

## Requirements and Procedures

### Cranes and other Tall Construction Equipment

Companies and contractors who require to operate cranes and lifting equipment within **6 kilometres** of an Aerodrome boundary and at heights of more than **10 metres AGL** or that of surrounding structures or trees, if higher, must receive prior permission from the Aerodrome operator.

Legislation controlling the use of cranes and lifting equipment in the vicinity of Aerodromes:

- The Air Navigation Order.
- CAP 168 Licensing of Aerodromes.

The Operator of such equipment must refer to British Standard Institute Code of Practice for the safe use of Cranes, **BS 7121: Part 1**, paragraph **9.3.3**. Crane control in the vicinity of Aerodromes.

The developer or crane operator should approach the Aerodrome concerned at least **one month** in advance of requiring to use a crane or other tall construction equipment to find out if there are any limitations and regulatory procedures that must be agreed before work commences.

In certain circumstances it will be necessary to approach the Civil Aviation Authority (CAA) in which case the applicant will need to co-operate in developing a safety case.

Once all procedures have been agreed the developer or project manager can arrange for the crane or other lifting equipment to be delivered to the site.

**At least three days** prior to delivery at the location of the crane or other lifting equipment, the operator must report to the Aerodrome with precise details of the crane or lifting equipment to be used on site and applies for the permit to set up and use the specified equipment. The permit will set out the criteria and any specific restrictions.

**A copy must remain with the crane operator for the duration of its operation and must be produced if requested by an Aerodrome or CAA official, or a police officer.**

## Location and Permission

### The following details will be required:-

- The precise location of the equipment is to be provided on an Ordnance Survey Grid. Either a reference to at least six figures for Eastings and Northings or marked out on a map that shows the Ordnance Survey Grid.
- The maximum operating height in metres Above Ordnance Datum (AOD), or the height of crane Above Ground Level (AGL) plus ground level in AOD.

**NOTE:** Heights "Above Ordnance Datum (AOD)" are those shown on Ordnance Survey maps as "above mean sea level" (amsl).

- Information must be provided on the type of Crane or tall construction equipment that is to be used, Tower Crane, Mobile Crane, etc.
- The radius of the jib or boom of a fixed crane;
- The area of operation of a mobile crane;
- The intended dates and times of operation;
- Applicant's name and contact details;
- Contact details for the crane when operating.

Once these details have been considered it will be determined whether the operation can proceed and whether restrictions need to be applied.

Any of the following conditions may be imposed to ensure the safety of aircraft:

- The fitting of **RED** obstacle lights;
- Restrictions on crane operating times;
- Crane operations dependant on the runways in use;
- Restrictions on crane operating height;
- Restrictions during poor visibility (whether caused by fog or low cloud).

**NOTE:** it may be necessary, in the event of an aircraft emergency, that the crane be lowered immediately.

## Maximum Operating Height

### Operating Height:-

The maximum operating height of the equipment must be provided in metres:-  
Above Ordnance Datum (AOD) or as:-  
Above Ground Level (AGL) provided that ground levels are indicated.

When the design of crane allows, it should normally be lowered when not in use, or when requested by an Aerodrome official, such as during periods of low visibility.

Where it cannot be lowered, it may be necessary for the jib to be parked in a specified direction when not in use.

### Obstacle Lights:-

Where it is deemed necessary that obstacle lights are required, the characteristics for the lights will be specified.

Normally, they will be steady red lights of either 200 or 2,000 candelas, depending on height, and visible from all directions and located on the highest point of the of the crane or lifting equipment.

For a tower crane, the lights should be provided on top of the tower and at the end of the jib. They should be visible throughout 360 degrees and be illuminated at all times.

Unserviceable lamps should be replaced immediately after failure, and in any event within 24 hours.

The 24 hour requirement may be relaxed if pairs of lights are fitted and one is still working.

## Aviation Safety

The term “Aerodrome” includes Airports, Airfields and Heliports where aircraft and helicopters land and take off.

The unauthorised operation of cranes and other high lifting equipment in the vicinity of such places could present a serious hazard to aircraft and helicopters, either as a physical obstruction or by interfering with electronic precision guidance equipment.

The risk to pilots and air crew who are unaware of such equipment when flying could result in an aircraft or helicopter colliding with such equipment resulting in an accident.

It is vital that any company or operator of cranes or other high lifting equipment understands the regulations governing the use of this equipment close to an Aerodrome.

This leaflet provides the information that all persons responsible for cranes and lifting equipment must follow.

Airport:-

Airside Operations:-

Tel:-

Fax:-

Email:-

Aviation Law, in particular The Air Navigation Order, makes it an offence to act recklessly or negligently in a manner likely to endanger aircraft. Therefore, the BSI Code of Practice on the Safe Use of Cranes places a duty on all operators of cranes and other lifting equipment to comply with procedures when intending to work in the vicinity of aerodromes.

In addition, the HSE states that health and safety legislation requires those with responsibilities for construction work to assess the risks to the health and safety of those at work, and others who might be affected.

In particular the CDM regulations 1994 require a Health and Safety plan for all sites which should cover all necessary arrangements for health and safety on the site, including information about restrictions which may affect the work and any emergency procedures.

The Regulations also require suitable arrangements for communication of site rules to all those concerned.

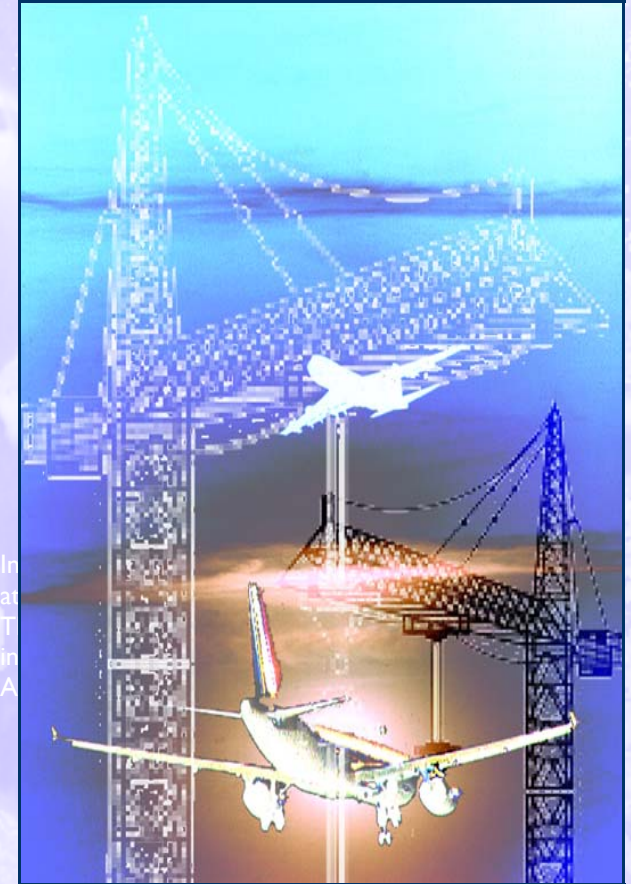
For further advice contact your local HSE office, or HSE Infoline on 08701 545500.

The appointed person should consult the Aerodrome manager for permission to work if a crane is to be used within **6 km** of the Aerodrome, measured from its perimeter, and its height exceeds **10m** above local ground level **or** that of the surrounding structures, trees, etc, if higher.

Operators who wish to use equipment of this nature must comply with the regulations and procedures that govern the operation of cranes and other equipment in the vicinity of an Aerodrome.

## CRANES and PLANES

A guide to Procedures for Operation of Cranes in vicinity of Aerodromes.



speaking for airports

