

Operational Safety Instruction

Procedure for Approving the Operation of Cranes and Other Tall Equipment

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

- 1.1 This Operational Safety Instruction (OSI) informs the airport community of the procedures for approving and operating cranes and other tall equipment, **including construction**, at or near Heathrow Airport.
- 1.2 Per ASWorks_OSI_004 Control of Works Airside, an Aerodrome Compliance Coordinator (ACC) will assess the use of any construction equipment used airside to ensure work can be conducted safely in the airside environment. However, the use of cranes or other tall equipment at or within the vicinity of the airport will require additional approvals through the **Crane Permit Scheme** detailed in this OSI.
- 1.3 This OSI forms part of Heathrow Airport Limited's (HAL) compliance with the Civil Aviation Authority (CAA) Regulation 139/2014 Aerodromes AMC GM (GM3 ADR.OPS.B.070 Aerodrome works safety).
- 1.4 This OSI must be read in conjunction with the following:
 - CAP 738 Safeguarding of Aerodromes.
 - CAP 1096 Guidance to crane users on aviation lighting and notification.
 - ASWorks_OSI_004 Control of Works Airside.
- 1.5 Due to the number of changes made, no red bars are added to the left-hand side of this document to indicate where changes have been made.
- 1.6 ASWorks_OSI_003 v2.0 is hereby cancelled.



2. Definitions

Abbreviation	Description
ACC	Aerodrome Compliance Coordinator
ADP	Airside Driving Permit
AGL	Above Ground Level
AWP	Airside Works Permit
CAA	Civil Aviation Authority
CAP	Civil Aviation Publication
HAL	Heathrow Airport Limited
VAP	Vehicle Apron Pass
WAN	Works Approval Notice

- 2.1** For this OSI, "contractor/operator" is a term generically applied to the individual(s) conducting works, operating cranes, or other tall equipment.
- 2.2** For this OSI, a "HAL Representative" refers to any individual from the HAL Airfield Operations, Security, Airside and Baggage Operations Teams.

3. Crane Permit Scheme - Application and Approval Procedure

- 3.1** The use of cranes or other tall equipment will require additional approvals through the Crane Permit Scheme. Contractors/operators will need a **Crane Permit** if one or more of the following circumstances are met:
- When the use of such equipment is planned within 6km of the aerodrome **and** the height of the equipment exceeds 10 metres or is higher than the surrounding structures or trees.
 - When the use of such equipment is taking place on or within the defined boundary of Heathrow Airport, regardless of height.

For images of the Heathrow boundary and 6km radius for Crane Permits, please see Appendix A of this document.



- 3.2** To obtain a **Crane Permit**, the contractor/operator shall send a completed '*Heathrow Airport Crane & Tall Equipment Application*' form (available at [Crane Permit applications | Heathrow](#)) to the Aerodrome Compliance Coordinators (ACC) at: Airside_Works_Approvals@heathrow.com.

The following details are required:

- Applicant Details
 - Operating Supervisor Details
 - Nature of Works
 - Equipment Type
 - Operating Dates & Times
 - Operating Details, including maximum working height and radius.
 - Location Coordinates, including "Above Ordnance Datum" of the site.¹
- 3.3** Applications should be made with complete and clear information and sufficient detail so that a person with limited construction understanding can interpret the works being undertaken and judge their impact. The use of acronyms or specialist terminology should be avoided.
- 3.4** Different permits are required based on the location of the crane/tall equipment. These permit requirements are detailed below:

Location of Crane/Tall Equipment	Required Permits
Airside	<ul style="list-style-type: none"> • A Crane Permit • An Airside Works Permit (AWP) per ASWorks_OSI_004 Control of Works Airside
Landside - <i>within the perimeter of Heathrow Airport</i>	<ul style="list-style-type: none"> • A Crane Permit • A Street Works Permit (obtained by contacting streetworks@heathrow.com)
Landside - <i>beyond the perimeter of Heathrow Airport up to 6km</i>	<ul style="list-style-type: none"> • A Crane Permit only

- 3.5** Crane Permits applications are subject to charges and must be submitted at least **four weeks** before the planned date of works or crane/tall equipment operations.
- 3.6** For more information regarding crane permit charges, please see Appendix B of this document.

¹ If a crane is operating at various locations within a site and not a fixed location, please provide coordinates of all four corners of the site for assessment.



- 3.7** Any crane or tall equipment operations in a critical location or around critical equipment (runway safeguard areas, approach or departure tracks, navigational aids, etc.) will require further assessment and may be subject to additional restrictions detailed in the crane permit.
- 3.8** Additional approvals, i.e. the Airside Works Permit (AWP) are required for Crane/tall equipment operations **airside**. For details regarding the requirements of AWP, please refer to ASWorks_OSI_004 Control of Works Airside for further information.
- 3.8.1** For Cranes/tall equipment, a copy of the 'Authorisation Permit for Cranes and Other Tall Equipment' must be uploaded in the Vehicle Apron Pass application.
- 3.8.2** Ensure the driver(s) of a mobile crane/tall equipment are in possession of an appropriate Airside Driving Permit (ADP) as per ASDRVE_OSI_006 Airside Driver Training and a Vehicle Apron Pass (VAP) as per ASDRVE_OSI_008 Vehicles and Equipment Airside – Requirements. The requirement for an Airfield Operations Leader escort will be covered in the AWP application process.
- 3.8.3** Any staff involved with the crane/tall equipment operation must have a valid HAL Airport ID with the appropriate access or arrange for the issue of temporary ID passes.
- 3.8.4** A Works Approval Notice (WAN) is raised with HAL Engineering (eng_works_notifications@heathrow.com) when the crane/tall equipment needs to be transported to the central terminal area via Tunnel Road West/East or the crane/tall equipment will be operated on Heathrow Property in which case Service Clearance will be required. Please refer to ASWorks_OSI_004 Control of Works Airside for more information.

4. Operational Procedures

- 4.1** Crane/tall equipment operations may be subject to additional operational restrictions, procedures and lighting requirements on top of what is stipulated in ASWorks_OSI_004 Control of Works Airside. These are specified in the relevant Crane Permit.
- 4.2** If the applicant wishes to make any changes to the existing Crane Permit (dates, heights, locations, etc.), these changes must be approved by the ACC. Otherwise, this will **invalidate the permit**. Operations cannot continue until a new crane permit is authorised.



- 4.3** The contractor/operator must be able to reference an approved **Crane Permit** and AWP or Street Works Permit where appropriate. This reference should be provided on request to any HAL representative as proof of authority to work in the given location per Section 3.4.
- 4.4** Wherever practicable, the crane (jib/boom) or tall equipment must be lowered in the following circumstances (**this does not apply to fixed/tower cranes**):
- When not in use.
 - When a change in runway configuration invalidates the operating requirements stipulated in the the relevant Crane Permit.
 - When low visibility safeguarding is declared by HAL Airside Operations, please refer to ASWeather_OSI_052 Low Visibility Operations for more information.
- 4.5** HAL Airfield Operations reserves the right to suspend or cancel crane/tall equipment operations immediately if there is a suspected risk to aircraft safety.
- 4.6** Any crane/tall equipment required to be fitted with obstacle lights (specified in the relevant Crane Permit) must comply with the following specifications:

Type of Crane	Height of Crane (AGL)	Minimum Lighting Requirements
Mobile Crane	Under 45m	32 candela steady red light to be attached to the end of the jib 24/7
	Over 45m	2000 candela steady red light to be attached to the top of the mast and end of the jib 24/7
Tower Crane	Under 45m	32 candela steady red light to be attached to the end of the jib 24/7
	Over 45m	2000 candela steady red light to be attached to the top of the mast and end of the jib 24/7

- 4.6.1** En-route obstacles (including cranes), must be fitted with medium intensity steady red lights positioned as close as possible to the top of the obstacle and at intermediate levels spaced so far as practicable equally between the top lights and ground level with an interval of not more than 52 metres in accordance with the Air Navigation Order.
- 4.6.2** All steady red lights must be displayed by day and night and be visible from all directions (omnidirectional). In the event of the failure of any light which is



required in accordance with the Air Navigation Order to be displayed by night, the person in charge must repair or replace the light as soon as reasonably practicable.

- 4.6.3** For more information, please refer to the relevant Crane Permit and CAP 1096 Guidance to crane users on aviation lighting and notification available [here](#).

5. Emergency Operations

- 5.1** If a crane and/or tall equipment needs to be raised in an emergency and falls within the requirements in Section 3.1, the Airfield Duty Manager must be contacted on 020 8745 7373.
- 5.2** Cranes and/or tall equipment may only be handled as an emergency if the request is in the interest of safety and/or will contribute to avoiding/mitigating major disruption to HAL operations.

6. Enquiries

Any other enquiries concerning the details in this OSI should be addressed to an Aerodrome Compliance Coordinator (ACC) at airside_works_approvals@heathrow.com.

7. References

The Air Navigation Order 2016
CAP 738 Safeguarding of Aerodromes
CAP 1096 Guidance to crane users on aviation lighting and notification
ASWorks_OSI_004 Control of Works Airside
ASWeather_OSI_052 Low Visibility Operations
ASDRVE_OSI_008 Vehicles and Equipment Airside – Requirements
ASDRVE_OSI_006 Airside Driver Training and the Airside Driver Permit



Document Data

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Document History

Revision	Description of Change	Date
v1.0	initial issue	08 th August 2017
v2.0	Updated Crane process	05 th February 2019
v3.0	Full document review, including updates to procedures, regulations, crane application process, references, new addition of emergency procedures and new addition of pricing structure and map.	05 th August 2024



Appendix A

If your Crane/tall equipment activity is within the below red boundary, a crane application will be required irrespective of the height of your planned works.

The coordinates below locate each corner of the red boundary:

OSGB36: **504587, 176911** / WGS-84: **51.481492N, -0.49526821W**

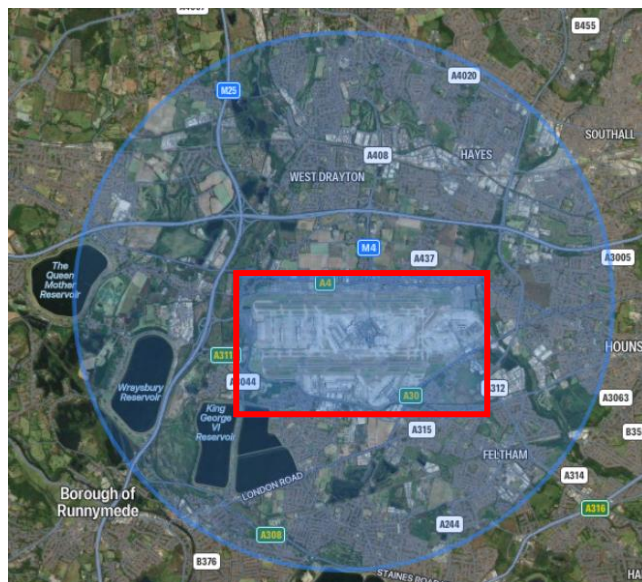
OSGB36: **510104, 177010** / WGS-84: **51.481340N, -0.41581414W**

OSGB36: **510230, 173957** / WGS-84: **51.453876N, -0.41495409W**

OSGB36: **504600, 173946** / WGS-84: **51.454838N, -0.49595177W**



If your Crane/tall equipment activity is outside of the red boundary but within the 6KM radius of the Heathrow Aerodrome Reference Point (OSGB36: **506949.64, 176524.65** / WGS-84: **51.477581N, -0.46137241W**), a crane application will be required for an operating height exceeding 10 meters AGL or higher than the surrounding structures or trees.





Appendix B

Charges apply for all crane permit applications. These charges are subject to annual review. The charges per permit application are as follows:

Standard crane / tall equipment without technical assessment	
Level 1 permit without technical assessment (Valid up to a maximum 3-month period)	£300 + VAT
Level 1+ permit without technical assessment (Valid from 3-month period up to a maximum 12-month period)	£450 + VAT
Crane / tall equipment with technical assessment	
Level 2 permit requiring further initial IFP assessment for a basic lifting operation	£1000 + VAT
Level 3 permit requiring initial IFP assessment for a more complicated lifting	£2500 + VAT

