Operational Advice Notice Pre-Conditioned Air Operating Principles for Summer 2025

30th April 2025

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Version 1.0

It is the responsibility of all employers to ensure that relevant OANs 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 Advice Notice (OAN) is written to detail the Pre-Conditioned Air (PCA) operating principles for summer 2025 at Heathrow Airport.
- 1.2 In pursuit of our carbon goal to achieve net zero by 2050, Heathrow take every opportunity to reduce carbon emissions on the ground, for example, replacing the PCA units and to impose the APU restrictions. For further information regarding APU restrictions, reference should be made to Operational Safety Instruction (OSI) "ASEnv_OSI_078, Use of Aircraft Auxiliary Power Units".
- **1.3** There is currently a PCA replacement project underway to replace 75 stands across Terminals 2, 3 and 5 with Format 9 units.
- 1.4 This project aims to enhance operational efficiency and support our vision for a more sustainable future by minimising the need for APUs by introducing PCA across all stands, contributing to improved air quality and reducing the environmental impact.

2. Definitions

Abbreviation	Description
AOP	Airport Operations Plan
APU	Auxiliary Power Unit
OAN	Operational Advice Notice
OSI	Operational Safety Instruction
PCA	Pre-Conditioned Air































3. APU Usage Guidelines

- The APU should be switched off as soon as possible after arrival.
- 3.2 The APU should not be used for temperature regulation of the aircraft while on the stand unless under any of the following conditions:
 - 3.2.1 The ambient temperature is too high, and the PCA cannot bring the temperature to a desired value after an extended period of use.
 - PCA is either unserviceable or unavailable. 3.2.2
 - 3.2.3 Connecting the PCA would affect aircraft maintenance works to be carried out.
 - 3.2.4 Where an extreme weather warning has been issued via the AOP and the Airport Community Application and, PCA cannot be safely deployed.

4. PCA Usage Best Practice:

- The PCA shall be used as a primary source for cabin temperature regulation purposes, especially when the following conditions are met:
 - 4.1.1 The ambient external temperature is 20°C (68°F) or likely to achieve this temperature or more.
 - 4.1.2 The aircraft is on the ground for 90 minutes or more.
- 4.2 It is the arriving flight commander's responsibility to leave the aircraft in the proper configuration for PCA connection. Otherwise, this should be completed by the aircraft engineer or other suitably trained persons as soon as practicable after arrival on the stand.
- 4.3 If there is a known issue with the aircraft, the flight commander should inform the ground handlers not to connect the PCA.
- For maximising the benefit of PCA, the following aircraft conditions should be considered:
 - 4.4.1 Connect and use the PCA on arrival on the stand at the earliest opportunity.
 - 4.4.2 Close doors that do not need to be open.
 - 4.4.3 Close all blinds.
 - 4.4.4 Ensure In-flight entertainment systems are off
 - Reduce the number of staff on board 4.4.5

































5. PCA Operational Awareness

- The PCA requires around 40 minutes on-average to adjust the temperature in the cabin.

 This time will change depending on the external temperature, internal cabin temperature and aircraft type.
- 5.2 When the external ambient temperature is +40C (+104°F), the time required to cool an aircraft will increase, and suitable time must be factored in to ensure effective cooling can occur.
- 5.3 During passenger transit on the ramp for boarding or disembarkation, all PCA must be retrieved from operations, and the APU should be used instead.
- 6. PCA Formats/Locations and Operating Specifications:
- **6.1** For PCA formats and locations, please refer to Appendix A of this OAN.
- 6.2 For PCA formats operating specifications, please refer to Appendix B of this OAN.

7. Emergency

- 7.1 In the event of an emergency, please call 222 (Heathrow landline) or 0208 759 1212 (external phone or mobile).
- 7.2 Where an emergency evacuation is required on stand, whether on an aircraft or in a terminal, the PCA must be switched off.

8. Enquiries

Any questions regarding this notice should be directed to <u>PCA General Enquiries Form</u> or via the QR code below:

































Appendix A: PCA Formats and Locations

PCA Formats 1-8 are currently in operation across the aircraft stands displayed, below. These units will remain in operation, until the project cycle reaches them. Format 9 is currently being introduced across Terminals 2, 3, and 5. Although the stand delivery has been completed, these units are not yet operational. It is expected that Format 9 at TSC will be ready for use from 5th May 2025 onwards. (Except Stand 336).

It is expected that F	ormat 9 at T5C will be ready	y for use from 5 th May 2025	or
Communications wi	ill be shared, as they become	e ready for Operational use.	

FORMAT 1			FORMAT 2					FORMAT 3			FORMAT 4			FORMAT 5	FORMAT 7		FORMAT 8		FORMAT 9	
T2A	T2B	Т3	Т2В	Т3	T5A	T5B	T5C	T2B	Т3	T5B	T5A	T5B	T5C	T5B	T2B	T5B	Т2В	Т3	ТЗ	T5C
216	237A		231A	307A	501	546L	555B	233A	303A		523			544R	238A		235	301	336	552
217	237B	342B	232A	307C	502A	546R	555C	247A	303C	533A			553				236			553
218A	238B		233B		503A		556B		305A	534A										554
218B	239A		247B		505A		556C		305C	535A										561
219	241A		248A		506A		557B			536A										562
220	242A		249A		507A		557C			537A										563
221A	242B				508A		564B			538A										
221C	243A				509A		564C			539A										
223	243B				511A		565B			542A										
224	244A				512A		565C			543A										
225	244B				513/514		566A			544L							•			
226	246A				515A					547B										
	246B				516/517					548A										
					518A															
					519A															
					520A															
					521A															
					522A															































Appendix B: PCA Formats Operating Specifications

PCA Formats	Ambient Cooling Range
Format 1	Up to 25°C
Format 2	Up to 22°C
Format 3	Up to 25°C
Format 4	Up to 30°C
Format 5	Up to 30°C
Format 6	Up to 30°C
Format 7	Up to 30°C
Format 8	Up to 30°C
Format 9	Up to 50°C





























