BournemouthAirport Part of Regional & City Airports			Ground Engine Running and Use of GPUs / APUs			Risk Rating	High– Reviewed annually
Reference:	BAI-AOPS-018	**Issue:**	V2.5	**Owner:**	Airfield Services Manager	**Department:**	Airfield Operations
Issue Date:		10/11/2025	**Compliance Date:**		10/11/2025	**Planned Review Start Date:**	10/10/2026

Ground Engine Running and Use of GPUs / APUs

BournemouthAirport
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❖ AMENDMENTS

Amendment ref		Effective Date	Amended By (Initials)	Summary of Change
Page	Para			
ALL	ALL	Oct 16	CWC	New Document
ALL	ALL	Dec 17	CWC	New Ownership
ALL	ALL	Aug 19	CWC	NIL
ALL	ALL	Apr 22	CWC	Use of runway for engine runs added
ALL	ALL	Apr 24	KJ	Instruction Reviewed
ALL	ALL	Jul 25	KJ	Simplified timings/idle engine run approvals
ALL	ALL	Nov 25	AR	Re-formatted Instruction

Changes to a document are identified in red italics and any wording which has been removed is crossed out using the strikethrough icon and highlighted in yellow. These remain on the document until it is ready for publishing. In instances where the document has been circulated for review and further changes have been requested, these changes are identified and distinguished from previous changes by highlighting in another colour i.e. blue and the document is circulated again.

❖ CONTENT

1. INTRODUCTION

1.1 PRINCIPLE

BOH is responsible for ensuring the safe ground running of aircraft engines on the Aerodrome and the control of blast, fumes and ground noise. Due to the environmental impact of engine ground running, particularly at night, it must be strictly controlled with the number of ground running operations kept to an absolute minimum.

1.2 DEFINITIONS

An engine ground run is defined as any engine start-up, which is not followed immediately by the departure of the aircraft concerned.

A high-powered engine ground run is defined as any engine ground run, which exceeds low or idle power.

2. MANAGEMENT OF ENGINE RUNS

2.1 PERMITTED TIMES

HIGH POWER ENGINE GROUND RUNS WILL NORMALLY BE PERMITTED WITHIN THE FOLLOWING PERIODS	
WEEKDAYS:-	Between 08:00 and 20:30
SATURDAYS & PUBLIC HOLIDAYS:-	Between 09:00 and 17:00
Note! Engine ground runs within the restricted times will require the authority of senior Airport management. Consideration may be given to granting permission, subject to receipt of justification for the engine ground run. Permission will be considered on an individual request basis only; no blanket permissions will be granted	
SUNDAYS:-	Senior Management Permission Only ,ADM to contact the Ops director or Airfield Services Manager.
ARMISTICE DAY:-	Not permitted between 10:55 & 11:05 hours; local
Note! Additionally, engine running will not be permitted during any other periods as specified by the Airport Authority	

2.2 APPROVAL

Approval for idle engine runs must be obtained in advance from ATC who can be contacted by telephone on 01202 364150. Engine running outside of the times detailed in the above table will not normally be granted and will be referred to Airport Senior Management for consideration Via the Airport Duty Manager.

ATC (Idle runs can be approved immediately by ATC, idle engine runs may be carried out on private aprons, the main apron and stand 21,23,25 and taxiway Bravo.

ATC will issue an Approved Reference Number; any subsequent variation to the details given must be subject to a further application and approval.

Permission to start engine(s) must be obtained from Air Traffic Control by radio and the Approved Reference Number must be quoted. Aircraft must remain in 2-way contact with ATC throughout the duration of the ground run.

2.3 INFORMATION REQUIRED

The following information is to be passed to ATC :-

- Aircraft Registration
- Aircraft Operator
- Aircraft Type
- Start Time of Activity + Duration
- Max % Power during Run

3. SAFETY ASSURANCE

3.1 PERSONNEL

All personnel concerned with engine ground running must be fully conversant with this Instruction, which must be complied with at all times. Aircraft shall be positioned such that noise and engine efflux are directed away from the noise sensitive areas prone to ignition and any loose surfaces that may produce debris; this would usually be dictated by prevailing wind conditions.

A trained member of the airline, operating company or handling agent staff is to be positioned on the stand / engine run area, in verbal contact with the flight deck. They will

communicate by the R/T or inter-phone with the flight deck to ensure that the engine(s) are shut down if persons or vehicles move into the danger area in front of, behind or in the vicinity of a live engine. For this purpose and if the R/T or inter-phone link is unserviceable, hand signals by day and light signals by night may be used.

Aircraft must remain in two-way contact with ATC throughout the duration of the ground run to ensure the prompt initiation of any emergency procedures.

The person in charge of the ground run must ensure that the aircraft is adequately restrained so that it cannot move under any circumstances.
All persons involved in engine runs are to utilise appropriate Personal Protective Equipment (PPE). The minimum standard of high visibility clothing on the aircraft Manoeuvring Area is a yellow waistcoat incorporating retro-reflective materials that meets the standard EN-471.

4. AIRCRAFT POSITIONING AND START-UP

4.1 LICENSED APRONS

The following criteria apply:-

a) On the licensed Aprons, unless otherwise authorised by senior management, engine ground runs will be limited to check-starts that do not exceed ground idle power. For checks requiring the use of higher power settings, a move to Taxiway Tango will generally be required; location details will be contained with the approval.

b) The aircraft must be positioned correctly at the location stipulated, in such a way that the engine running will not harm persons or cause damage to aircraft, buildings, installations, vehicles or equipment; any ground equipment must be placed at a safe distance from the aircraft.

c) If applicable, before any approved engine run is permitted, the Rear of Stand road must be closed to safeguard vehicular traffic. Ground running must not take place when passengers are being embarked / disembarked on any adjacent stands.

d) Reverse thrust engine runs are required to be carried out on taxiway Tango.

e) The aircraft anti-collision beacon(s) must be switched on before engine(s) are started and must remain on for the duration of the ground run.

4.2 REMOTE LOCATION

The designated remote location for ground engine running is Taxiway Tango, where ground engine runs will be permitted from ground idle power to full power checks.

The following criteria apply:-

a) The aircraft must be positioned on the designated concrete area, in-line with the Taxiway centre-line, in such a way that the engine running will not harm persons or cause damage to aircraft, buildings, installations, vehicles or equipment.

b) Any ground equipment must be placed at a safe distance from the aircraft.

c) If applicable, cross taxiways to the rear of the aircraft must be closed to safeguard aircraft / vehicular traffic, before any approved engine run is permitted.

d) The aircraft anti-collision beacon(s) must be switched on before engine(s) are started and must remain on for the duration of the ground run.

e) A trained member of the operating company must be in attendance as the Safety Person and maintain verbal contact with the flight deck. For this purpose and if the R/T or inter-phone link is unserviceable, hand signals by day and light signals by night may be used.

f) The safety Person is responsible for ensuring that the area around the aircraft is free from FOD and is suitable for the engine test process. The area to the rear of the aircraft, which may be subjected to blast, is to be clear of persons, vehicles and equipment.

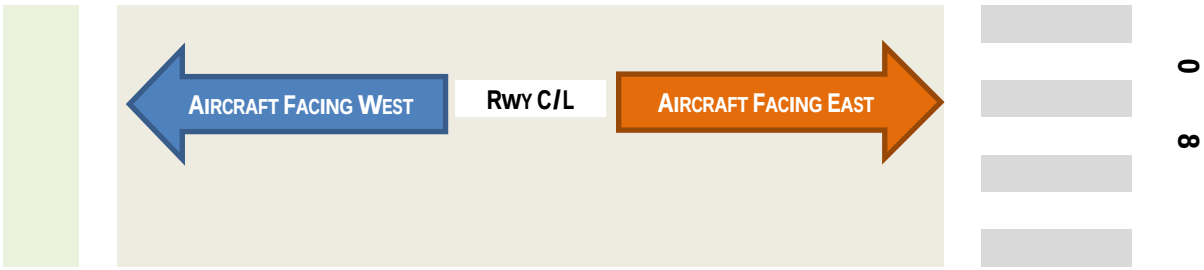
g) On completion of the engine run activity, the safety person should ensure that no equipment etc. is left at the location.

4.3 ACCOMMODATING LARGER AIRCRAFT

With the exception of idle power only, wide-bodied aircraft are only permitted to carry out engine runs on the concrete extension of the Runway. The aircraft must be positioned in line with the Runway centre-line and located such that the blast area is over the concrete portion.

END OF PA

CONCRETE EXTENSION AREA



Operators wishing to conduct engine runs on the Runway must make prior arrangements with the Airfield Services Manager, providing as much notice as possible, so that suitable times for the closure of the Runway can be determined and promulgated in a timely manner.

Once the time has been agreed, operators must ensure that they operate to schedule; an extension to the agreed closure time cannot be guaranteed. If subsequently, they are unable to operate at the agreed time, they must advise ATC as soon as known and seek to establish a revised time for the activity with the Airfield Services Manager.

Closure of the Runway for engine runs will normally only be granted within the approved times specified in Para 2; typically, in the early evening period or during periods when traffic levels are known to be generally lighter.

4.4 SPECIAL LIMITATIONS

Propeller aircraft, which require to carry out pre take-off engine power checks, must pay particular attention to the location of adjacent aircraft, equipment, buildings and persons, prior to commencing the power check. Blast effects must be minimised and due consideration given to the potential of noise disruption to adjacent establishments.

4.4 ENVIRONMENTAL CONSIDERATIONS

The criteria for selecting the location for the engine run should be to minimise the environmental impact of the run, while protecting the safe operation of the Airport.

Wind can exacerbate noise if it is blowing in the direction of the surrounding communities. Unfortunately, the strength of the wind may preclude the ideal position being used.

5. POWER UNITS

5.1 GROUND POWER UNITS (GPUS)

The constant running of a GPU can cause high levels of noise on Apron areas, are an additional obstruction to free movement around a parked aircraft and if poorly maintained, may deposit oil spillage on Airfield surfaces.

When purchasing GPUs, operators should take account of the manufacturers' noise attenuation standard; 85 dBA **at 4 metres is the maximum level permitted**. Lower working noise levels should be encouraged in the selection process

Operators must ensure that the connection cable between the GPU and aircraft is routed, so that as far as is reasonably practicably, it does not present a trip hazard to persons.

Operators are to ensure that the GPUs are adequately maintained so that they do not present a safety or environmental hazard (i.e. emissions). In addition, all associated cabling must be adequately shielded.

5.2 AUXILIARY POWER UNITS (APUS)

Aircraft APUs generate high levels of noise and significant fumes which can cause disturbance to those in nearby aprons, buildings and residential areas. The noise of an APU may mask the noise of an approaching vehicle, thus endangering staff.

Airlines and handlers are to ensure that APUs are used for no more than 5 minutes after arrival on stand and no more than 30 minutes before planned departure. Wherever possible, they are not to be used whilst passengers are embarking or disembarking.

APUs are not to be used as a substitute for GPUs.

Inbound aircraft with unserviceable APUs &/or requiring an "air start" on departure will not be parked on any stand that adjoins a Rear of Stand road. Any aircraft already on stand, that subsequently requires an air start, will be repositioned to a remote stand to do so.

Aircraft APUs can generate high levels of noise and significant fumes, which can cause disturbance to those using nearby aprons, buildings and residential areas. The noise of an APU may mask the noise of approaching vehicles, thus endangering staff.

Wherever possible, operators / handlers are to ensure that APUs are used for no more than 5 minutes after arrival on stand and no more than 30 minutes before planned departure.

Wherever possible, APUs are not to be used whilst passengers are embarking / disembarking; GPUs are to be used in preference to APUs wherever possible.