



# Ground Running of Aircraft

Operational Safety Policy

Feb 2021

**MELBOURNE AIRPORT**

## Foreword

This operational policy has been prepared by Melbourne Airport to meet the applicable requirements of the *Melbourne Airport Aerodrome Manual*, the *APAC Safety Management Standard* and also the *Part 139 (Aerodromes) Manual of Standards 2019*, made under regulation 139.095 of the *Civil Aviation Safety Regulations (CASR) 1998*.

Any external references made to regulations, standards and documents should be read in conjunction with this document. As these external references are in force from time to time and may be subject to change, the latest issues/amendments should be checked prior to using this document. APAM will review this document regularly to ensure as far as possible that the information contained within is current, accurate and suitable for the intended purpose. Should any changes be found necessary, or where compliance with this policy becomes impractical or impossible, the Airfield Manager is to be advised immediately.

**Airfield Manager**  
**Aviation**  
**Australian Pacific Airports Melbourne**

## Contents

1.	Introduction .....	4
1.1.	Rationale .....	4
1.1.1.	Aim .....	4
1.1.2.	Authority and Responsibilities .....	4
1.1.3.	Scope .....	4
1.1.4.	Alteration .....	4
1.1.5.	No Derogation .....	4
1.2.	Definitions .....	5
2.	Engine Ground Runs .....	5
2.1.	Locations for Ground Run Activities .....	5
2.1.1.	SITE 1 - Aircraft Parking Positions .....	5
2.1.2.	SITE 2 – Taxiway Bravo Run-up Bay .....	6
2.1.3.	SITE 3 – Taxiway Kilo Run-up Bay .....	6
2.1.3.1.	Taxiway Kilo Run-up Bay Additional Restrictions (Hours of Night) .....	7
2.1.4.	SITE 4 – Airline Maintenance Base Aprons .....	7
2.2.	Approvals for Ground Runs .....	7
2.3.	Standard Radio Phraseology (Sites 2 and 3) .....	7
2.4.	Cross Bleed Engine Starts for Maintenance Purposes .....	8
2.5.	Reverse Thrust .....	8
2.6.	The Use of Ground Running Cones .....	8
2.7.	Recording of Details .....	9
2.8.	Safety Precautions .....	9
3.	Further Information .....	10
3.1.	Important Contacts .....	10
3.2.	Emergencies .....	10
	APPENDIX A Plan of Engine Ground Run Sites .....	11
	APPENDIX B Engine Ground Running Cones .....	12

## **1. Introduction**

The purpose of this policy document is to outline the process for the ground running of aircraft at Melbourne Airport. The policy applies to all aircraft operators and those involved in the ground running of aircraft on the airside at Melbourne Airport.

The ground running of aircraft policy outlined in this document is to be followed in conjunction with each individual organisation's procedures and requirements.

### **1.1. Rationale**

#### **1.1.1. Aim**

This policy has been produced in the interests of safety and security at Melbourne Airport. It details the safety rules for operators on the airside.

This policy aims to provide a safe environment for all airside staff, passengers and aircraft and to ensure that the requirements documented in this policy are relevant and capable of practical implementation by all staff.

#### **1.1.2. Authority and Responsibilities**

This ground running of aircraft policy has been prepared by Australia Pacific Airports (Melbourne) Pty Limited, hereafter referred to as Melbourne Airport. This policy must be read and complied with in conjunction with the Airport Conditions of Use and other operational safety policies.

#### **1.1.3. Scope**

This document applies to the ground running of aircraft which all operators and their staff should follow to ensure a safe working environment on the airside at Melbourne Airport.

#### **1.1.4. Alteration**

Melbourne Airport may vary this policy at any time. A reference to ground running of aircraft should be considered as referring to this policy as distributed, published or otherwise declared to be in force by Melbourne Airport from time to time.

#### **1.1.5. No Derogation**

Nothing in the ground running of aircraft policy shall derogate from any responsibility otherwise imposed by law, agreement or other policy, procedure or rule imposed by Melbourne Airport with respect to the same or similar subject matter as this policy.

## 1.2. Definitions

Term	Definition
<b>Maintenance Base Aprons</b>	Apron area located in front of the Maintenance Bases.
<b>Cross Bleed Engine Start</b>	The use of bleed air from one engine to start another, normally requiring power to be set higher than idle.
<b>Engine Ground Run</b>	The ground operation of an engine or a propeller for the purpose of testing or maintenance.
<b>Engine Run-up Bay</b>	An area allocated for engine ground runs.
<b>Jet Blast</b>	Exhaust from the rear of an operating jet engine.
<b>Maintenance Organisation</b>	An organisation involved in the maintenance of aircraft.
<b>Terminal and Freight Aprons</b>	Apron areas around the passenger and freight terminal buildings.
<b>Tow Bar Disconnect Point (TBDP)</b>	A marked position where an aircraft is pushed back or towed to commence taxi under its own power.

## 2. Engine Ground Runs

### 2.1. Locations for Ground Run Activities

Four sites are available for ground running activities as follows:

- **Site 1:** Aircraft Parking Positions
- **Site 2:** Taxiway Bravo run-up bay (preferred site for aircraft with a wingspan greater than 36 metres)
- **Site 3:** Taxiway Kilo run-up bay
- **Site 4:** Airline Maintenance Base Aprons

Refer to [Plan of Engine Ground Run Sites](#).

#### 2.1.1. SITE 1 - Aircraft Parking Positions

Aircraft engine ground running operations may be conducted at any time on a defined aircraft parking position provided that:

- Power settings are limited to **ground idle**.
- All aircraft types are limited to **one engine at a time**.
- Engine ground run durations are limited to **20 mins**.
- Supervising engineer has approval from the Senior Airside Safety Officer prior to commencing any engine ground run.

Due consideration must be given to minimising the noise and jet blast from such operations on the surrounding apron and taxiway areas.

### 2.1.2. SITE 2 – Taxiway Bravo Run-up Bay

Aircraft engine ground running operations may be conducted at any time on Taxiway Bravo run-up bay with power settings and run duration at the discretion of the supervising engineer concerned, subject to the following conditions:

- All engine ground runs are at the discretion of Senior Airside Safety Officer.
- Only engine runs **tail north** are permitted on the marked position: **RUB1**
- Aircraft travelling under tow to and from this location must be escorted across Runway 27 and to the site by an authorised Airside Safety Officer.
- Supervising engineer must have approval from the Senior Airside Safety Officer prior to commencing the engine run.

### 2.1.3. SITE 3 – Taxiway Kilo Run-up Bay

Aircraft engine ground running operations may be conducted on Taxiway Kilo run-up bay subject to the following conditions:

- All engine ground runs are at the discretion of Senior Airside Safety Officer.
- Only ground runs where the aircraft tail is facing either **north or south** are permitted in this run-up bay.
- During engine ground runs aircraft must:
  - when tail south be as far north as possible (*but not outside the parking limit area*).
  - when tail north be as far south as possible (*but not outside the parking limit area*).
- Supervising engineer must have approval from the Senior Airside Safety Officer prior to commencing the engine run.
- The supervising engineer must monitor aircraft operations in the vicinity and power engines down to idle if TWY Kilo is required and the aircraft is in a tail north configuration.
- The following aircraft are limited to a maximum power setting of 50% due to jet blast limitations:
  - Boeing 747-8, 747-400
  - Airbus A380
  - Airbus A350
  - Boeing 777 (all series)
  - Boeing 787 (all series)

Should the above aircraft types require a power setting greater than 50%, the engine ground run MUST be conducted at Site 2 (Taxiway Bravo run-up bay).

**Note:** *Excluding the aforementioned aircraft types, there is no restriction on run duration and power settings for Taxiway Kilo run-up bay during hours of day (0500 - 2300 hrs local time).*

#### 2.1.3.1. Taxiway Kilo Run-up Bay Additional Restrictions (Hours of Night)

During hours of night (**2300 - 0500 hrs local time**) the following conditions apply:

- Power settings not above **ground idle**
- Engine ground run durations are limited to **20 mins**.

#### 2.1.4. SITE 4 – Airline Maintenance Base Aprons

Aircraft engine ground running operations may be conducted on Airline Maintenance Base Aprons subject to the following conditions:

- Power settings are limited to **ground idle**.
- All aircraft types are limited to **one engine at a time**.
- Engine ground run durations are limited to **20 mins**.
- Ensure aircraft weight does not exceed apron strength limitations.
- Aircraft orientation must avoid unnecessary jet blast or fumes being directed towards adjacent facilities and public areas.
- Supervising engineer must have approval from the Senior Airside Safety Officer prior to commencing the engine run.

### 2.2. Approvals for Ground Runs

The supervising engineer must obtain approval 20 mins prior to conducting an aircraft ground run activity. For all sites a text message approval must be obtained from the Melbourne Airport Senior Airside Safety Officer (Car 2) on 0418 335 985 and **must include the specific location, aircraft type and registration, confirmation of power setting and the requested time of the ground run**.

For **sites 2 and 3** these additional procedures must be followed:

- Supervising engineer is to contact the Senior Airside Safety Officer 30 minutes prior to the ground run activity.
- Supervising engineer must contact ATC when the aircraft is ready to be positioned.
- ATC will direct the aircraft to the site nominated by the Senior Airside Safety Officer.

### 2.3. Standard Radio Phraseology (Sites 2 and 3)

Refer to AIP (<https://www.airservicesaustralia.com/aip/aip.asp>) for standard phraseology.

## 2.4. Cross Bleed Engine Starts for Maintenance Purposes

Cross bleed engine starts when performing maintenance may only be conducted under the following conditions:

- Supervising engineer is to contact the Senior Airside Safety Officer 20 minutes prior to the cross bleed ground run activity.
- Supervising engineer must gain approval from ATC prior to commencing pushback and engine start.
- No aircraft engine is to be run above idle power until the aircraft is positioned at the cross bleed approved Tow Bar Disconnect Point.

## 2.5. Reverse Thrust

Aircraft are only permitted to conduct reverse thrust engine runs at **sites 2 and 3** according to that area's specific conditions.

## 2.6. The Use of Ground Running Cones

Prior to the commencement of any engine ground runs at sites 1 and 4, the supervisor of the engine run must display the **green ground running cones** provided by Melbourne Airport. The green cones are located at various locations on each of the concourses and are stored on top of the plinth next to the high mast flood light.

The ground running cones have been approved to be used during day/night operations, with the addition of two class 1 high visibility reflective tape encircling the cones. During night operations the ground running cones can be seen from a distance of up to **100 metres** away.

In windy conditions above **45 knots or 83 km/h**, engine ground running must cease until wind conditions decrease. At this time any deployed engine ground run cones are to be collected and secured.

The cones are to be placed on the ground immediately behind the aircraft in line with the tail with a cone at each wing tip. Refer [Engine Ground Running Cones](#).

## 2.7. Recording of Details

Details of all engine ground runs shall be recorded by the supervising engineer and held by their organisation. These records must include:

- The date of the run *i.e. 26 November 2021*
- The type of aircraft and its registration *i.e. A333 VH-ABC*
- The site at which the run was conducted *i.e. Site 1, 2, 3 or 4*
- Aircraft heading *i.e. north*
- Confirmation FOD sweep conducted *i.e. yes or no*
- The number of engines being run *i.e. 1, 2, 3, 4*
- Duration of run *i.e. 20 mins*
- The time each run commenced and finished *i.e. 0500-0515hrs*
- The power setting used for each run *i.e. Idle, medium, high*

A copy of the records must be emailed to the Airfield Operations and Works Coordinator at [airfieldworkscordinator@melair.com.au](mailto:airfieldworkscordinator@melair.com.au) by the following working day.

## 2.8. Safety Precautions

When conducting engine ground runs the following safety precautions must be adhered to:

- Anti-collision beacons must be switched on throughout the engine ground run
- Supervising engineer must ensure that:
  - there are no foreign objects present in proximity to the engine inlet zone particular to the aircraft type
  - all personnel, equipment and cargo are to be well clear of the hazard areas around the aircraft during an engine ground run
  - there is sufficient distance between the aircraft and any people, vehicles, equipment and buildings so that they will not be unduly affected by jet blast from the ground running operation.
- Supervising engineer or another appropriate person must ensure the safety of the operation and all personnel, vehicle and aircraft in the vicinity. The engine ground run must be stopped immediately if a dangerous situation arises.
- Supervising engineer should not make any gestures to any other airside drivers unless it is necessary to direct them in the event of a critical incident or emergency.
- Any observed incidents or hazards **must** be reported to the Senior Airside Safety Officer as soon as practicable.
- Before commencement of aircraft ground run activity at **Site 1 (aircraft parking positions)**, engine ground run cones must be used to warn other apron users that aircraft ground run activity is in progress. *Note: Engine ground run cones must be removed immediately following the end of the aircraft ground run activity to signal to apron users that it is safe to pass behind the aircraft.*

### 3. Further Information

For further information with regard to this **Operational Safety Policy**, please contact:

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Airfield Support  
03 8326 2525  
[airfieldsupport@melair.com.au](mailto:airfieldsupport@melair.com.au)

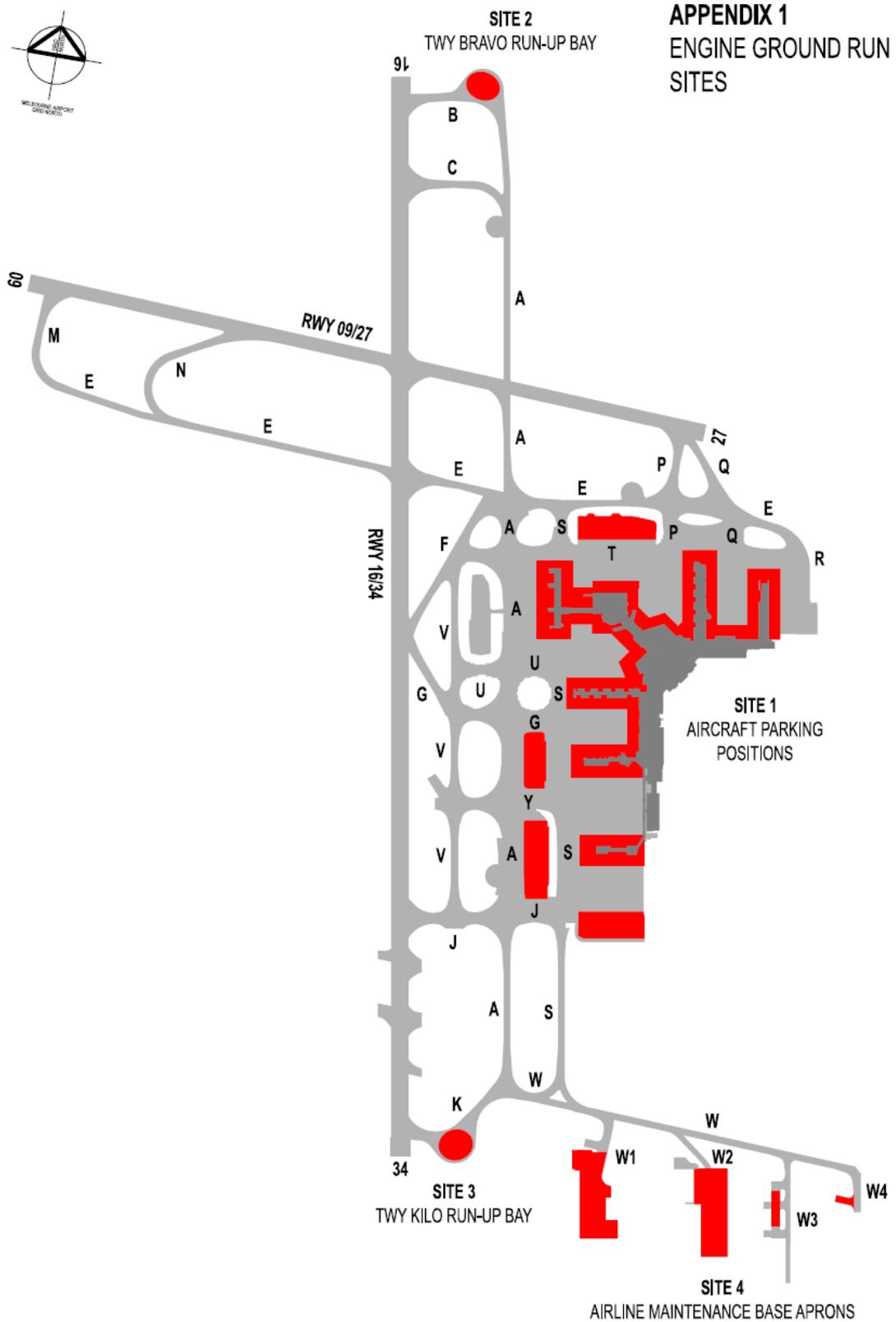
#### 3.1. Important Contacts

Senior Airside Safety Officer: **0418 335 985**

#### 3.2. Emergencies

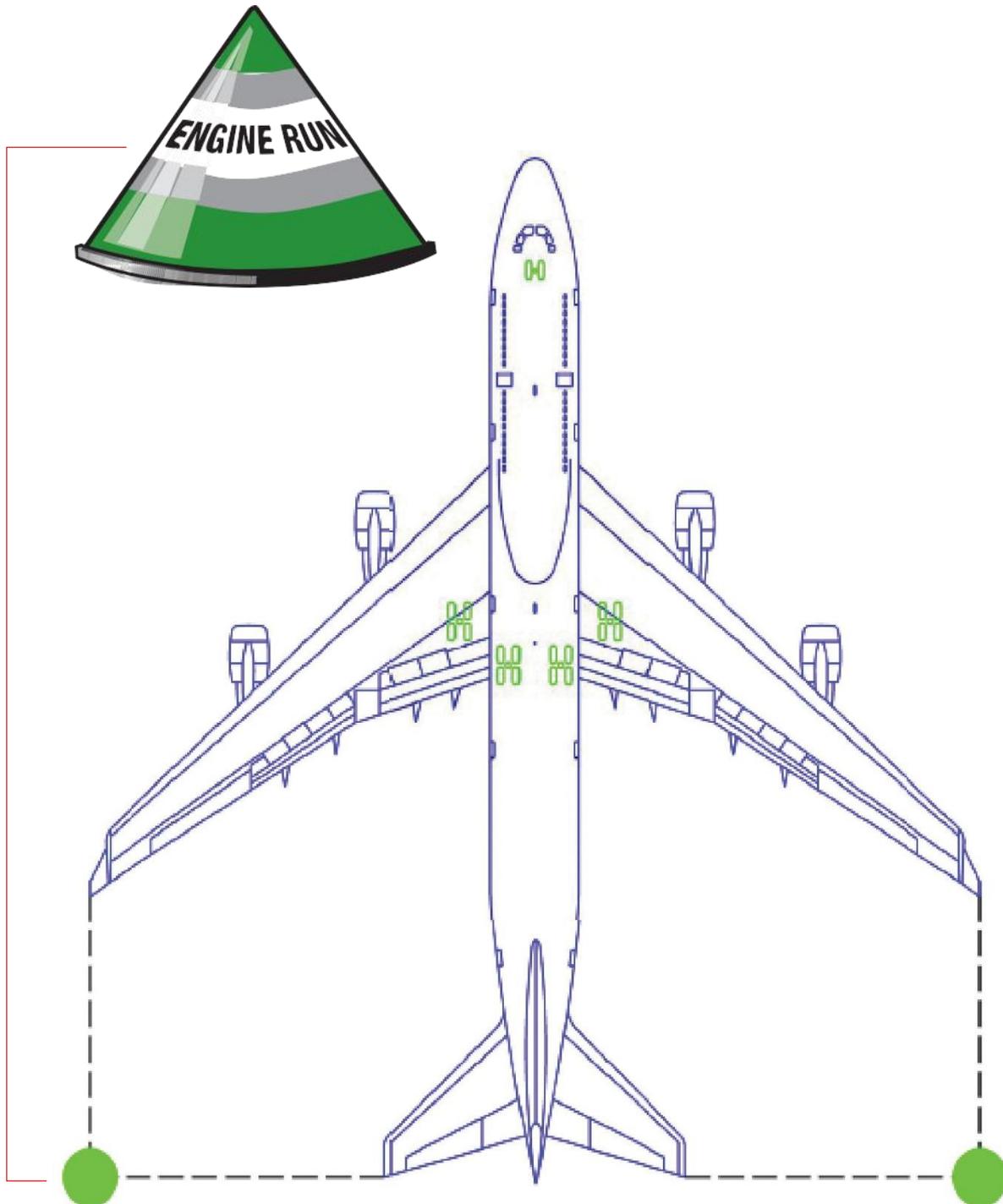
In case of emergency contact the Integrated Operations Centre Emergency Line on **03 9297 1601** or by pressing the **Apron Emergency Call Point** button.

# APPENDIX A Plan of Engine Ground Run Sites



DRG. RT68075 (REV 6)

## APPENDIX B Engine Ground Running Cones





NO STEEL ON

452CL

PRESSURE RELIEF DOOR

452DL

PRESSURE RELIEF DOOR

452EL

PRESSURE RELIEF DOOR

12

IN ALL 4 LATCHES IN  
THE UPPER ORDER ON  
WITH THE HANDLE  
DOWN TO OPENING  
EITHER FOR INLET

AUSTRALIA PACIFIC AIRPORTS (MELBOURNE) PTY LTD ABN 62 076 999 114

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