating times.
- Restrictions on operations dependent upon the runway that is in use at Leeds Bradford Airport.
- Restrictions on crane operating height.
- Restrictions during poor weather e.g. fog or low cloud.

It should be noted that it may be necessary to lower the crane immediately in the event of an Aircraft emergency or similar.

3 SECTION 2 - Works in Progress (WIP) During LVP Conditions

3.1 General

In the past, procedures stated that during LVP conditions, Work In Progress (WIP) may only continue when the Aerodrome Controller can provide visual separation between the work area and active aircraft on the manoeuvring area, unless the area of work is contained within secure fencing.

Many maintenance procedures are time critical in nature resulting in the above procedures been impractical to maintain during LVP conditions.

The following procedures ensure that under clearly defined conditions, Work In Progress may continue where visual separation cannot be maintained by the Aerodrome Controller.

3.2 Procedures

Work In Progress shall continue on the airfield without the requirement for the Aerodrome Controller to maintain visual separation in the following circumstances:

- The works takes place outside the instrument strips & Navaid critical / sensitive areas at all times (the works party shall only proceed to the area, crossing runways or taxiways using the one at a time, or visual separation criteria).
- The details of the work, including location shall be promulgated to Air Traffic Control by an Operational Works Instruction (OWI), or email to ensure that no confusion exists over the location of the work.
- A member of the AOU / RFFS / AGL / ATE / Groundsmen acts as an escort and remains with the works party at all times whilst on the manoeuvring area.
- The works shall only commence when staffing allows other duties (such as runway inspections, bird dispersal activity) to be untaken, allowing uninterrupted escorting of work personnel at all times.

Aerodrome Controllers are reminded that work may continue without restriction when visual separation can be applied by the Aerodrome Controller or gaps between movements allows unrestricted access.