

Ground Movement Handling of Airbus A380 & Antonov AN225 Aircraft

Airside Operation Instruction 06

Document Owner – Airfield Operations.



GROUND MOVEMENT HANDLING OF A380 & AN225 AIRCRAFT

1 GROUND MOVEMENT HANDLING OF A380 & AN225 AIRCRAFT

1.1 Introduction

- a. ICAO Annex 14 – Volume 1 (Aerodrome Design and Operations) gives reference to aircraft from code A upwards. Each code designates specific aircraft wingspan/outer main gear wheel span dimensional parameters.
- b. The largest recognised aircraft dimensional code in ICAO Annex 14 – Volume 1 (Aerodrome Design and Operations) is currently code F, which relates to those aircraft with a wing span from 65 metres up to but not including 80 metres. i.e. Airbus A380 (79.80m).
- c. Aircraft with dimensions greater than code F i.e. Antonov 225 (88m), are not currently classified within ICAO Annex 14 – Volume 1 (Aerodrome Design and Operations).

1.2 Objectives

- a. This document is produced to ensure that at all times the ground movement handling, specifically of Airbus A380 and AN225 aircraft, is carried out in accordance with Operational Safety Management Assessments documented (in Safety Assurance Document 16) and approved by the CAA (SARG).
- b. EMA ensures that, during ground movements, required safety margins are maintained for both aircraft to aircraft and aircraft to obstacles.
- c. EMA ensures that aircraft parking arrangements are carried out with due regard to safe distances maintained between A380 & AN225 aircraft and obstacles, as detailed in EASA CS-ADR-DSN.E.365 which states that “the minimum clearance between an aircraft using the stand and any adjacent building, aircraft on another stand and other object as being 7.5m for a code F aircraft”.

1.3 Ground Movement Handling (System Description)

- a. Operational functions included within the ground movement procedure are aircraft landing, aircraft arrival, aircraft parking, aircraft departure and aircraft take-off. Responsibility for these functions lies with both Air Traffic Control (Ground Movement Control) and Airfield Operations. Air Traffic Control safety/operating functions are contained within EMA MATS (Part 2).
- b. Airfield Operations safety/operating functions are obstacle clearance marshallers, aircraft marshallers (if required) and wildlife control duties. Stand allocation is undertaken by the EMA Control Room.

1.4 Ground Movement Handling. (Operational Procedures)

- a. Aircraft Landing.

Procedures to be carried out upon the landing of A380 or AN225, on either runway 09 or 27, are as follows:

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- i. Whilst the aircraft is on 'final approach' or the runway, in order to maintain the correct safety separation, the 'Alpha' Taxiway should be restricted to use by code D (or smaller) aircraft only.
 - ii. Additional runway inspections may be required after landing, at the request of ATC.
- b. Aircraft Arrival (Runway 09 Landing)

Procedures to be carried out whilst A380 or AN225 aircraft are taxiing are as follows:

- i. The aircraft should vacate the runway via taxiway 'Alpha' and re-enter the runway via taxiway 'Whiskey', backtracking on the runway to vacate at taxiway Golf. (See Annex A).
 - ii. To allow correct aircraft/obstacle separation, upon vacating via taxiway 'Alpha', the following should be instigated:
 - The perimeter track road should be closed and cleared of traffic between marshalling Position 1 and Position 2 (See Annex C)
 - iii. Whilst the aircraft is on the 'Alpha' taxiway, in order to maintain correct safety separation, the runway should be restricted to use by code D (or smaller) aircraft only.
 - iv. In order to mitigate the effects of jet blast and FOD problems, ATC should instruct the aircraft to operate on minimum engine thrust whilst manoeuvring. The Airfield Operations Supervisor (AOS) should then carry out an inspection of the taxiway used.
- c. Aircraft Arrival (Runway 27 Landing)

Procedures to be carried out whilst A380 or AN225 aircraft are taxiing are as follows:

- i. Whilst the aircraft is on the 'Alpha' taxiway, in order to maintain correct safety separation, the runway should be restricted to use by code D (or smaller) aircraft only.
 - ii. The aircraft should vacate the runway via taxiway Golf, joining the Alpha taxiway and should then enter the West Apron through the 'Foxtrot' bell-mouth. (See Appendix B).
 - iii. Whilst the aircraft is on the 'Alpha' taxiway and in order to maintain correct safety separation, the 'Bravo' Taxiway on the West Apron should be restricted to use by code D (or smaller) aircraft only.
 - iv. In order to mitigate the effects of jet blast and FOD problems, ATC should instruct the aircraft to operate on minimum engine thrust whilst manoeuvring. The AOS should then carry out an inspection of the taxiway used.
- d. In Low Visibility, the procedures as listed above, together with full Cat. 3-runway/taxiway lighting should be followed.
- e. Aircraft Parking (Runway 27 and 09 Landing)

Procedures to be carried out whilst parking an aircraft of type A380 and AN225.

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- i. A380 & AN1225 aircraft should be positioned on stand 107, as per standard parking procedures.
 - ii. AN225 & A380 should be parked/positioned on stand 107 (stands 106 and 108 should be vacant, stand 105 should downgrade to ATP and 109 should downgrade to a B757-200W or smaller aircraft).
 - iii. During this part of the procedure the aircraft will be under full marshal control until shut down on stand.
 - iv. In order to mitigate the effects of jet blast and FOD problems, ATC should instruct the aircraft to operate on minimum engine thrust whilst manoeuvring. The AOS should then carry out a FOD inspection of the taxiway/apron used.
- f. Aircraft Departure

Procedures to be carried out prior to and during departure of an aircraft of type A380 or AN225

- v. AN225 & A380 should pushback as per standard procedures, (see Annex D,E.)
 - i.
 - ii. In order to mitigate the effects of jet blast and FOD problems, ATC should instruct the aircraft to operate on minimum engine thrust whilst manoeuvring. The AOS should then carry out a FOD inspection of the taxiway/apron.

Aircraft Take-Off (Runway 09 departure)

- i. Whilst the aircraft is on the 'Alpha' taxiway, in order to maintain correct safety separation, both the runway and Bravo Taxiway on the West Apron, (between the 'Bravo' hold and abeam the 'Golf' taxiway) should be restricted to use by code D (or smaller) aircraft only.
- ii. The aircraft should enter the runway via taxiway Golf, (See Annex E).

g. Aircraft Take-Off Runway 27 Departures.

- i. Whilst the aircraft is on the 'Alpha' taxiway, in order to maintain correct safety separation, both the runway and Bravo Taxiway on the West Apron, (between the 'Bravo' hold and abeam the 'Golf' taxiway) should be restricted to use by code D (or smaller) aircraft only.
- ii. The aircraft should enter the runway via taxiway 'Golf' and back-track, and vacate via taxiway 'Whiskey'.
- iii. To allow correct aircraft/obstacle separation, upon vacating the runway the following should be instigated:
 - The perimeter track road should be closed and cleared of traffic between Position 1 and Position 2 (See Annex C)

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- iv. The aircraft will, subject to meeting the above requirements, traverse along the Alpha taxiway and at holding point 'Alpha 1' obtain ATC approval to re-enter the runway, (See Annex D).

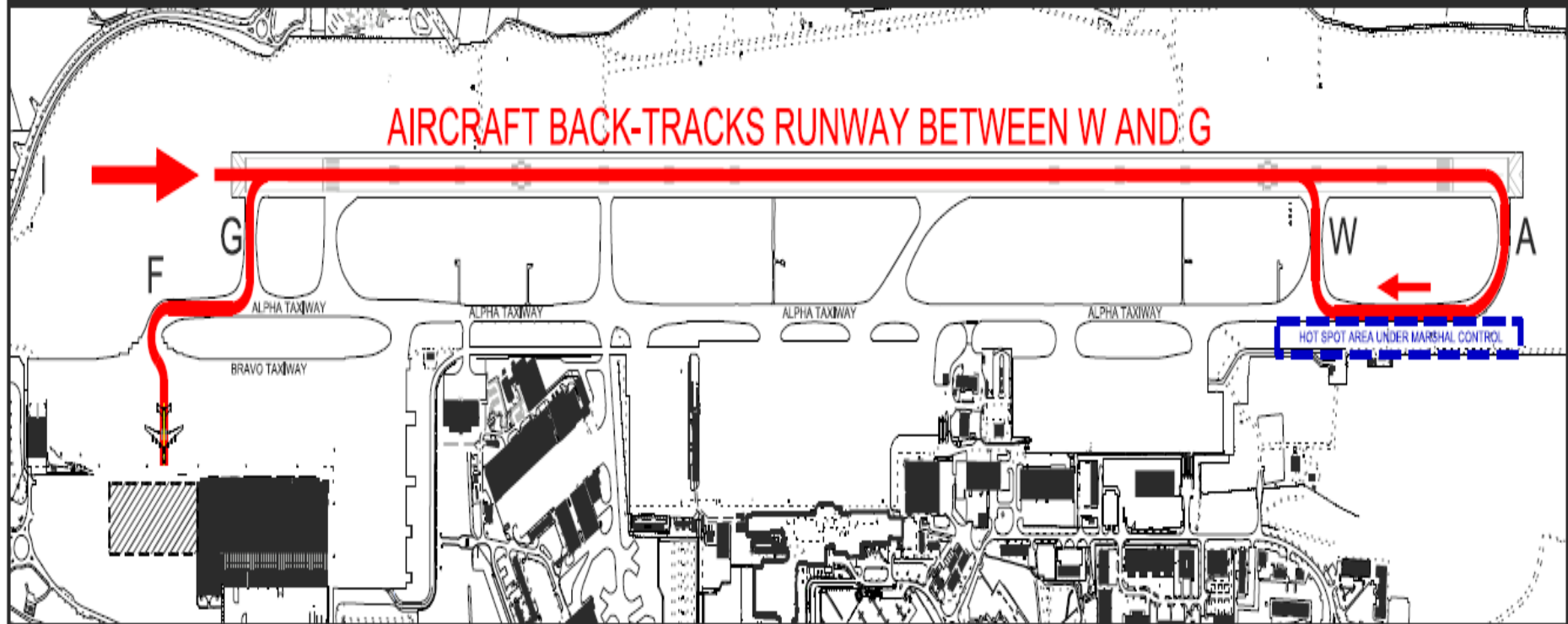
- vi. Whilst the aircraft is on the 'Alpha' taxiway, in order to maintain correct safety separation, the runway should be restricted to use by code D (or smaller) aircraft

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ANNEX A

A380 & AN225 OPERATIONS

09 LANDING, TAXIING AND PARKING

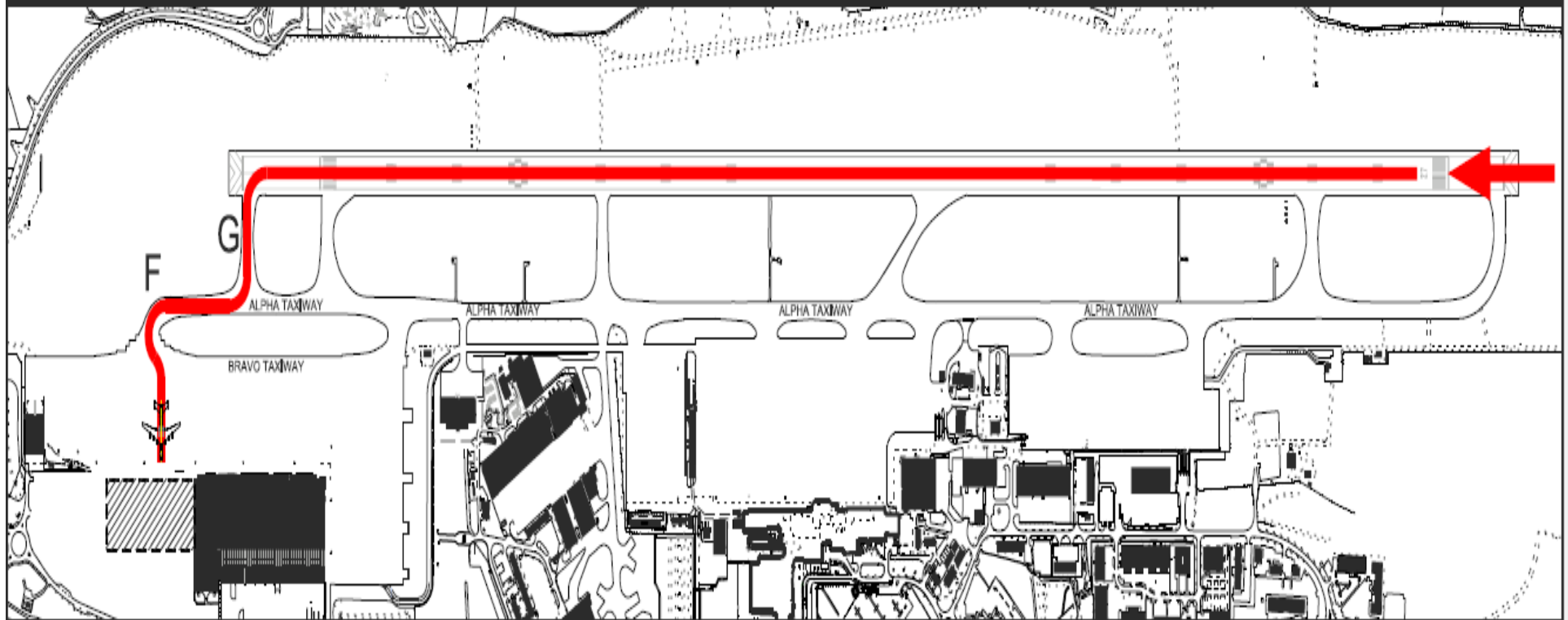


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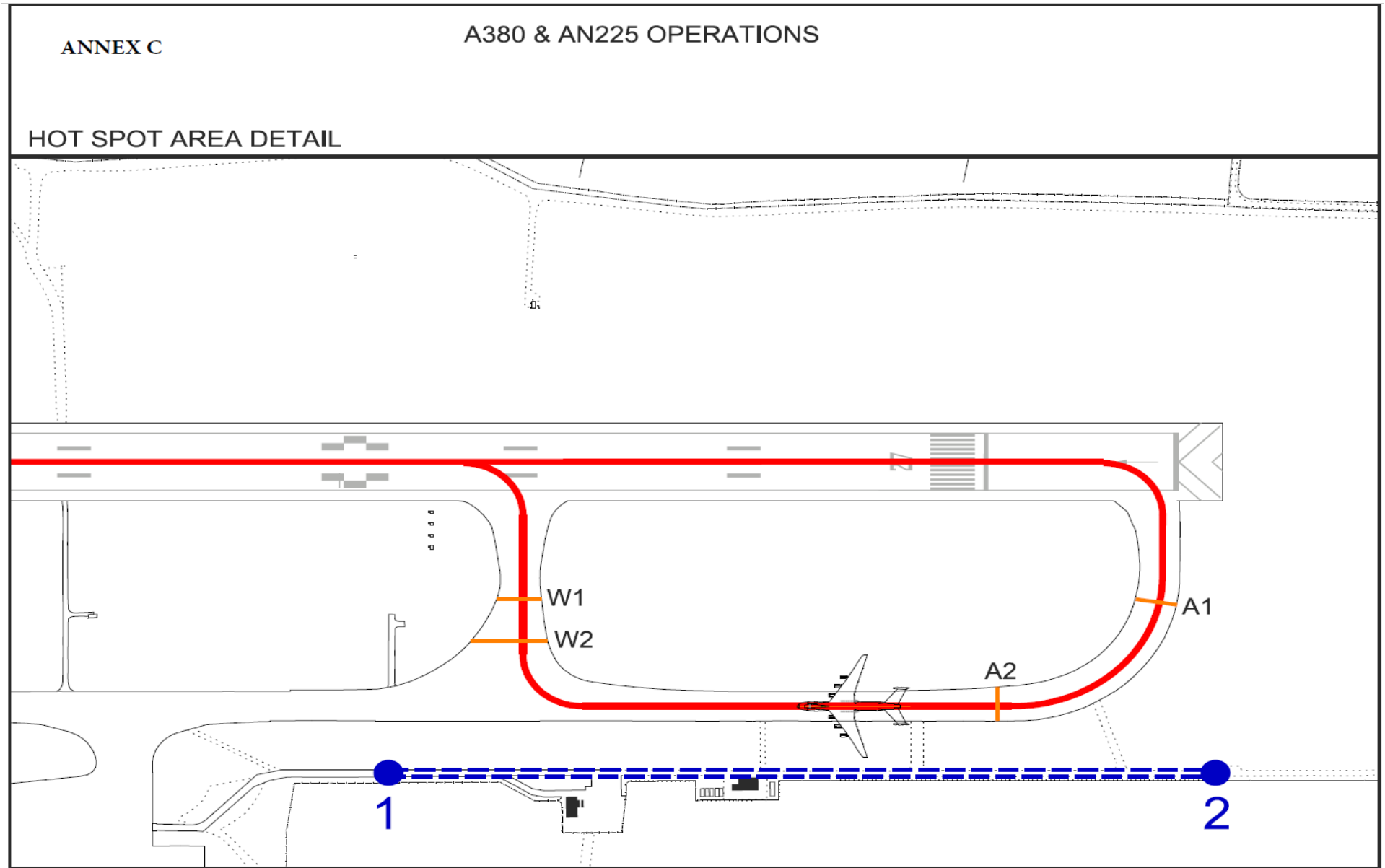
ANNEX B

A380 & AN225 OPERATIONS

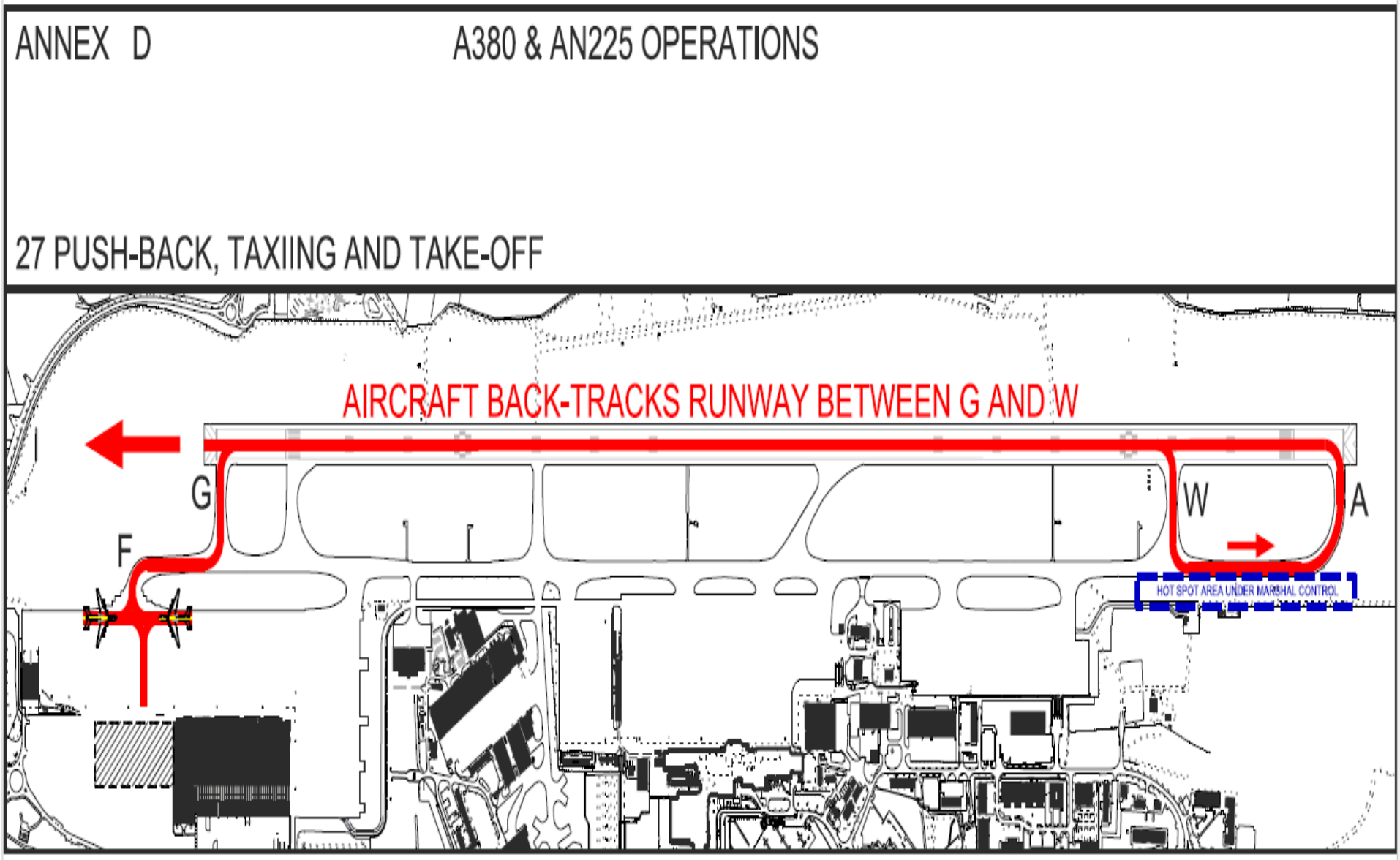
27 LANDING, TAXIING AND PARKING



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GROUND MOVEMENT HANDLING OF A380 & AN225 AIRCRAFT



GROUND MOVEMENT HANDLING OF A380 & AN225 AIRCRAFT

ANNEX E

A380 & AN225 OPERATIONS

09 PUSH-BACK, TAXIING AND TAKE-OFF

