



Operational Safety Instruction

Pre-conditioned Air Rules and Procedures

28th September 2016

ASEnv_OSI_055

v1.0

It is the responsibility of all employers to ensure that relevant OSIs 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 OSI provides details of the rules and procedures for the use of Pre-Conditioned Air units, where provided on aircraft parking stands. As part of the Terminal 5 planning conditions all pier served stands on T5 are fitted with PCA units; additionally, there is an undertaking to provide PCA units on all future pier served stand projects throughout the airport. Appropriate use of PCA minimises the running of the aircraft Auxiliary Power Unit during the turn round process and works towards improving air quality and reducing noise generated at Heathrow. The PCA units can provide cool air, vent or warm air depending on weather and temperature condition.

1.2 Details of the operating rules and procedures for APU's can be found in ASEnv_OSI_61 Control of Ground Noise and Emissions from Aircraft at Heathrow.

1.3 OSI/21/11 is hereby cancelled.

2. Definitions

Abbreviation	Description
APU	Auxiliary Power Unit
dB	Decibel
m	Metres
PCA	Pre-conditioned Air

3. Safety Procedure

3.1 Equipment

3.1.1 The PCA unit is mounted on the underside of the airbridge. The control panel for the unit is mounted on the airbridge legs. Each unit has two yellow hoses on reels, which shall be connected directly to the aircraft receptacle via hose



connectors. The PCA monitors the aircraft cabin temperature via a temperature probe which is mounted on the airbridge head. It is best practise to set the units at either auto, cold or hot and leave the probe on the jetty head.

3.1.2 For most aircraft types one PCA unit (using either one or two hoses) will provide sufficient cooling or heating of the aircraft cabin. For the Airbus A380, two units (four hoses) are required. The stands that are able to accommodate this aircraft size are appropriately equipped.

3.1.3 Any handling agent or airline wishing to use mobile PCA units as an alternative must first have authorisation to do so by the Heathrow Ramp Assurance Team prior to the unit being brought onto the airport. Applications to bring on mobile PCA should be directed to the Heathrow Ramp Assurance Manager on 07730 148 268 and must be supported by documentation to validate 3.1.4 below.

3.1.4 Mobile PCA must meet the requirements set down in the International Air Transport Association Airport Handling Manual of 85dB at 4.6m from the perimeter of the equipment at a height of 1.5m above the ground.

3.2 Rules

3.2.1 When an aircraft is parked on a stand which is fitted with PCA, the PCA must be use when heating or cooling of the cabin is required.

3.2.2 The APU shall not to be used as a substitute for heating or cooling the cabin where PCA is operationally viable.

3.2.3 The running of the APU will be limited to a maximum of:

3.2.3.1 Ten minutes after arrival on stand and fifteen minutes prior to departure for narrow body aircraft.

3.2.3.2 Ten minutes after arrival on stand and fifty minutes prior to departure for wide body aircraft.

3.2.3.3 Fifteen minutes after arrival on stand and ninety minutes prior to departure for the A380.



3.2.4 Exceptions to the APU running times in extreme temperature conditions are stated in ASEnv_OSI_61 Control of Ground Noise and Emissions from Aircraft at Heathrow. These do not affect the use of PCA.

3.2.5 It is best practise to operate PCA whenever an aircraft is on stand as with FEGP.

3.2.6 Heathrow advise PCA should not be attached when the wind speed is 25 knots and above.

3.3 Training

3.3.1 Users must be appropriately trained to use the units; training material is available from Heathrow who will provide training on fixed PCA units for all appointed individuals. The appointed individuals should contact the Heathrow Ramp Assurance Team or your local Heathrow Engineering team.

3.3.2 It is the responsibility of the company providing mobile PCA to ensure all operators are appropriately trained on its use.

3.3.3 All operators of fixed PCA must be trained by the appointed individual(s) who has/have been licensed to train by the Heathrow Airside Safety Department.

3.3.4 Companies using all types of PCA units must maintain records of the licensed trainer(s) and staff trained to operate the system. Heathrow reserve the right to conduct audits of training records at any time.

3.3.5 Authorised users of PCA must comply with any requirements or conditions which may be determined from time to time by Heathrow.

3.4 Fault Reporting

3.4.1 If a fault is found with the PCA unit, it must be reported immediately to the Heathrow Aircraft Operations Unit on 020 8745 6033.

3.4.2 If the PCA system is unserviceable or not available for any reason, APU's can only be used in accordance with the procedures laid down in ASEnv_OSI_061 Control of Ground Noise and Emissions from Aircraft at Heathrow.



3.5 Monitoring

3.5.1 Heathrow Airside Operations staff routinely patrols all areas of the apron and they will carry out monitoring to ensure operators are complying with this OSI.

3.5.2 If it is found that operators are not complying with this OSI, the operator will be notified of the date, time, stand, and aircraft registration number relating to the incident. They will be asked to investigate the matter and provide a full explanation, to the Airside Environment Manager at the address in 3.7 below, within 7 days of notification.

3.6 Conditions of Use

3.6.1 Use of the PCA system by an airline, aircraft operator, aircraft owner or handling agent shall constitute their prior acceptance of the conditions set out in this Instruction at clauses 3.2, 3.3 and 3.4 and the promulgated charges set out from time to time by Heathrow.

3.6.2 Heathrow will provide and maintain each PCA unit, hoses and supporting infrastructure and will provide electricity supply for its operation.

3.6.3 The PCA system may be operated on behalf of and with the permission of their employers only by persons approved by Heathrow as in 3.3.1 and 3.3.2.

3.6.4 Heathrow shall not be liable for any loss or damage resulting from the use of the PCA system or any part thereof due to non-availability from whatever cause.

3.6.5 Neither Heathrow, its servants or agents shall be liable for any loss of, or damage to, property arising directly or indirectly from any act or omission of Heathrow in connection with the provision or use of the service, other than the loss or damage which is solely attributable to wilful misconduct or negligence on the part of Heathrow, its servants or agents.

3.6.6 The airline, aircraft operator, aircraft owner or handling agent shall indemnify Heathrow, its servants or agents against all actions, claims, proceedings and demands (including those of servants of Heathrow or of the airline, aircraft operator, aircraft owner or handling agent) in respect of any loss of or damage to property or for personal injury (including injury resulting in death) which may be made against Heathrow, its servants or agents, arising out of or in connection with



3.6.7 the provision or use of the service other than loss, damage or injury which is solely attributable to wilful misconduct or negligence on the part of Heathrow.

3.7 Enquiries

3.7.1 Any questions regarding this Instruction should be addressed to the Airside Environment Manager, Airside Operations Facility, Building 16887, Heathrow Airport, TW6 2GW telephone: 07900 307 697.

4. References

ASEnv_OSI_61 Control of Ground Noise and Emissions from Aircraft at Heathrow

