

AOP 22 – *Aviation Fuel Management*

VERSION No: 1.0

1.2 Fuel Suppliers

All fuel suppliers wishing to sell fuel on the main apron at the airport are required to sign up to the following agreements by way of deeds of adherence:

1.2.1 Airport.

FUEL STORAGE USER AGREEMENT
INDEMNITY AGREEMENT

Details of the agreements can be obtained from Leeds Bradford Airport.

1.2.2 Airport storage operating company.

INTO PLANE SERVICES AGREEMENT

Details of the agreement can be obtained from ASIG.

1.3 Oversight and Audit

In accordance with the statutory obligations arising from EASA implementing rule ADR.OPS.B.055 fuel quality, CAA requirements detailed in CAP 700, CAP 393 and CAP 748, the airport utilises independent oversight to ensure compliance. The review is primarily based on the relevant parts of 'JIG Standards', Airport Instructions, HSE requirements and wider industry 'best practice'.

All organisations undertaking aircraft fuelling activities will be subject to a regular audit programme proportionate to the scale and or perceived risk of the operation, as required by the airport, and no new operator will be permitted to commence aircraft fuelling at LBA until the Airport and it's independent fuel oversight advisor have confirmed that the operation meets the appropriate industry standards and new operators will be audited more frequently until the airport is satisfied that the appropriate standards are being delivered consistently.

Fuel operators will also be subject to regular oversight by the Airside Operations Unit who monitor ramp activity daily and carry out regular turn around checks and the airport independent compliance auditor who carries out Ramp Audits of all third-parties operating on the ramp to an agreed schedule.

The Airport reserves the right to suspend any fuelling activity that fails to adequately and appropriately address identified serious deficiencies within an appropriate timescale.

A Copy of all third party audit reports/findings must be sent to the Head of Airfield Services for review.

1.4 Safety

It is the responsibility of all organisations handling, dispensing, and receiving or in any other way involved in aviation fuel usage to ensure that rigorous safety precautions are applied at all times. The minimum requirements are outlined below.

2 SECTION 2 - Fuelling

2.1 Definition

For the purpose of both CAP 748 and this Instruction, the term "fuelling" is to Include fuelling, de-fuelling and the draining of aircraft tanks.(de-fuelling and draining of aircraft tanks is only to take place in exceptional circumstances and not routine operations)

2.2 Supervision of Fueling

Airline operating companies shall appoint an authorised person to be responsible for the technical aspects of aircraft fuelling for each fuelling operation. The authorised person is termed “Fuelling Supervisor” by CAP 748 and is nominated as per airline procedures (which may delegate the task to their Ground Handling agent).

If the airline company or handling agent decides that the responsibilities of the fuelling supervisor shall be limited to the technical aspects of fuelling only, the turnaround supervisor (as detailed in the LBA Generic Aircraft Turnaround Plan) shall be made responsible for the overall safety requirements during the fuelling operation. This supervisor(s) should be readily identifiable and remain in the area during fuelling operations.

Authorised members of a flight crew may also undertake the responsibilities of supervising fuelling operations.

2.3 Fueling Zone and Vent Points

Industry best practice requires the establishment of FUELLING ZONES before fuelling commences. These zones should be regarded as extending not less than 6 metres (20 feet) radially from the filling and venting points on the aircraft and fuelling equipment.

During fuelling, air and fuel vapour are displaced from the aircraft tanks. This potentially explosive vapour is expelled from the aircraft via vent points that are usually situated at the wing tips.

Within the fuelling zones, all personnel must avoid any activity involving the risk of fuel vapour ignition. Smoking (including e-cigarettes) is prohibited everywhere airside at LBA (with the exception of the dedicated smoking area) but danger could result from the use of naked lights, the operation of electrical systems or the sparks from exposed iron or steel studs on footwear or from tools.

In addition, engines must not be left running in the fuelling zones, particularly in the vicinity of fuel vents.

When de-fuelling takes place, the cargo tank of the refueller will be venting. Consequently, a fuelling zone, as detailed above, must be established around the vehicle vent points.

2.4 Fire Extinguishers

Fuelling companies are responsible for ensuring that fire extinguishers, for the protection of the fuelling equipment are readily available before the transfer of fuel begins. These extinguishers should be maintained to the standards recommended by the manufacturers and fuelling company personnel should be trained in their use.

2.5 Precautions Prior to Fueling

The aircraft is to be firmly restrained on the stand with brakes applied and / or chocks in position in line with established airline procedures. It is preferable that both methods of restraint are used when aircraft brake systems requirements do not make this impracticable.

All personnel working in the vicinity of any aircraft while it is being refuelled are to ensure that they do not obstruct escape routes by which fuelling vehicles may leave the aircraft rapidly without having to manoeuvre in the event of an emergency. Should the escape route be obstructed, the fuel company operator has no alternative but to cease fuelling, with the inevitable risk of delay to the aircraft turnaround.

All personnel involved in the fuelling of aircraft are to be instructed by their employer in the procedure of summoning the Airport Fire Service. This should include the use of the Emergency Stand telephones (Dial 2299 and ask for Fire Service) and/or the use of radio links as an alternative where the radio is intrinsically safe.

2.6 General Precautions

Aircraft borne auxiliary power units (APU) that have an exhaust efflux discharging into the fuelling zone must, if required to be running during the fuelling operation, be started before filler caps are removed or fuelling connections made. If the APU is stopped for any reason during the fuelling operation, it should not be restarted until the flow of fuel has ceased and there is no risk of igniting fuel vapours.

The replenishment of oxygen systems is not to take place when fuelling is in progress.

Only those aircraft switches essential to the fuelling operation are to be switched when fuelling is in progress, except that switches essential to the servicing of the aircraft may be operated subject to the authorisation of the Fuelling Supervisor.

Aircraft external lighting and strobe systems are not to be operated during fuelling. AOU must be notified of any observed breach of this rule.

In the event of an emergency such as a bomb alert or fire, either on the aircraft being fuelled or on an adjacent aircraft, fuelling is to cease. The Fuelling Supervisor is to establish from the emergency services or AOU staff in attendance the extent of the emergency. Fuelling can recommence when the Fuelling Supervisor has established that it is safe to do so.

If the presence of fuel vapour is detected by Cabin Staff in the aircraft interior, or any hazard or potential hazard is observed during the fuelling operation, the Fuelling and Safety Supervisors are to be informed immediately.

Under these conditions fuelling operations, as well as any maintenance work being carried out, shall cease immediately. No additional electrical equipment shall be switched on and unless electrical equipment already running is likely to cause a special hazard, it should not be switched off until the hazard has been declared safe.

2.7 Fueling of Aircraft with Passengers Onboard and During Embarkation and Disembarkation

In general, passengers should be disembarked prior to the commencement of fuelling. However the operator may deem this to be inappropriate. The aircraft operator should have assessed the risks associated in order to formulate and establish procedures for fuelling with passengers on board.

It is the responsibility of each airline to determine whether fuelling of its aircraft should take place with passengers on board and the method by which this is to be carried out. However, when wide-cut fuels (JP4 / JETB) are involved, airlines are advised that:

Passengers should be disembarked before fuelling if wide-cut fuel is involved and the fuel does not contain an anti-static additive. Wide-cut fuel is considered to be involved when it is being supplied or is present in the aircraft tanks, or the tanks contain a mixture of more than 5% wide-cut kerosene.

Passengers may remain on board the aircraft only if the operator is satisfied that all fuel being boarded contains an approved anti-static additive, that the guidance given in CAP 748 is being followed and that the appropriate instructions have been given to their operating staff.

The following safety measures are to be taken when fuelling with Aviation Kerosene (Jet A1), with passengers on board or when airline or other staff are on board for maintenance or other purposes:

Passengers / staff are to be warned that fuelling is taking place and they must neither smoke, use mobile phones or produce sources of ignition.

The aircraft cabin “No Smoking” signs are to be illuminated together with sufficient interior lighting to enable the aircraft emergency exits to be identified.

Ground servicing activities outside and within the aircraft are to be conducted in such a manner that they do not create a hazard. Exits are not to be obstructed by vehicles or equipment. Should an incident occur, the crew should be able to disembark the passengers via the aircraft steps or escape chutes without obstruction.

Inside the aircraft cabin, the aisles between seats and the areas where the aircraft escape chutes may be deployed are to be kept clear of obstructions.

When passengers are embarking or disembarking, their route is to avoid areas where fuel vapours are likely to be present, e.g. beneath fuel vent points, and they are to be under the direct supervision of airline staff at all times. The “No Smoking” rule is to be strictly enforced.

When it is necessary to carry out passenger / baggage reconciliations on the ramp, this must be done away from all the fuelling zones.

2.7.1 Aircraft Equipped WITH Automatic Inflatable Chutes

The following measures should be adhered to when refuelling aircraft equipped WITH automatic inflatable chutes.

- During fuelling, one set of aircraft passenger steps is to be positioned at the main passenger door normally used for the embarkation / disembarkation of passengers.
- As a precautionary measure, the left or right rear door is to be manned constantly by a member of the Cabin Staff and is to be available immediately for use as an emergency escape route using the automatic inflatable chute.
- The Fuelling Supervisor is to ensure that the area of ground beneath the door selected as an emergency escape route is kept unobstructed.

2.7.2 Aircraft NOT Equipped with Automatic Inflatable Chutes

The following measures should be adhered to when refuelling aircraft NOT equipped with automatic inflatable chutes.

- During fuelling, aircraft passenger steps are to be positioned at two of the main passenger doors normally used for the embarkation / disembarkation of passengers.

- Where aircraft are fitted with integral stairways and these are deployed, each may count as one means of egress.
- The Fuelling Supervisor is to ensure that two means to egress are available throughout the fuelling operation.

2.8 Cabin Safety

For the purpose of this Instruction, Cabin Staff may include airline staff trained in the use of emergency escape equipment.

Cabin Staff are required to supervise passengers and to ensure aisles and emergency doors are unobstructed.

Helicopters and Fixed Wing aircraft are not permitted to refuel with passengers on board.

In the event of the aircraft Captain or airline official requiring fire cover during the operation of fuelling with passengers on board, the Fire Service are to be requested via the operators handling agent or directly to the Fire Station Watch Manager (Extension 3241). The Fire Station staff will be made aware of the request.

2.9 Helicopters

Passenger(s) should not remain on the helicopter whilst fuelling is in progress except in exceptional circumstances, in which case all exits should be available for immediate use and the external area clear of obstructions if the only normal exit is on the same side as the fuelling points

The fuelling of helicopters with engines or rotors running is prohibited.

2.10 Fuel Spillages

In support of the Airport's environmental policy, all airside companies should be committed to minimising the occurrence and effects of fuel spillages at all times.

The Airport Emergency Orders detail the actions required in the event of aviation fuel spillages in the airside environment.

Every case of fuel spillage, irrespective of the amount must be reported immediately via Extension 2299 and to AOU. AOU will liaise with ATC as appropriate who may alert the Airport Fire Service. AOU will ensure that the incident has been satisfactorily concluded. When a major or extensive spillage is involved, the Fire Service may require the aircraft to be removed from the stand.

All staff that work airside have a responsibility to report any fuel spillage they may discover, in accordance with Section 12 of the Emergency Orders by calling ext. 2299 / 0113 391 3399 with details.

When LBA manpower and or materials are employed in dealing with a spillage, a charge may be levied for the service against the operator or handling agent of the aircraft concerned. Payment will be the responsibility of the operator or agent, as appropriate. Any negotiation with the fuel company involved will also be a matter for the aircraft operator or handling agent.

2.11 Fuel Samples and Waste Fuel – Disposal

Routine fuel samples are a fire hazard and their disposal must be conducted in a safe manner. Sample cans must be placed in an appropriate bunded container as soon as possible. Fuel samples are not to be stored in open containers or placed in grit bins, dustbins or sawdust bins. Under no circumstances must fuel be allowed to enter the storm water or foul-drainage systems. Waste fuel must be in a suitable container stored in a bunded location.

Bulk fuel samples must be retained in a Proprietary safety vessel which has the following characteristics:

- The vessel is to be clearly marked with the grade of fuel it contains and the words, “FLAMMABLE” or “HIGHLY FLAMMABLE”,
- The vessel must state the type of fuel contained and marked “ NOT FOR FLIGHT USE”
- The vessel is to be free from leakage and sealed.
- The vessel is to be of such a size and weight that it can be easily manhandled in the event of an emergency.
- Fire extinguishers should be available in close proximity to retained fuel samples.
- Bulk fuel sample containers are not to be positioned near to a recognised means of escape or other building or near any electrical sources or similar area of high risk.

2.12 Defueling

Airlines/Handling agents that require defueling or the transfer of fuel, must provide detailed procedures and risk assessment to the Head of Airfield Services for approval.

2.13 Maintenance of Vehicles and Ground Servicing Equipment

All vehicles and ground equipment operating airside are to be properly inspected and maintained to ensure that they do not create a fire risk. They should meet the requirements as detailed in CAP 642 which dictates MOT standards or similar.

All general maintenance on vehicles or equipment is strictly forbidden on the apron/ramp area. Only essential repairs due to breakdown or vehicle incident will be authorised but **MUST** have prior approval from the Airside Operations Unit. In these circumstances a remote area airside will be identified.

Vehicles/equipment that requires maintenance or servicing must be relocated landside if not contracted to LBA Vehicle Maintenance Department.

As stated in the Aerodrome, all drivers must ensure that their vehicle is parked in such a manner as to not prevent or restrict the access/exit of other vehicles or equipment. The keys must be left in the ignition in case the vehicle requires moving in an emergency.

Any operator that carries tools for their work (regardless of ownership of the tools) should keep these in a secure strong box /tool box in the rear of the vehicle and locked. With the key kept separate from the ignition key.

The Airside Operations Unit will undertake frequent audits of airside/apron operations and operators will be notified of any practices observed that do not comply with the above procedures.

2.14 Enforcement

In the event of any breach of this Instruction, the airline / handling agent or fuelling company is to report the incident to LBA. If the incident is sufficiently serious, an investigation may be carried out jointly in conjunction with the airline and fuelling company concerned. If, in the opinion of the investigation team, there has been negligence, advice will be sought with a view to legal action.

2.15 Implementation

If individual airlines or handling agents have difficulty in reconciling their current company fuelling regulations with this Instruction, they should inform LBA in writing of the differences and forward a copy of the relevant regulations and their risk assessment of the proposed operation. Each case will be examined by LBA and expert advice may be sought to see if the individual airline or handling agent's regulation can be considered a safe working practice in the light of the standards already established.