

# Royal Air Force Woodvale



## Flying Order Book

## Section B

## Standing Orders - Flying

## General

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## ORDER WDV B1 – Control of Flying, Supervision and Flying Weather Limits

### References:

- A. 6FTS Flying Order 2305 – Supervision of Flying.
- B. CAP 393 – Air Navigation - The Order and the Regulations (Section 5 – Visual Flight Rules).
- C. Operating Agreement issued by SoS for Defence to Woodvale Aircraft Owners Ltd.

### Rationale

*To enable a safe environment for flying operations at RAF Woodvale and ensure that flying operations are supervised in accordance with correct procedures.*

### Contents

- B1 (1): Control of Flying**
- B1 (2): Supervision**
- B1 (3): Flying Weather Limits**

### Flying Order WDV B1 (1)

WDV B1 (1) All flying operations at RAF Woodvale **shall** be conducted in accordance with regulated local procedures.

### Acceptable Means of Compliance WDV B1 (1)

#### Control of Flying

1. **Air Traffic Control.** When RAF Woodvale Air Traffic Control (ATC) is manned, supervisors **should** ensure that flying operations be conducted under positive control through ATC. When ATC is unmanned, flying operations are permitted under negative control for air system of the Woodvale Aircraft Owners' Ltd (WAOL) within boundaries defined at Reference C. OC Fg **should** ensure that an updated copy of Reference C is contained within the RAF Woodvale Defence Aerodrome Manual (DAM) at Chapter 2 Annex F (Formal Related Operating Agreements).
2. **Overall Control of Flying.** OC Flying is responsible to the Aviation Duty Holder (Comdt 6FTS) for the overall control of flying at RAF Woodvale. Accordingly, OC Flying **should** maintain and distribute the RAF Woodvale FOB and **should** oversee the supervision of ATC services at RAF Woodvale. Orders for OC Flying are detailed at Annex A.
3. **Civilian Air System Operations.** Military flying operations take precedence over civilian air system operations at RAF Woodvale. Ac Cdrs of a civilian, privately owned air system **should** comply with the agreed limitations imposed within the FOB.
4. **6FTS Tutor Flying Operations.** In accordance with 6FTS Flying Orders, flying operations by 6FTS Tutor air systems **should** only be conducted under positive ATC control.
5. **Flying Operations with ATC Unmanned.** When RAF Woodvale ATC is unmanned and during day/VMC conditions:
  - a. **WAOL.** Current WAOL members may operate their air systems subject to regulations detailed by the CAA and orders at Section E of the RAF Woodvale FOB.
  - b. Ac Cdrs **should** follow normal noise abatement procedures and fly standard circuit patterns/heights as defined at Order B2 (4).
6. **WAOL Flying Operations.** WAOL members can operate a civilian air

### Guidance Material WDV B1 (1)



system subject to compliance with Reference D. WAOL members are strongly advised to contact ATC or consult the electronic RAF Woodvale Flypro ('Google Docs') to ascertain the flying programme demands for the day and attempt to fly during quieter periods of military operations if at all possible. Notwithstanding, all WAOL operators **should** operate iaw Section E of this document.

#### Flying Order WDV B1 (2)

WDV B1 (2) Flying operations at RAF Woodvale **shall** be supervised by suitably qualified and authorised persons.

#### Acceptable Means of Compliance WDV B1 (2)

### Supervision

7. **Duty Pilot.** All routine military flying at RAF Woodvale **should** be supervised by a suitably qualified and appointed Duty Pilot (DP) as defined at Reference A. When UAS instructional flying is taking place, OC Flying **should** ensure that the DP role is carried out by a SQEP individual. The Stn Cdr **should** maintain a list of 6FTS officers who are approved to carry-out the role of DP. OC Flying **should** ensure that the current DP list is prominently displayed at the point of authorisation within Stn Ops, RAF Woodvale. Local orders for the DP, supplementary to regulations at Reference A, are detailed at Annex B.

8. **Supervision of AEF Flying.** When AEF flying operations are concurrent with UAS flying operations, the DP **should** maintain overall supervision of all military flying at RAF Woodvale.

9. **Supervision of AEF Flying Outside of UAS Operating Hours.** When AEF flying operations are scheduled outside of programmed UAS instructional flying operations (ie. weekend periods), OC 10 AEF **should** normally act as DP provided that he is qualified and approved for the DP role. There may be circumstances when it is impracticable for OC 10 AEF to provide adequate supervision of AEF flying operations outside of UAS operating times, for instance if OC 10 AEF is required to fly intensively and weather conditions are expected to be marginal. In such circumstances, OC 10 AEF in concert with OC Flying **should** ensure that an alternative DP is provided to supervise AEF flying. If AEF manning dictates that a VR(T) AEF Deputy Flt Cdr is required to act as DP, OC Flying **should** arrange for a regular or FTRS officer (qualified to act as DP) to be appointed as Duty Executive (DE) for the duration of AEF flying operations. Full responsibilities of a DE are detailed at Annex C. If OC 10 AEF is not available for duty during periods of AEF-only flying operations and no AEF Deputy Flt Cdr is available to act as DP, OC Flying **should** ensure that an alternative DP is appointed for the duration of AEF flying operations.

10. **Supervision of Air Traffic Services.** The Senior Air Traffic Control Officer (SATCO) is responsible to the Stn Cdr through OC Flying for the organisation and supervision of all aspects of air traffic control including airfield crash and fire services at RAF Woodvale.

11. **Supervision of WAOL Flying Operations.** When the WAOL is operating, a WAOL duty officer **should** be available at RAF Woodvale when WAOL air systems are operating within the RAF Woodvale ATZ.

<p><b>Guidance Material</b> WDV B1 (2)</p>	<p>12. <b>Supervision of Student Solo Flying.</b> If the QFI authorising a solo student sortie is not the DP, the authoriser <b>should</b> brief the DP on the planned student solo exercise(s).</p> <p>13. <b>Reaction to Emergency States.</b> In the event of an emergency under positive control, or incident requiring closer control, the first officer qualified as DP arriving at the ATC tower <b>should</b> take control until the nominated DP arrives. This is particularly important when, due to the limited manning available at Woodvale, the on-duty DP is supervising whilst airborne.</p> <p>14. Further guidance material for the supervision of flying operations is contained within Annexes A and C.</p>
<p><b>Flying Order</b> WDV B1 (3)</p>	<p>WDV B1 (3) All flying operations at RAF Woodvale <b>shall</b> be conducted in accordance with prescribed weather limits.</p>
<p><b>Acceptable Means of Compliance</b> WDV B1 (3)</p>	<p><b>Flying Weather Limits</b></p> <p>15. <b>Minimum Weather Limits.</b> Minimum weather limits for 6FTS (UAS/AEF) air system operations are detailed at Reference A. Flying operations from RAF Woodvale by WAOL members are constrained by the weather limits detailed at Reference C.</p> <p>16. <b>Daily Operations and Meteorological Brief.</b> All military aircrew operating from RAF Woodvale <b>should</b> attend a daily operations and meteorological briefing covering the intended period of flying operations before commencing flying operations.</p> <p>17. <b>Flying Phase and Diversion.</b> Before 6FTS flying operations commence, the DP <b>should</b> declare the applicable flying phase through ATC and publish the flying phase and diversion details on the 'Google Docs – Ops Brief' electronic sheet. Thereafter, the DP <b>should</b> inform ATC of any changes to the flying phase and diversion and update the electronic 'Google Docs – Ops Brief' accordingly. During military flying operations at RAF Woodvale, the DP <b>should</b> maintain an over watch of forecast and actual weather conditions at RAF Woodvale, within the local flying area and at the nominated diversion airfield(s) to ensure compliance with extant regulations.</p>
<p><b>Guidance Material</b> WDV B1 (3)</p>	<p>18. <b>6FTS Weather Minima.</b> Minimum weather limits, and associated operational constraints, are summarised at Annex D.</p>

Annexes:

- A. Orders for OC Flying, RAF Woodvale.
- B. Orders for the RAF Woodvale Duty Pilot.
- C. Orders for other RAF Woodvale Duty Supervisors.
- D. RAF Woodvale Tutor Operations Phase Chart

## **FOB Section B - Standing Orders Flying (General)**

### **Annex A to Order WDV B1**

#### **Orders for OC Flying, RAF Woodvale**

1. OC Flying **should** supervise the daily flying task at RAF Woodvale and is responsible to HoE and Comdt 6FTS for ensuring ops are conducted in a safe and effective manner. These orders are supplementary to terms of reference issued by higher authority (normally HQ 6FTS).
2. OC Flying **should**:
  - a. Supervise and control the flying task at RAF Woodvale.
  - b. Nominate suitable flying supervisors to act as DP.
  - c. Conduct continuous review of the RAF Woodvale FOB and issue amendments when required.
  - d. Conduct quarterly users' meetings with all elements associated with the flying task at RAF Woodvale so as to improve procedures and efficiency. These meetings may be scheduled with the quarterly flight safety meetings.
  - e. Conduct a continuous review of the Stn Crash Plan and periodically test its effectiveness.
  - f. Liaise with all flying users based at RAF Woodvale and be a point of contact for any visiting users.
  - g. Arrange for an officer to act as OC Flying when his absence coincides with that of the other UAS Sqn Cdr at RAF Woodvale.

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## FOB Section B - Standing Orders Flying (General)

### Annex B to Order WDV B1

#### Orders for the RAF Woodvale Duty Pilot

1. **Orders for the Duty Pilot.** Orders within this annex are supplementary to orders contained within Reference A. OC Flying **should** promulgate a list of those Tutor pilots qualified for RAF Woodvale DP duties. The Duty Pilot (DP) **should**:

- a. Continuously supervise the 6FTS flying task. He **should** liaise daily with the other 6FTS supervisors during the supervision and de-confliction of flying on the station.
- b. Keep the Duty ATC Controller (DATCO) informed of his whereabouts at all times. If 2-way communication with the DATCO is not assured the UAS DP **should** supervise from the ATC tower. The DP may be airborne subject to the following conditions detailed at Reference A, Order 2305:
  - (1) Occasions when the DP is airborne **should** be kept to a minimum (*see Note*).
  - (2) The actual and forecast weather at base and diversion airfield(s) for the planned airborne period plus 30 min **should not** be worse than 1500ft cloudbase and 5km visibility.
  - (3) The DP **should** remain VMC, visually monitor base weather conditions and be able to carry out an expeditious recovery. *RAF Woodvale supervisors **should** consider 'an expeditious recovery' to mean a 'recall to landing time' of less than 10 minutes.*
  - (4) Two-way communication **should** be maintained with ATC at base.
  - (5) The period from engine start to shutdown **should not** exceed 1hr 30 mins.
  - (6) A SQEP individual **should** be immediately available to run the ops desk and action the stn crash plan if the DP is airborne.

*Note: The phrase '**should** be kept to a minimum' allows for some flexibility within the bounds of sensible supervisory practice. If an alternative, suitably qualified officer who can act as DP is on duty at RAF Woodvale, the duty of DP should be handed-over to avoid the DP being airborne.*

- c. Attend the Daily Engineering Brief at 0815 (L) in the Ops Room to coordinate air system availability with the Duty Engineer. Attend the 6FTS Daily Flying Operations Brief (LUAS or MASUAS) at 0830 (L).
- d. Declare the weather phase through ATC and publish it on the 'Google Docs' Ops Brief.
- e. Nominate, and confirm the availability of, the Stn diversion airfield for Tutor operators (when a legal diversion is available) and declare the resultant minimum landing fuels for qualified pilots and solo student pilots. The active diversion airfield and declared minimum landing fuels should be promulgated through ATC and the 'Google Docs' Ops Brief.
- f. Liaise with the DATCO over the selection of the runway to be used, taking into account cross-wind limitations and options in the event of an EFATO.
- g. Promulgate air system availability in Stn Ops.

## **FOB Section B - Standing Orders Flying (General)**

h. On handover of DP duties (off-going):

(1) Inform the DATCO of the change of DP.

(2) Brief the on-coming DP on the current weather phase, diversion airfield and any student flying tasks that are in-progress and planned.

**Orders for Other RAF Woodvale Duty Supervisors**

1. **Orders for OIC AEF Flying.** The OIC AEF Flying **should** carry out the routine supervision and management of AEF flying. He **should** ensure that he carries out a face to face outbrief with all AEF pilots before they commence flying. He **should** monitor base and diversion weather and restrict AEF flying in accordance with the appropriate weather minima in concert with the DP.
2. **Orders for the Duty Executive.** In order to provide an increased level of support and accountability, when OIC AEF flying is a VR(T) Deputy Flt Cdr, a Duty Executive (DE) will be appointed. The DE **should** be selected from RAF Woodvale permanent QFIs (regular or FTRS officers) that are qualified to act as Duty Pilot (DP). The role of DE may be conducted remote from RAF Woodvale provided that the OIC AEF flying can request support from the DE via reliable telephone communication throughout the entire flying period. In addition to providing supervisory support to an AEF Deputy Flt Cdr, the DE **should** be available to provide immediate advice and assistance in the event of an air system accident or serious incident.

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	PHASE 0	PHASE 1 or 2	PHASE 3 (RPO)*	PHASE 3	PHASE 4	PHASE 5
BASE						
Cloudbase (SCT or Greater)	Less than 300 ft or below procedure minima	N/A  No approach aid available at Woodvale.	Not less than 1000 ft aal	Not less than 1000 ft aal	Not less than 1500 ft aal	Not less than 2500 ft aal
Visibility	Less than 800 m or below procedure minima		3700m	3700m	5 km	8 km
Instrument Approach Aid	N/A		Not required			
DIVERSION						
Cloudbase (SCT or Greater)	Not less than procedure minimum plus 200 ft		Not less than procedure minimum plus 400 ft	Not less than 1000 ft aal	Not less than 1500 ft aal	Not less than 2500 ft aal
Visibility	Procedure minimum but not less than 800 m		Not less procedure minimum plus 500 m	3700 m	5 km	8 km
RESTRICTIONS	Flying requires approval of Comdt 6 FTS (or deputy)	Military MG, Green or Civilian IR pilots only	Instrument-Rated pilots only	Solo trainees not to leave the circuit	Solo trainees post IHT/PFB may leave the circuit	Unrestricted
		Weather Diversion Mandatory				
		Visual recoveries permitted if VMC can be maintained.				

This phase chart **should** be interpreted in conjunction with 6FTS Flying Order 2305 and GASO 2305(1).

- (Instrument) Rated Pilots Only

### Wind Limits

	Max Wind Strength	Max Crosswind
Qualified Pilot and 1 <sup>st</sup> / 2 <sup>nd</sup> party passengers	35 kts steady or gusting 40 kts	25 kts
EFT / UAS Students	30 kts	10 kts (15 kts when cleared)
Cadets and 3 <sup>rd</sup> party passengers	20 kts steady or gusting 25 kts	25 kts

### Cadet Flying (See Note 1)

Criteria	Inside ATZ	Outside ATZ
General (Flt Conditions)	VMC and in sight of the ground	
Minimum Visibility	3700m	5 km
Minimum Cloudbase (SCT or greater)	1000 ft aal	1500 ft agl

1. **Cadet Flying.** Due to limited EFATO options at RAF Woodvale, AEF Cadet Flying **should not** be conducted as a continuous series of circuits. Further regulation on the conduct and minimum weather conditions for cadet flying is detailed at GASO 2340.
2. **Phase Caveats.** The following operating limitations may be applied to the declared weather phase under the prescribed conditions:

Condition	Phase Caveat (Limitation)
Weather conditions unsuitable for Cadet and 3 <sup>rd</sup> Party Passenger Flying (as detailed at Paras 2 and 3).	<b>No AEF</b>
Weather conditions are unfit for ab-initio UAS/EFT solo trainee flying or high tide conditions limit EFATO options for the in-use runway.	<b>No Trainee Solos</b>
Minimum of Phase 3 conditions prevail at RAF Woodvale and weather is forecast to enable VFR departure and recovery. However, forecast weather conditions at the diversion airfield fall within Phase 2 conditions.	<b>Phase 3 (Rated Pilots Only)</b>
Solo ab-initio trainee flying planned and crosswind component in excess of 10 kt but not in excess of 15 kt.	<b>15 kts Crosswind Clearance</b>

3. **Meteorological Reports and Forecasts.** Weather requirements at diversion airfields are based on actual conditions and forecast conditions for the period that air systems are expected to use that diversion plus one hour. Although supervisors must pay due regard to forecast weather conditions at the operating base, too rigid an approach could unnecessarily restrict operations. Therefore, while exercising a degree of caution when conditions are forecast to deteriorate, supervisors are expected to use their judgement and will select an appropriate flying phase based on the best possible information including direct observation and airborne reports.
4. **Weather Minima for Take-off.** The minimum RVR is 800 m. The minimum cloudbase for 1<sup>st</sup> and 2<sup>nd</sup> party passengers and UAS training is **500 ft agl** and for 3<sup>rd</sup> party passengers **1500 ft agl**.
5. **Solo Sector Recce.** Phase 5 and **should** be flown not below 2000 ft agl, remaining in sight of the ground and at least 500 ft clear of cloud.
6. **Weather Minima for Instrument Approaches:**
  - a. **Straight-in Approach.** Air systems **should not** descend below the higher of 1000 for the Final Approach Fix (FAF) unless the current RVR for the runway in use is at least equal to the higher of 800 m or the specified minimum for that runway, as published in current approach charts. If no RVR measurement is available, RVR **should** be derived using the RVR conversion table at 6FTS Flying Order 2305(1) Para 22.
  - b. **Circling Approach.** Air systems **should not** descend below 1000 ft QFE, unless reported conditions are **at least equal to the higher of:**
    - Cloudbase of: 400 ft **aal** and a meteorological visibility of 1500 m.
    - Cloudbase and visibility minima for the airfield, as published in current approach charts.
7. **Prevailing Visibility.** The criteria in relation to prevailing visibility at 6FTS Flying Order 2305(1) para 24 **should** be observed.

## FOB Section B - Standing Orders Flying (General)

### ORDER WDV B2 – Air Traffic Control and Local Air System Operating Procedures

#### References:

- A. CAP 413 – CAA Radio Telephony Manual.
- B. CAP772 – Wildlife Hazard Management at Aerodromes.
- C. RAF Woodvale DAM Chapter 2 Annex E – Aerodrome Hazard Log.

#### Rationale

*To define local air traffic control, air-ground communication and air systems operating procedures deemed necessary for the safe operation of multiple air system types from differing operating authorities at RAF Woodvale.*

#### Contents

- B2 (1): Air Traffic Control**
- B2 (2): Air System Ground Movements**
- B2 (3): Departure and Arrival Procedures**
- B2 (4): Visual Circuit Procedures**

#### Flying Order WDV B2 (1)

WDV B2 (1) All flying operations at RAF Woodvale **shall** be subject to appropriate and standardised Air Traffic Control (ATC) procedures.

#### Acceptable Means of Compliance WDV B2 (1)

#### Air Traffic Control.

1. **Airfield Operating Period.** The daily airfield operating period is normally from 0900 hrs to 1745 hrs (local) or 30 min before sunset, whichever is earlier.
2. **RAF Woodvale METAR.** ATC staffs **should** produce the RAF Woodvale METAR every hr +50 mins within the airfield operating period and SPECI as required by meteorological conditions.
3. **Altimetry.** The altimeter pressure datum that all Ac Cdrs **should** use within the RAF Woodvale ATZ is QFE. Tutor operators **should** refer to Order C3 (1) for further guidance.
4. **ATC Unmanned – ‘Negative Control’ R/T Procedures.** When ATC is unmanned, operators who are approved to conduct flying operations **should** adopt the following ‘NEGATIVE CONTROL’ R/T procedures. Ac Cdrs **should** complete standard R/T calls in accordance with Reference A on the “Woodvale Approach” frequency of 121.0 MHz. If a WAOL or transiting GA air system contacts “Woodvale Radio” when ATC is closed, only ‘reported’ information may be provided by airfield users such as the runway in use, circuit direction, the ‘reported’ number of air systems operating at that time and whether they are in circuit or in the local area. Ac Cdrs **should not** articulate clearances or approvals to any other air systems.
5. **Transponder Procedures.** Whilst operating in the local flying area, Ac Cdrs of RAF Woodvale based military air system **should** squawk 7375 with ALT (when available) unless subject to alternative ATC instructions.
6. **Noise Abatement.** Ac Cdrs **should** avoid direct overflight of Formby, Ainsdale, Birkdale and Southport whenever possible within the bounds of good airmanship and air safety.

7. **Aerodrome Wildlife Hazard Management.** RAF Woodvale ATC personnel are contracted<sup>1</sup> to 'provide bird scaring and bird control facilities' in accordance with Reference B. There are no personnel dedicated solely to aerodrome wildlife hazard management at Woodvale. ATC controllers and assistants conduct such duties alongside the provision of ATC services. When ATC personnel resources become stretched, response to wildlife hazards on the aerodrome (particularly bird hazards) may be slower than ideal. This limitation is described within the aerodrome hazard log at Reference C. To minimise adverse impact on air safety, personnel **should** employ the following procedures:

- a. **DATCO.** If the DATCO considers that response to wildlife hazard on the aerodrome might be compromised, or if wildlife hazards are exacerbated, he **should** inform the 6FTS Duty Pilot (DP) and any Ac Cdrs in the vicinity of the aerodrome who may be directly affected by a wildlife hazard.
- b. **6FTS Duty Pilot.** If the DP has been informed that aerodrome wildlife hazard management may be compromised, he **should** consider employing mitigations to minimise any adverse impact on air safety. Examples of such mitigations are modification of the Woodvale flying programme, a moratorium on continuous periods of circuit flying, increased 'Fuel on the Ground' (FoG) or cessation of 6FTS flying operations. The DP may assist the DATCO to manage ATC resources by informing when continuous periods of circuit flying are planned, through the Woodvale flying programme or verbally to ATC (Extension 7243).
- c. **Air System Operators.** If an Ac Cdr identifies an increased wildlife hazard on the aerodrome, he **should** inform ATC and consider employing appropriate measures to minimise any resultant degradation in air safety.

**Guidance  
Material  
WDV B2 (1)**

8. **Definition of Sunset.** ATC/Ops staffs **should** promulgate the daily sunset and projected latest airfield opening time (defined at para 1) within the electronically published Daily Operations Brief. ATC staffs and operators **should** use sunset times as published in the UK Air Almanac (AP1602). The current AP1602 is available in electronic (PDF) format through the internet at:

<http://astro.ukho.gov.uk/nao/publicat/ukaa.html>

9. **Airfield Details.** RAF Woodvale airfield details are published in the RAF Woodvale DAM, AIDU FLIPs and the UK AIP.

**Flying Order  
WDV B2 (2)**

WDV B2 (2) All air system ground movements at RAF Woodvale **shall** be conducted in a safe, controlled and coordinated manner in accordance with approved local procedures.

<sup>1</sup> ACT/01937 Schedule 2 Part 13.



Acceptable  
Means of  
Compliance  
WDV B2 (2)

**Air System Ground Movements**

10. **Airfield Manoeuvring Areas.** Use of the Southern Taxiway by jet and turbo prop air systems, other than detailed below, is prohibited (except in an emergency). Taxi patterns are to be iaw Annex B. For jet and turbo prop air systems the Southern Taxiway is closed between the Runway 03 Hold and the Runway 26 Hold. The western end of the Southern Taxiway (Runway 08 Hold) may be used as a refuge to complete pre-flight checks for Runway 08.
11. **Air System Dispersal Areas.** All personnel engaged with flying operations **should** exercise extreme caution in the vicinity of air systems and **should** have particular regard for safety in the vicinity of propellers. Excepting aircrew who are directly crewing into an air system, all personnel within any active air system operating surface at RAF Woodvale **should** wear a high visibility jacket. Passengers and AEF cadets may wear helmets when walking to and from the air system if escorted by an AEF flight staff cadet or qualified ground crew person.
12. **Air System Parking Procedures – ‘Tutor Dispersal’.** Unless manoeuvring into or out of a marked parking slot, Ac Cdrs **should** taxi within the Tutor dispersal using the solid yellow taxi markings as illustrated at Annex A. Groundcrew personnel should ensure that all ground support equipment (i.e. air system steps and fire extinguishers) is stored within a marked ground equipment area unless such equipment is under direct and close supervision by a groundcrew person. Ac Cdrs **should not** taxi directly past ground equipment which is outside of a marked ground equipment area unless a competent air system marshaller is present to indicate safe clearance from the obstruction.
13. **Engine Starting.** Before engine start, military Ac Cdrs **should** ensure that ground crew are present in the vicinity with fire extinguishers. They **should** request engine start clearance on UHF 282.575 (WDV APP #2).
14. **Taxi Clearance.** Under conditions of positive ATC control and prior to taxi, pilots **should** request taxi clearance, stating:
  - a. The number of Persons On Board (POB).
  - b. Intentions. For military Woodvale-based Ac Cdrs, this **should** include the intended de-confliction operating area if no ATC radar unit Traffic Service is expected to be available within the local operating area.
  - c. Request for relevant altimeter pressure settings if required (ie. RPS for a navigation sortie).
  - d. Sortie length, if this varies from the ‘standard sortie length’, assumed to be one hr for UAS sorties and 25 minutes for AEF sorties.
  - e. Destination, in the case that it is a land-away sortie or if there is an intermediate point of arrival.

Guidance  
Material  
WDV B2 (2)

15. **Taxiing.** Taxi patterns are illustrated at Annex B and described as follows:
  - a. **Runway 08L (Piston Engine Air Systems).** Ac Cdrs should expect

## FOB Section B - Standing Orders Flying (General)

initial taxi clearance to taxi to Point ALPHA or to hold at the southern end of the Tutor ASP. Ac Cdrs must await further clearance to commence taxi via the Southern Taxiway. After landing, the return taxi pattern is through Point ALPHA onto the Eastern Taxiway.

b. **Runway 08L (Jet and Turbo Prop Air Systems).** Ac Cdrs should expect initial taxi clearance to taxi to Point ALPHA or to hold at the southern end of the Tutor ASP. Ac Cdrs may be cleared by ATC for back-track to Southern Taxiway Runway 08 Hold as a refuge to complete pre-departure checks. Following completion of all pre-departure checks, Ac Cdrs **should** advise ATC that they are "Ready for departure". Air systems will be held before back-track is cleared if landing or departing traffic has priority. After landing, the return taxi pattern is through Point ALPHA onto the Eastern Taxiway.

c. **Runway 26R.** Ac Cdrs should expect initial taxi clearance to taxi to Point ALPHA or to hold at the southern end of the Tutor ASP. Following completion of all pre-departure checks, Ac Cdrs **should** advise ATC that they are "Ready for departure". After landing:

(1) Piston engine ac cdrs should expect clearance to taxi via the Southern Taxiway and exit at Point ALPHA onto the Eastern Taxiway.

(2) Jet and Turbo Prop ac cdrs should expect clearance to back-track the runway for exit at Point ALPHA onto the Eastern Taxiway.

d. **Runway 21R.** Ac Cdrs should expect to taxi via the Eastern Taxiway and the Jet Loop. ATC may direct traffic to taxi via the "Short Hold". Pre-departure checks may be carried out on the Short Hold or Jet Loop as applicable. Following completion of all pre-departure checks, Ac Cdrs **should** advise ATC that they are "Ready for departure". After landing:

(1) Piston engine ac cdrs should expect clearance to taxi via the Southern Taxiway or RW 08 and exit at Point ALPHA onto the Eastern Taxiway.

(2) Jet and Turbo Prop ac cdrs should expect clearance to taxi via RW 08 and exit at Point ALPHA onto the Eastern Taxiway.

e. **Runway 03L.** Taxi patterns for RW 03L are as follows:

(1) Piston engine ac cdrs should expect clearance to taxi via the Southern Taxiway and conduct pre-departure checks at the 03 Hold.

(2) To avoid the Southern Taxiway, Jet and Turbo Prop ac cdrs should expect clearance to taxi via RW 26. They can expect to hold abeam the DRDF facility.

(3) After landing, ac cdrs should expect to taxi via the Eastern Taxiway.

16. **Bi-directional taxi flow.** A bi-directional taxi pattern exists along the Eastern Taxiway through Hold Point ALPHA. For Jet and Turbo Prop air systems, cdrs should expect routine back-track for ingress and egress of

## FOB Section B - Standing Orders Flying (General)

Runways 08 and 26 (respectively). Operators **should** note the following procedures in order to maintain safe separation of air systems:

- a. **Compliance with ATC instructions.** Operators **should** comply with all ATC instructions for taxiing operations. The bi-directional flow of the Eastern Taxiway may result in air systems being held before initial taxi in order to recover air systems from the runway after landing,
- b. **Visual circuit training.** The DATCO or Duty Pilot **should** consider restricting periods of continuous visual circuit training during busy periods of air system departure and/or arrival. Operators **should** comply with such restrictions when they are applied through ATC instructions or during out-brief by a flying authoriser.
- c. **Use of the Tutor ASP (Southern End) as a Taxiing Refuge.** To facilitate an orderly flow of traffic through the bi-directional Eastern Taxiway, ATC may direct departing traffic to hold at the southern end of the Tutor ASP. This would be to facilitate recovery of traffic from Runway 08/26 through Point ALPHA to the parking ramp. Ac Cdrs **should** exercise caution whilst holding on the Tutor ASP to ensure that propeller slipstream does not present a hazard to persons, vehicles or other air systems. Cdrs **should not**, under any circumstances, emit high intensity strobe lights whilst holding on the Tutor ASP.
- d. **Use of Runway 08 Southern Taxiway refuge.** Operators **should** consider requesting use of the Runway 08 Hold on the Southern Taxiway for completion of pre-departure checks when such procedures may be prolonged (i.e. a cold engine).
- e. **Hold Point ALPHA.** Operators conducting checks in a queue at Point ALPHA **should** ensure that safe separation is maintained from parked air systems and personnel on the Tutor parking ramp. High intensity strobe lights **should not** be selected on in close proximity to personnel who are operating on the Tutor parking ramp.

### Flying Order WDV B2 (3)

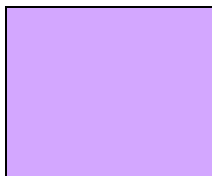
WDV B2 (3) All air system departure and arrival procedures at RAF Woodvale **shall** be conducted in accordance with standardised local procedures.

### Acceptable Means of Compliance WDV B2 (3)

#### Departure and Arrival Procedures

17. **6FTS Tutor Departures - Runways 03L and 21R.** Ac Cdrs operating 6FTS Tutor ac **should** adhere to the local departure procedures for runways 03L and 21R detailed at Order WDV C4 (1); specifically the 'jink procedure' which is designed to optimise land-out options in the event of EFATO.
18. **West Lancashire Microlight School.** Ac Cdrs **should** be aware of the West Lancashire Microlight School (WLMS), situated 3nm SE of RAF Woodvale. Ac Cdrs of RAF Woodvale based ac **should** avoid WLMS (N5332 W00301) by  $\frac{3}{4}$  nm up to 1000' agl. WLMS are expected to inform DATCO, RAF Woodvale, whenever flying is planned to take place and WLMS pilots are briefed to avoid the Woodvale ATZ unless positively cleared.
19. **Model Aircraft Site (Segars Lane).** Ac Cdrs **should** be aware of a model aircraft flying site at 070°/2.5nm from RAF Woodvale (OS Grid SD343118).

## FOB Section B - Standing Orders Flying (General)



20. **Visual Arrivals.** Ac Cdrs **should** contact Woodvale Approach on 121.0 MHz prior to entering the ATZ.

21. **QGH Arrivals.** Withdrawn.

### Guidance Material WDV B2 (3)

22. **Visual Departures.** Once clear of the visual circuit, a Basic Service is available from Woodvale App during normal airfield operating periods. A Traffic Service or Deconfliction Service may be requested from Warton Radar (233.175) or Liverpool Approach (119.85). Operators should note that normal operating periods for Warton Radar are Monday to Friday; no radar service is available on Saturday and Sunday.

23. **Runway 03 and 21 Departures.** 6FTS Tutor air systems are obliged to fly modified climb-out profiles from runways 03L and 21R involving a 'right jink' through approximately 30 deg at approximately 200ft on climb-out. This procedure is necessary to optimise land-out options in the event of EFATO. AS Cdrs departing from runways 03L and 21R who follow this procedure may continue to clear the ATZ on the track achieved during the 'jink procedure' detailed at Order WDV C4 (1).

**Flying Order  
WDV B2 (4)**

WDV B2 (4) All visual circuit procedures at RAF Woodvale **shall** be conducted in accordance with standardised local procedures.

**Acceptable  
Means of  
Compliance  
WDV B2 (4)**

**Visual Circuit Procedures**

25. **Recovery.** Ac Cdrs **should** contact Woodvale Tower before joining the visual circuit and may be held off if the circuit is full or when non-standard circuits are in progress. Notwithstanding the requirement to minimise noise disturbance within the area of the airfield, standard joining procedures are:

a. **Initial Join.** Ac Cdrs **should** position at the Initial Point (IP) for the runway in use. They **should** continue towards the airfield on the deadside before joining the circuit. IPs for each runway are shown in Annex C. The initial join for RW03L is non-standard because the right hand departure jink infringes the circuit deadside. Joiners **should** remain at 1000 ft and east of the Formby by-pass until visual with circuit traffic, as detailed at Annex C (Fig 1). The initial join for RW21RH is non-standard for noise abatement over Ainsdale. Ac Cdrs **should** be aware of the departure jink when turning crosswind as detailed at Annex C (Fig 3). Pilots joining through the Runway 21 IP are encouraged to avoid the noise sensitive area over Birkdale below 2000ft AGL as illustrated at Annex C (Fig 2).

b. **Overhead Join.** The overhead join **should** be flown in the circuit direction commencing from a minimum of Circuit Height + 1000ft (normally 1800 ft), crossing the active threshold before descending on the deadside to join crosswind. Ac Cdrs **should** call 'Deadside, Descending' in the standard position.

c. **PFL.** Tutor High Key is from 2500-3500 ft QFE on the deadside of the duty runway with Low Key at approximately 1500 ft QFE downwind.

26. **Non-Standard Joins.** Ac Cdrs **should** obtain prior ATC clearance before commencing any non-standard join to the visual circuit (i.e. any join procedure not detailed at para 22). ATC may refuse clearance for a non-standard join if it may cause a conflict with other traffic in the ATZ.

27. **VRIAB.** Run in and breaks are permitted not below 500 ft QFE for runway 26R and not below 800 ft for runways 03L, 08L and 21R.

28. **Circuit Height.** All circuits **should** be flown on the RAF Woodvale QFE.

Standard circuit heights for light ac are:

- a. Normal Circuit: 800 ft.
- b. Flapless Circuit: 800 ft (see Note 1).
- c. Glide Circuit: 1500 ft.
- d. Low-Level Circuit: 500 ft (see Note 2).
- e. The normal circuit height for other fixed-wing traffic is 1000 ft.

### Notes:

1. Tutor flapless circuits may only be practiced on Runways 21R and 26R by QSPs.
  2. Tutor low-level circuits are prohibited on runway 03L, 08L and 21R.
29. **Circuit Patterns.** Tutor ac carry out standard RAF oval circuits, turning downwind at 500 ft QFE for a normal circuit or at 1000 ft QFE for a glide circuit. Due to limited landing options in the event of EFATO, non-standard circuits are flown on RW21R and RW03L as shown at Annex C. The departure jinks are mandatory for 6FTS Tutor ac and recommended for all other air systems. However Ac Cdrs **should** consider particular air system limitations to determine whether they are able to comply with the recommendation. More information on the departure jinks is available at Order WDV C4 (1).
30. **Non-Standard Circuits.** Pilots intending to carry out low-level or glide circuits **should** make an information R/T call on the upwind leg. No response will be made by ATC except to deny permission which **should** be acknowledged by the requesting pilot.
31. **Increased Risk in the Event of EFATO.** Runways 08 and 26 have more restricted options in the event of EFATO compared to those for Runways 03 and 21. Ac Cdrs should be aware that Tutor supervisors and operators will consider the following measures to mitigate increased risk in the event of EFATO:
- a. **Touch-and-go.** In light headwind conditions (i.e. less than 10 kts) EFATO options become more restricted on both Runway 08 and 26. Operators can expect ATC/Duty Pilot to declare use of Runway 03 or 21 in such conditions, even if this means accepting a crosswind that would normally favour Runway 08 or 26.
  - b. **Glide and flapless landings.** Whilst conducting glide or flapless landings on Runway 08/26, operators **should** consider a go-around or full-stop landing as preferable to a touch-and-go landing, especially when the headwind component is less than 15 kts.
32. **PFL Trg at RAF Woodvale.** Non-standard PFLs may be carried out onto the airfield. PFLs in the opposite (left/right) circuit pattern **should** be requested via ATC and will be declined if other air systems are joining.
33. **Practice Engine Failure After T/O (EFATO).** Ac Cdrs **should** precede any practice EFATO with a call on Woodvale Tower of "Fan stop"; on completion of the exercise a "Climbing away" call **should** be made. Instructors carrying out a practice EFATO, which culminates in a land-ahead decision, **should** Go Around as soon as it is clear a successful landing in the chosen area would have been achieved. Tutor and WAOL Ac Cdrs **should** adhere to CAA General Exemption E3940 to SERA.5005(f) (previously ANO Rule 5). Once more than half of the upwind turn has been completed, Ac Cdrs **should** call "simulated engine failure downwind" to differentiate from an upwind "Fan stop".
34. **Practice Turn Back and Practice Engine Failure Downwind.** Ac Cdrs **should** request permission from ATC before carrying out a practice turn back or practice engine failure downwind. This **should** be sought during a downwind or pre-departure R/T call, for example "c/s Downwind Touch and Go, Request Turn



## FOB Section B - Standing Orders Flying (General)

Back”.

35. **Circuit Congestion.** The maximum number of ac permitted in the visual circuit is 4 with a fifth ac landing or departing.

36. **Landing Clearance.** Unless cleared to “Land” or “Touch and Go” QSPs **should** go around by 100 ft MSD. Solo students **should** go around by 200 ft MSD.

37. **Safe Taxi Speed Post Landing.** Woodvale based ac may be asked by ATC to call when at a safe taxi speed after landing. This information is to facilitate early clearances for other ac to use the runway, eg. When taxiing for RW08L.

38. **Use of Transponder in the Visual Circuit.** Pilots **should** squawk with 7375 + ALT (where this facility is fitted) when flying in the visual circuit.

39. **Circuit Priorities.** The DATCO **should** exercise the following order of priorities to ac in the circuit:

- a. Air system in distress or having declared ‘Minimum Fuel’.
- b. Air system intending to Land.
- c. Air system ready for departure.
- d. Air system in the circuit intending to Touch and Go / Go Around.

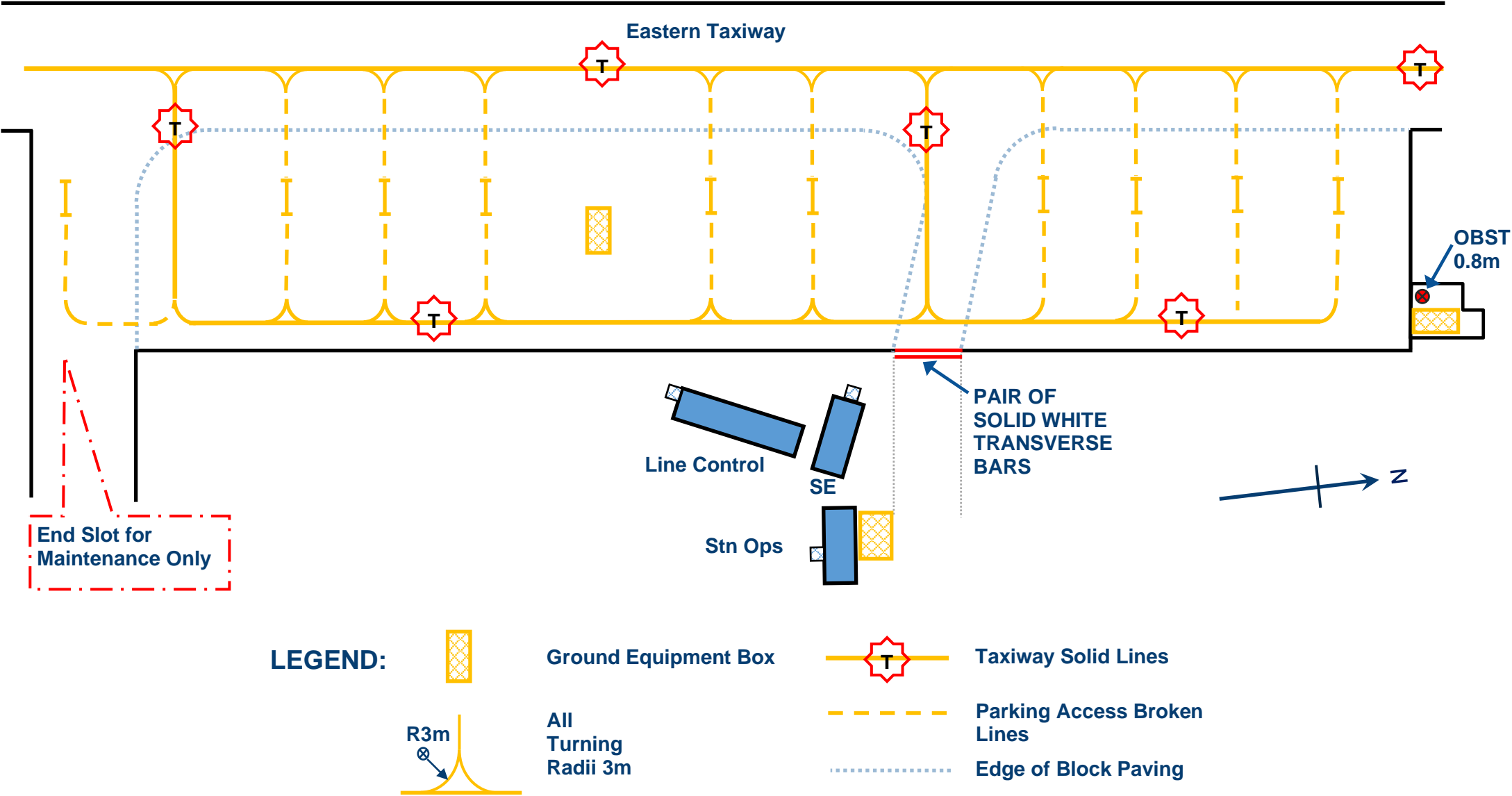
**Guidance  
Material  
WDV B2 (4)**

40. **Runway Vacated Calls.** Pilots **should** call “runway vacated” when the air system is taxied clear of the active runway.

Annexes:

- A. Modified ‘Tutor Dispersal’ Parking Procedures.
- B. Standard Taxi Patterns.
- C. Runway Initial Points, Standard Join Tracks and Circuit Patterns.

Modified 'Tutor Dispersal' Parking Procedures



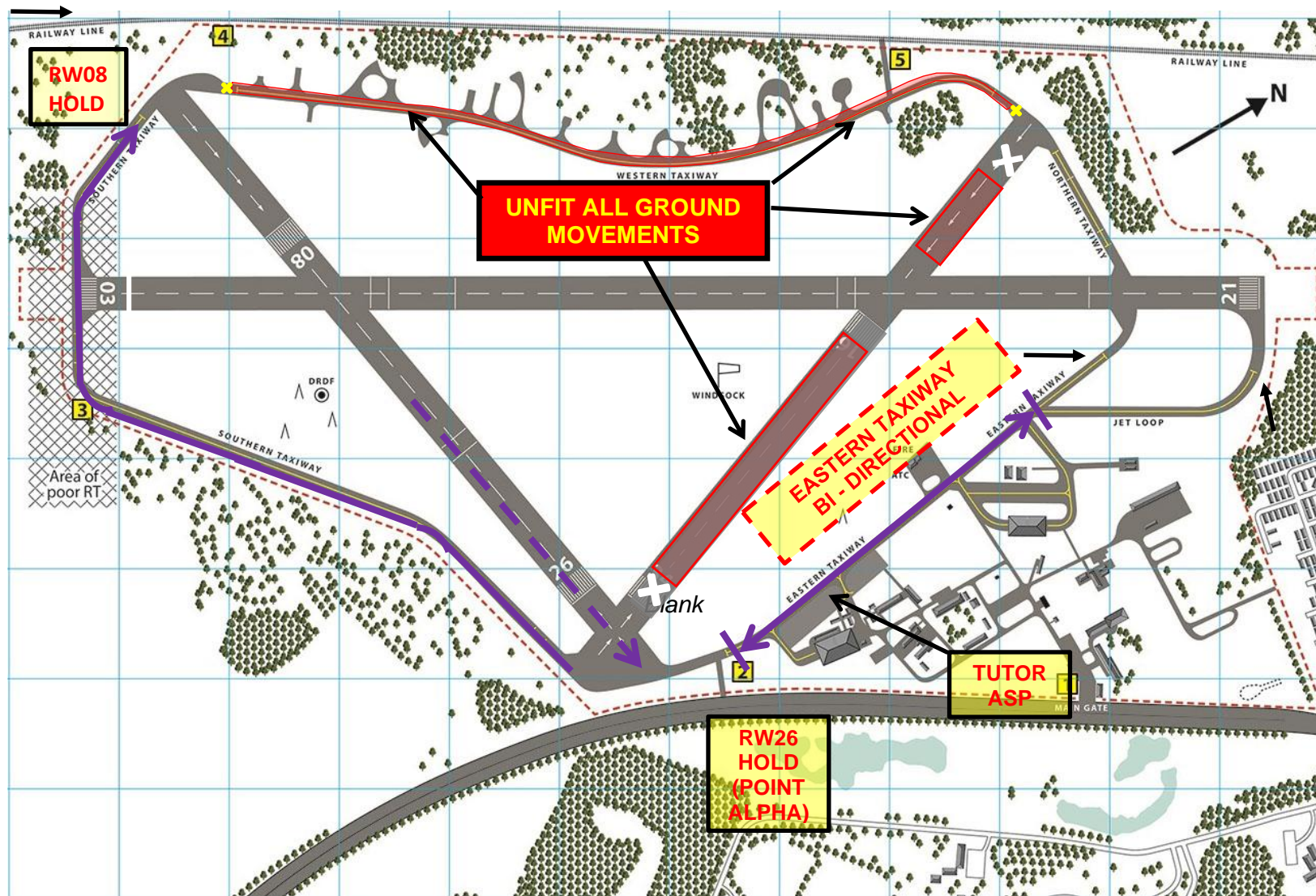


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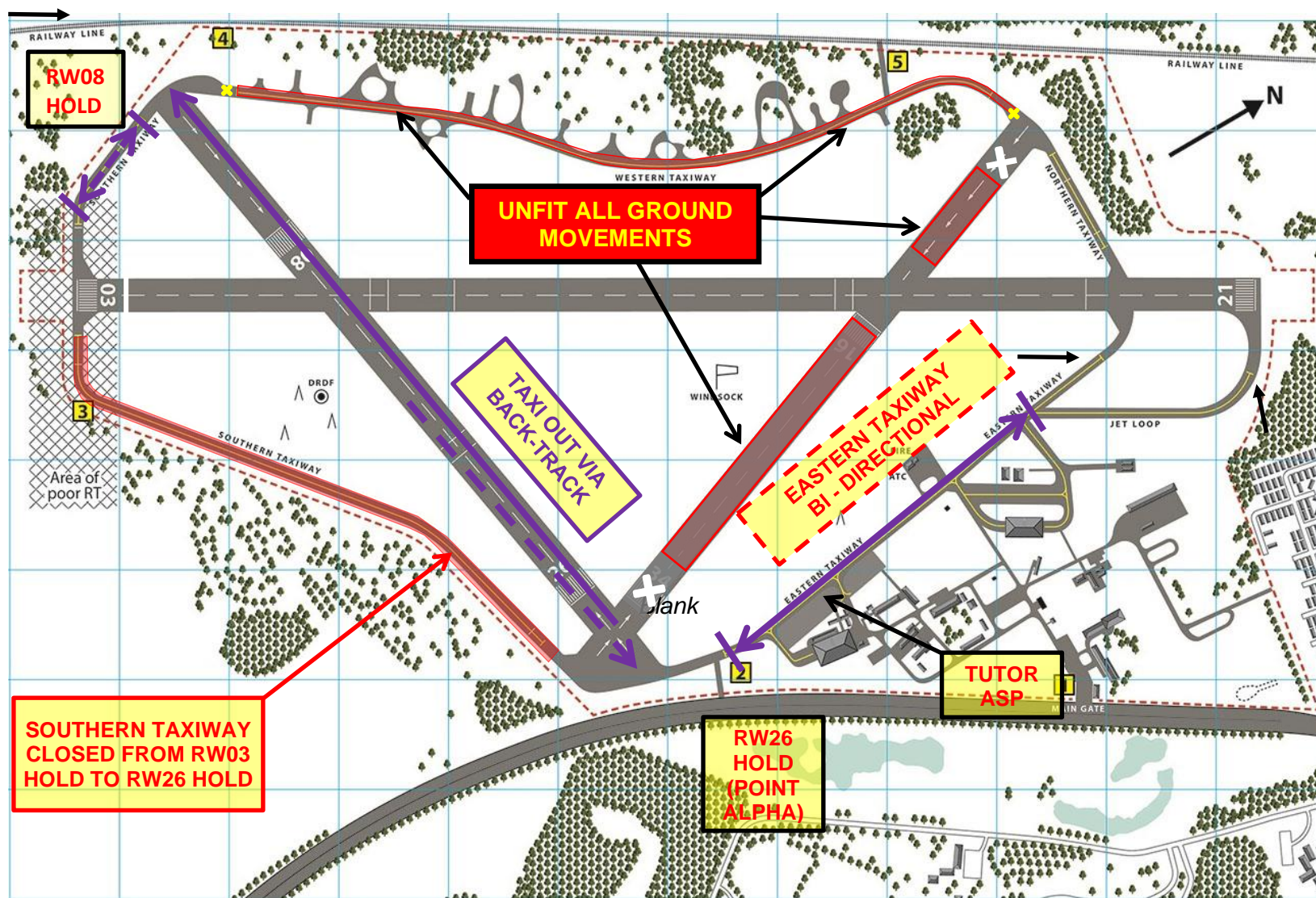




FOB Section B - Standing Orders Flying (General)

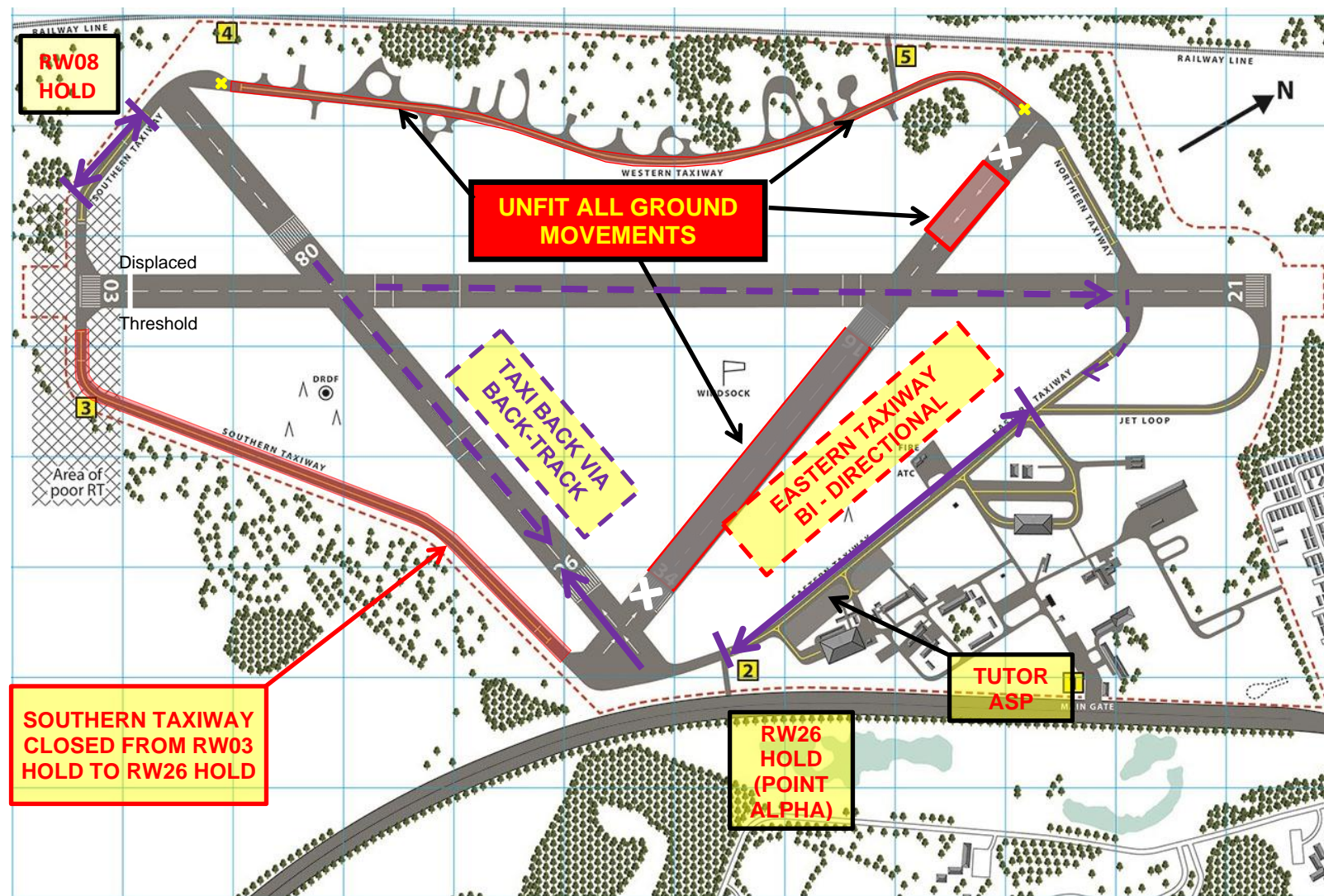
Annex B to Order WDV B2 - Standard Taxi Patterns

TAXI PATTERN FOR JET AND TURBO PROP AIR SYSTEMS – RUNWAY 08.



FOB Section B - Standing Orders Flying (General)

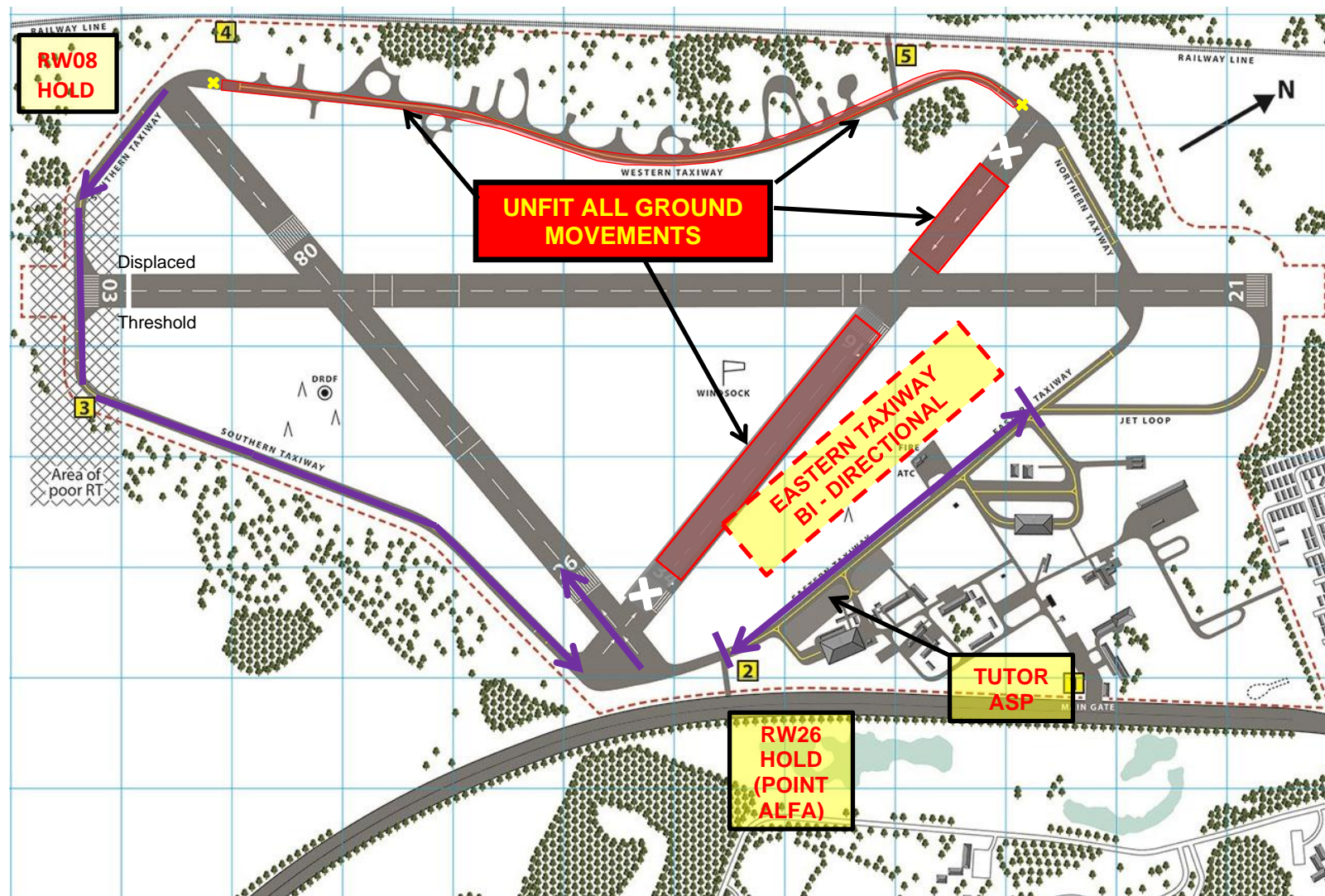
TAXI PATTERN FOR JET AND TURBO PROP AIR SYSTEMS – RUNWAY 26.





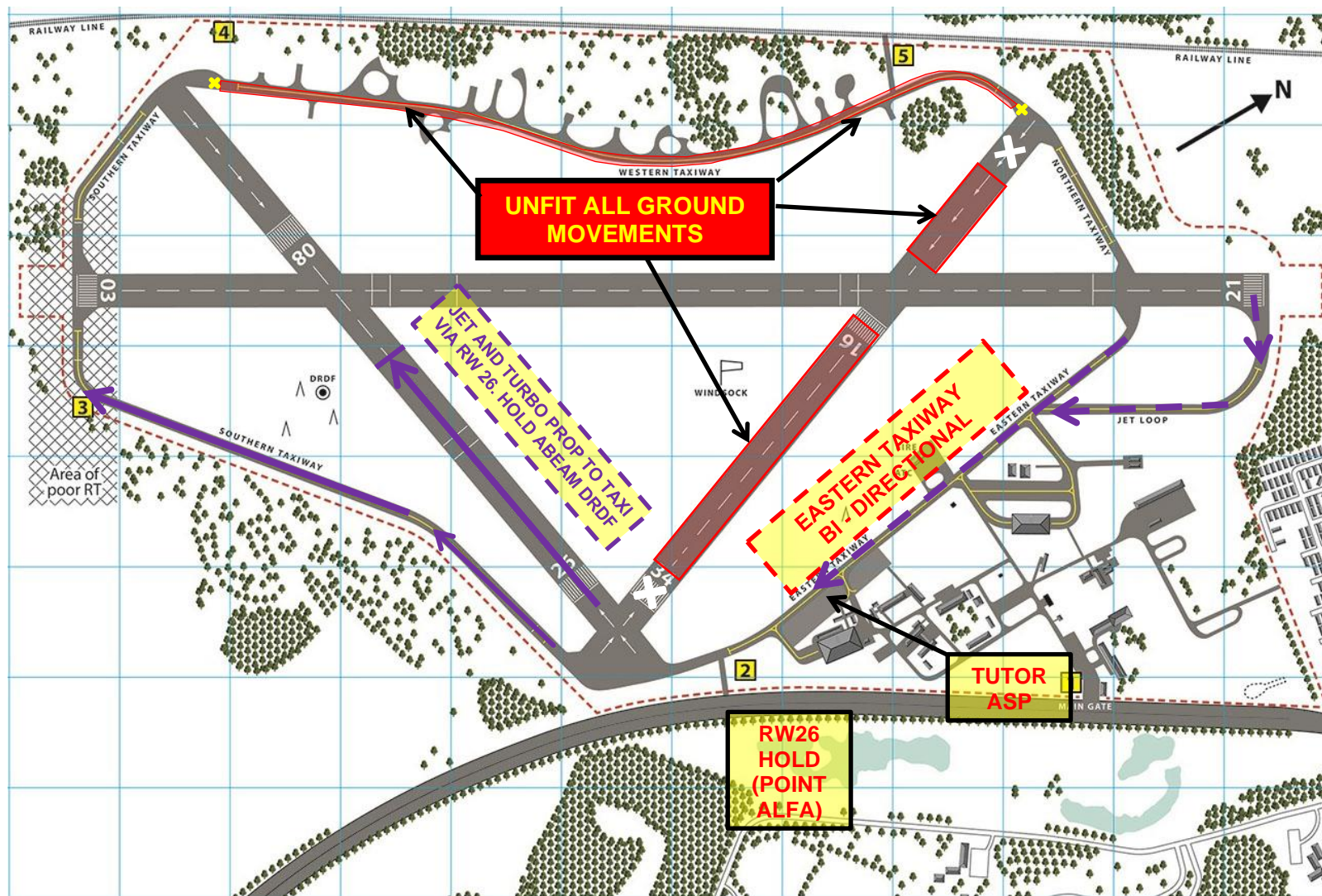
## FOB Section B - Standing Orders Flying (General)

### TAXI PATTERN FOR PISTON ENGINE AIR SYSTEMS – RUNWAY 26.



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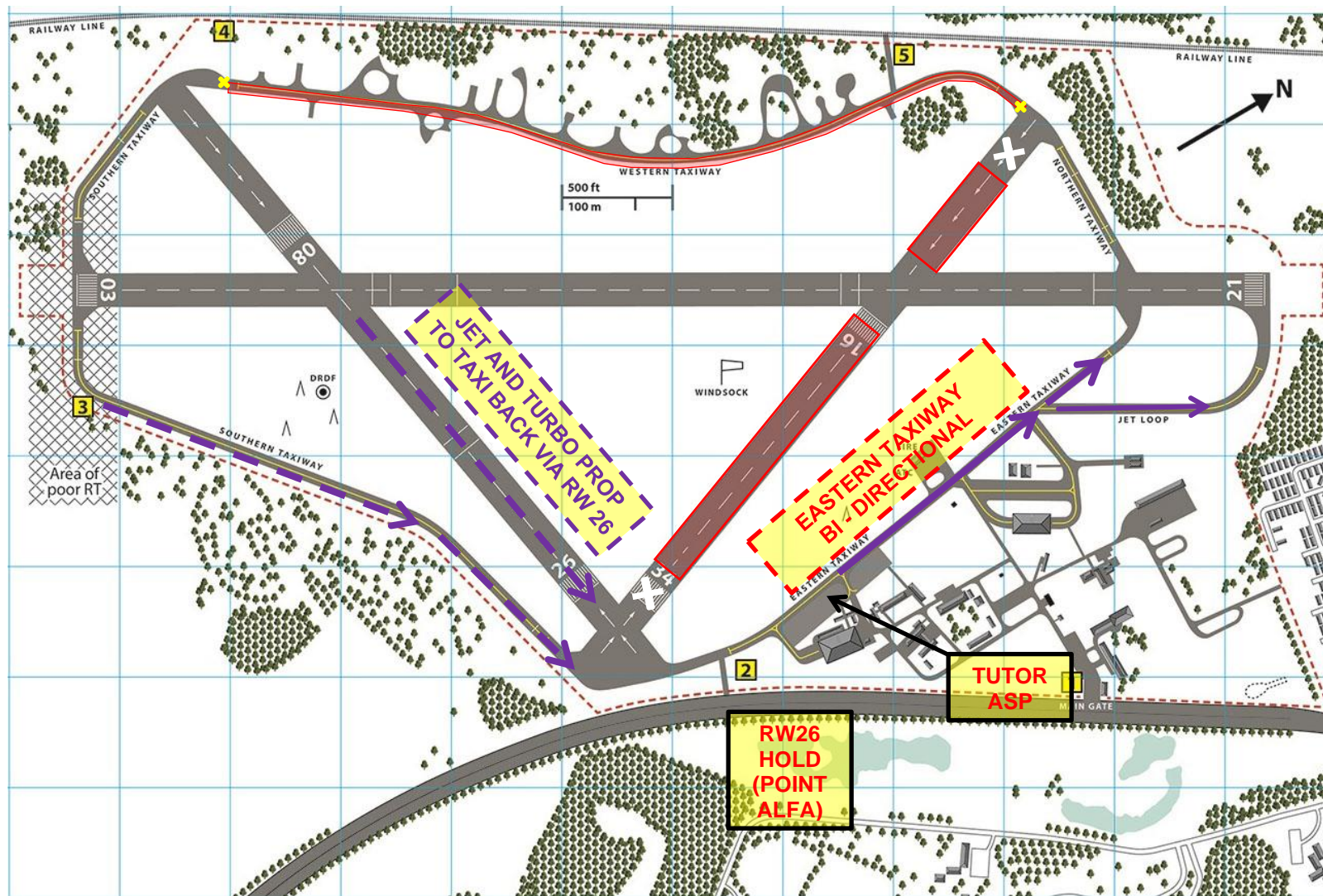
## TAXI PATTERN FOR RUNWAY 03





# FOB Section B - Standing Orders Flying (General)

## TAXI PATTERN FOR RUNWAY 21



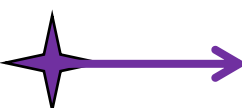
## **FOB Section B - Standing Orders Flying (General)**



Initial Points, Circuit Join Tracks, Local Noise Sensitive Areas and Circuit Patterns



Fig 1. Initial Points, Standard Join Tracks and Runway 03L Circuit Pattern.

Initial Point (IP) and Run-in Track 

Visual Circuit 03L Track  including example 'Departure Jink'

Runway 03L IP to Deadside Track 





Fig 2. Noise Sensitive Area at Birkdale and Recommended Runway 21 IP Join Tracks





Fig 3. Runway 21R Circuit Pattern – Including Example ‘Departure Jink’.

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## FOB Section B - Standing Orders Flying (General)

### ORDER WDV B3 – Local Flying Area Air System De-confliction

#### References:

- A. HQ 6 FTS DHAN 207 dated (To be published).
- B. 6FTS Flying Orders.
- C. CAP 774 – UK Flight Information Services.
- D. RAF Woodvale FOB Order C5 – Local Airspace Procedures.

#### Rationale

*To enable effective air system de-confliction procedures for RAF Woodvale based military operators within the local flying area in order to reduce the risk of mid-air collision.*

#### Contents

##### B3 (1): Local Airspace Management

##### B3 (2): Local Flying Area Air System De-confliction.

#### Flying Order WDV B3 (1)

WDV B2 (1) RAF Woodvale Flying Supervisors **shall** prescribe appropriate airspace management procedures within the local flying area for the purpose of air system de-confliction.

#### Acceptable Means of Compliance WDV B3 (1)

##### Local Airspace Management.

1. **Background.** BAe Warton ATC does not operate at the weekend and experience has shown that Liverpool Airport ATC has a limited capacity to provide a Traffic Service for traffic operating autonomously outside of the Liverpool Control Zone. The 22 Gp ODH approved continued weekend flying operations from RAF Woodvale as detailed at Reference A, but RAF Woodvale flying supervisors **should** review and enhance airspace management procedures in order to minimise the risk of mid-air collision.
2. **Use of ATCRU Traffic Service.** Tutor Ac Cdrs **should** note that whenever possible, in accordance with Reference B, the preferred option for minimising a mid-air collision risk is to secure a Traffic Service (TS) from a local ATC radar unit as defined at Reference C.
3. **Airspace Management.** Revised airspace management procedures within this instruction follow existing guidance at Reference B (Order 2307 – Rules of the Air). Three particular aspects of local airspace management that **should** be enhanced in accordance with the order are:
  - a. **Use of Operating sectors.** To avoid unnecessary congestion between unit based air systems, local operating areas **should** be geographically delineated into operating sectors:
    - (1) Sectors **should** be prominently displayed in stn ops.
    - (2) Supervisors **should** manage flying operations such that individual sectors are not unnecessarily congested.
    - (3) Out-briefs **should** include a requirement to check sector congestion.
    - (4) Ac Cdrs **should** display intended operating sector on the de-confliction board in stn ops.
  - b. **Visual Reporting Points.** Prominent local features **should** be

## FOB Section B - Standing Orders Flying (General)

identified and promulgated in ops, to facilitate the use of broadcast position reports.

c. **Transit Lanes.** Where conditions necessarily require transit to and from operating sectors, local procedures **should** include geographically delineated transit lanes. Where geographically delineated lanes are not practicable, local procedures **should** include height separation for departing and recovering traffic.

### Guidance Material WDV B3 (1)

4. **RAF Woodvale Operating Sectors.** The delineation of local airspace into discrete operating sectors is detailed at Annex A. Local Visual Reporting Points (VRP) within operating sectors are identified, with further description of VRP detailed at Annex B.

### Flying Order WDV B3 (2)

WDV B2 (1) RAF Woodvale based military operators **shall** employ prescribed air system de-confliction procedures whilst operating within the Local Flying Area.

### Acceptable Means of Compliance WDV B3 (2)

#### Local Flying Area Air System De-confliction.

5. **Operations under Traffic Service.** During weekday operations, a TS is normally available from Warton Radar (Primary 233.175 MHz, Secondary 129.53 MHz) within areas CENTRAL, OFFSHORE and NORTH. IAW 6FTS Order 2307, Tutor Ac Cdrs **should** secure a Traffic Service (TS) through Warton Radar whenever possible. Ac Cdrs **should** annotate their intended operating area on the de-confliction tote in the ops room to enhance geographic de-confliction of Woodvale based ac within the local operating area. Within area SOUTH, a TS may be available from Liverpool Approach (Primary 119.85 MHz) although this is often constrained to a Basic Service (BS) due to controller workload. Before daily flying operations commence, RAF Woodvale ATC staff may request from Liverpool ATC their anticipated capacity for provision of a TS. If it is proven unlikely that Liverpool ATC can provide a TS for Woodvale-based Tutor operators, Ac Cdrs may utilise a BS from Woodvale Approach (121.0 MHz) within operating area SOUTH to take best advantage of the de-confliction procedures defined in this order.

6. **Operations without Traffic Service.** The following de-confliction procedures are designed to mitigate the increased risk of collision between RAF Woodvale based air systems which are operating in the local area when no TS is available.

7. **Airspace De-confliction Procedures.** Effective airspace management relies upon good coordination between Ac Cdrs and RAF Woodvale ATC. Flying supervisors **should** oversee de-confliction procedures during Tutor flying operations to ensure that sensible and effective de-confliction procedures are maintained. Procedures for managing Tutor traffic in the local airspace are described below:

a. **Pre-flight Procedure.** During the out-brief process, Ac Cdrs **should** annotate their intended operating sector using both the de-confliction board in the ops room, and CADS. Ac Cdrs **should** note the maximum capacity of each operating area as detailed at para 7c and annotated adjacent to the de-confliction board in stn ops. Ac Cdrs are not wholly constrained by their initial choice of operating area. If adverse weather or traffic density necessitates a change of area during a sortie, this can be achieved by standard procedure. However, in the interest of effective



## FOB Section B - Standing Orders Flying (General)

airspace management, Ac Cdrs **should** endeavour to maintain their nominated operating area for the duration of a sortie if the task may be safely and effectively achieved by doing so.

b. **Notification to Woodvale ATC.** During the R/T call for taxi, ac cdrs **should** state their intended operating area, eg:

“Woodvale Tower, *CALLSIGN*, taxi, dual, one hour in area NORTH”

c. **Airspace Monitoring by Woodvale ATC.** Woodvale ATC staff **should** maintain a running log of which areas Woodvale based military air systems are operating, and pre-noting to operate in a discrete operating area. If the number of reported air systems in a particular area exceeds, or is likely to exceed the numbers detailed below, ATC staff **should** inform Ac Cdrs when an area is at maximum capacity:

OPERATING AREA	MAXIMUM CAPACITY (see Note 1)
LIVERPOOL (Class D)	No limit
SOUTH	3
SEFTON	1 (see Note 2)
CENTRE	4
NORTH	No limit
OFFSHORE	3

**Table 1. Woodvale Operating Area Maximum Capacities**

Notes:

1. If an Ac Cdr requires to transit through an area that is at maximum capacity, this is permissible provided that intent, including transit height and approximate routing is broadcast on the Woodvale Approach frequency.
2. Except for specific tasks where an Ac Cdr is required to remain in close vicinity to the airfield (eg. air test sortie), area SEFTON **should not** routinely be used for training sorties except as a transit route to areas LIVERPOOL and SOUTH.

An example of an ATC information call regarding operating area capacity, in this case in response to an Ac Cdr's intentions on taxiing is:

“*CALLSIGN*, Woodvale Tower, 3 aircraft reported operating in area SOUTH, that area is at maximum capacity.”

A similar information call should be provided by ATC if an Ac Cdr announces intentions whilst airborne to move to a different operating area which is at maximum capacity. In this event, the ac cdr should re-plan their sortie profile to use an un-congested operating area.

8. **R/T De-confliction Procedures.** Coordination of de-confliction procedures requires all Woodvale based military Ac Cdrs to operate on, and monitor a common frequency and to interact with Woodvale ATC. Whilst operating in all areas except area LIVERPOOL and when no TS is available from an ATCRU, Ac Cdrs **should** continuously monitor the Woodvale Approach frequency (121.0 MHz) with a Basic Service from the time of the departure R/T

## FOB Section B - Standing Orders Flying (General)

call until switching to Woodvale Tower for recovery. This does not preclude ac cdrs from switching to a discrete ATC agency whilst, for instance, carrying-out a practice diversion. Ac Cdrs **should** monitor STUD 8 (COM 1) whilst carrying-out general handling within Woodvale operating sectors. When other Woodvale based military traffic is suspected to be in a common area, Ac Cdrs **should** be prepared to transmit pilot-to-pilot de-confliction messages, such as announcing intention, position and altitude block for aerobatics. The following standard R/T calls should be completed on the Woodvale Approach frequency when an Ac Cdr cannot achieve a TS:

- (a) **Departure call.** After switching to Woodvale Approach on departure for a Basic Service, Ac Cdrs **should** inform ATC of their intended operating area, transit height and operating height block.
- (b) **Repositioning message.** If an Ac Cdr decides that the originally intended operating area is unfit for the training task, he **should** inform Woodvale Approach of his intention to move to a different area with a revised operating height block if applicable. If such a reposition includes transit through a different Tutor operating area, this **should** be included in the message with indented transit height and approximate routing.
- (c) **Pilot-to-pilot de-confliction messages.** In accordance with good airmanship and when operating without a Traffic Service, Ac Cdrs **should** broadcast intentions to carry-out dynamic aerial manoeuvres (such as aerobatics and spinning) on R/T. The preferred frequency for such broadcasts is the Woodvale Approach frequency (121.0 MHz). If the Woodvale Approach frequency is deemed to be too busy for such communications, pilots should revert to using STUD 8 (COM 1) for transmitting de-confliction messages. Such information calls may be transmitted 'blind', or directly to another callsign if a discrete confliction is suspected.
- (d) **Position reporting.** Ac Cdrs **should** use commonly understood ground features to articulate position reports over R/T. Standard VRPs are defined at Annex B to assist with effective position reporting between operators. Whilst providing positional information to external ATC agencies (ie. Warton and Liverpool), Ac Cdrs **should** aim to use unique, unambiguous ground features (i.e. airfields and large towns) because a controller may not be familiar with VRPs and areas defined for ac de-confliction.
- (e) **Recovery Message.** Whilst leaving an operating area for recovery at Woodvale (or any other destination), the Ac Cdr **should** inform Woodvale Approach of their intent to depart the area, including their intended transit height for recovery.

Annexes:

- A. RAF Woodvale Local Flying Area Operating Sectors.
- B. RAF Woodvale Local Flying Area Visual Reporting Points.



## FOB Section B - Standing Orders Flying (General)

### Annex A to Order WDV B3

#### RAF Woodvale Local Flying Area Operating Sectors

For the purpose of airspace management, 7 discrete operating areas are defined within the RAF Woodvale LFA and are illustrated overleaf:

**Area LIVERPOOL.** The LIVERPOOL area encompasses airspace within the Liverpool control zone and consists of Class D airspace from the surface to 3500 ft amsl, excepting a narrow fillet on the western edge where the base of Class D airspace is 1500 ft amsl. RAF Woodvale based operators may request an ATC pre-note to fly within the LIVERPOOL for recognised UAS and AEF tasks such as IF training and approved NAVEX routes.

**Area SOUTH.** The SOUTH area is bound to the west by a line extending through VRPs KIRKBY-SWITCH JUNCTION-LYDIATE, to the south by the northern boundary of the Liverpool Control Zone and to the north by the boundary of Class A airspace from 3500 ft AMSL.

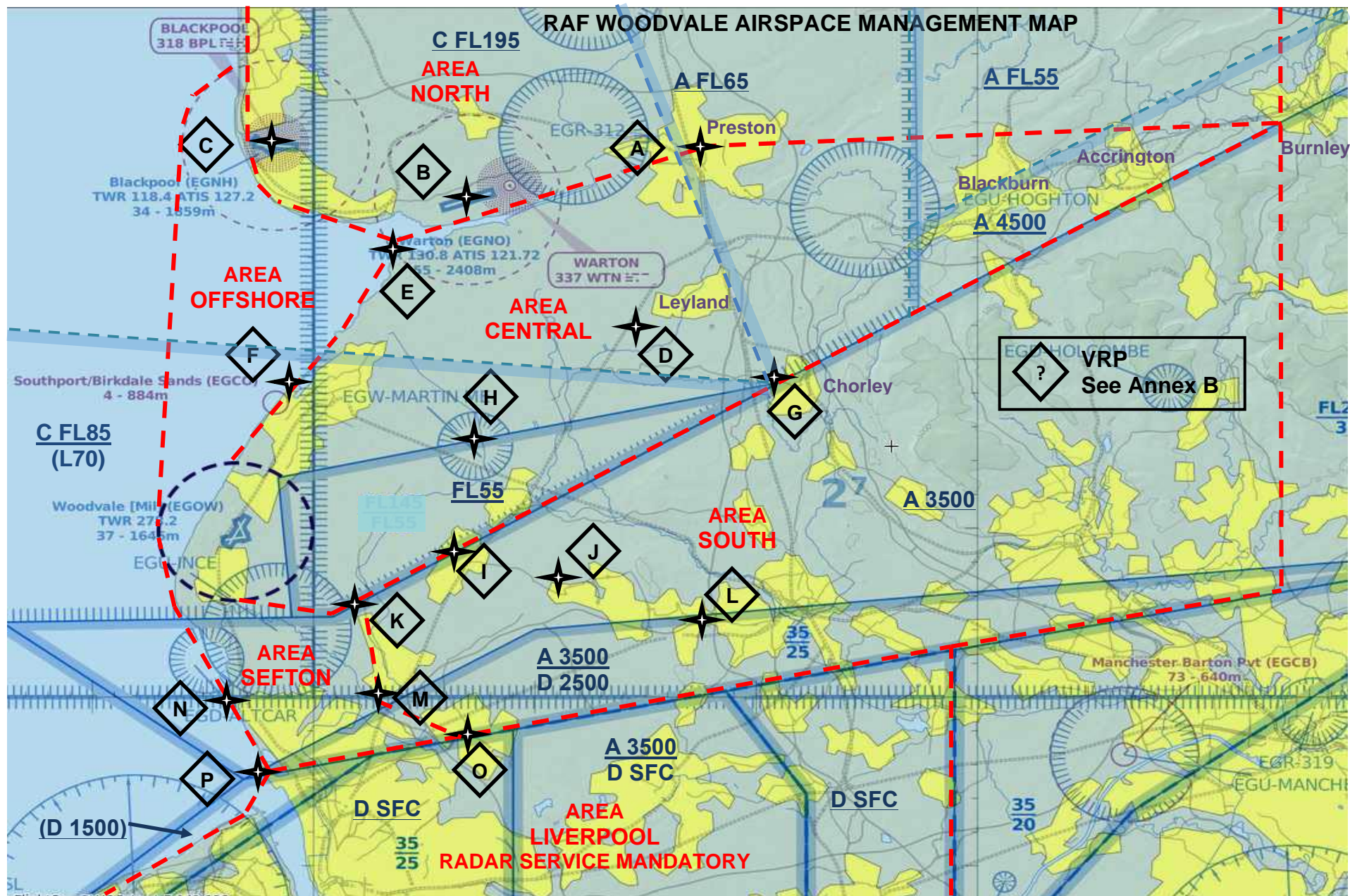
**Area SEFTON.** Area SEFTON is a small area to the south of the Woodvale ATZ which should predominantly be used to transit between Woodvale and areas SOUTH and LIVERPOOL. This area contains the Altcar Small Arms Range (SFC-500 ft amsl by NOTAM) and the Ince Blundell Microlight Site. Area SEFTON is bound to the west by the Sefton coast, to the south by the Liverpool Control Zone and to the east by a line extending through VRPs KIRKBY-SWITCH JUNCTION-LYDIATE (adjoining area SOUTH). The majority of area SEFTON is constrained by controlled airspace above, with Class A airspace commencing at 3500 ft amsl and a fillet of Class D airspace from 2500 ft amsl at the southern edge.

**Area CENTRAL.** The CENTRAL area is bound to the west by a line extending along the Sefton coast from the edge of the Woodvale ATZ to the southern entrance of the Ribble estuary. The northern boundary then follows the mean course of the River Ribble to VRP PRESTON and then east to the south-west edge of Burnley. The southern boundary adjoins area SOUTH at Burnley, following the northern edge of Class A airspace (extending from 3500 ft AMSL) from Burnley through VRP CHORLEY to VRP LYDIATE. The CENTRAL area contains a fillet of Class A airspace with a base of FL55.

**Area NORTH.** The NORTH area is bound to the west by the coastline extending from the northern extent of Southport, through the entrance to the Ribble Estuary and along the coast past Lytham St Annes and Blackpool. The southern boundary adjoins area CENTRAL, extending from the southern edge of the entrance to the Ribble estuary through VRP PRESTON to the south-west edge of Burnley. No northern boundary is defined.

**Area OFFSHORE.** The OFFSHORE area is bound to the east by the coastline extending from the northern edge of the Woodvale ATZ, through the entrance of the Ribble estuary to the northern edge of the Blackpool ATZ. The western boundary is defined by a line tangentially joining the western edges of the Woodvale and Blackpool ATZs.

## FOB Section B - Standing Orders Flying (General)





## FOB Section B - Standing Orders Flying (General)

### Annex B to Order WDV B3


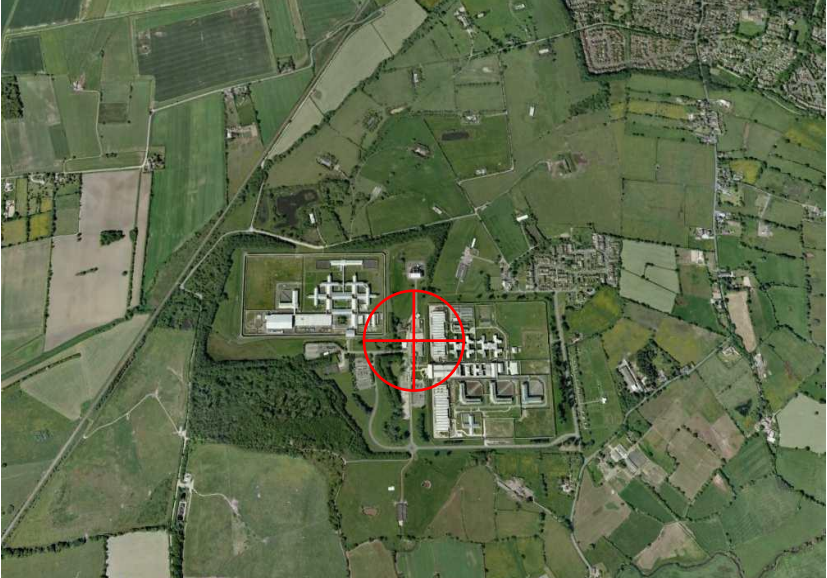

#### RAF Woodvale Local Flying Area Visual Reporting Points

The following Visual Reporting Points (VRP) are defined for use with RAF Woodvale LFA de-confliction procedures

ID	VRP Name & Description	VRP Image
A	<b>PRESTON</b> Geographic centre of the town.	
B	<b>WARTON</b> Centre of the main runway.	

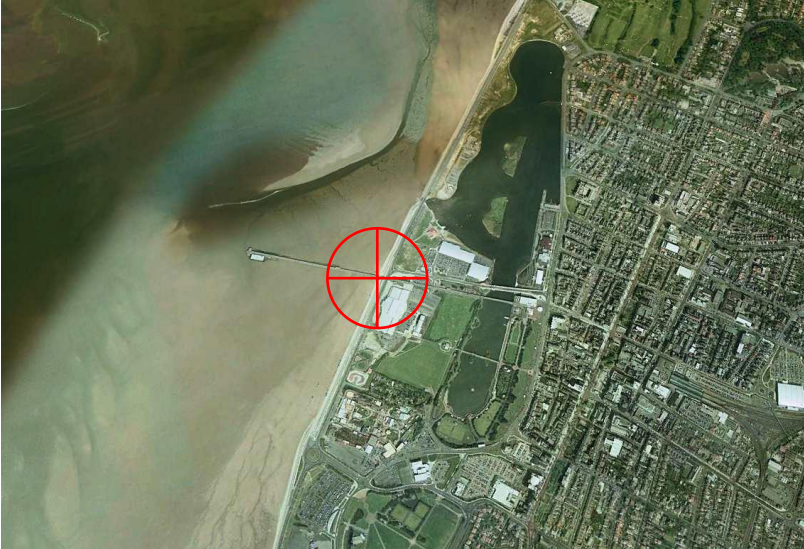
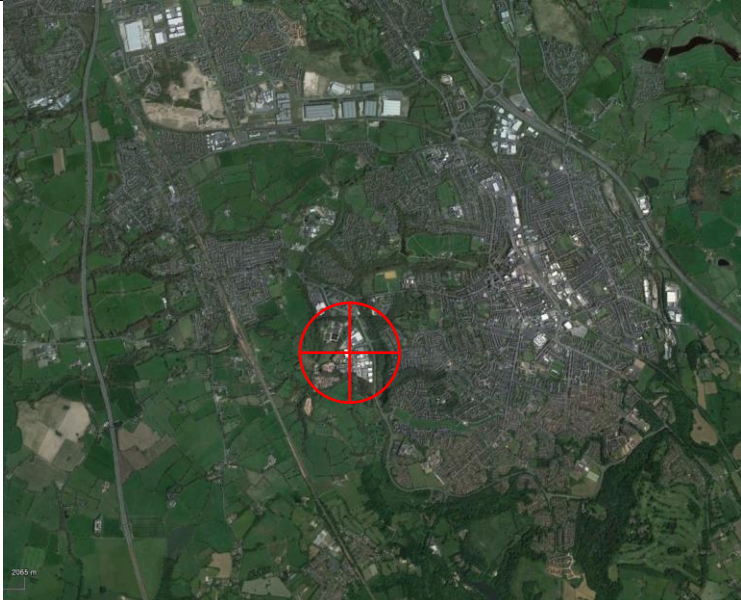



## FOB Section B - Standing Orders Flying (General)

<b>C</b>	<p><b>BLACKPOOL</b></p> <p>Centre of the main runway.</p>	
<b>D</b>	<p><b>PRISON</b></p> <p>HMP Garth complex south-west of Leyland</p>	
<b>E</b>	<p><b>MARSHSIDE</b></p> <p>Spit of marshland on southern entrance to Ribble Estuary (south of Lytham).</p> <p>VRP used by Blackpool ATC.</p>	






**FOB Section B - Standing Orders Flying (General)**

<b>F</b>	<b>SOUTHPORT PIER</b>	 An aerial photograph showing a coastal area. A pier extends into the sea on the left. A red circle with a crosshair is centered on the pier. The land to the right of the pier is densely built up with residential and commercial buildings.
<b>G</b>	<b>CHORLEY</b> Industrial estate on the western boundary of Chorley.	 An aerial photograph of a town area. A red circle with a crosshair is centered on an industrial estate located on the western boundary of the town. The surrounding area includes residential buildings and green fields.
<b>H</b>	<b>MARTIN MERE</b> Centre of the Martin Mere Wetlands Centre	 An aerial photograph of a wetland area. A red circle with a crosshair is centered on the Martin Mere Wetlands Centre. The landscape is a mix of green fields, water bodies, and some buildings.



**FOB Section B - Standing Orders Flying (General)**

<b>I</b>	<p><b>ORMSKIRK</b></p> <p>Geographic centre of the town.</p>	
<b>J</b>	<p><b>SKELMERSDALE INDUSTRIAL</b></p> <p>Industrial estate on the north-western boundary of Skelmersdale.</p>	
<b>K</b>	<p><b>LYDIATE</b></p> <p>Northern boundary of Lydiate/Maghull.</p>	

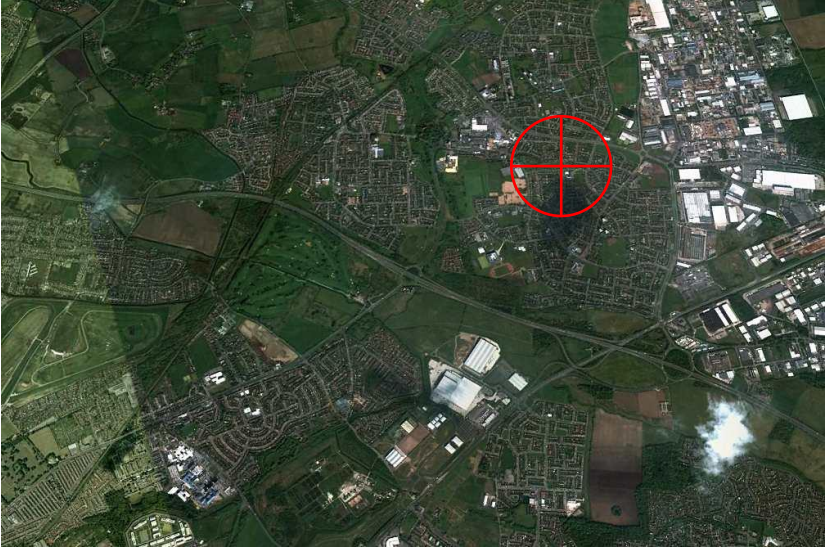
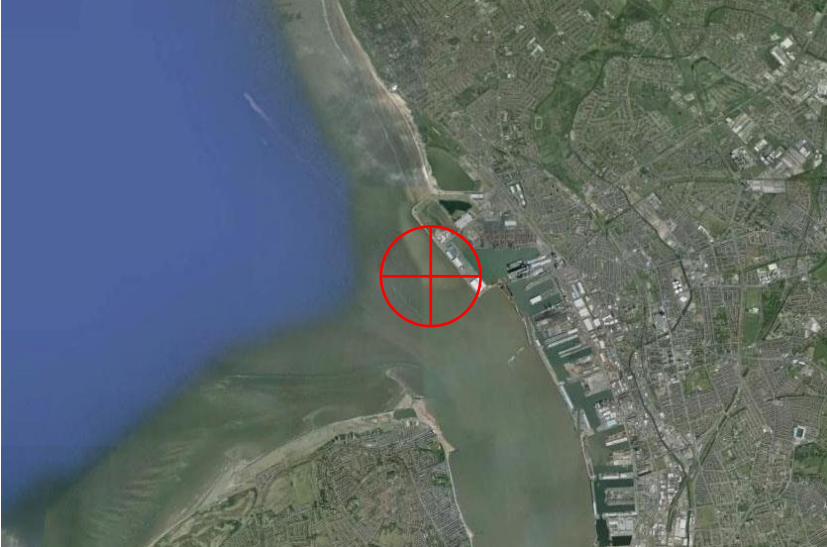


## FOB Section B - Standing Orders Flying (General)

<b>L</b>	<p><b>JUNCTION 26</b></p> <p>Junction 26 of M6 at the end of the M58.</p>	
<b>M</b>	<p><b>SWITCH JUNCTION</b></p> <p>Junction of M57, M58 and A59, north of Aintree.</p>	
<b>N</b>	<p><b>CROSBY</b></p> <p>North end of Crosby where it meets the West Lancashire Golf Course.</p>	



## FOB Section B - Standing Orders Flying (General)

<b>O</b>	<p><b>KIRKBY</b></p> <p>Centre of Kirkby town north-east of M57 Junction 6.</p> <p>ATC VRP on the edge of Liverpool Zone.</p>	 An aerial photograph of the Kirkby area in Liverpool. A red circle with a crosshair is superimposed on the image, marking a specific location in the town, identified as the ATC VRP on the edge of the Liverpool Zone.
<b>P</b>	<p><b>SEAFORTH</b></p> <p>Just offshore from the Royal Seaforth Dock</p> <p>ATC VRP on the edge of Liverpool Zone.</p>	 An aerial photograph of the Seaforth area in Liverpool, showing the coastline and the Royal Seaforth Dock. A red circle with a crosshair is superimposed on the image, marking a location just offshore from the dock, identified as the ATC VRP on the edge of the Liverpool Zone.



## FOB Section B - Standing Orders Flying (General)

### ORDER WDV B4 – Telephone Flying Complaints

Reference:

A. 2006DIN03-0002.

#### Rationale

*To ensure that any telephone flying complaint received by stn personnel from a member of the public is appropriately handled.*

#### Contents

#### B4 (1): Telephone Flying Complaints.

#### Flying Order WDV B4 (1)

WDV B4 (1) RAF Woodvale stn personnel who receive a telephone flying complaint from a member of the public **shall** handle the communication in accordance with MOD guidelines.

#### Acceptable Means of Compliance WDV B4 (1)

1. **Guidelines.** To protect the reputation of the Service, it is essential that any flying complaint made by members of the public is promptly, sympathetically and courteously handled in accordance with MOD guidelines at Reference A.
2. **Procedure.** Stn personnel receiving a flying complaint **should** comply with the following guidelines:
  - a. Under no circumstances is the complainant to be referred to another unit.
  - b. The conversation **should** be chatty and understanding without making any commitments or acknowledging any responsibility.
  - c. If the call cannot be continued due to an emergency situation arising arrangements **should** be made to re-contact the complainant at the earliest opportunity.
  - d. The person handling the complaint **should** record all details required on MOD Form 953, copies of which are retained at station headquarters and stn ops. Particular attention **should** be paid to the following:
    - (1) **Section 2.** Accurate and complete personal details and address.
    - (2) **Section 6.** Do not prompt or raise the subject of claims, but ascertain whether there has been any injury to persons and/or livestock, or damage to property.
3. **Receipt by WAOL Personnel.** WAOL personnel receiving a telephone flying complaint are requested comply with this order, but inform ATC/Duty Pilot or, when ATC is closed, main guardroom staff at the earliest opportunity.

#### Guidance Material WDV B4 (1)

*Intentionally Blank*

## FOB Section B - Standing Orders Flying (General)

### ORDER WDV B5 – Air System Emergencies

Reference:

A. No1 AIDU Flight Information Handbook (FIH).

#### Rationale

*To ensure that aircrew react appropriately in the event of specific air system emergencies leading to loss of radio communications.*

#### Contents

#### B4 (1): Air System Emergency Procedures

#### Flying Order WDV B5 (1)

WDV B5 (1) Aircrew operating from RAF Woodvale **shall** follow standard emergency procedures in the event of total radio failure, total electrics failure or pilot microphone failure causing total loss of radio communications.

#### Acceptable Means of Compliance WDV B5 (1)

1. **Radio Failure on the Ground.** If an air system suffers total radio failure whilst taxiing for departure the Ac Cdr **should** proceed to the duty Runway Holding Point and attract the attention of ATC by turning towards the ATC Tower and flashing the landing light. On receipt of a 'FLASHING WHITE' signal from the tower the Ac Cdr **should** return to dispersal via the runway in use and the normal taxi pattern. Following a landing with a total radio failure, the Ac Cdr **should** taxi to dispersal following the normal taxi pattern and flash the landing light. Under negative control, the ac **should** be returned to the appropriate dispersal whilst exercising caution.

2. **Radio Failure in the Air.** Ac Cdrs should adopt the following procedures:

a. **In VMC.** In the event of a total radio failure Ac Cdrs **should** remain VMC and return to RAF Woodvale when possible. They **should** determine the active runway and circuit direction then re-join via initials and fly on the deadside to attract the attention of the ATC controller. Subsequently, Ac Cdrs **should** join downwind and land on receipt of a 'GREEN' signal. The RAF Woodvale Tower frequency **should** be selected throughout and 'blind calls' **should** be made as normal. The local ATC controller **should** climb other circuit traffic to not below 1000 ft and warn them that an air system with an R/T failure is in the circuit as soon as is practicable. This procedure may be practised in weather conditions that are Phase 3 or better provided that the Ac Cdr informs Woodvale Approach that the R/T failure is simulated prior to commencement.

b. **In IMC or Above Cloud.** In the event of a total radio failure in IMC or above cloud, Ac Cdrs **should** attempt to regain VMC and proceed as detailed at para a. Instrument Rated pilots may choose to descend to MSA in an attempt to gain VMC below cloud or to divert. Ac Cdrs may consider diverting to Warton and carrying out the following procedure:

- (1) Squawk 7600/7700 + ALT (as appropriate).
- (2) Proceed to Warton at or above 3500' RPS (or Warton QNH, if a recent, accurate figure is known).
- (3) Self position for ILS/DME Rwy 25L to land, or circle for Rwy 07R if appropriate.

## FOB Section B - Standing Orders Flying (General)

(4) If IMC at their minima pilots **should** carry out the published MAP.

3. **Total Electrics Failure.** In the event of a total electrics failure in IMC, Ac Cdrs **should** attempt to regain VMC immediately. If VMC above cloud, Ac Cdrs **should** carry out the Distress Procedure for Radar Identification as detailed at Reference A and fly for endurance. If Woodvale ATC is alerted of an air system with communications failure in the local area, the DATCO **should** inform the DP who may consider launching a shepherd ac to lead the emergency ac below cloud. Ac Cdrs **should** ensure that crew complete the abandoning drill (if appropriate) if it is anticipated that fuel may be exhausted.

4. **Pilot's Microphone U/S.** In the event of a u/s microphone, Ac Cdrs **should** adopt the let-down procedure detailed at Reference A, using either VHF or UHF frequencies.

5. **Nil.**

Guidance  
Material  
WDV B5 (1)

## ORDER WDV B6 – Air System Accidents and Serious Incidents

Reference:

- A. RAF Woodvale Post-Crash Management Plan.
- B. MAA Manual of Post-Crash Management.
- C. MAA APCM Aide Memoire.

### Rationale

*In the event of an air system accident or serious incident, stn personnel are required to react appropriately in order to preserve life, prevent further hazard to persons and preserve evidence for any subsequent investigation that may follow.*

### Contents

**B6 (1): Maintenance of Air System Post-Crash Management Plan.**  
**B6 (2): Reaction to Air System Emergency States**

### Flying Order WDV B6 (1)

WDV B6 (1) RAF Woodvale flying supervisors **shall** maintain an air system post-crash management plan and ensure that the plan is readily available for use in the event of an air system accident or serious incident.

### Acceptable Means of Compliance WDV B6 (1)

#### Maintenance of Air System Post-Crash Management Plan.

1. **APCM Plan.** OC Flying **should** periodically review and update the RAF Woodvale Air System Post-Crash Management Plan as detailed at Reference A. OC Fg **should** ensure that the plan is readily available in a 'crash bag' within stn operations along with relevant supporting documentation.
2. Further guidance can be found at the References.

### Guidance Material WDV B6 (1)

### Flying Order WDV B6 (2)

WDV B6 (2) Following an air system accident or serious incident, RAF Woodvale personnel **shall** follow appropriate procedures to preserve life, prevent further hazard to persons and preserve evidence for any subsequent investigation.

### Acceptable Means of Compliance WDV B6 (2)

#### Reaction to Air System Emergency States

3. **Immediate actions.** The RAF Woodvale Post-Crash Management Plan (Reference A) is contained within the RAF Woodvale Defence Aerodrome Manual (DAM). In the event of an air system accident or serious incident involving a Woodvale-based air system or occurring at RAF Woodvale, supervisors **should** immediately implement procedures detailed at Reference A.
4. **Further Guidance.** Further guidance material on Air system Post Crash Management (APCM) procedures is detailed at References B and C.

### Guidance Material WDV B6 (2)

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