Flight Information Handbook Australia

AD2 Supplement Williamtown

Issue 2612

Effective 26 Nov 2026

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Change summary

WILLIAMTOWN FIHA AD2 SUPP
Issue 2612 – Effective 26 November 2026

Location of change	Change description
Multiple throughout	R596 now amended to R597A/B. Alpha – Low Bravo - High
2.4	Ship transfer airspace Operations now not above 1500ft visual by day, NVIS by night.
2.9.2.2	SAWR vertical dimensions – R597B internal highest usable
2.9.5	SAWR ATIS requirements
2.10.5.1	AD2 SUPP AMDT 04/25 incorporated – ACG SID Procedure chart included (SY1/IB1)
2.3 *2.11.15.4* *2.13.2.6* *3.8.2.6*	All references to applying a reduced separation service to the Coastal route, when occupied by civil ACFT have been amended to meet the intent of AMDT 01/26
2.11.6.1	Amendment to remaining laterally clear of the CIRA
2.11.6.1.1	Close Initial – added VFR transition when established within CIRA.
2.11.6.3.1	Added Pilots are to advise ATC when tracking via Initial at non-standard levels
2.11.6.4 & RT guide	Added ‘Duty RWY No.’ is accompanied with the visual approach clearance when arriving via COT – FASU UA

Location of change	Change description
2.12.1	Removed ‘Choppers Run’, from Table 6 – no longer used by CHC
2.12.4	Helicopter standard routes removed. Entry/Exit gates ‘Choppers North and South’ remain
2.13.2.3 *3.8.1.1* *3.8.2.4*	Separation between ACFT in adjacent training areas – FOSC agenda item – adjacent training areas considered active at all times.
3.3.2.3	RPAS operations in LFA’s. Automatic clearance to operate below 100ft AGL
4.3.2.2	Thunder corridor amendment – FOSC agenda item 3.3 – Relates to the usage of non-standard levels during periods of adverse weather
5.1.1	ATC support window annotated on FPARS, to indicate full staffing ISO ACG IAW the four weekly planning conference.
5.1.7.1	Airspace planning for SAWR High. Highest usable level must be stated for NOTAM action, rather than activating to maximum height each time. FOSC 3.11
5.5.1	Operation of transponders – All elements to squawk on departure until established in standard or close formation – FIHA/STAND1
5.7.1	ATC/C2 Taxi coordination – removed advice that the ACFT is not PART A/B/C compliant

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1 Introduction

This Flight Information Handbook Australia (FIHA) AD2 Supplement (SUPP) Williamtown (YWLM) is categorised as Electronic Aeronautical Information (EAI) and is available for Electronic Flight Book (EFB) use via the Defence Aeronautical Information Service Provider (AISP).

1.1 Purpose

The purpose of these procedures is to, in order of priority:

a) ensure the safety of flight
b) facilitate flying operations which cannot be conducted within standard flight rules or ATC procedures
c) facilitate the efficient use of military ASPC
d) ensure compliance with regulations
e) flexibly and cooperatively integrate military flying into the national ASPC system.

1.2 Scope

This instruction applies to the conduct of flying operations and control services at YWLM aerodrome and associated ASPC. Information contained in this instruction that may have civil application, or may enhance overall useability, will also be available in the YWLM section of Enroute Supplement Australia (ERSA).

This document is divided into four parts for ease of reading.

1.2.1 Part A (Williamtown domestic ASPC)

The procedures in Part A apply within:

a) WLM CTR A / WLM CTR B
b) WLM C1/C2/C3/C4/C5/C6/C7/C8/C9
c) R597A/B
d) D589.

1.2.2 Part B (Williamtown Eastern ASPC)

a) The procedures in Part B apply within:
b) M581/582/583/584
c) R585 A/B/C/D
d) R586 A/B/C.

1.2.3 Part C (Williamtown Western ASPC)

The procedures in Part C apply within:

a) R560 A/B
b) D566 A/B
c) R570 A/B/C/D/E/F/G/H
d) D576 A/B/C/D.

1.2.4 Part D (Administration and planning)

The procedures in Part D apply to the planning and administration of flying operations and ASPC in any of the ASPC addressed in Parts A, B or C.

1.3 Authority

The authority for this FIHA AD2 SUPP is AC SI(OPS) 01-20 *Aeronautical Information Management.*

1.3.1 Approval authority

CO 453SQN

1.3.2 Consulted authorities

- ACG SO1 ACM
- 78WG SO2 STANDO
- 81WG SO2 STANDO
- 82WG SO2 STANDO
- 26SQN ABXO
- SRG A7 SO2 STAND E7
- HQSRG A7 SO2 STAND IAMD
- FLTCDR ARDU TEF WLM
- Head of Flying Operations, CHC HELICOPTER WLM SAR FLT
- Head of Flying Operations, AIR AFFAIRS AUSTRALIA
- Head of Flying Operations RAYTHEON AUSTRALIA.

1.3.3 Sponsor

FLTCDR 453SQN WLM FLT

1.3.4 ASPC Control Authority

FLTCDR 453SQN WLM FLT

1.4 Definitions

C2/C2 agency	Any authorised military command and control agency, other than ATC, providing ACFT control. This may include: • CRU • AEWC • JTAC/FAC(A) • Naval ships.
Domestic ASPC	WLM CTR A / CTR B and WLM C1/C2/C3/C4/C5/C6/C7/C8/C9
Fast jet ACFT	Any of the following ACFT types, unless specifically mentioned otherwise: • F15 • F16 • F18 (all variants including EA18) • F22 • F35 • Hawk • Lear Jet • PC-21.
General flying training area (GFTA)	The training area subdivisions in the Williamtown Eastern and Western ASPC, described in para 3.4 and para 4.3

Training area(s)	Any of the following areas described in this Supplement: • CIRA • DISP • OHEAD • SAWR • HTA • LFA (see para 3.4) • WLM Eastern GFTA (see para 3.4) • WLM Western GFTA (see para 4.3).
Willy Approach	Dependant on staffing configuration, Willy Approach is provided on frequencies described in AIP. Specific frequency requirements will be published in AIP or as a directed instruction from ATC or C2 agency.

1.5 Table listing

Table	Description
1	CIRA Summary
2	DISP Summary
3	OHEAD Summary
4	SAWR Summary
5	ACG SID Summary
6	HTA Summary
7	LFA Summary
8	Eastern GFTA Summary
9	Eastern GFTA gates and lanes Summary
10	Eastern ASPC frequency allocation Summary
11	Thunder corridor gates summary
12	Western ASPC Summary

13	Western ASPC frequency allocation
14	Eastern ASPC flight planning
15	Western ASPC flight planning

1.6 Figure listing

Figure	Description
1	Arrestor cables
2	DISP ASPC
3	SAWR ASPC
4	Initial points
5	Hawk PFL profile
6	PC21 PFL profile
7	F35 PFO profile
8	LFA diagrams
9	Eastern GFTA
10	Class G wedge
11	Western GFTA
12	Thunder corridor
13	Eastern GFTA waypoint data card
14	LFA waypoint data card
15	Western ASPC waypoint data

2 Part A: Williamtown domestic ASPC

2.1 Compliant ACFT

These procedures apply to the following 'compliant' ACFT:

a) ACFT operated by ACG & ARDU TEF WLM (using SIGMA callsign only)

b) ACFT operated by Air Affairs Australia, Raytheon Australia or CHC Australia (WLM SAR FLT only) using a callsign published in MATS 6.2.2.4

c) Australian military or ADF-contracted ACFT where the pilot in command or detachment commander has declared they are "PART A COMPLIANT"

d) Foreign military ACFT that have agreed to these procedures in writing.

Any other ACFT are assumed non-compliant. ACFT may also opt-out of the application of these procedures by advising ATC (see para 2.2).

2.2 Non-compliant operations

To ensure separation with civil aviation and compliant traffic, operations for non-compliant ACFT (other than simply arriving to and departing from the aerodrome) are only available through:

a) publication of AIP SUP or an ACP for a temporary activity

b) 'due regard' procedures

c) operations under the control of a C2 agency who will accept responsibility for ensuring compliance

d) individual arrangements made with ATC well in advance.

2.3 VFR routes

Two VFR routes are provided for general aviation traffic to transit WLM ASPC. These routes are depicted on charts and described in ERSA.

2.3.1 Inland lane (D589)

Civil ACFT may use the inland lane without clearance or communication with ATC.

2.3.2 Coastal route

The coastal route connects NBB-ANA-PSS-BRI-SUG following the shoreline over water.

'CLEARED COASTAL NORTHBOUND/SOUTHBOUND' will be issued to compliant ACFT seeking transit of the coastal route once the ACFT report visual. This is a clearance to:

a) operate VFR
b) descend as required
c) leave and re-enter controlled ASPC as required
d) operate between NBB and ANA (or reverse) within 2NM of the coast not above 500 FT
e) operate between ANA and SUG (or reverse) within 4NM not above 2000 FT.

Note 1: Due to poor radar coverage, ACFT tracking southbound can expect a clearance limit of ANA.

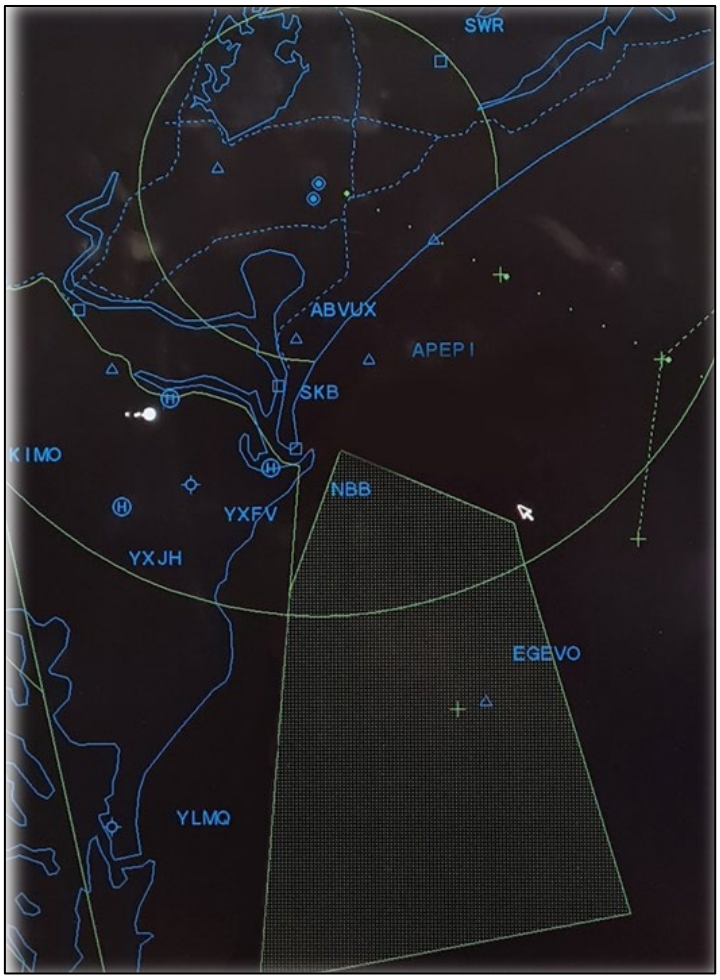
Note 2: Communications with ATC are shielded by terrain below 2000 FT north of PSS.

Note 3: Civil ACFT will remain within the lateral distance of the coast as per ERSA (2NM).

***Caution:** Civil ACFT may operate between SUG and BRI without ATC clearance and ATC communications are poor in this area. ATC are therefore unable to provide directed traffic information for this area.*

2.4 Ship transfer airspace

Multiple companies employed by the Port Authority of Newcastle operate helicopters between Newcastle Harbour and a defined ship-boarding area southeast of Nobby's Head. Operations are conducted by day not above 1500FT AMSL and by night not above 1500FT NVIS AMSL. The lateral boundaries of the area of operations (AO) are detailed in ERSA FAC WLM under Flight Procedures para 5. See illustration below:



2.5 Circuit area (CIRA)

LUL	SFC
HUL	Standard circuit altitude (see para 2.5.1) or as cleared by ATC
Standard frequency	118.30
Flight category	VFR unless ATC approve otherwise

Table 1 – CIRA summary

Caution: *Para 2.13.2.6 applies to operations within the CIRA.*

2.5.1 Dimensions

The CIRA is within 5TAC WLM over land.

The highest usable level is the applicable circuit altitude, or as cleared by ATC. Circuit altitudes are:

a) Non-jet fixed wing ACFT MTOW >7000 KG: 1500 FT
b) Jet fixed wing ACFT: 1500 FT
c) Non-jet fixed wing ACFT MTOW ≤7000 KG: 1000 FT
d) Rotary wing ACFT: 500 FT (1000FT by night).

2.5.1.1 Low level circuit

Low-level circuit height is not above 1500 FT.

2.5.2 Notes

Avoid extended downwind RWY 12 over Raymond Terrace if practicable.

At ATC discretion only, pilots may extend upwind RWY 12 to 5TAC over water for separation or sequencing.

A specific clearance to operate in the circuit is not required when conforming to the appropriate circuit height promulgated in ERSA.

2.5.3 Position reports

No downwind report is required. All traffic must report Base abeam the landing threshold, or as soon as practicable and before commencing the Base turn; including intentions if other than a full stop (touch and go, etc).

ACFT that have been operating in the circuit must report turning crosswind for full stop on their final circuit. Other pilots may report turning crosswind or on the pitch with landing intentions to assist the situational awareness of other traffic. ATC will not respond to crosswind calls.

2.5.4 Traffic information

ATC will pass relevant traffic information to Part A compliant ACFT entering the CIRA:

a) at left/right/straight initial
b) no later than 5NM final for ACFT conducting a straight-in approach
c) updating traffic after completing the VGAP (see para 2.11.12) and prior to pitching into the circuit
d) no later than high key for spiral PFL/PFO (see para 2.11.15)
e) when entering the CIRA laterally if joining by any other means, such as downwind.

Note: *See reduced separation 3.8.2 and 2.12.2*

2.5.5 Circuit saturation

ATC declare the circuit saturated when traffic volume, traffic complexity, and/or weather conditions cause any of the following to occur:

a) ATC workload or frequency congestion becomes excessive
b) arriving and departing ACFT are being unreasonably delayed, having regard for their priority status
c) there is insufficient space in the circuit to safely pitch or execute a VGAP.

2.5.5.1 ATC actions on circuit saturation

When the circuit is saturated, ATC advise recovering ACFT on first contact. The following restrictions will then apply, unless ATC grant approval case-by-case:

a) no additional ACFT are permitted to join the circuit
b) arrivals may be held outside the CIRA
c) arrivals will be via a straight-in approach
d) circuit traffic may be directed to land or depart the circuit area to facilitate higher priority arrivals/departures.

If the circuit remains saturated after 15 minutes, ATC consult with duty supervisors to attempt to reduce the traffic volume.

2.5.6 Priority

Other fast jet ACFT have priority over PC-21 ACFT in the CIRA.

When Expect Visual Approach (EVA) is advertised on the ATIS, fast jet circuit ACFT have priority over all other fast jet ACFT conducting straight-in approaches.

Local military ACFT and scheduled RPT flights have priority over visiting military and civilian ACFT circuit operations.

2.5.7 Formation go around

A formation may elect to go around remaining in formation. This is indicated by the lead using the formation call sign in the go around call, for example “COUGAR GOING AROUND”. Except that a touch-and-go landing clearance will not be issued, all other requirements of FIHA ENR (formation touch and go) apply.

Pilots or ATC may still break the formation if required.

2.6 Aerodrome

2.6.1 Airfield arrestor systems (AAS)

2.6.1.1 Operation

The AAS are operated IAW ERSA except:

a) both approach end cables are raised and lowered together and both departure end cables are raised and lowered together, unless specifically requested or advised otherwise

b) the departure end arrestor cables may be left in the UP position for cable arrestable ACFT and Hawk concurrent circuit operations, or if the concurrent operations are immediately pending

c) at the request of the ACFT captain.

2.6.1.2 Deviation from FIHA AD

The Cable Arrestor systems at WLM are experiencing chronic maintenance issues that have resulted in frequent failures of the system leading to the cables inability to completely raise or lower. The primary cause of these failures is due to excessive high speed ACFT trampling during normal landings.

2.6.1.3 Naming

For most purposes, the arrestor cables are referred to as the ‘approach end cables’ or ‘departure end cables’ as appropriate. To identify specific cables when required (e.g. to describe an unserviceability), individual cables are named in accordance with

Figure 1.

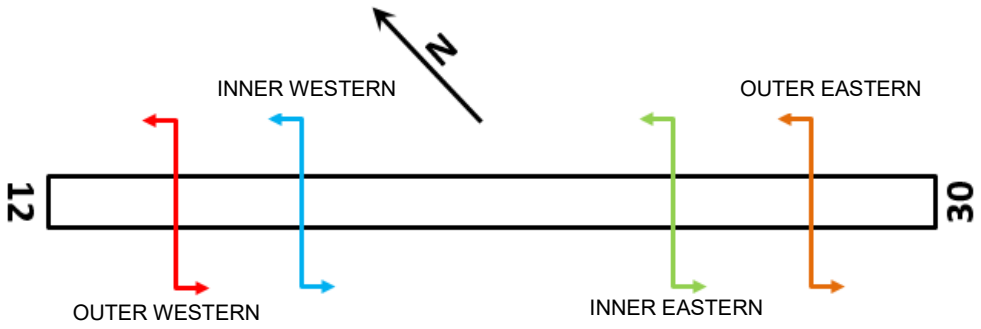


Figure 1 – arrestor cable names

2.6.2 Alert aprons

ACFT will remain on SMC frequency when holding in the Alert Apron East (AAE) or Alert Apron West (AAW).

2.6.3 ACFT clear water rinse facility (ACWRF)

Procedures for use of the ACWRF are IAW the WAM and managed by the ABOC.

2.6.4 ACFT safety points (ASP)

Detailed information on the ACFT Safety Points (ASP) for WLM are contained in the RAAF Williamtown Aerodrome manual.

2.6.5 Standard taxi routes

Abbreviated RT is used for standard taxi routes. Refer to Appendix D.

Standard taxi routes apply for taxiways B & D unless otherwise cleared by ATC.

RWY 12: Out on D, in on B

RWY 30: Out on B, in on D

2.7 Display ASPC (DISP)

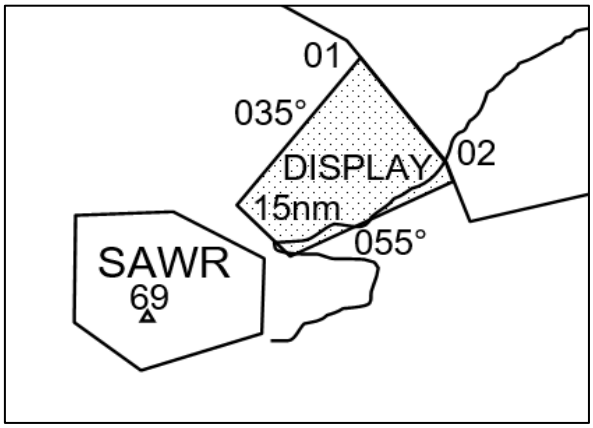


Figure 2 – DISP ASPC

LUL	SFC

HUL	Pilot nominated (max 15 000 FT, FL120 when CTA C6/C8/C9 not active)
Lateral Dimension	035R - 055R / 15 - 25 TACAN
Standard frequency	120.70
Flight category	VFR (IFR on transit to/from)

Table 2 – DISP summary

2.7.1 Dimensions

The Display ASPC is the minor arc between the WLM 035 and 055 TACAN radials, 15 to 25 TACAN WLM, SFC to 15 000 FT (or as requested from ATC).

2.7.2 Notes

Avoid the coastal corridor when operating within the Display ASPC. See para 2.3.2. DISP should be booked IAW Part D. Short notice use may be facilitated by ATC subject to traffic and workload. The Display ASPC is not available when SAWR is active.

2.8 Overhead Display ASPC (OHEAD)

LUL	SFC
HUL	Pilot nominated (max 15 000 FT)
Standard frequency	120.70 or 118.30
Flight category	VFR

Table 3 - OHEAD summary

2.8.1 Dimensions

5 TAC WLM, SFC-15 000 FT (or as cleared by ATC).

2.8.2 Notes

This ASPC is to be sanitised for the duration of the display.

Practise display ACFT may operate on 120.70 if a discrete frequency is preferred. ATC will monitor 120.70 during practises but not normally transmit. Otherwise, operations should be on 118.30.

The OHEAD should be booked IAW Part D. Short notice use may be facilitated by ATC subject to traffic and workload.

2.9 Salt Ash Air Weapons Range (SAWR)

SAWR is an essential and necessary component of Defence training. When operational its proximity to the airfield causes significant limitations and increases complexities for safe and expeditious flow of military and civil air traffic. Use of SAWR must be carefully considered and limited to activities that are absolutely necessary. Where Air to ground communication only is required, R585 is the preferred option.

2.9.1 Priority transits

On some occasions, priority aircraft require passage through SAWR whilst it is in use. In this case, ATC will issue necessary restrictions to ACFT operating in SAWR, most often in the form of a not-below-level. When this instruction is issued, any lasing, dropping of stores, launching of any model rocketry or any other activity that may infringe the airspace in any way or affect the safety of the priority aircraft must cease immediately. ATC will release the restriction as soon as it is safe to do so.

2.9.2 Dimensions

2.9.2.1 Lateral

The ASPC associated with SAWR range is referred to as ‘Salt Ash’ and is contained within R597A/B. Lateral dimensions are depicted in Figure 3.

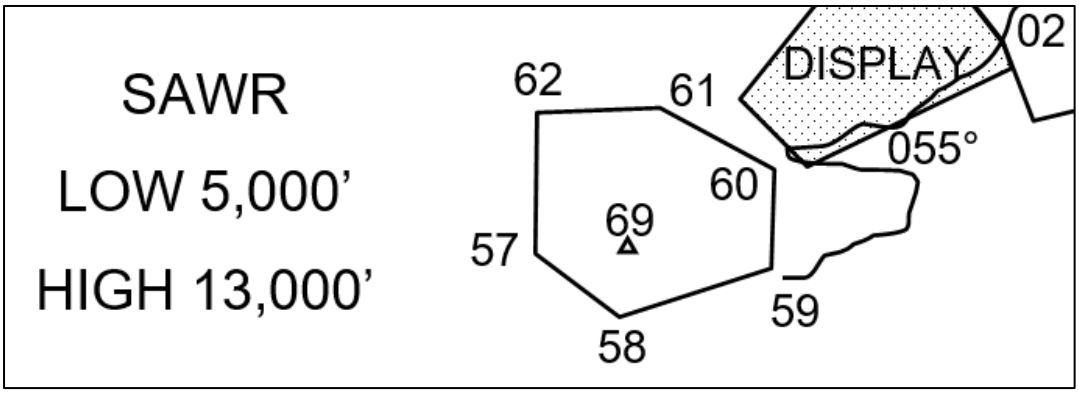
2.9.2.2 Vertical

To facilitate safe and expeditious military Fast Jet movements, SAWR will be activated as either:

SAWR High: SFC – 13 000 FT HUL (R597A and B Active)

SAWR Low: SFC – 5 000 FT HUL

Note: Pilots may nominate a different HUL however any level above 5 000 FT will activate SAWR High and remove the use of the ACG SID (SAWR segregation).



57 SAWR1	S 32 46.00	E 151 51.00
58 SAWR2	S 32 48.83	E 151 55.55
59 SAWR3	S 32 46.50	E 152 04.00
60 SAWR4	S 32 42.00	E 152 04.00
61 SAWR5	S32 39.50	E 151 57.75
62 SAWR6	S 32 39.50	E 151 51.00
69 TGT 25'	S 32 45.28	E 151 54.78

Figure 3 - SAWR diagram

LUL	SFC
HUL	Pilot nominated (max 13 000 FT) as per 2.8.1.2
Standard frequency	260.00 (alternative frequencies must be passed to ATC prior to entry)
Flight category	VFR (incl. transit to/from)

Table 4 - SAWR summary

2.9.3 SAWR departures

ACFT departing for SAWR operate VFR and use the departure procedures described below (para 2.9.3.1 and 2.9.3.2). The visual departure and radar SID requirements of para 2.11.5 do not apply.

2.9.3.1 Salt Ash 12 departure:

a) maintain RWY heading

b) not before 2 TAC WLM, turn left to enter SAWR inside 7.5 TAC WLM

c) following elements of a formation may turn before 2 TAC to catch the lead.

2.9.3.2 Salt Ash 30 departure:

a) maintain RWY heading
b) not before 2 TAC WLM, turn right to enter SAWR inside 7.5 TAC WLM
c) following elements of a formation may turn before 2 TAC to catch the lead.

2.9.4 SAWR recoveries

Contact APP (#4/135.7) for recovery.

Do not depart SAWR until cleared by ATC.

Remain VFR on recovery from SAWR.

2.9.5 Notes

SAWR should be booked IAW Part D.

ATC broadcast as applicable “R597A/B (Alpha/Bravo) Active” on the ATIS when SAWR is active.

2.10 Procedures applicable to all ACFT

2.10.1 Altimeter setting

Operations within GFTAs shall be with reference to WLM QNH, unless a force/area QNH is provided by a C2 agency.

Altimetry at all other times shall conform to ICAO standards.

2.10.1.1 Force QNH in combined airspace

When combining airspaces over various Area QNH Zones (AQZ) for extended areas (eg. Exercise TMOA/TRA), TAC C2 will issue the lower of the adjoining areas’ QNH as Force QNH (FQNH). To meet FIHA ENR standards of accuracy, Area QNH must not differ from an adjoining Area QNH by more than 5 (hPa). Where a localised weather event contributes to a difference of ±5 (hPa), TAC C2 will issue a common FQNH across all areas. For example, where WLM & AMB combined airspace may cover Areas 20/24/40.

2.10.2 Training area boundary compliance

ACFT must be capable of maintaining within training area(s) boundaries, including all applicable navigation and equipment error tolerances. The technical means in which this is achieved is left to the discretion of airworthiness authorities.

Caution: *ATC will not apply additional buffers. A serious safety incident may result from vertical or lateral training area excursion.*

2.10.3 Flight rules

ACFT operate IFR within Williamtown ASPC, except:

a) where specific training areas or procedures in this document require VFR

b) where other OIP require VFR

2.10.4 Communication

ACFT are to comply with the radiotelephony procedures contained in Appendix D.

2.10.4.1 Automatic transfer

Part A ACFT are to automatically transfer to STUD5 (APP HIGH) on departure unless otherwise directed by ATC (e.g., Range airborne, STUD 4 or Remain this frequency)

2.10.5 Military departures

PC21 and other military ACFT operating within WLM training areas who are unable to comply with the ACG SID shall depart via Visual Departure or Radar SID as appropriate. Military ACFT departing WLM domestic ASPC into civil controlled ASPC are subject to normal flight planning and departure procedures outlined in AIP.

ACFT should expect to be issued departure types IAW the following table:

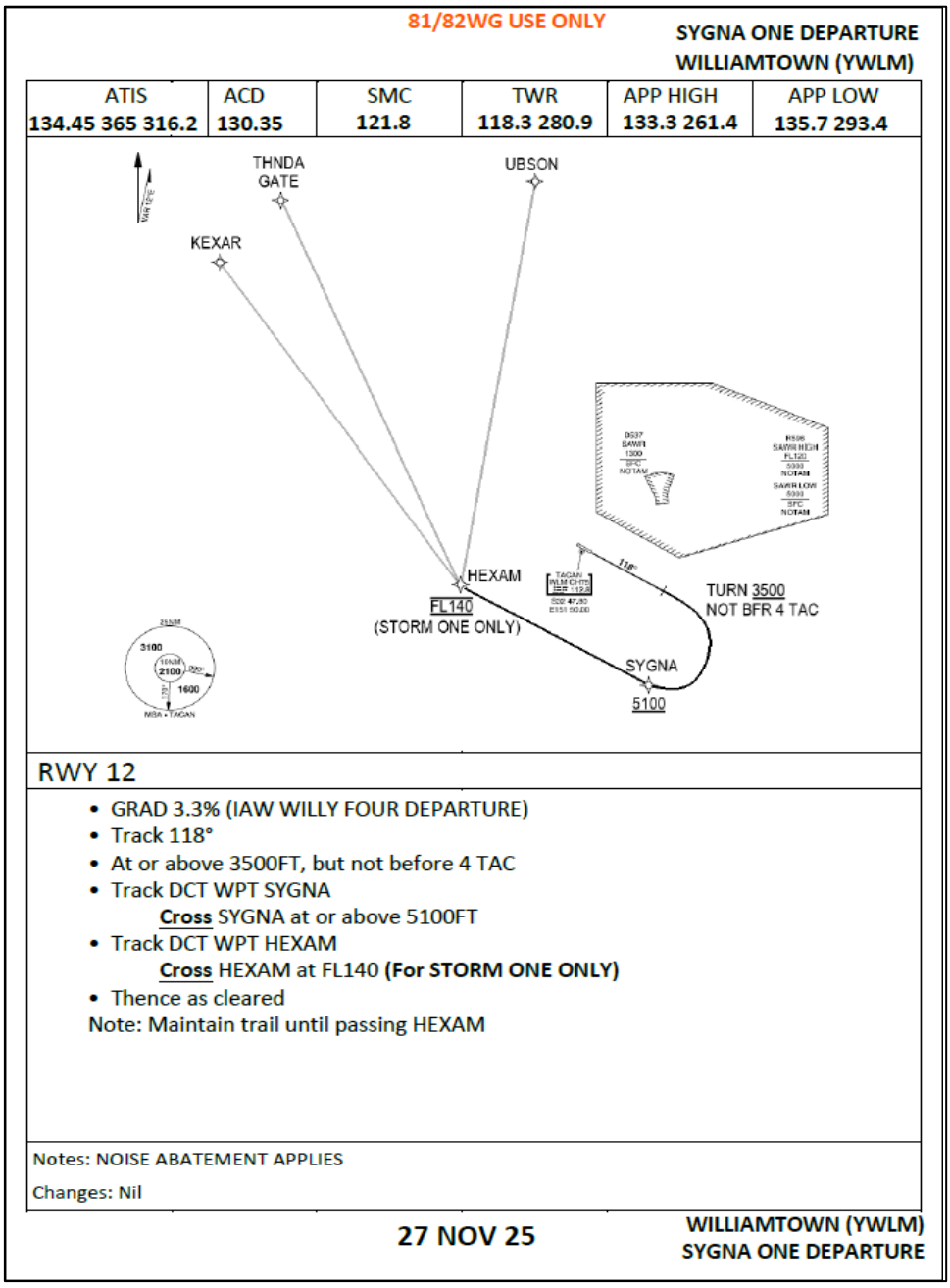
Tracking	RWY12	RWY30	RWY12 SAWR Low	RWY30 SAWR Low	RWY12 SAWR High	RWY30 SAWR High
G1 - G2	PEPPER	PEPPER	PEPPER	PEPPER	PEPPER	PEPPER
G3- G7	CLASSIC	CLASSIC	CLASSIC*	PEPPER	CLASSIC*	Radar/VSD
G9-11	Radar/VSD	Radar/VSD	Radar/VSD	Radar/VSD	Radar/VSD	Radar/VSD
WSTN	CLASSIC	CLASSIC	CLASSIC	CLASSIC	CLASSIC	CLASSIC
* ACFT departing RWY12 for Gates 3-7 will avoid SAWR on the CLASSIC SID track * ACFT departing on CLASSIC 1 departure will be issued a direction of turn in the take-off clearance						

Table 5 ACG SID Summary

2.10.5.1 Thunder corridor/northern planned route departures

The following two SID's for RWY 12 have been integrated with the WILLY FOUR (RADAR SID) profile. The CLASSIC ONE SID remains the primary SID for RWY 30 departures.

2.10.5.1.1 SYGNA ONE DEPARTURE (WSTN/NORTHERN FPR)

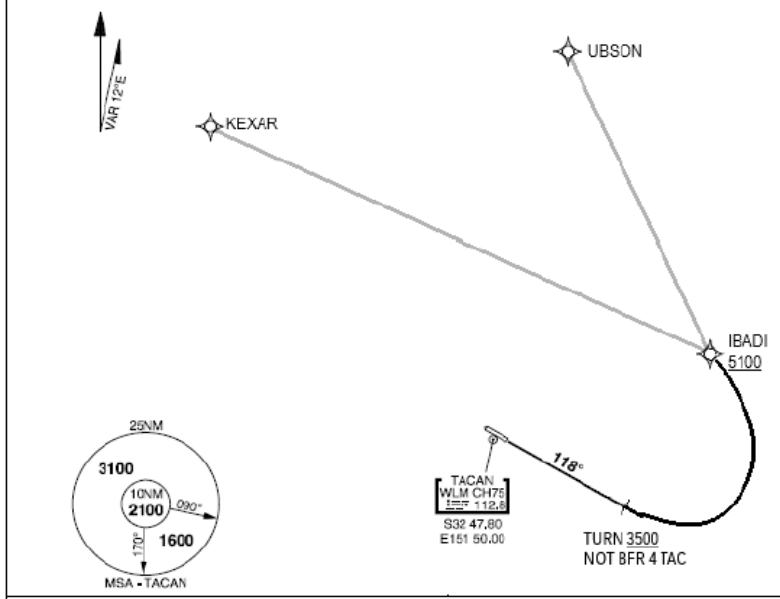


2.10.5.1.2 IBADI ONE DEPARTURE (NORTHERN FPR)

81/82WG USE ONLY

IBADI ONE DEPARTURE RWY 12
WILLIAMTOWN (YWLM)

ATIS	ACD	SMC	TWR	APP HIGH	APP LOW
134.45 365 316.2	130.35	121.8	118.3 280.9	133.3 261.4	135.7 293.4



RWY 12

- GRAD 3.3% (IAW WILLY FOUR DEPARTURE)
- Track 118°
- At or above 3500FT, but not before 4 TAC
- Track DCT IBADI
  Cross IBADI at or above 5100FT
- Thence as cleared
- Note: Maintain trail until passing IBADI

Notes: NOISE ABATEMENT APPLIES

Changes: Nil

27 NOV 25

WILLIAMTOWN (YWLM)
IBADI ONE DEPARTURE RWY 12

2.10.6 Departure levels

ACFT departing without a flight plan shall nominate preferred transit level with initial clearance request.

ATC may restrict initial climb for traffic management. Pilots should pass requirements for unrestricted climb with initial airways clearance request, noting this may incur a delay.

2.10.7 Sector entry

ACFT will not conduct a sector entry at the IAF for WLM instrument approaches unless:

a) entering a holding pattern
b) directed by ATC
c) pilot requested.

Caution: *ATC may sequence following ACFT on the assumption that no sector entry will be flown.*

2.10.8 Avoid Salt Ash

Airborne compliant ACFT may be instructed to 'AVOID SALT ASH' by day or night in VMC or IMC. ACFT instructed to avoid SAWR must:

a) remain outside the lateral boundaries of SAWR, and
b) not track between the southern border of SAWR and the RWY, unless cleared to do so by ATC.

A clearance for a visual approach via initial, and the VGAP procedure (see para 2.11.12) constitutes a clearance to track between the southern border of SAWR and the RWY.

Note: Pilots are responsible for separation between compliant ACFT operating within SAWR and compliant ACFT operating close to the boundary (see para 2.13.2.4).

2.10.9 Chaff, flares, and countermeasures

Any dispensing of chaff, flares, or similar stores, use of DIRCM/LAIRCM, or use of electronic attack, is to be in accordance with AC SI (OPS) 04-05 – Electronic Attack Policy.

2.10.10 Mean Line of Advance (MLA)

When cleared for MLA, ACFT can deviate up to 3nm left and right of track. If further deviations are required this should be specifically requested, e.g. 'request 5nm left of track'.

2.11 Special procedures for fast jet ACFT

2.11.1 Formation management

A pair's departure will always maintain standard formation.

Stream departures will stabilise in a 2 NM trail, and:

a) close to standard formation and report established to ATC, or

b) remain in 2 NM trail until established in their training area.

ACFT will be assumed to be operating in standard formation upon recovery unless ATC are advised otherwise.

Note: Special transponder requirements apply to stream departures (see para 5.5.1*)*

Caution: *ATC will base separation with formations on this procedure and any deviation from it shall be relayed to ATC as soon as the change is known.*

2.11.2 Fast Jet - Standard Instrument Departure (SID)

Strategic integration of fast jet military operations and the air Traffic Management Plan (TMP) is essential to the safe and expeditious flow of traffic within the domestic ASPC. The ACG SID contributes to this by significantly decreasing controller and pilot workload and facilitating access to FTA's via a standard profile. The ACG SID is the primary departure type, flown IMC or VMC and should be used prior to issuance of another Radar SID or Visual Departure.

Note: Pilots can expect the ACG SID to be cancelled and direct tracking to applicable gate when separation requirements of the SID are no longer required.

2.11.2.1 Radar SID Headings

When ACFT are issued a radar SID, a heading will not be included in the departure instructions/take-off clearance unless required for ATC traffic management purposes. Where a heading is not specified by ATC, make a single turn onto departure track IAW para 2.11.3 or 2.11.5 as applicable.

2.11.3 Departure tracking

When not departing via the ACG SID, ACFT departing on a nominated track or radial must intercept departure track within 10TAC.

ACFT departing via a gate or tracking point must be established on a direct track to that point within 10 TAC.

2.11.4 Departures requiring Block Levels

For a departure profile that requires a block level the pilot or formation lead must incorporate the VNAV requirements of the ACG SID into their level request.

Example 1: ‘Climb via SID Block Level A070-A080’ allows compliance with Not Above A080 at ERVEV.

Example 2: ‘Climb via SID Block Level FL130-FL140 allows compliance with Not Below FL130 at OLVEP.

2.11.5 Visual departure and Radar SID requirements

Fast jet ACFT, excluding Learjet and PC21, fly the following departure profiles for visual and radar SID departures:

2.11.5.1 RWY 12

a) maintain RWY heading
b) for left turns, turn at 3 TAC onto assigned heading (if issued) or departure track IAW para 2.11.3
c) for right turns, turn not before 3 TAC and not below 2500 FT onto assigned heading (if issued) or departure track IAW para 2.11.3.

2.11.5.2 RWY 30 with a heading issued by ATC:

a) maintain RWY heading
b) at 1.5 TAC turn onto assigned heading

2.11.5.3 RWY 30 with a right turn (no heading):

a) maintain RWY heading
b) at 1.5 TAC turn right heading 360
c) at 5 TAC turn for departure track IAW para 2.11.3.

2.11.5.4 RWY 30 with a left turn (no heading):

a) maintain RWY heading
b) at 1.5 TAC turn for departure track IAW para 2.11.3.

Note: If a visual departure is issued, all headings specified are flown visually until above the applicable LSALT.

ATC facilitate initial climb to at least 10 000 FT for F35 ACFT where practical.

Caution: *ATC will base separation on these procedures. Inability to comply must be reported prior to take off.*

2.11.5.5 F35 Contingency Operations

When WLM RSR is not available, ATC will advise F35 aircrew on clearance delivery that ‘Contingency OPS are in effect’.

Note: Contingency OPS Procedures are detailed in 81WG SOP and 453SQN WLM FLT LI.

2.11.6 Visual approach (VSA) procedures

2.11.6.1 Remain laterally clear of the CIRA

Regardless of level assignment ACFT should remain 1NM laterally clear of the CIRA when tracking to Left, Right or Straight Initial. ATC base separation on this tracking so only when issued a clearance ‘direct to’, or ‘track close’ via the relevant IP shall ACFT infringe the lateral dimensions of the CIRA.

2.11.6.1.1 Close initial

When cleared to track via a close left or right initial ACFT will track as required between the IP and RWY Threshold and transition to VFR once established within the CIRA. This tracking will take into consideration other traffic in the circuit pattern and noise abatement considerations. TWR will provide relevant traffic on first contact.

2.11.6.2 Visual approaches at night

At night, when ACFT report visual, regardless of whether they are under a vector or tracking instruction, ATC may issue a visual approach without issuing descent to the lowest safe altitude (LSALT) or positioning the ACFT to intercept final or to establish in the circling area. Aircrew are responsible for terrain separation upon accepting the VSA clearance.

2.11.6.3 Initial points



Figure 4 - initial points

The Initial Points (IPs) and the extended Initial Track for military stream landing pattern approaches are aligned with Taxiway Alpha and located at:

a) RWY 12: the south-western tip of Grahamstown Dam

b) RWY 30: the coastline.

The Left, Right and Straight Initial positions are 30 seconds flying time prior to the IP. ACFT report at Left/Right/Straight Initial and shall be wings level and tracking parallel to the RWY centre-line by the IP to ensure de-confliction with final approach.

2.11.6.3.1 Vertical requirements

Where cloud permits, climb/descend to reach 2500 FT by the IP (2000 FT for PC-21). Once past the IP, descend to reach 1500 FT by the pitch (1000 FT for PC-21). Aircrew are to remain below 2500 FT from the IP as ATC may separate traffic at 3500 FT and above.

Should the cloud preclude the standard descent profile, but conditions allow a visual recovery at or above 1500 FT (1000 FT for PC-21), a VSA may be flown between 1500 FT-2500 FT (1000 FT-2500 FT for PC-21). Pilots are to advise ATC when flying at non-standard levels as soon as practicable.

ATC may vary the level when required for separation or sequencing. Such instructions supersede the above procedure.

ACFT may manoeuvre up to 1.5nm north of TWY A during the run in from the IP, to enable clear sighting of downwind traffic, prior to the pitch.

2.11.6.3.2 Noise abatement for left Initial RWY 12

Weather and traffic permitting, overflying the Riding for the Disabled School (UTM LJ 863 785) should be avoided when tracking for left initial RWY 12. To remain laterally clear, track west of the ridgeline to the west of Grahamstown Dam over the Williams River. See Figure 4.

If overflight is unavoidable, it should be conducted not below 1500 FT and at 350 KTS or less, with every effort made to reduce noise.

2.11.6.4 Visual approach from the coastal corridor

ACFT tracking south via the coastal corridor to Nobbys Head will be issued a visual approach (along with Duty RWY No,) and instructed to contact TWR leaving the coast. On receiving this clearance, ACFT will proceed as follows:

a) climb to not above 2500 FT between Stockton Bridge and Nobbys Head
b) for RWY 30 make a left turn between Stockton Bridge and Nobbys Head then track via left initial
c) for RWY 12 make a right turn from Stockton Bridge and track via right initial
d) proceed IAW para 2.11.6.
e) switch to TWR frequency leaving the coastal corridor.

2.11.6.4.1 Ship transfer airspace active

When the ship transfer airspace is active IAW para 2.4, ACFT conducting a VSA IAW para 2.11.6.4 may be advised by ATC of the traffic by use of the phrase “Ship transfer airspace active”.

2.11.7 Instrument approach procedures

The tower supervisor declares ‘expect instrument approach’ (EIA) whenever the conditions do not favour visual recovery or ATC is unable to visually separate arrivals/departures with CIRA traffic.

Note: Traffic permitting, ACFT that report visual may still be issued a VSA clearance regardless of the advertised recovery status.

2.11.8 Minimum fuel

FIHA ENR 1.1 – 55 Para 10.9.2 (duplicate reference of the AIP document) contains a generic definition of Minimum Fuel, pilot expectations and the potential impact on Final Reserve Fuel. Both these documents in turn refer to the Manual of Standards Part 91 Para 19.02 in defining Final Reserve Fuel. However, with respect to fast jet operations, namely F35/F18E/F and HAWK ACFT, this definition inadequately represents the fuel critical nature of Fast Jet MIN FUEL states.

Therefore upon receipt of any control instruction (vectors, speed control or tracking) that impacts a FJ ACFT ability to conduct a Missed Approach, Go around, VGAP procedure or CCT leg extensions whilst above final reserve fuel the PIC should declare ‘MINIMUM FUEL’ at the earliest possible opportunity.

On receipt of a MINIMUM FUEL call, ATC will provide as much priority and track shortening as possible without unduly delaying other ACFT.

In the circuit area, MINIMUM FUEL ACFT should receive priority to land.

2.11.9 Speed restrictions

When “expect instrument approach” is declared on the ATIS, maintain 250 KTS CAS when within 25 NM of WLM, until turning onto or established on final. Additional speed adjustments may be necessary for ATC to achieve sequencing.

This speed restriction is not applicable to ACFT cleared for a VSA.

2.11.10 Stereo approach

The WLM Stereo is the primary procedure for recovering to YWLM during high levels of military flying. ACFT recovering via the Stereo will operate IAW pilot responsible for separation (PRS) procedures.

Activation of the WLM Stereo will be at the discretion of the Approach Supervisor. Activation will be broadcast on the ATIS and ATC shall advise CRU/AEWC.

The Approach Supervisor, after assessing traffic numbers and weather, will attempt to advise 78/81WG OPS of Stereo activation prior to morning brief. Short notice Stereo activation may still be required in the event of unexpected bad weather, increased traffic numbers and/or Brisbane Centre operations.

On first contact with CRU, AEWC or WLM ATC, ACFT will be cleared via a nominated gate or position for commencement of the Stereo.

The Radio telephony (RTF) procedures outlined in Appendix D are to be used after initial identification and tracking has been established.

2.11.11 Circuit procedures

2.11.11.1 Reduced RWY separation

ACFT agree to accept reduced RWY separation with a wet RWY, as per FIHA ENR.

2.11.11.2 Landing sequence

ATC will issue a landing sequence when there are other airborne ACFT landing ahead (e.g. cleared to land number 2) in anticipation of a reduced RWY separation standard.

2.11.11.3 Hot lane

When reduced RWY separation is applied, the southern side of the RWY is to be available for use as a ‘Hot Lane’.

2.11.11.4 Low approach

ATC may issue a clearance for a ‘LOW APPROACH’ which authorises fast jet ACFT to delay commencement of a go-around not later than 50 FT above the landing RWY threshold. Should other ACFT be landing ahead of the low approach ACFT, reduced landing separation must be achieved before the pilot may descend below 200 FT AGL.

2.11.11.5 CIRA operations at night

If ATC require ACFT to extend upwind/downwind for sequencing at night, ACFT will be issued a clearance ‘not above A025’ (>10NM MSA) for terrain protection outside the relevant Performance Category circling area. Once ACFT are re-established within their respective circling areas, they are to adopt the automatic CIRA clearance commensurate with their ACFT type IAW 2.4.1.

2.11.12 Visual go-around procedure (VGAP)

2.11.12.1 VGAP procedure

The VGAP is designed to provide circuit traffic priority over ACFT conducting straight-in approaches in VMC. ACFT instructed to go-around from a straight-in approach conduct the VGAP as follows:

a) go-around left/right onto the dead side of RWY 12/30, so as to be displaced 1000 FT from the RWY centreline as soon as practicable (Taxiway Alpha is approx. 700 FT from the RWY)
b) climb to, descend to, or maintain 1000 FT until all traffic has been sighted
c) join the circuit pattern or adopt ATC departure instructions, as appropriate.

2.11.12.2 Departing from a VGAP

ACFT departing from a VGAP will not be established on RWY centreline. By day, the VGAP instruction will automatically re-clear departing VGAP ACFT for a VISUAL DEPARTURE. By night, once all other traffic is sighted, VGAP ACFT are to re-establish on RWY centre-line prior to proceeding IAW a WILLY FOUR DEPARTURE.

2.11.12.3 ATC-initiated VGAP

ATC may initiate the VGAP by directing an ACFT on a straight-in approach '(callsign) GO-AROUND (LEFT or RIGHT) [AT (position)]'. The ACFT is to manoeuvre IAW the VGAP detailed above.

2.11.12.4 Pilot-initiated VGAP

The pilot of an ACFT conducting a straight in approach initiates a VGAP at 4TAC WLM if:

a) unable to comply with ATC instructions, or
b) unable to sight conflicting circuit traffic.

2.11.13 Brake chutes

ACFT intending to deploy the brake chute shall advise ATC as soon as possible. Chutes will be deployed in the cold lane. If strong cross winds are likely to blow the chutes into the hot lane, deployment should be delayed until beyond 4000 FT from the landing threshold.

Aircrew are to advise if the chute deployment is required or requested. ATC will accommodate all chute requirements and will attempt to accommodate all requests subject to traffic.

2.11.13.1 Landing with chutes on the RWY

When a chute is on the RWY, use of the RWY is limited to fast jet landings only, provided:

a) no chutes within 3000 FT of the approach end threshold
b) ACFT are advised of the obstruction
c) all chutes are in the cold lane.

2.11.14 F35 chase procedure

2.11.14.1 Conducting the chase procedure

ACFT intending to conduct chase procedures in the CIRA will advise ATC "WITH CHASE" on first contact or otherwise ASAP.

Chase ACFT adopt and remain in close formation.

When on base the chase ACFT flies on the outside of the trainee, displacing to the dead side remaining south of TWY A. The chase ACFT is not required to report the status of their gear and it will not be challenged by ATC. Chase ACFT go around and enter the circuit once the trainee lands on a full-stop.

If the chase ACFT will overfly ACFT or vehicles, ATC may restrict descent to not below 350FT or advise the chase ACFT that they are ‘restricted to the huts’ IAW 453SQN WLM FLT LIs. A ‘restriction to the huts’ is a restriction for the chase ACFT to not track any further north than the cable huts.

Advise “CHASE COMPLETE” when appropriate. If aircrew wish to resume the chase procedure they are to make a new request.

2.11.15 Practice & precautionary flameout and forced landing procedures (PFO/PFL)

PFO/PFL procedures flown for training use the following profiles:

a) High key
b) Straight in
c) Random entry
d) Glide approach.

Practice procedures are flown for training. Precautionary procedures are flown when an ACFT is experiencing abnormal operations which could develop into a forced landing.

Caution: *ATC will assume any request for a PFO or PFL is for training. ACFT conducting a precautionary procedure must declare a PAN or MAYDAY to receive priority.*

Note: the terms “PFO” and “PFL” are used interchangeably in this document and in radio comms.

2.11.15.1 Flight rules

Except for the IMC PFO procedure, all ACFT conducting a PFO/PFL procedure become VFR once:

a) they have requested a PFO/PFL, including requesting tracking to high key, and
b) they are visual.

Except for the IMC PFO procedure, ATC will not clear ACFT to commence a PFO/PFL procedure until they have reported visual. IMC PFO ACFT may be cleared to commence the approach in IMC (and therefore remain IFR) but may subsequently become VFR IAW para 2.11.15.7.

2.11.15.2 Altimetry

PFO/PFL are flown on Williamtown QNH.

2.11.15.3 Transition to CIRA

Once established laterally within the circuit area, PFO ACFT are considered to be operating in the CIRA (see para2.5.4).

2.11.15.4 Separation responsibility

Pilots conducting any PFO/PFL procedure are responsible for separation with other traffic in the CIRA IAW para 2.13.2.1.

2.11.15.5 High key (spiral) procedure

The high key procedure is conducted overhead the airfield, remaining within the lateral boundaries of the Circuit Area (see para 2.5.1). Any level may be requested. Standard levels are:

a) F35: 12 000 FT
b) Hawk: 5000 FT
c) PC21: 3000 FT

Exact trajectory varies by ACFT type and conditions, but high key is always overhead the RWY or on the dead (northern) side of the circuit and low key is always on the active (southern) side of the circuit. Diagrams of the typical Hawk, PC21 and F35 profiles are shown at *Figure 5*, *Figure 6*, and *Figure 7*.

If departing from the circuit to high key, the initial turn must be towards the active (southern) side of the circuit unless ATC approve otherwise.

Report at high key. ATC will issue:

a) holding instructions, or
b) “CLEARED VISUAL APPROACH”, or
c) “TRACK VIA THE PFO NOT BELOW [LEVEL]”, and
d) relevant traffic information and, if required, sequencing instructions.

Note: do not depart high key until authorised by ATC.

Report “HIGH BASE, THREE GREENS, (INTENTIONS)” at the base position.

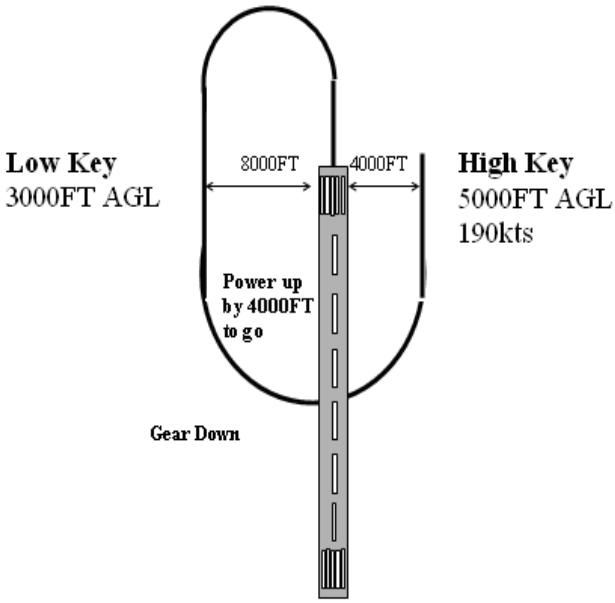


Figure 5 – Hawk PFL profile

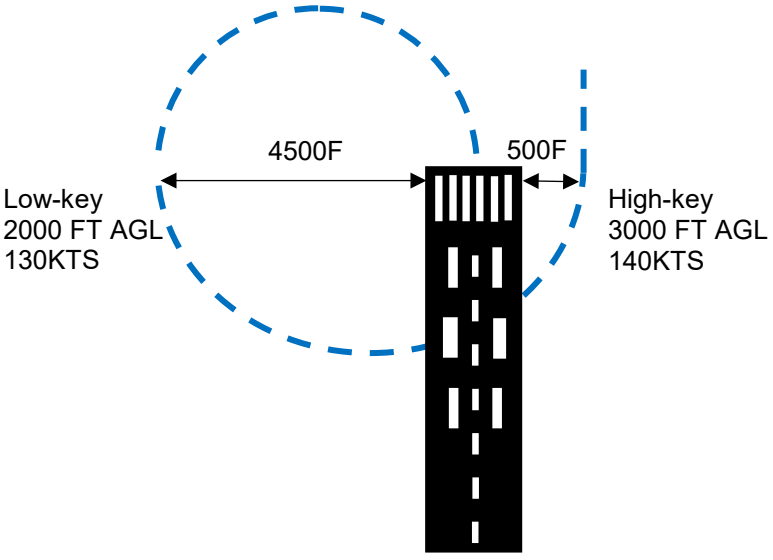


Figure 6 – PC21 PFL profile

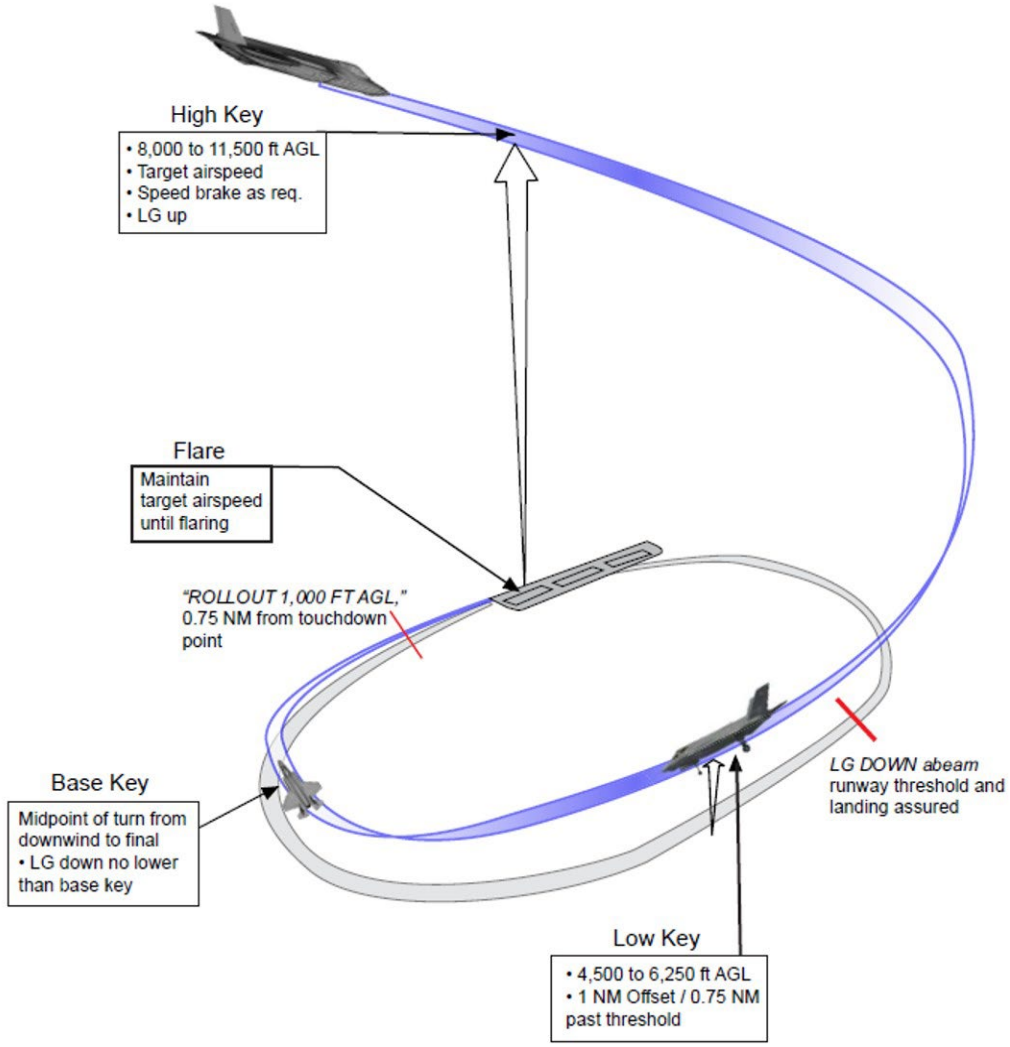


Figure 7 – F35 PFO profile

2.11.15.6 Straight in and random entry procedure

Straight in PFO are conducted as a straight-in visual approach commencing at 10 NM final, unless a shorter distance is approved by ATC.

Random entry PFOs are conducted from a pilot-nominated position direct to the closest base key for the duty RWY. The closest base key may be on the dead side of the circuit.

Commencement altitude is nominated by the pilot (typically between 7000 FT and 12 000 FT).

ATC will issue:

a) tracking to the commencement point

b) holding instructions, or

c) “CLEARED VISUAL APPROACH”, or

d) “TRACK VIA THE PFO NOT BELOW [LEVEL]”.

ATC will issue relevant traffic information and, if required, sequencing instructions.

2.11.15.7 IMC PFO procedure

Straight in or random entry PFOs may be flown in IMC by requesting an ‘IMC PFO’ approach. This procedure is flown as per the equivalent VMC procedure, except that it is not a requirement to be visual to commence the approach and ATC will use the phrase “CLEARED IMC PFO” in lieu of “CLEARED VISUAL APPROACH”.

Do not descend below 2100 FT unless visual. VFR will apply automatically if the ACFT descends below 2100 FT.

If not visual at 2100 FT:

a) stop descent at 2100 FT

b) track direct to WLM, then upwind via the extended RWY centreline

c) climb to and maintain 3100 FT by 10TAC

d) proceed as instructed by ATC.

Note: The IMC PFO procedure significantly affects arrivals, departures, and circuit traffic. Holding should be expected, especially when visual approaches are suitable.

2.11.16 Hawk glide approach procedure

The Hawk glide approach procedure is used by ACFT operating in the CIRA, and is effectively the final stage of the high key procedure (from low key to touchdown).

Request glide approaches by requesting “CIRCUITS NOT ABOVE 3000” from ATC. ATC will clear the ACFT “CIRCUIT AREA NOT ABOVE 3000”. Note that this clearances requires ATC coordination and will not be issued immediately.

Once cleared:

a) climb upwind to 1500 FT

b) turn crosswind in the standard circuit direction

c) report “CROSSWIND, GLIDE”

d) maintain 3000 FT until low key (See *Figure 5*)

e) report “HIGH BASE, 3 GREENS, TOUCH AND GO”

f) proceed as instructed by ATC.

Subsequent approaches may be made without requesting a new clearance each time, until:

a) re-cleared in the circuit area not above 1500 FT, or

b) a full stop landing is made.

2.12 Special procedures for helicopters

2.12.1 Helicopter training areas (HTA)

The following HTAs are available:

AREA	DESCRIPTION	DEFINITION	LEVELS
Chief 1	Overwater operating area.	3NM radius centred on S32 48 E152 15 (WLM078/021).	Pilot request
The Strip	An old airstrip in a pine plantation, predominantly used for night sun, low level search and transit training.	Landing site S32 34.45 E152 12.98 (WLM043/023). The operating area is defined as, WLM 035R east to the coast between 20-25 TACAN.	Pilot request
Broughton Island Training Area	Overwater day/night training area incorporating coastal islands	Up to 3NM east of the coastline between Yacaaba Head and Broughton Island, including the whole of Broughton Island Caution: See para 3.4.7.4	Not above 3100 FT
SAR Training Area	Overwater/over land day/night training area	The Strip plus Broughton Island Training Area Caution: See para 3.4.7.4	Not above 3100 FT
Tomaree Training Area	Day time training between Anna Bay and Tomaree Head.	Outside 13DME WLM, east of Nelson bay RD including that part of the Coastal Corridor.	Pilot request

Table 6 – HTA summary

Note: The Broughton Island and SAR Training Areas slightly lie within LFA Whiskey (R585A). Despite this, these areas are considered adjacent training areas and concurrent activities are permitted. When the Broughton Island Training Area or SAR Training Area are in use at the same time as LFA Whiskey, ATC will advise traffic in each training area that the adjacent area is active, but will not provide separation between the two training areas (see para 2.13.2.3).

2.12.2 Priority

Part A compliant helicopters will be afforded priority for training equal to that of Part A compliant fixed wing ACFT as far as possible.

2.12.3 Flight rules

General helicopter operations are VFR unless approved otherwise.

Operations in any HTA must be VFR.

2.12.4 CHC helicopter Entry Gates

To assist with traffic management, Entry Gates (CHOPPERS North/South) that are perpendicular to the RWY are available for ease of transition to spot landings on parallel TWY A, RWY or any temporary HLS nominated by ATC, minimising RWY occupation.

2.12.4.1.1 Choppers North

Described as abeam and north of the high speed Engine run facility.

a) Waypoint coordinate – 32 46 53S 151 50 41E:
b) Standard altitude – 500FT – unless instructed otherwise

2.12.4.1.2 Choppers South

Described as abeam and south of the WLM NDB.

Transit altitude

a) Waypoint coordinate - 32 48 12S 151 49 44E
b) Standard altitude – 500FT – unless instructed otherwise



2.12.4.2 Lateral Separation

To achieve separation with ACFT on final approach in marginal meteorological conditions, CHOP21 may be instructed to hold at either FTC (Northern shore of Fullerton Cove) or RRR (Richardson road roundabout) depending if arriving from the north or south.

a) Waypoint coordinate - FTC – 32 49 33S 151 48 15E

b) Waypoint coordinate - RRR – north of Richardson Rd, and East of Medowie Rd, abeam the roundabout – 32 46 18S 151 51 40E

2.13 ATC procedures

This section lists reductions to the normal ATC services provided in military ASPC, and additional pilot responsibilities that apply in the ASPC.

2.13.1 Class of service

ACFT will receive a Class C service, except where specified in para 2.13.2.

2.13.2 Reduced separation

2.13.2.1 Separation between ACFT in the circuit area

Caution: *Para 2.13.2.6 applies to all circuit traffic, including arrivals and departures.*

On departure and arrival, pilots of Part A compliant ACFT are responsible for separation with all other Part A compliant ACFT in the CIRA.

Where two ACFT have a mutual separation responsibility, unless ATC issue other instructions:

a) departing ACFT give way to ACFT conducting circuits
b) arriving ACFT give way to ACFT conducting circuits, and departing ACFT.

Note: The above does not preclude ATC from applying judicious segregation between ACFT in order to prevent collisions. Particularly during abnormal operations, where increased workload exists.

2.13.2.1.1 Exceptions

ATC are responsible for:

a) separating arriving ACFT conducting an instrument approach with all other traffic, when “expect instrument approach” (IMC) is broadcast on the ATIS
b) separating IMC PFO ACFT with all other traffic until they report visual.

2.13.2.2 Separation between ACFT in the same training area

Pilots are responsible for separation between ACFT in the same training area.

Prior to an ACFT entering a training area, ATC will either hand the ACFT off to a C2 agency, or provide traffic information on ACFT already in the same training area, as a minimum consisting of the callsigns already established, e.g. “NUMBER THREE TO BBCT21 AND HDDO”.

2.13.2.3 Separation between ACFT in adjacent training areas

Pilots established in a training area are responsible for separation with ACFT operating in adjacent training areas. Pilots are to consider adjacent training areas active at all times. Traffic information available on request.

2.13.2.4 Separation between ACFT in training area(s) and external traffic

Pilots are responsible for separation between ACFT operating in a training area, and part A/B/C compliant ACFT operating at or adjacent to the boundary.

2.13.2.5 Separation from terrain

Pilots are responsible for terrain separation within training areas.

2.13.2.6 Separation from Coastal route

Except when operating in the OHEAD training area IAW para 2.8, Part A compliant pilots are responsible for separation with other Part A compliant traffic operating in the coastal route

This responsibility exists by day and night, in VMC and IMC (except instrument approaches to RWY 30), and includes operations within a training area, departure, arrival, and transit.

When applied between Part A compliant ACFT, ATC will not pass traffic information about traffic in the coastal route. Pilots must assume the route is always occupied and avoid it at all times, including on departure.

2.13.3 Termination of identification

ATC identification and control services automatically terminate on entry to a training area.

2.14 Emergencies and abnormal ops

2.14.1 RWY obstructions

2.14.1.1 Land on unobstructed side of RWY

If only half the RWY width is obstructed, fast jet ACFT may land on the unobstructed side.

2.14.1.2 Land on TWY Alpha

If military ACFT are to land on TWY Alpha, ATC shall bring the airfield to Local Standby and:

a) ensure all vehicles, pedestrians and ACFT operating within the manoeuvring and apron areas are held short of TWY Alpha at the intermediate holding points
b) instruct SECFLT to secure:
    i) the intersection of the perimeter road and TWY Mike
    ii) the access road to TWY Alpha located next to the ACFT Arrestor Systems Hangar and Emergency Staging Area.

2.14.2 Hot lane procedures

ACFT experiencing an emergency on landing and requiring the use of the 'Hot Lane' are to transmit on Tower frequency: '(Callsign), HOT LANE, HOT LANE.' Other ACFT in the CIRA respond as follows:

a) ACFT on the RWY move to the northern side of the RWY (cold lane), as soon as safely possible
b) ACFT beyond the departure end cables expedite taxi to clear the area
c) circuit ACFT are to climb to or maintain circuit altitude, remain in the circuit pattern and maintain separation with other circuit or re-joining traffic.

ATC respond as follows:

a) for cable arrestable ACFT, raise the departure end cables and acknowledge the emergency ACFT with '(Callsign), DEPARTURE END CABLES UP'
b) for barrier arrestable ACFT, raise the departure-end barrier and acknowledge the emergency ACFT with '(Callsign), BARRIER UP'
c) activate aerodrome emergency plan (AEP) and other required services.

2.14.3 Hot brakes procedures

ACFT with hot brakes or wheel fire shall advise ATC of the condition, any ordnance or dangerous cargo, and their intentions. ATC shall dispatch ARFF IAW the information received.

2.14.3.1 Hot brakes safe areas

The following hot brakes safe areas described in the Williamtown Aerodrome Manual are suitable for most military ACFT. Limitations on ACFT type, armament, dangerous cargo, safe headings etc. apply to each location and are listed in the Aerodrome Manual.

a) Compass swing (all types)
b) OLA20 (all types, including armed ACFT)
c) Alert Aprons East & West (fast jet ACFT).

If in doubt, OLA20 suits the widest range of ACFT sizes and armament including HE and forward firing ordnance.

2.14.4 Wheel fire

If a wheel fire occurs on an ACFT that is located in a flight line, the ACFT is to be taxied forward 15 metres (if safe to do so) and shut-down immediately. An ACFT in any ASP is to be shut-down in its present position, without taxiing forward. Normal fire evacuation procedures are to be followed.

2.14.5 Emergency cable arrest

Emergency cable arrests may occur at short notice. Whilst emergency traffic has priority over all other traffic, ATC should give consideration to recovering as many fuel-sensitive ACFT as possible prior to the engagement.

Practice cable arrests do not have priority over other traffic. ATC may refuse or defer requests to avoid delaying other traffic.

15-30 minutes is used as a guide for RWY restoration. Further details regarding cable arrests, including strip and RWY restoration times, are detailed in the RAAF Base Williamtown AEP and Williamtown Aerodrome Manual.

2.14.5.1 Pilot responsibilities after landing

To help expedite the towing process if the jet will shut down on the RWY, the pilot is to remain in the ACFT (unless a safety issue dictates otherwise) and act as the brakeman for towing. The pilot remains responsible for cockpit safety measures.

An expedited engine shut-down is expected to occur within two minutes of landing. Once engines have been shut-down (should this be the case), broadcast this fact for ground agencies' information.

2.14.6 Physiological emergencies

In the event of a physiological PAN or MAYDAY being declared (e.g. smoke and fumes in cockpit), the pilot should shut-down the ACFT in the nearest alert apron or a location coordinated with ATC.

2.14.7 Premeditated ejection

The premeditated ejection area is overhead the sand hills east of WLM (WLM120002), with the ACFT heading 120 degrees and not below 2000 FT.

3 Part B: Williamtown Eastern ASPC

3.1 Compliant ACFT

These procedures apply to the following ‘compliant’ ACFT:

a) ACFT operated by ACG, 2SQN, & ARDU TEF WLM (using SIGMA callsign only)
b) ACFT operated by Air Affairs Australia, Raytheon Australia or CHC Australia (WLM SAR FLT only) using a callsign published in MATS 6.2.2.4
c) Australian military or ADF-contracted ACFT where the pilot in command or detachment commander has declared they are “PART B COMPLIANT”
d) Foreign military ACFT that have agreed to these procedures in writing.

Any other ACFT will be assumed non-compliant. ACFT may also opt-out of the application of these procedures by advising ATC (see para 3.2).

3.2 Non-compliant operations

To ensure separation with civil aviation and compliant traffic, operations for non-compliant ACFT (other than simply arriving to and departing from the aerodrome) shall only be available through:

a) publication of AIP SUP or an ACP for a temporary activity
b) ‘due regard’ procedures
c) operations under the control of a C2 agency who will accept responsibility for ensuring compliance
d) individual arrangements made with ATC well in advance.

3.3 Low Flying Areas (LFA)

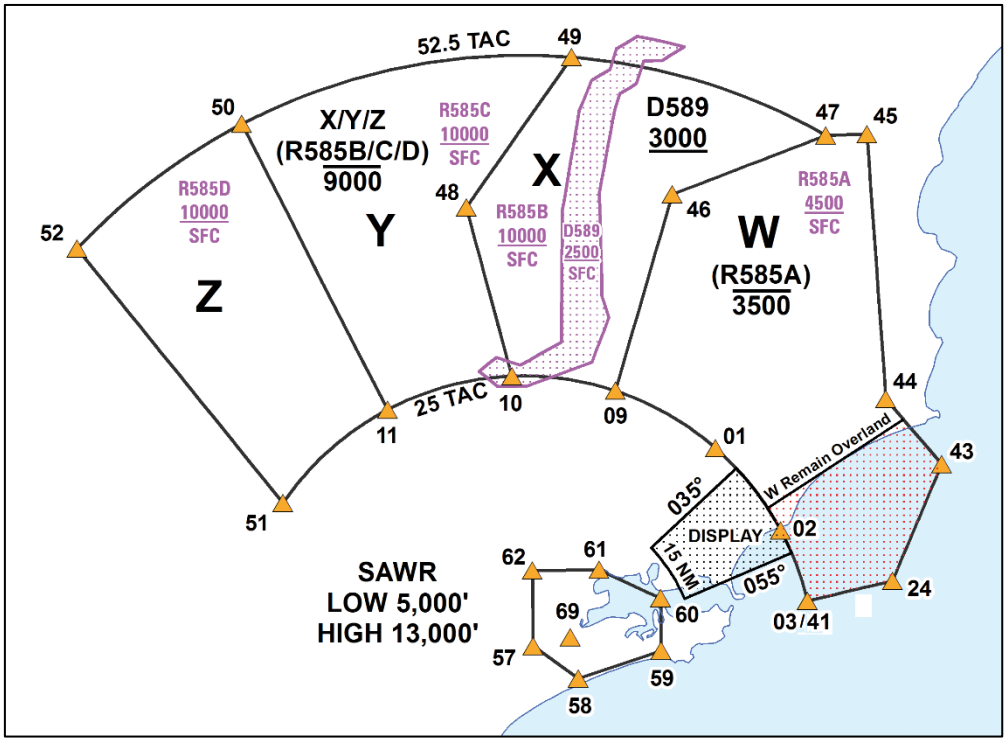


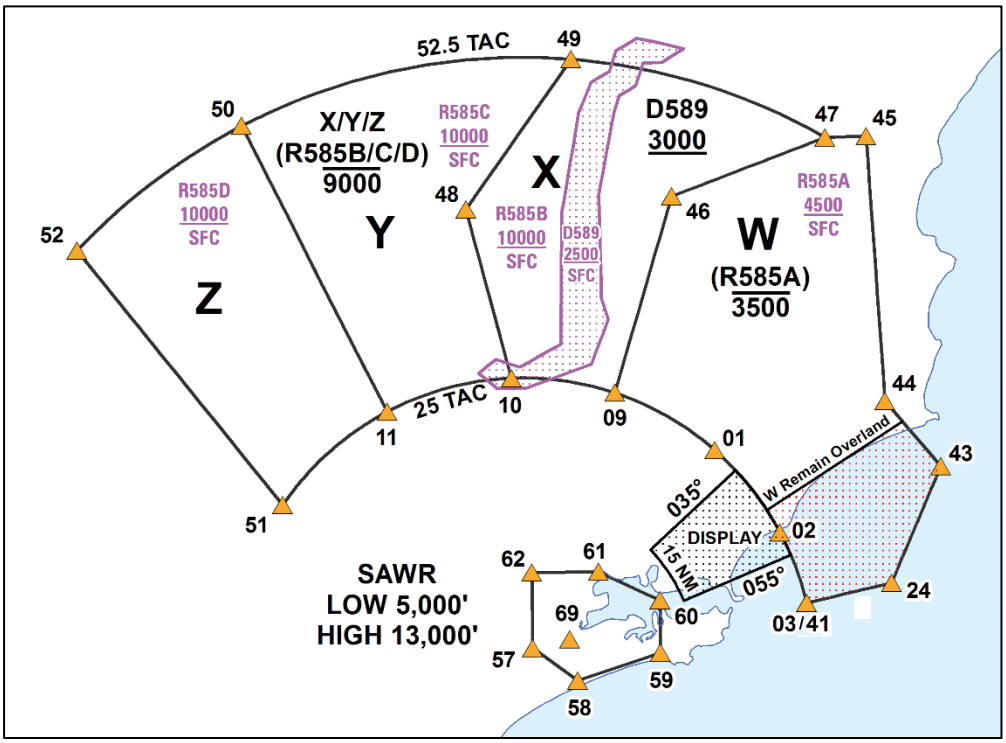
Figure 8 – LFA diagram

LUL	SFC
HUL	W: 3500 FT X, Y, Z: 9000 FT
Standard frequency	120.70
Flight category	VFR (IFR on transit to/from)

Table 7 - LFA summary

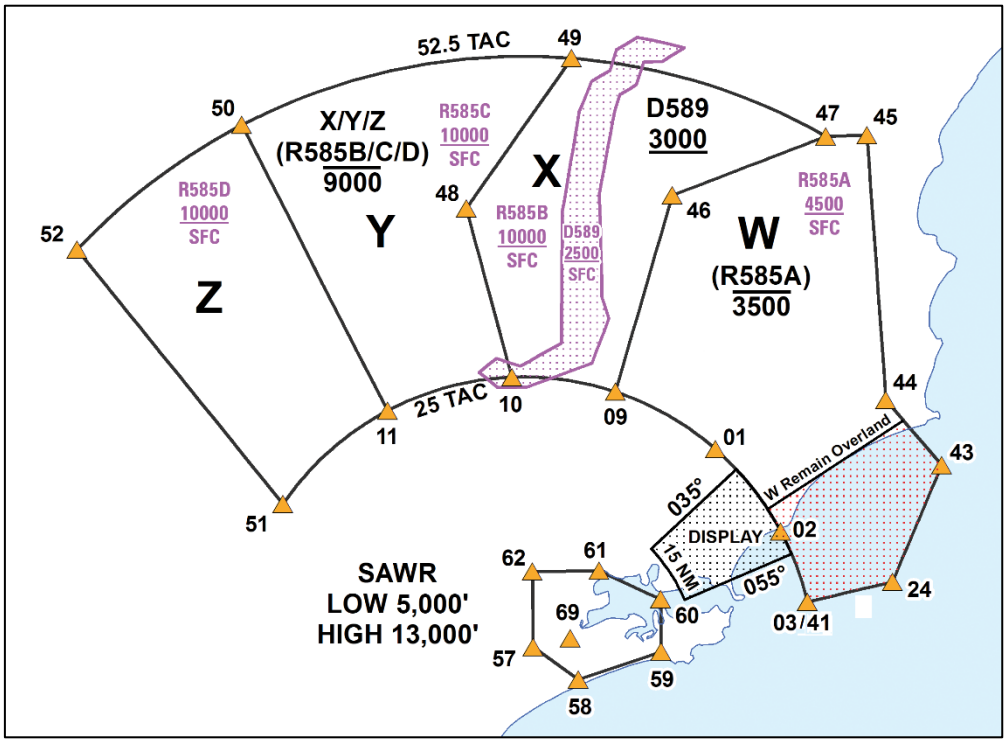
3.3.1 Dimensions

3.3.1.1 Low Flying Area Whiskey



To avoid confliction with coastal corridor traffic, SAR and Broughton Island Training Areas (See 2.12.1), ACFT should remain over land in area W.

3.3.1.2 Low Flying Areas X-Ray, Yankee and Zulu



3.3.1.3 Flight rules

Flight within all LFAs is conducted VFR.

3.3.2 LFA/GFTA combined operations

The LFAs may be combined with Hotel and adjacent GFTA(s) to form an extended training area. When LFA W is combined with GFTA H altitudes 3500 – 5500 FT are useable with the combined clearance.

3.3.2.1 Flight rules for combined operations

When operating in a combined LFA/GFTA, IFR ACFT will become VFR automatically when they descend below the base of Hotel (5500 FT), and revert to IFR once established back within Hotel. ACFT transiting to and from the ASPC will be IFR.

3.3.2.2 Medevac Transit

MEDEVAC transit of the combined W/H ASPC is not uncommon and generally at levels up to 6000FT. ATC shall issue clearance instructions as required.

3.3.2.3 RPAS operations

RPAS operations in the LFAs are automatically approved by the RPAS cell at WLM ATC, provided operations are not above 100ft AGL. WLM ATC will provide details and a map of approved operations above 100ft AGL via SQN email to relevant squadrons (76SQN, 4SQN and ARDU) as soon as practicable. RPAS operators requiring higher than 100ft AGL will only be approved by WLM ATC after consultation with relevant squadrons.

3.4 Eastern General Flying Training Areas (GFTA)

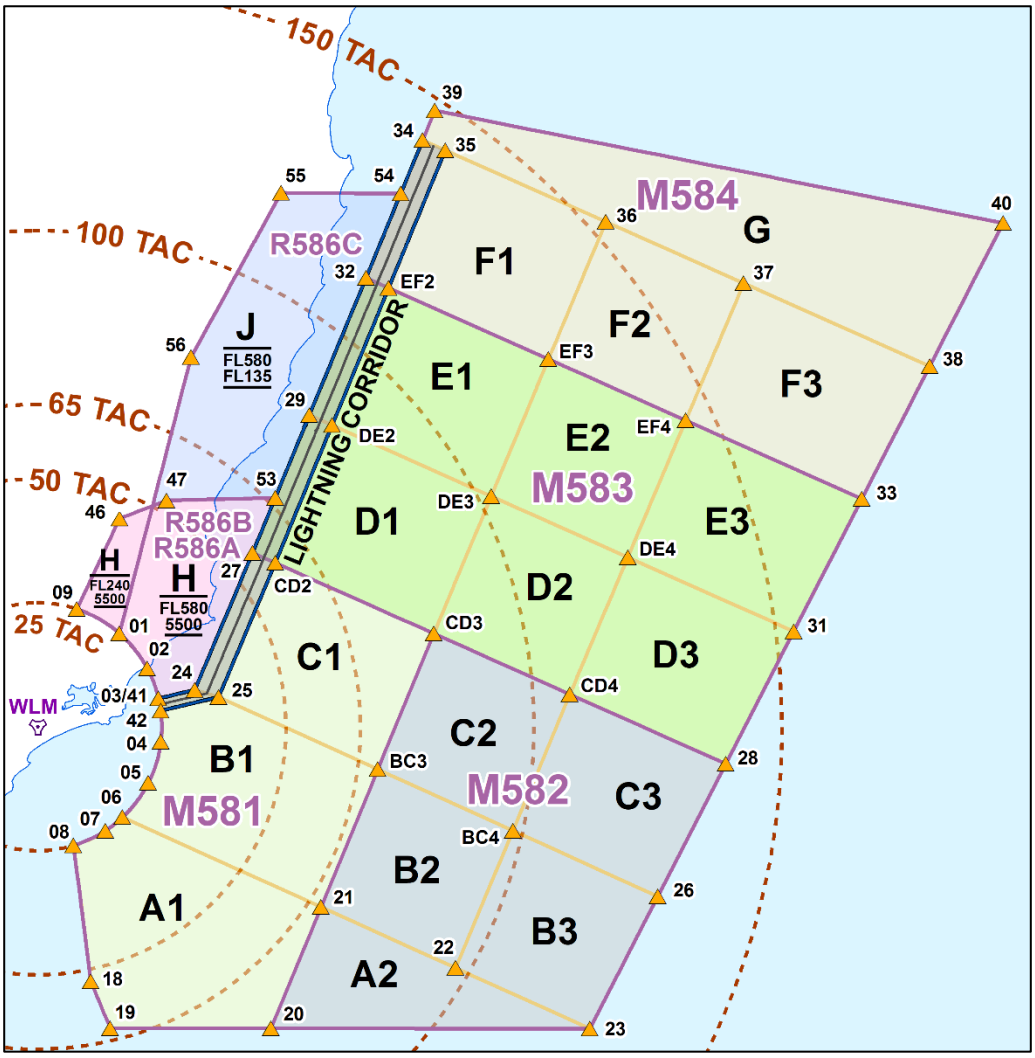


Figure 9 - Eastern GFTA

LUL	GFTA H: 5500 FT GFTA J: FL135 All others: SFC
HUL	GFTA H: FL580 / FL240 (see para 3.4.7.2) All others: FL580 (F570 if supersonic)
Standard frequency	IAW para 3.6

Flight category	IFR (incl. transit to/from)

Table 8 - Eastern GFTA summary

3.4.1 Dimensions

There are 20 locally defined Eastern GFTA subsets individually depicted in Areas that may be grouped as required to accommodate a variety of missions.

Waypoints for these training areas are published in Appendix B: Eastern ASPC waypoint data card.

3.4.2 Altimeter settings

Operations within Eastern GFTAs shall be with reference to WLM QNH, unless a force/area QNH is provided by a C2 agency.

Altimetry at all other times shall conform to ICAO standards.

3.4.3 Priority for use

Priority of use applies to the Eastern GFTA. See para 5.1.4.

3.4.4 Radiotelephony

Pilots nominate their planned training area(s) to ATC with their initial clearance request on Clearance Delivery. ATC will not usually read this back unless there is a discrepancy between the requested area and the flying program. Standard radiotelephony for Williamtown areas are published at Appendix D: WLM specific RT guide.

3.4.5 Departure gates and transit lanes

Transit to and from the Eastern GFTA via one of the following gates or lanes in *Table* 9. Waypoints for gates and lanes are published in Appendix B: Eastern ASPC waypoint data card.

GFTA	Gate/Lane
A1	Gate 7
A/B	Gate 6 for Lane A-B
B1	Gate 4 or Gate 5
C - G	LG - Lightning Gate (corridor access waypoint)

H	Gate 1, 2 or Gate 3
W	Gate 1
X,Y,Z	Gates 9 – 11 or radial as requested

Table 9 – Eastern GFTA gates and lanes

3.4.5.1 Lightning corridor

To facilitate traffic transiting to GFTAs Charlie through Juliet, the lightning corridor is active whenever M581 is active. The corridor is only active for the portions were a corresponding MOA is active by NOTAM, i.e. if M584 is inactive then only the portions of the lightning corridor in M581 and M583 are active. The corridor is active from 5000ft on applicable QNH with a width of initially 2.5nm opening to 5nm and accessed via the Lightning Gate (068/25) which is centred on IFR waypoint NELSN.

ACFT operating in the corridor are to transit north in blocks 10000ft to 14000ft, 20000ft to 24000ft, etc. and transit south in blocks 5000ft to 9000ft or 15000ft to 19000ft, etc. Different altitudes in the corridor may be coordinated by C2 agencies.

ACFT are to transit in the centre of the corridor. Formations up to 1nm total width are permitted, but must centre the formation in the middle of the corridor. ACFT in adjacent GFTAs are to avoid the lightning corridor by 2.5nm laterally.

Note that the lightning corridor is contained within M581, M583 and M584. ACFT are to transit no further north than the 065R inside 35nm to avoid R586 and civilian ASPC. If the MOAs are not active, the lightning corridor will not be active for ACFT transiting to GFTAs Hotel or Juliet.

Changes to the lightning corridor procedures to facilitate exercises must be coordinated with all ASPC users.

To avoid ACFT on RTB in the 15000FT to 19000FT block, departing ACFT for LG should flight plan to FL200 or above.

3.4.5.2 Lanes

ACFT may transit the east-west lanes that are delineated alphabetically. The lanes will be referred to by their adjoining ASPC eg. Lane Charlie-Delta. ACFT should transit the lanes at multiples of 5000FT. Eg. 10000FT, 15000FT etc. ACFT operating on lanes are responsible for their own separation IAW para 2.13.2.3

3.4.5.3 2SQN Operations east of the Eastern GFTAs

To facilitate operations beyond the eastern boundary of the GFTAs , 2SQN shall advise ATC of their tracking through the GFTAs IAW with *Table 9* either by flight plan or on clearance request.

3.4.6 Clearance to operate

A traffic statement from ATC is a clearance to operate in the training areas nominated. For example, “NUMBER 1 IN BRAVO ONE AND CHARLIE ONE” is a clearance to operate in Bravo 1 and Charlie 1 only.

If ATC switch an ACFT to a C2 agency prior to entering the training area, clearance to operate is issued by that C2 agency.

3.4.6.1 Exception

If the C2 agency does not have an ASPC release from ATC, ATC may issue a clearance to operate in specific training areas, a requirement to maintain listening watch on 121.5MHz and / or 243.0 MHz, and a frequency transfer. In this case the ATC clearance has precedence over C2 instructions.

3.4.7 GFTA Hotel and Juliet

3.4.7.1 Dimensions

Area Hotel comprises R586A and R586B. R586A has a LUL of 5500ft and a HUL F240. R586B has a LUL of F240 and a HUL of F580.

Area Juliet is contained within R586C with a LUL of FL135 and a HUL of F580.

3.4.7.2 Civil Air Routes above GFTA Hotel (R586A)

Aircrew are to be cognisant of the civil air routes west of R586B, above R586A. To remain clear, ACFT must operate at or below FL240 when west of a line between Gate 1 and WP56 (see Appendix B: Eastern ASPC waypoint data card).

3.4.7.3 MEDEVAC transit of Hotel

With only Hotel or LFA-W active (not LFA/GFTA combined operations), a non-standard IFR altitude of 4500ft is available for transiting MEDEVAC ACFT which will be used whenever possible. If the MEDEVAC traffic requires a higher altitude and Hotel is active, traffic in Hotel may be issued with a temporary vertical or lateral restriction.

3.4.7.4 LFA W and helicopter training areas

LFA W overlaps the helicopter training areas Broughton Island Training Area and SAR Training Area (see para 2.12.1). Concurrent activity is permitted however separation between the areas is not provided IAW para 2.13.2.3.

3.5 ASPC Boundaries

3.5.1 Boundary compliance

All ACFT operations shall be wholly contained within the boundaries published in this SUPP. These boundaries have been designed to assure separation with external civil traffic. Civil IFR ACFT will be provided with 5nm clearance from the boundaries of restricted ASPC. Although unlikely, aircrew should be aware that VFR ACFT may fly to the boundary of the restricted area and MOAs in class G and E ASPC.

To keep a 5nm buffer between ACFT in adjoining ASPC, ACFT are not to operate within 2.5nm of adjacent internal ASPC including the lightning corridor without coordination or SA of adjacent area and lane traffic. Reduced separation standards apply to flying on the lanes between ASPC as per para 3.4.5.2.

The waypoints delineating the ASPC are published in Appendix B: Eastern ASPC waypoint data card.

3.5.2 Boundary keeping

ACFT must be capable of maintaining within training areas boundaries, including all applicable navigation and equipment error tolerances. The technical means by which this is achieved is left to the discretion of airworthiness authorities.

Caution: *ATC will not apply additional buffers. A serious safety incident may result from vertical or lateral training area excursion.*

3.6 Frequency allocation

Frequency designators typically consist of a colour and a number. The number aligns to the stud (where available) while the colour designates the nominal, but not mandatory, use for the frequency. Default colour designators for WLM are:

a) Aqua (AA) – Blue Force
b) Ruby (RY) – Red Force
c) Bronze (BE) – Kill Common
d) Violet (VT) – VHF ABM
e) Yellow – AAR
f) Hazel – HF ABM

Standard frequency allocations for Williamtown Eastern ASPC are shown in Table 10. Use these frequencies unless given alternative instructions by C2 or ATC.

Frequency decode is IAW AFEMSOC OPTASK COMMS

Area	First	Second	Third	Net
A	RY21			
B	AA23	RY24	BE25	Net 3
C	AA26	RY27	BE28	Net 4
D	AA29	RY30	BE31	Net 5
E/F	AA32	RY33		
H	AA20			
J	BE22			
W	AA20			
XYZ	BE34			
LC	WHITE01			

Table 10 – Frequency allocation summary

3.7 Recovery procedures

3.7.1 General

All ACFT are required to obtain a clearance from their C2 agency prior to leaving GFTA under C2 control.

- If no reason exists to hold the ACFT, the C2 agency instructs ‘SQUAWK CHARLIE (if not already), TRACK DCT WLM (or GATE if required) CONTACT WILLY APPROACH STUD FIVE’.

ACFT must establish two way comms with WLM Approach (#5) and be confirmed “identified” prior to leaving the GFTA.

- An IDENT by ATC constitutes a clearance to depart the GFTA. If not identified by ATC, clarification should be sought as to whether the ACFT is cleared to leave the GFTA.

3.7.2 RTB advice

IOT assist with recovery planning to achieve a smooth traffic flow and minimise the potential for holding on RTB, ACFT are to provide ATC/C2 with at least 5 minutes notice prior to RTB. If this advice is passed to C2 they must relay to ATC.

This may be advised as a ‘joker’ call, which indicates the formation are on their last mission run prior to RTB.

During high tempo periods or large scale LFEs this advice might be difficult. In these instances this information should be passed if time allows.

3.7.3 Civil CTA

All recoveries from the Eastern GTFAs must be at or below FL210 by 25TAC WLM to ensure separation with Civil CTA.

3.7.4 Areas C to G

When recovering from GFTAs C-G, the C2 agency:

a) arranges tracking via the lightning corridor
b) provides descent to deconflict with outbound or other traffic
c) ensure that Mode 3C is squawked.

ACFT returning via the lightning corridor from these areas do not require an ATC clearance. Instructions from the C2 agency to track for the lightning corridor are sufficient. Once the C2 agency instructs an ACFT to transfer to ATC frequency, continue tracking to 25 TAC WLM via the lightning corridor and then track direct WLM, unless otherwise instructed by ATC.

3.7.5 Clearance requirements

If any operation is not covered in this instruction, ATC and C2 agencies shall use direct co-ordination to facilitate the required clearance.

3.7.5.1 ATC RTF for recovering ACFT

ACFT are to initiate contact with ATC on #5 (Willy Approach) with callsign only.

ATC may use one of three responses in addressing recovering ACFT. The responses and associated pilot responsibilities are:

a) ‘(Callsign) WILLY APPROACH IDENTIFIED’ – ACFT may depart their training area, continue to track to WLM and provide details.
b) ‘(Callsign) WILLY APPROACH IDENTIFIED STANDBY’ – ACFT may depart their training area but need to wait until prompted for further details by the controller.
c) ‘(Callsign) WILLY APPROACH STANDBY’ – ACFT are to remain in their training area and wait for further prompt from the controller.

Note: ACFT recovering via the lightning corridor that are given ‘(callsign) WILLY APPROACH *STANDBY’ are not required to hold in their training area. They are to track IAW para 3.7.44.*

After identification by ATC, ACFT are to report:

a) present level
b) if visual
c) approach intentions
d) number in formation and formation type (if other than standard)
e) ATIS code received.

If the pilot does not advise receipt of the current ATIS, ATC will only advise:

a) duty RWY,
b) QNH, and
c) other information considered significant, such as SAWR activity, expected approach type etc.

3.7.5.2 Frequency congestion

Should frequency congestion cause difficulty in contacting ATC, aircrew shall:

a) if inbound via the lightning corridor, proceed as per lost communications and hold overhead WLM at FL130 until a clearance is received
b) hold in their training area between 25 and 35 TACAN WLM until contact is made with ATC

3.7.6 Coastal recovery from the Eastern GFTAs

ACFT may request a coastal recovery from the Eastern GFTAs. ACFT recovering from areas other than Hotel should notify their C2 agency of their intention, track to join the lightning corridor in the block 5000ft to 9000ft and contact Willy Approach (#5). The centre of the lightning corridor will take ACFT to a point northeast of SUG where a descent and turn to track coastal southbound can be initiated.

ACFT recovering from the GFTAs , including the lightning corridor, for the coastal corridor, will be provided Traffic Information from ATC/C2 on ACFT operating in GFTAs H and W IAW section 2.13.. Once cleared into the coast, ACFT established at or below A035, will avoid traffic operating in W, as that traffic should be remaining over land IAW 3.3.1.1.

When ACFT are required to transit other areas for BRI, C2 shall transfer the ACFT with no restrictions. ACFT cleared by C2 direct to BRI shall advise ATC of the clearance (this eliminates the need for ATC - C2 coordination).

ACFT will switch to VFR upon reporting visual, and after receiving a clearance to enter the coastal corridor. .

ASPC to the west of the lightning corridor below 5000 FT prior to LFA W is class G (see Figure 10 - Class G Wedge). The Standard ATC Coastal Clearance includes clearance to leave and re-enter WLM ASPC in the coastal route.

To avoid IFR frequency transfer and ATC-ATC coordination for the Class G ASPC transit, ACFT unable to report visual shall be maintained not below 5000 FT until past the Class G ASPC wedge approximately 3nm south of SUG.

The Standard ATC Coastal Clearance includes clearance to leave and re-enter WLM ASPC in the coastal route. Due to poor radio and radar coverage in the corridor, expect a clearance limit during descent for the corridor.

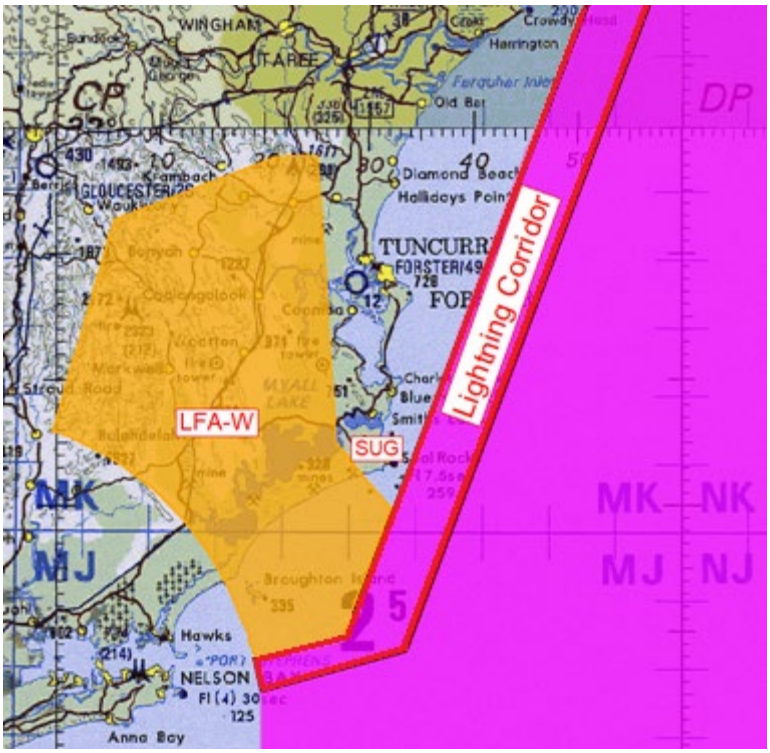


Figure 10 - Class G Wedge

3.8 ATC procedures

This section lists reductions to the normal ATC services provided in military ASPC, and additional pilot responsibilities that apply in the ASPC.

3.8.1 Class of service

ACFT will receive a Class C service except where specified in this chapter. This includes within a MOA which will be treated as military controlled ASPC IAW AIP regardless of the underlying classification that may include Class G ASPC.

3.8.1.1 Compliant ACFT

Compliant ACFT will not be provided the following elements of a class C service:

- Separation with other compliant ACFT operating in the same or adjacent training areas
- Prior to entering the training area, they will be provided with traffic information on ACFT within the same training area.

3.8.1.2 SAR alerting service

SARWATCH is maintained via use of a time nominated in flight plan, if there is no time in the flight plan ATC will obtain an 'operations normal' time.

3.8.2 Reduced separation

3.8.2.1 Separation between ACFT in the same training area

Pilots are responsible for separation IAW para 2.13.2.2

3.8.2.2 Separation between ACFT in adjacent training areas

Pilots established in a training area are responsible for separation IAW para 2.13.2.3 and para 3.5.1

3.8.2.3 Separation between ACFT in training area(s) and external traffic

Pilots are responsible for separation IAW para 2.13.2.4

3.8.2.4 Separation with lanes

Pilots using the Lightning Corridor are responsible for separation with ACFT in adjacent training areas and are to fly at the altitudes IAW para 3.4.5.1.

Pilots using transit lanes are responsible for separation with ACFT in adjacent training areas and are to fly at the altitudes IAW para 3.4.5.2.

Pilots using lanes on ATC frequency are to consider adjacent training areas active at all times. Traffic information available on request.

ATC will not provide traffic information to ACFT established within training areas on ACFT using transit lanes.

3.8.2.5 Separation from terrain.

Pilots are responsible for terrain separation IAW para 2.13.2.5.

3.8.2.6 Separation from VFR routes.

Pilots are responsible for separation with the coastal VFR route IAW para 2.13.2.6.

3.8.3 Termination of identification

ATC identification and control services automatically terminate on entry to a training area.

3.8.4 Resumption of ATS on RTB

ATS resume IAW section 3.8.1.when ACFT on RTB are identified and in receipt of a clearance.

3.9 Emergencies and abnormal ops

3.9.1 Comms failure

In addition to the standard no radio (NORDO) re-join procedures outlined in ERSA, whilst operating within WLM ASPC, ACFT shall comply with the following:

3.9.1.1 Single ACFT in VMC

Single ACFT in VMC are to remain in VMC and track for a straight-in VSA for the last known duty RWY.

3.9.1.2 Single ACFT in IMC

Single ACFT in IMC, or unable to remain in VMC, are to re-join via a straight-in instrument approach for the last known RWY.

If an ACFT malfunction renders an instrument approach impracticable, the ACFT should attempt to obtain vectors from ATC (speechless radar approach procedures are published in ERSA). ATC will then vector the ACFT for the final approach path or other suitable position from which a VSA can be made.

To enable the ACFT to optimise descent and speed profiles and configure for landing, ATC will provide regular advice of track miles to run or miles to touchdown, as appropriate.

3.9.1.3 Formation in VMC

The NORDO ACFT may recover individually IAW the single ACFT procedure, after indicating the loss of radio to another section ACFT by visual signals.

Alternatively, the NORDO ACFT may be led back by a serviceable ACFT. The formation lead or shepherding ACFT is to notify the operating agency of the circumstances.

3.9.1.4 Formation in IMC

The NORDO ACFT is to be led back for landing by a serviceable ACFT as dictated by weather conditions and fuel available.

3.9.1.5 No radio domestic ASPC penetration

Should an ACFT penetrate WLM domestic ASPC without communication with ATC and without squawking Code 7600, emergency services are to be alerted.

3.10 Chaff, flares, and countermeasures

Any dispensing of chaff, flares, or similar stores, use of DIRCM/LAIRCM, or use of electronic attack, is to be in accordance with AC SI (OPS) 04-05 – Electronic Attack Policy.

3.11 ASPC administration

For information on bookings, activation and planning for Williamtown Eastern ASPC, refer to Part D.

4 Part C: Williamtown Western ASPC

4.1 Compliant ACFT

These procedures apply to the following ‘compliant’ ACFT:

a) ACFT operated by ACG, 2SQN and ARDU TEF WLM (using SIGMA callsign only)
b) ACFT operated by Air Affairs Australia, Raytheon Australia or CHC Australia (WLM SAR FLT only) using a callsign published in MATS 6.2.2.4
c) Australian military or ADF-contracted ACFT where the pilot in command or detachment commander has declared they are “PART C COMPLIANT”
d) Foreign military ACFT that have agreed to these procedures in writing.

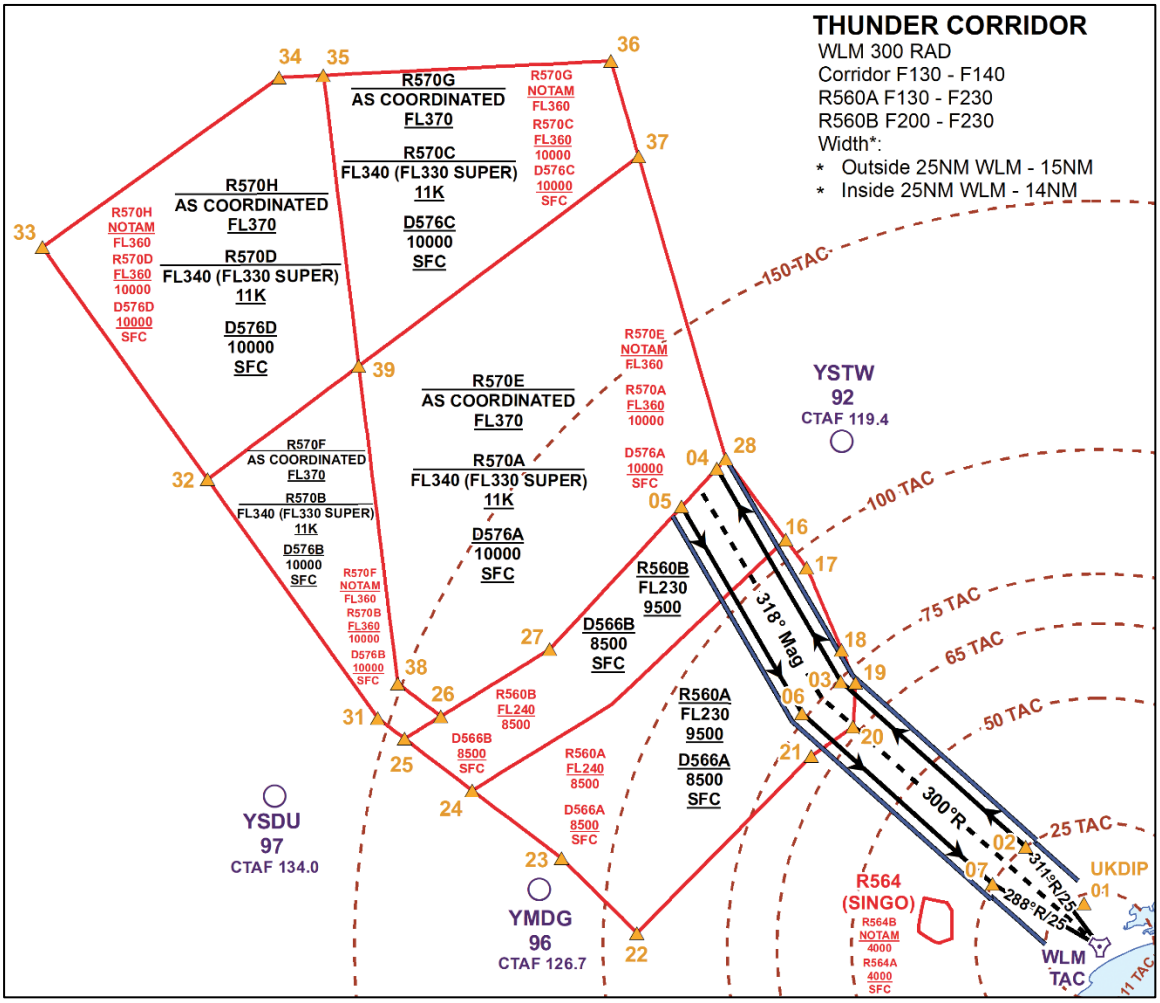
Any other ACFT will be assumed non-compliant. ACFT may also opt-out of the application of these procedures by advising ATC (see para 3.2).

4.2 Non-compliant operations

To ensure separation with civil aviation and compliant traffic, operations for non-compliant ACFT (other than simply arriving to and departing from the aerodrome) shall only be available through:

a) publication of AIP SUP or an ACP for a temporary activity
b) ‘due regard’ procedures
c) operations under the control of a C2 agency who will accept responsibility for ensuring compliance
d) individual arrangements made with ATC well in advance.

4.3 WLM Western GFTA



**Note Thunder Corridor width is only 14NM wide until 25NM WLM – See* 4.3.2.2

Figure 11 - *WLM Western GFTA*

Thunder Gate	Latitude / Longitude
THNDA	S 32 27.88 E 151 32.22 (WLM 311/25)
TG3	S 31 54.38 E 150 50.23
TG4	S 31 09.97 E 150 21.38
TG5	S 31 17.13 E 150 13.28
TG6	S 31 58.68 E 150 38.32
STORM	S 32 34.86 E 151 24.65 (WLM 289/25)

Table 11 - *Thunder Corridor Gates*

LUL	R560AB: 9500 FT R570ABCD: 11000 FT
HUL	R560AB: FL230 R570ABCD: FL340 (FL330 supersonic) R570EFGH: As coordinated (default FL570 supersonic) D566AB: 8500 FT D576ABCD: 10000 FT
Standard frequency	See Table 13
Flight category	R560 / R570: IFR (incl. transit to/from) D566 / D576: VFR (incl. transition in/out of training area above)

Table 12 - Western ASPC summary

4.3.1 Dimensions

Waypoint data for the Western ASPC is provided in Appendix G: R560 and R570.

4.3.2 Thunder Corridor

Transit between the domestic and Western ASPC is permitted via the Thunder Corridor without the need for handoff to civil ATC. Due to the uncertain nature of radio communications ATC may issue both the outbound ‘STORM ONE’ and inbound ‘STORM TWO’ clearance on initial airways clearance. When this occurs the Thunder Corridor will be kept active for the duration of all sorties IAW submitted flight plans and

an area common frequency IAW *Table 13* shall be used for transit of the Thunder Corridor outside 50 TAC WLM.

4.3.2.1 Separation

Departing and arriving ACFT within the Thunder Corridor will be assigned vertically separated levels. The Thunder corridor is considered military controlled ASPC for the application of PRS.

4.3.2.2 Gates and Dimensions

The outer dimensions of the corridor are shown at Figure 11 - *WLM Western GFTA*, commencing at WLM 300/011 TACAN. The applicable gates are at

Table 1. The outbound and inbound corridors outside 25nm WLM are laterally separated by 5nm. ATC will provide applicable separation with the corridor.

The Thunder corridor is only 14nm wide until 25NM WLM. This section is only 7NM either side of the 300 Radial, expanding to a 15NM at 25NM with 7.5NM either side of the 300 radial.

Transits within the Thunder corridor will be flown at vertically separated levels to the east of R560. ACFT issued the STORM ONE will maintain FL140. ACFT issued the STORM TWO will maintain FL130. Within the confines of R560A, the corridor is FL130 to FL230. Within the confines of R560B, the corridor is FL200 to FL230 (see figure 12).

During severe weather events, where vertical separation cannot be maintained, alternative means of separation must be applied in areas where the inbound and outbound tracks do not provide lateral separation from each other. Non-standard levels may be requested and negotiated as a part of the Thunder Corridor release. For levels facilitated outside of an official release, PRS cannot be employed as the airspace is not considered to be under military control.

4.3.3 Altimeter settings

Operations within Western GFTA are flown on YCBB QNH unless a force QNH is provided by a C2 agency. If YCBB QNH is not available, ACFT will operate on the relevant area QNH. ACFT are responsible for accounting for the differing QNH with standard pressure to ensure they remain below the applicable ASPC HUL flight level.

C2 agency will provide the YCBB QNH on first contact. If no C2 exists, ATC will advise the current YCBB QNH on clearance to operate.

Caution: *Civil traffic operates below the Western GFTA on a variety of altimetry settings. Pilots should be aware of the potential for altimeter setting variations when operating close to the vertical limits of the GFTA.*

4.3.4 Boundary compliance

All ACFT operations shall be wholly contained within the internal boundaries published in this SUPP. Civil IFR ACFT will be provided with 5nm clearance from the boundaries of restricted ASPC. Although unlikely, VFR ACFT may fly to the boundary of the restricted area and Thunder Corridor in class G and E ASPC. The waypoints delineating the ASPC are provided in Appendix G: R560 and R570.

4.3.5 Supersonic

Supersonic flight is defined as operations above M0.95. Supersonic operations are permitted within R570 with the following restrictions:

a) ACG flights to be conducted IAW SQN/WG OIP
b) Nil supersonic flight at night
c) Built up areas to be avoided laterally by no less than 5nm
d) No supersonic flight within 15nm pointing toward built up areas
e) Supersonic flight must not be conducted below 15000 FT AMSL
f) Supersonic flight should not be conducted below 20000 FT AMSL

4.3.6 D566A/B AND D576A/B/C/D

Operations are available in D566 and D576 from SFC to base of the training areas above.

ACFT may descend into D566 / D576 and subsequently re-enter the training area without coordination to ATC, provided that operations below the cleared training area are conducted VFR or IAW published due regard procedures.

4.3.7 Clearance to operate

A traffic statement from ATC is a clearance to operate in the restricted areas nominated. For example “NUMBER 1 IN R570 Alpha and Charlie” is a clearance to operate in R570 A and C only.

If ATC switch an ACFT to a C2 agency prior to entering the training area, clearance to operate is issued by that C2 agency.

4.3.8 Communication limitations

453SQN WLM FLT do not have the staff or radio coverage to monitor operations within R560 A/B and R570 A-H. This in combination with the dynamic nature of military fast jet operations requires pilots to absorb all applicable buffers for their operations within the advertised NOTAM levels.

ACFT operating in R560 A/B and R570 A-H should monitor 243.0MHz, which may be required to relay medical or emergency divert advice and associated ASPC restrictions.

Whilst no other communication plan exists, WLM ATC will monitor 243.0MHz using the Mount Dowe transmitter site at all times R560 A/B and R570 A-H is in use. If the Mount Dowe transmitter is unserviceable, affected SQN's will be notified of this limitation.

4.4 Outbound Procedures

4.4.1 Airways Clearance

Transit clearance for the Thunder Corridor from domestic ASPC to R560/R570 shall be issued as the coded clearance 'STORM ONE'.

STORM1 ONE is defined as clearance to track THNDA– TG3 – TG4 (as applicable) established at the following level:

a. FL140 in the northern section of the corridor prior to THNDA and thence to boundary of R560A, and the following block levels,

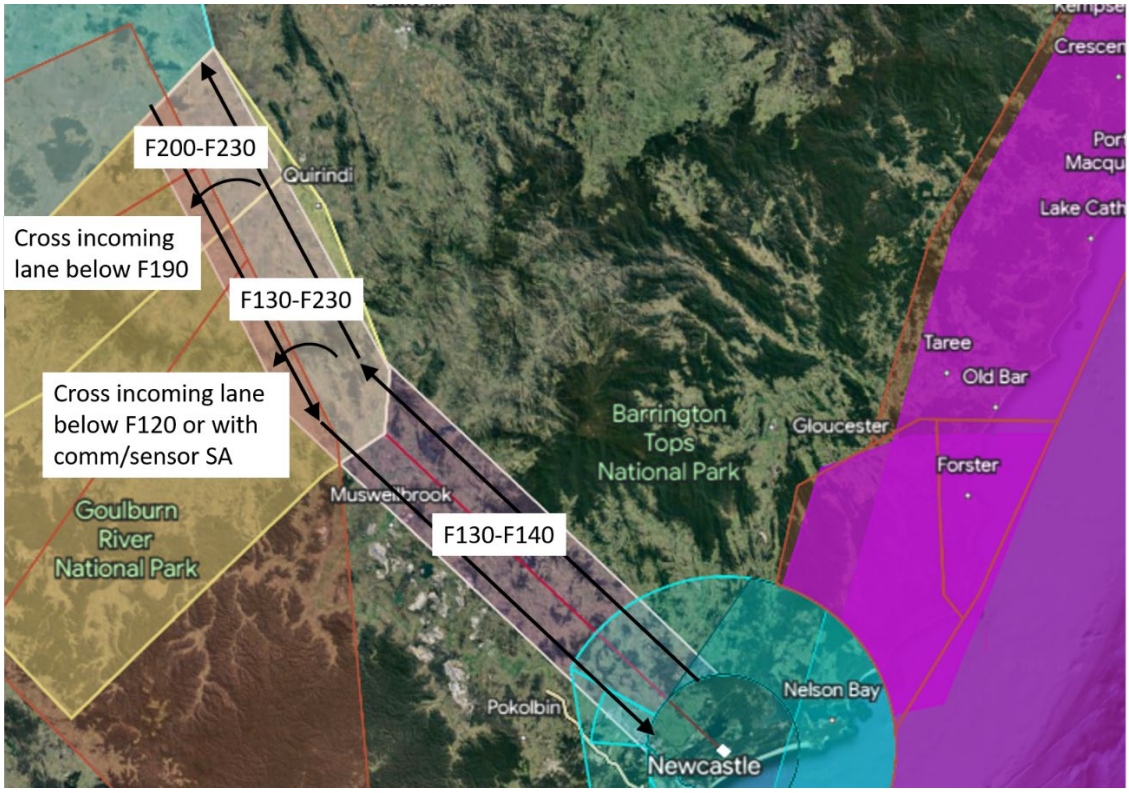
b. FL140 – FL230 within bounds of R560A, and

c. FL200 – FL230 within bounds of R560B.

If ACFT are cleared into R560 only, then they must turn to enter the ASPC prior to TG4.

4.4.2 Segregation

ACFT entering R560 from the thunder corridor are responsible for segregation from ACFT established inbound in the corridor. This can be facilitated by descending below FL120 on entering R560, with comm or sensor SA of conflicting traffic, or by extending to the boundary of R560B at or below F190 prior to turning west. See - Figure 12- *Thunder Corridor*



Note. Thunder Corridor width not to scale in diagram as corridor is only 14NM wide until 25NM WLM – See 4.3.2.2 - Figure 12- *Thunder Corridor*

4.5 Recovery procedures

4.5.1 General

To avoid unnecessary delays ACFT should call “10 minutes out” to ATC or their C2 agency to assist ATC in recovery planning and sequencing. All ACFT are required to obtain a clearance from their C2 agency prior to leaving R560/R570 under C2 control.

4.5.2 Airways clearance

Transit clearance for the Thunder Corridor from R560/R570 to domestic ASPC shall be issued as the coded clearance ‘STORM TWO’.

‘STORM TWO’ is defined as clearance to track in the southern section of the Thunder Corridor via TG5 – TG6 – STORM GATE , then as cleared by ATC. Transit shall be IAW the following levels:

a. FL200 – FL230 within bounds of R560B

b. FL130 – FL230 within bounds of R560A, and

c. FL130 between boundary of R560A and WLM.

ACFT recovering from R560 should enter the corridor via TG6 where possible.

Recovery outside the dimensions of Thunder Corridor will require ACFT to seek either a full airways clearance from the applicable ATC sector or a traffic statement to conduct RTB outside controlled ASPC (CTA).

Note: Transit outside CTA should be conducted VFR; significant delay may be incurred if requesting IFR.

Caution: *Confirm the status of Singleton Artillery Range (R564A/B) before transiting.*

4.5.3 Mission complete

Upon mission completion, ACFT are to:

a) set altimetry to standard setting if recovering above the transition layer
b) squawk assigned Mode 3/C and advise ATC or C2 agency that operations are complete.

4.5.4 ATC RTF for recovering ACFT

4.5.4.1 Standard Communications

On initial contact with WLM ATC (Willy Approach #5), ACFT are to establish communications with callsign only**.**

After identification by ATC, ACFT are to report:

a) present level,
b) if visual,
c) approach intentions,
d) formation type (if other than standard), and
e) ATIS code received.

If the pilot does not advise receipt of the current ATIS, ATC will only advise:

a) duty RWY,
b) QNH, and

other information considered significant, such as SAWR activity, expected approach type, etc.

4.6 Frequency allocation

Area	First	Second	Third	Fourth
TC >50TAC	BE16			
R560	AA14	RY15	BE16	Net 6
R570	AA17	RY18	BE19	Net 6

Table 13 – Western ASPC Frequency Allocation

4.7 Coordination ATC–C2

R560 and R570 subdivisions may be released to C2 agencies. The Thunder Corridor must remain with ATC. ACFT transiting through the Thunder Corridor remain on ATC frequencies or IAW Table 13 – Western ASPC Frequency Allocation.

4.8 ATC procedures

This section lists reductions to the normal ATC services provided in military ASPC, and additional pilot responsibilities that apply in the ASPC.

4.8.1 Class of service

ACFT will receive same level of ATS as described in para 3.8.1.

4.8.1.1 Compliant ACFT

Compliant ACFT will be provided the same air traffic service described in para 3.8.1.1.

4.8.1.2 SAR alerting service

SARWATCH is maintained via use of a time nominated in flight plan, if there is no time in the flight plan ATC will obtain an ‘operations normal’ time.

4.8.2 Reduced separation service

4.8.2.1 Separation between ACFT in the same training area

Pilots are responsible for separation IAW para 2.13.2.2.

4.8.2.2 Separation between ACFT in adjacent training areas

Pilots established in a training area are responsible for separation IAW para 2.13.2.3.

4.8.2.3 Separation from terrain.

Pilots are responsible for terrain separation IAW para 2.13.2.5.

4.8.3 Termination of identification

ATC identification and control services automatically terminate on entry to a training area.

4.8.4 Resumption of ATS on RTB

ATS resume IAW section 4.8.1.when ACFT on RTB are identified and in receipt of a clearance.

4.9 Emergencies and abnormal ops

4.9.1 Premeditated ejection

The premeditated ejection area for WLM operations is IAW para 2.14.7.

4.9.2 Comms failure

In the event of a comms failure whilst operating in R560 or R570, it is recommended that ACFT track for the Thunder Corridor and from STORM Gate follow the standard recovery procedures described at 3.9.1.

If lightning or icing are expected to be a problem in the corridor, ACFT may track to WLM VFR in the class G ASPC below 6500ft.

In addition to the standard no radio re-join procedures outlined in ERSA, from STORM Gate ACFT shall comply with the procedures outlined in para 3.9.1.

4.10 Chaff, flares, and countermeasures

Any dispensing of chaff, flares, or similar stores, use of DIRCM/LAIRCM, or use of electronic attack, is to be in accordance with AC SI(OPS) 04-05 – Electronic Attack Policy.

4.11 ASPC administration

For information on bookings, activation and planning for Williamtown Western ASPC, refer to Part D.

5 Part D: ASPC administration and planning

5.1 ASPC management

5.1.1 ASPC planning

Flying activity for WLM ASPC is planned using four-weekly and weekly planning conferences. WLM-based units, including visiting detachments, must be represented at these conferences. Non-WLM based units intending to use WLM ASPC or base support services should be represented.

Four weekly planning conferences are facilitated by ACG PLANS to coordinate ASPC requirements, ATC hours, and base support services. ATS hours in support of ACG shall be published in FPARS as an 'ACG Support Window.' All ACG operations, from taxi request to landing, are to be conducted within the approved flying window used to determine ATC staffing levels. SQNs must notify ASPR ASAP of any required extensions within the four-week planning period.

Weekly planning conferences are facilitated by ACG PLANS on Thursdays of the week prior, to coordinate training area allocations, base support services, and de-confliction plans.

5.1.1.1 RAN OPS in Eastern GFTAs

RAN is responsible for attending the WLM ASPC planning conference(s) to ensure the effective de-confliction between RAN and ACG OPS. ACG OPS will retain priority.

RAN is to contact HQAC NALO (hqac.nalo@defence.gov.au or +61 2935 91518) with all airspace requests. Further information regarding the RAN WLM ASPC coordination process can be found in the FXP User Guide.

RAN OPS not addressed through the WLM ASPC planning conference may be subject to delay or may not receive approval. RAN users should refer to the FXP User Guide for guidance on any short notice requests.

5.1.1.2 RAN Part B Compliance

RAN assets must be conversant with Part B Williamtown eastern ASPC requirements and have continuous two way communication with WLM ATC when any of the Eastern GFTAs are released to RAN assets.

5.1.2 PFO de-confliction

The WLM civilian SIDs have the potential to cause significant delays and holding for Overhead PFO operations, particularly for RWY 12 operations. Where heavy PFO

training is scheduled, the SQN responsible for the activity and ATC must discuss strategies for de-confliction at the four weekly and weekly planning conferences.

5.1.3 ASPC NOTAM

453SQN WLM FLT raise ASPC NOTAM on Fridays for the week ahead based on the outcome of the weekly planning conference.

5.1.4 Efficient use of ASPC

Defence have a responsibility not to unreasonably impede civil aviation, especially traffic to/from Sydney.

WLM ATC may deactivate or release any training area without notice if there are no planned users on FPARS.

5.1.5 ASPC changes

Changes to ASPC use or timing that require NOTAM amendment must be coordinated to ATC by the requesting unit directly. Availability is not assured. Minimum notice periods apply for ASPC activation or extension:

a) 2 hours for R586, R585 and M583/M584

b) 8 hours for all other restricted ASPC and M581/582

Address change requests to ATC AFD (02) 4034 6807 or 453sqnwlmflt.ops@defence.gov.au. Urgent emails should be followed up by phone. The requesting unit is responsible for coordination with other support agencies.

5.1.6 ASPC deconfliction

ATC do not provide a scheduling or deconfliction service within WLM training areas. ASPC users requiring exclusive use of a training area must coordinate that requirement through the four weekly and weekly planning conferences.

5.1.7 R597A/B and SAWR

R597A/B must be active when SAWR is used.

The SAWR and its environs are politically sensitive. Squadron flying program changes notwithstanding, the range area is only to be used IAW the schedule developed at the four weekly planning conference, which is the basis for a media release advising the public of military flying activity.

The Base Public Relations/Noise Complaints Officer is to be advised of unplanned activity at SAWR immediately.

5.1.7.1 ASPC planning and NOTAM requirements

For airspace planning, flying squadrons should specify when only SALTASH LOW (R597A) is required. If SALTASH HIGH is needed, the highest usable level must be stated, both for NOTAM activation and when requesting airways clearance, rather than assuming or requesting the full airspace to FL130.

5.2 Flying programs

5.2.1 FPARS

Unit flying programs must appear on FPARS for WLM-based units, including visiting detachments.

Sorties operating in WLM ASPC from another base, such as KC30 from AMB or LJ35 from NWA, must appear on FPARS either through their own unit program or on the program of the local unit being supported.

Units unable to promulgate their program using FPARS must make an unclassified copy available to ATC to 453sqnwlmflt.ops@defence.gov.au at least one working day prior.

5.2.2 Same-day program changes

When not required for military use, parts of WLM ASPC may be released for civil use. Minimum recall times apply. Same-day changes to flying programs must therefore be passed to WLM AFD as soon as possible by phone (02) 4034 6807, in addition to updating FPARS.

5.3 ATC-imposed traffic restrictions

Reduction in ATC services may be required due to ATC staff shortages or equipment failure. Short-notice restrictions will be coordinated directly to the affected units. Planned disruptions will be passed at the four weekly and weekly conferences.

In addition to normal separation and sequencing procedures, the following restrictions may be imposed by ATC:

a) limited or no continuous circuit operations
b) limited or no practice instrument approaches
c) delays for departure or recovery
d) limitations on operations within the Domestic ASPC
e) limitations to the maximum number of ACFT airborne simultaneously
f) restricted flying window.

5.4 Callsign format

Conventional callsign usage (e.g. MAPLE ONE ZERO) is employed in tactical operations. In order to maintain consistency in local operations and to avoid callsign confusion (and any associated safety impacts), conventional callsign format is employed in local domestic ASPC operations contrary to the group form callsign requirements detailed in MATS and FIHA.

Aircrew are to apply the group form callsign (e.g. MAPLE TEN) requirements of MATS and FIHA in operations outside WLM domestic ASPC and training areas.

5.4.1 Duplicate use of TIGR callsign

To avoid potential confusion of callsigns, 76SQN should not plan to use callsign TIGR when operating in YSNW ASPC. RAN 816SQN will also avoid using the TIGR callsign whilst operating in YWLM ASPC.

5.5 Transponders and SSR code allocation

5.5.1 Operation of transponders

Within WLM ASPC, transponders are operated IAW FIHA ENR (describing transponder use in formations and exceptions) as follows:

a) **Established in a training area.** ACFT may squawk standby or as directed by C2 once established in a training area.

b) **In-trail formations.** The last ACFT in trail must always squawk regardless of trail distance.

c) **Streaming departures.** All elements must squawk until established in close or standard formation.

These requirements are minimum requirements. Additional ACFT within a formation may squawk if required.

5.5.2 SSR code allocation

If allocated a code by ATC, use that code. For formation ACFT, the formation lead uses that code.

If not allocated a code by ATC, including formation members other than the lead, use the appropriate SSR skin code listed in Appendix H: SSR code allocation.

If no appropriate SSR skin code exists, request a code from ATC or use the generic codes IAW FIHA ENR 1.6 section 7.

Note: Some SSR skin codes listed in Appendix H: SSR code allocation *are not unique within a SQN. Squadron PROGOs must not schedule two ACFT with identical SSR skin codes at the same time.*

5.6 Flight planning

5.6.1 Mandatory flight notification

All flights intending to operate within ASPC covered by this Supplement must submit a flight notification, including VFR flights. Flight notification does not constitute an ASPC booking – flying programs must still be compiled IAW para 5.2.

5.6.1.1 Submission

Submit flight notifications for Williamtown ASPC in order of preference:

a) online via NAIPS at least 30 minutes prior to taxi
b) by fax or telephone to the Airservices Flight Briefing Office at least 60 minutes prior to taxi (contact details in FIHA ENR 1.10 Appendix 1).

WLM ATC are unable to accept flight plan details or amendments by radio.

5.6.1.2 SAR FLT exception

WLM SAR FLT helicopters operating entirely within WLM ASPC under VFR may be notified by telephone directly to WLM ATC (02) 4034 6807 with no minimum notice period.

5.6.1.3 SARWATCH

Compliant ACFT should nominate a SAR time in their flight plan remarks IOT reduce the requirement for this to be relayed to ATC when airborne.

5.6.2 Templates

Flights that will operate entirely within WLM training areas, including flights using the Thunder Corridor, should use the routes in Appendix A to complete their flight notification form. This will ensure the flight plan is distributed correctly and the flight record remains active in ATC systems for the duration of the sortie.

5.7 ATC/C2 coordination

5.7.1 Taxi coordination

ATC advise the primary C2 agency when an ACFT for C2 control taxies. The call includes:

a) call sign
b) requested ASPC if not in accordance with FPARS

C2 will read back this information and may request amendments to the taxiing ACFT's departure track, level, ASPC or operating frequency to meet safety or mission requirements.

5.7.1.1 Departure hold

C2 may request a departing ACFT hold on the ground to meet safety or mission requirements. In this case C2 will respond to the taxi call with 'HOLD (callsign) [DUE (reason) (expected roll time)]. ATC will read back 'HOLD (callsign)'.

To release a held ACFT, C2 use the phrase 'RELEASE (callsign)'.

5.7.2 ATC/C2 radar handoffs

ACFT may be handed off between ATC & C2 without voice coordination, except:

a) to relay emergency or abnormal details
b) to coordinate non-standard restrictions (see para 5.7.2.2)
c) for ACFT recovering from Eastern GFTAs below 6000 FT
d) if either ATC or C2 request voice coordination
e) if separation responsibility between opposite direction ACFT is not clear.

5.7.2.1 Standard transfer points

ATC will transfer outbound ACFT to the coordinated C2 frequency no later than 5 NM prior to the ASPC boundary, or request a late transfer.

C2 will transfer recovering ACFT to the appropriate ATC frequency no later than 10 NM prior to the ASPC boundary, or request a late transfer.

Recoveries from the Eastern GFTA should not be transferred to ATC outside 60 TAC WLM. Recoveries via a lane should be transferred to ATC by 45 TAC WLM.

5.7.2.2 Restrictions after handoff

5.7.2.2.1 ATC to C2

C2 shall not vary the level or tracking without coordination, until the ACFT is established in the training area.

For ACFT on a lane, C2 shall not climb the ACFT above the level coordinated by ATC until it is clear of any opposite direction traffic on the same lane.

5.7.2.2.2 C2 to ATC – ACFT on a lane

ATC shall not turn an ACFT off the lane laterally into C2 controlled ASPC without coordination. ATC have no vertical restrictions unless voice coordinated by C2. If ATC descend ACFT on a lane, ATC are responsible for separation with outbound lane traffic on climb to the coordinated outbound level.

5.7.2.2.3 C2 to ATC – ACFT not on a lane

C2 instruct recovering ACFT to track direct to WLM. If tracking to a gate is required, the ACFT shall be instructed to relay this on first contact with ATC. e.g. '(callsign), CONTACT WILLY APPROACH STUD FIVE, ADVISE TRACKING DIRECT GATE (number)'.

ATC have no lateral or vertical restrictions for ACFT not on a lane, except ATC will not manoeuvre the ACFT into an adjacent GFTA released to C2 without coordination. For example, an ACFT recovering from GFTA Charlie will not enter Bravo unless Bravo is controlled by ATC.

5.7.2.2.4 Thunder Corridor

C2 must not vary the level or track of Thunder Corridor traffic until established in the Western GFTA.

5.7.3 Primary C2 agency

When two C2 agencies are operating simultaneously in WLM ASPC, one agency will operate as the primary C2 agency and the other(s) will conduct operations subordinate to the primary agency.

ATC will coordinate with the primary C2 agency for all ASPC and ACFT issues, regardless of final control agency. The primary C2 agency will then be responsible for passing all relevant information to subordinate C2 agencies.

The default primary C2 agency, when manned, is 3CRU.

5.7.4 Primary to subordinate agency coordination

The primary C2 agency passes the following information from ATC to the subordinate C2 agency:

a) clearance to operate in assigned ASPC

b) a frequency allocation other than that specified in para 3.5 or para 4.6

c) any restrictions in the operating ASPC imposed by ATC.

On the CRU Flying Program, AEWC is to advise CRU prior to the ACFT taxiing any restrictions imposed upon the operating ASPC by ATC.

5.7.5 Primary C2 agency handover

When handing over responsibility for primary C2 agency, the handover will include:

a) assigned ASPC as released by ATC, including any restrictions, clearances or limitations
b) ASPC or Force QNH
c) ACFT under control/surveillance including callsign, ASPC and frequency
d) ACFT that have taxied

5.7.6 C2/ATC comms requirements

The primary C2 agency must have reliable two-way communication with ATC in order to facilitate MEDEVAC transits and emergency deviations in the ASPC. This may be by relay through a third party, provided this is prearranged with all concerned.

Once established in their operating area and prior to assuming primary C2 responsibilities, test comms with ATC.

5.7.6.1 Unsatisfactory comms

If comms are not satisfactory, a C2 service can still be provided however ATC will not release ASPC. ACFT receive their ASPC clearance directly from ATC and the C2 agency must not issue instructions that will conflict with that clearance.

ATC will transfer all ACFT to the default area frequency in para 3.6 unless other frequencies have been prearranged, and no C2/ATC coordination is conducted. Standard restrictions and transfer points still apply.

ACFT must be instructed to monitor 243.0 MHz for ATC safety instructions.

5.7.7 ASPC releases

Standard phraseology is to be used between ATC and the primary C2 agency. The terms ‘request’, ‘release’ and ‘accept’ are to be used IAW the following definitions and phraseology.

5.7.7.1 ASPC request

Used to initiate the transfer of control of ASPC from one agency to another.

a) (CRU/AEWC) ‘REQUEST (name of ASPC), [levels].’
b) (ATC) ‘(name of ASPC), [levels], STANDBY.’

5.7.7.2 ASPC release

Designates the formal offer of ASPC from the current owner of the ASPC to the requesting agency.

- (ATC) ‘RELEASE (name of ASPC), [levels]’.

5.7.7.3 ASPC acceptance

Designates the formal transfer of responsibility for the nominated ASPC.

- (CRU/AEWC/ATC) ‘ACCEPT (name of ASPC), [levels]’.

5.7.8 WLM ATIS changes

ATC advise the primary C2 agency of any ATIS change to/from instrument approach conditions. The primary C2 agency then advises subordinate C2 agencies and ACFT under their control.

5.8 CRU equipment failure

5.8.1 Radio failure

In the event of CRU suffering a radio failure, the following procedures shall apply:

a) CRU notify ATC and release CRU ASPC
b) ATC broadcast on GUARD to ACFT under CRU control advising of the circumstances and for ACFT to continue autonomous operations within allocated ASPC and to contact APP on recovery
c) If applicable for non-compliant ACFT ATC apply an ops normal time based upon actual take-off time + duration (from SQN Program)
d) CRU will continue to provide radar surveillance.

5.8.2 Total system failure

In the event of CRU suffering a total system failure, the following procedures shall apply:

a) CRU notify ATC and release ASPC
b) ATC broadcast on GUARD to ACFT under CRU control advising of the circumstances and for ACFT to continue autonomous operations within allocated ASPC and to contact APP on recovery
c) If applicable for non-compliant ACFT ATC apply an ops normal time based upon actual take-off time + duration (from SQN Program)
d) dependent upon operator workload, ATC will provide a SSR safety watch (within the limits of sensor coverage) and notify ACFT of any violations of controlled ASPC (VCA) or impose lateral or vertical restrictions on operating ASPC via GUARD.

5.8.3 Total ground radio failure

In the event of CRU suffering a total ground radio failure, the following procedures shall apply:

5.8.3.1 If AEWC is operating within WLM ASPC

a) CRU notify ATC via SELCAL or telephone
b) ATC inform AEWC of the CRU radio failure and see if AEWC is able to assume CRU's duties. Whenever the on-board communications plan and system serviceability allows, AEWC will monitor WLM ATC frequencies to ease coordination and increase situational awareness. CRU will be notified if ATC is not being monitored.

5.8.3.2 If AEWC is not operating within WLM ASPC or cannot assume CRU's duties

a) CRU notify PLN and release any ASPC they hold
b) ATC broadcast on GUARD to ACFT under CRU control advising of the circumstances and for ACFT to continue autonomous operations within allocated ASPC and to contact WLM APP on recovery
c) If applicable for non-compliant ACFT ATC apply an 'ops normal' time based upon actual take-off time + duration (from SQN Program).
d) CRU will continue to provide radar surveillance.

5.8.4 Total ground radar failure

In the event of CRU suffering a total ground radar failure, the following procedures apply.

5.8.4.1 If AEWC is operating within WLM ASPC

CRU shall notify:

a) all ACFT under their control
b) ATC via SELCAL or telephone
c) AEWC via the C2 Net.

5.8.4.2 If AEWC is able to assume CRU's duties

CRU will:

a) release their current ASPC to AEWC
b) hand-off their airborne ACFT to AEWC, including frequencies and working areas
c) pass details of ACFT that have taxied for CRU's ASPC, including the departure gate/lane and level

d) provide other assistance as required.

5.8.4.3 If AEWC is not operating within WLM ASPC or cannot assume CRU's duties

a) CRU notify ATC but maintain ASPC to conduct procedural operations
b) CRU notify ACFT under their control of the circumstances and to continue autonomous operations within allocated ASPC. ACFT will be instructed to 'SQUAWK NORMAL'
c) Dependent upon operator workload, ATC may provide a SSR safety watch (within the limits of sensor coverage) and notify CRU of any VCA or the need to impose lateral or vertical restrictions on operating ASPC.

5.8.5 Total system failure

In the event of CRU suffering a total system failure, the following procedures shall apply:

a) CRU notify ATC via any available means
b) ATC informs AEWC of the CRU total system failure and see if AEWC is able to assume CRU duties (Whenever the on-board communications plan and system serviceability allows, AEWC will monitor WLM ATC frequencies to ease coordination and increase situational awareness. CRU will be notified if ATC is not being monitored).

5.8.5.1 If AEWC is able to assume CRU duties

ATC relays, from CRU, all available information on the following items to facilitate a handover of:

a) CRU current ASPC release
b) ACFT that are currently airborne, including operating frequencies and working areas
c) ACFT that have taxied for CRU ASPC, including the departure gate/lane and level.

5.8.5.2 If AEWC is not operating within WLM ASPC or cannot assume CRU duties

a) CRU notify ATC and release ASPC
b) ATC broadcast on GUARD to ACFT under CRU control advising of the circumstances and for ACFT to continue autonomous operations, squawk normal within allocated ASPC and to contact WLM APP for recovery
c) ATC apply an 'ops normal' time based upon actual take-off time + duration (from SQN Program)
d) dependent upon operator workload, ATC provide a SSR safety watch (within the limits of sensor coverage) and notify ACFT of any VCA or to impose lateral or vertical restrictions on operating ASPC via GUARD.

5.8.6 Fire emergency at EASTROC

The fire suppression system for the core area of Building 536 is a gas-based system that activates 30 seconds after the alarms commence. Personnel without correct protective equipment in the area after the gas release risk incapacitation.

In the event of a fire that is threatening the core area the following actions will be taken:

a) if practical, the Battle Director (BD) or OD contacts ATC to advise of evacuation
b) the BD begin immediate evacuation of the Control and Reporting Centre and transmit the following twice on 243.0MHZ “ALL ACFT, (CALLSIGN), ARGONITE, ARGONITE, ARGONITE”
c) controllers with ACFT under their control will transmit ‘(Callsign) ARGONITE, ARGONITE, ARGONITE’ prior to leaving the core

On receipt of the code word ARGONITE all ACFT under control of CRU are to maintain assigned ASPC and contact WLM APP stud 5. All control services are terminated.

If not already completed, the BD or OD or deputy will notify ATC of the situation as soon as possible. If ACFT have not contacted WLM APP as above, WLM ATC will broadcast on GUARD, advising of the circumstances.

5.9 AEWC equipment failure

5.9.1 Radio failure

E7 has two VHF only radios that are independent to the mission system communications suite. In the event of a failure of the mission system radios, these VHF only radios will be unaffected. In the event of a total mission system radio failure, E7/AEWC crews will perform the following:

a) notify CRU via VHF
b) coordinate a handover of ACFT with CRU via VHF
c) coordinate the handover of ASPC to CRU
d) maintain radar surveillance
e) provide any assistance that is required.

In the unlikely event that there is a simultaneous total failure of the mission system radios and the two independent VHF only radios, AEWC will squawk 7600. Once CRU has confirmed that AEWC has had a total radio failure, CRU should:

a) establish communications and take responsibility for AEWC ACFT (ACFT should be operating on standard local frequencies or can be contacted on GUARD)
b) take responsibility for AEWC ASPC
c) communicate this change of responsibilities to ATC.

5.9.2 Radar failure

In the event of a radar failure, AEWC crews shall:

a) notify CRU
b) notify any ACFT under control of the radar failure
c) continue operations if permitted IAW relevant OIP
d) coordinate a handover of ACFT with CRU if operations are not permitted to continue IAW relevant OIP.

5.9.3 Identification Friend/Foe (IFF) failure

In the event of an IFF failure, AEWC crews shall:

a) notify CRU
b) notify any ACFT under control of the IFF failure
c) coordinate with CRU to confirm if another agency can perform an IFF safety watch.

If the IFF safety watch can be undertaken by another agency and operations are permitted to continue by 42WG SIs, operations can commence/continue at the AEWC MCs discretion.

If the IFF safety watch cannot be undertaken by another agency or operations are not permitted to continue by 42WG SIs, a handover of ACFT to CRU is to be coordinated.

5.9.4 Radar and IFF failure

In the event of a total RADAR and IFF failure, AEWC crews shall:

a) notify CRU
b) notify any ACFT under control of the RADAR and IFF failure
c) coordinate a handover of ACFT with CRU
d) maintain a radio watch on assigned frequencies and provide any assistance that is required/requested.

5.9.5 Total mission system failure

In the event of a total system failure, the independent VHF only radios will still be available for a handover of any ACFT under control.

5.10 ACG CTAF operations

5.10.1 General

In the event that ATC are unable to provide Air Traffic services due to staffing or equipment issues, procedures have been established that will enable units to continue reduced flying operations at WLM under CTAF rules and procedures.

The ASPC used during ACG CTAF operations and pilots RT requirements can be found at Appendix E: ACG CTAF operations.

Note: ACG CTAF operations are not available if WLM ATC are providing a reduced level of service. ATC must be providing no service before such operations may commence.

5.10.2 Ground support services

ACG CTAF operations at WLM relate to both air activities and ground support services. With the exception of ATC, the provision of ground support services during ACG CTAF operations shall remain the same as those provided during ATC services.

5.10.3 CTAF broadcasts

During ACG CTAF operations, the formation lead or ACFT captain shall make appropriate broadcasts prior to entering the WLM CTAF.

5.10.4 Requirements

ACG CTAF operations are conducted as follows:

a) shall only occur by day, under VFR in VMC
b) all WLM based ACFT shall hold an additional 10 minutes holding fuel above normal reserve requirements
c) ACFT shall not conduct circuit training
d) only occur when ATC services at the primary diversion airfield are available
e) comply with all promulgated CTAF procedures and procedures applicable to VFR transits through Class E and G ASPC IAW FIHA.

5.10.5 For operations within M581/2/3/4 flight is conducted as follows:

a) ACFT shall be under C2 control
b) ACFT departing WLM shall not be flown above 300KTS and at standard levels not above 6500 FT (Class E ASPC) until entering the Eastern GFTAs.
c) ACFT departing the Eastern GFTAs for WLM shall not be flown above 250KTS and at standard levels not above 6500 FT (Class E and G ASPC).

5.10.6 CTAF emergencies

5.10.6.1 Abnormal operations

No change

5.10.6.2 Minor emergency

A minor emergency involves no cable arrest, no effect on other ACFT.

a) Area: declare PAN PAN, contact Operations (CRU/AEWC to confirm cable requirement).
b) CTAF: rebroadcast PAN PAN, track for straight in approach.
c) WILLY FIRE will acknowledge the emergency, monitor the situation and act IAW WLM AEP.
d) Ground: Cancel PAN PAN

5.10.6.3 Minor emergency with cable arrest

a) Area. Declare PAN PAN, contact SQN OPS (or C2 agency) to confirm cable requirement
b) CRU/AEWC to re-broadcast PAN PAN on GFTA operating frequencies.
c) CTAF: rebroadcast PAN PAN, track for straight in approach.
d) WILLY FIRE will acknowledge the emergency, monitor the situation and act IAW WLM AEP.
e) Ground: follow directions, cancel PAN PAN.

5.10.6.4 Major emergency

a) Area: declare MAYDAY, contact Operations if able
b) C2 agency (if available) to re-broadcast MAYDAY on GFTA operating frequencies.
c) CTAF: re-broadcast MAYDAY, track for straight-in approach.
d) WILLY FIRE will acknowledge the emergency, monitor the situation and act IAW WLM AEP.
e) Ground: follow directions.

5.10.6.5 In all cases

a) Broadcast ‘HOOK DOWN’ if making an arrested landing.
b) If deemed necessary, for non-arrested PAN PAN landings request that the Fire Controller enter and follow the emergency ACFT post landing.
c) Broadcast a ‘Short Final’ to land advisory to aid AEP agency situational awareness.

5.11 Document administration

This AD2 SUP is managed by 453SQN WLM FLT.

Refer all queries or requests for change to FLTCDR 453SQN WLM FLT via the most relevant POC listed in para 1.3.2.

6 Appendix A: Flight planning guidance

6.1 Williamtown domestic and Eastern ASPC

Use this template for flights in any ASPC covered by Part A or Part B of this Supplement, including DISP, OHEAD, SAWR, LFAs, and Eastern GFTAs.

Level	Preferred outbound transit level
Route	DCT WLM DCT WLM040120 DCT WLM050165 DCT WLM105105 DCT WLM135060 DCT WLM DCT

Table 14 - Eastern ASPC flight planning

6.2 Williamtown Western ASPC

Use this template for flights in any ASPC covered by Part C of this Supplement, including Western GFTAs, when the Thunder Corridor will be used to enter and depart the ASPC.

If the Thunder Corridor will not be used in both directions, flight plan using actual route and level.

Level	FL140
Route	DCT WLM DCT WLM311025 WLM300110 DCT WLM280130 DCT WLM270100 DCT WLM300110 DCT WLM289025 DCT WLM DCT

Table 15 - Western ASPC flight planning

6.3 SARWATCH

IAW 5.6.1.3 SQN OPS should include a SAR time in the flight plan remarks using the following examples:

Standard OPS – ‘OPS NORMAL ATD + 2H30M’

OPS with AAR – ‘OPS NORMAL ATD + 3H30M’

7 Appendix B: Eastern ASPC waypoint data card

7.1 Gate/lane configuration

G1	WLM029/25	**G6**	WLM125/25-WP21-WP22
G2	WLM050/25	**G7**	WLM135/25
G3	WLM065/25	**G9**	WLM007/25
LG	WLM068/25 (corridor access)	**G10**	WLM345/25
G4	WLM088/25	**G11**	WLM320/25
G5	WLM105/25		

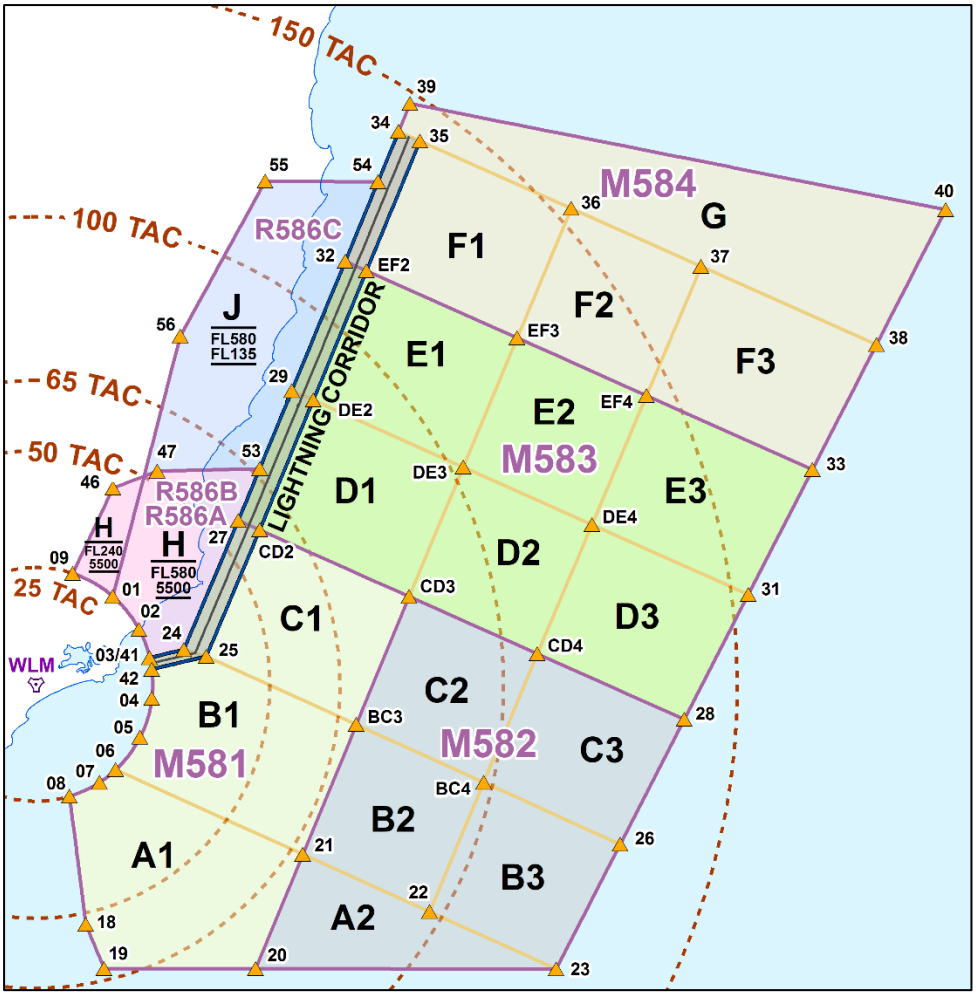


Figure 13 - Eastern ASPC

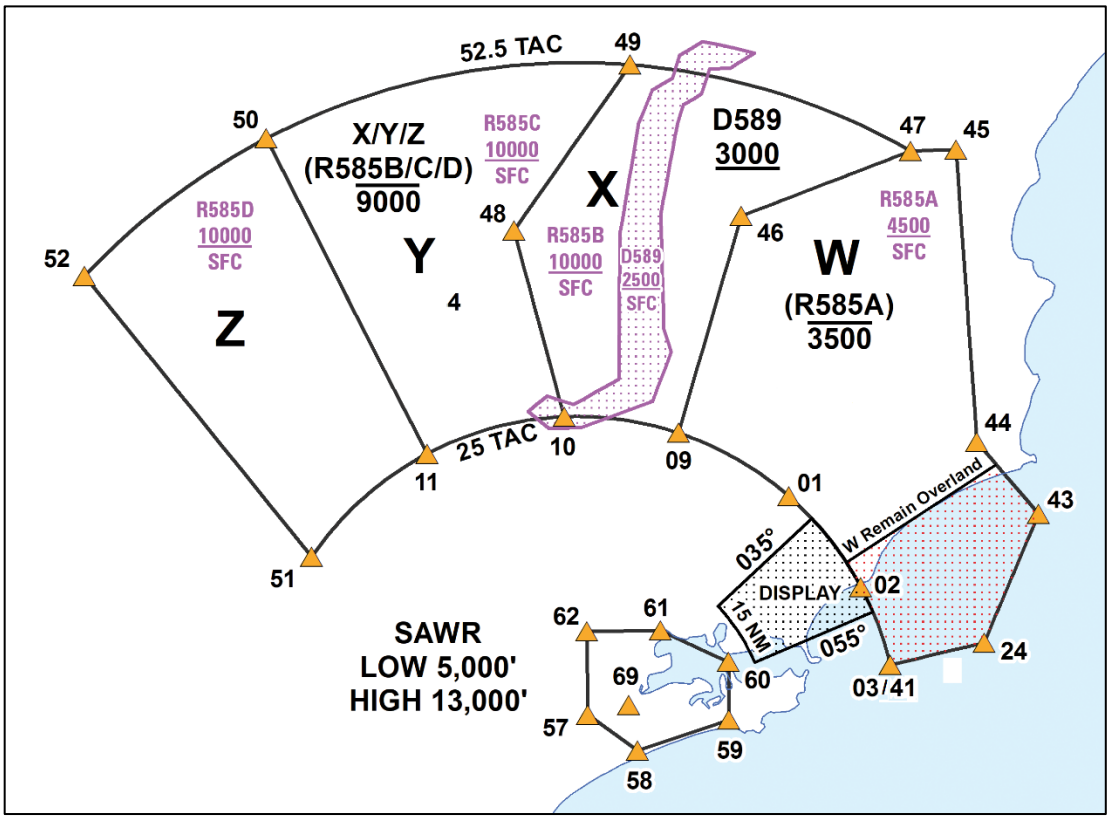


Figure 14 - Low Flying Areas

7.2 WLM ASPC waypoint data card

EASTERN SOP						
WPT *Elev*		**LAT**	**LONG**		**LAT**	**LONG**
0 WLM 23'		S 32 47.83	E 151 49.99	31 DE5	S 32 28.06	E 154 50.51
1	G1	S 32 29.13	E 152 09.69	32 EF1	S 31 17.40	E 153 08.38
2	G2	S 32 36.25	E 152 16.26	33 EF5	S 32 01.02	E 155 06.10
3	G3	S 32 42.31	E 152 18.90	34 FG1	S 30 49.55	E 153 21.62
		B +077° T	R 10.5NM	35 FG2	S 30 51.57	E 153 26.94
LG/NELSN		S 32 43.58	E 152 19.22			
		B +080° T				

		B 068° M				
4	G4	S 32 51.08	E 152 19.40	36 FG3	S 31 05.81	E 154 04.74
5	G5	S 32 59.38	E 152 16.33	37 FG4	S 31 17.88	E 154 37.33
6	G6	S 33 06.29	E 152 10.06	38 FG5	S 31 33.96	E 155 21.55
7	G7	S 33 08.95	E 152 05.96	39 G1	S 30 43.55	E 153 24.45
8	G8	S 33 11.89	E 151 58.23	40 G2	S 31 04.72	E 155 38.05
9	WX1	S 32 24.13	E 151 59.59	41 LC1	S 32 42.31	E 152 18.90
10	XY1	S 32 22.79	E 151 49.12	42 LC2	S 32 44.79	E 152 19.42
11	YZ1	S 32 25.54	E 151 36.48	43 W1	S 32 30.62	E 152 32.63
12 THR12 30’		S 32 47.23	E 151 49.36	44 W2	S 32 25.00	E 152 27.00
		B +310° T	R 5.0NM	45 W3	S 32 02.25	E 152 25.22
13 VIPCO		S 32 40.88	E 151 48.83	46 WX2	S 32 05.88	E 152 09.95
14 ERVEV 8000’		S 32 33.04	E 152 02.20	47 WX3	S 32 02.31	E 152 21.09
15 OLVEP 13000’		S 32 40.92	E 151 58.39	48 XY2	S 32 08.23	E 151 44.70
16 UKDIP 9000’		S 32 39.06	E 151 46.33	49 XY3	S 31 55.43	E 151 55.50
17 UDIXA		S 32 47.00	E 152 05.00	50 YZ2	S 32 00.81	E 151 22.17
18	A2	S 33 39.43	E 152 02.10	51 Z1	S 32 33.43	E 151 25.75
19	A3	S 33 48.90	E 152 06.68	52 Z2	S 32 11.29	E 151 05.33
20	A4	S 33 49.10	E 152 45.63	53 J1	S 32 01.87	E 152 46.92
21	AB2	S 33 24.61	E 152 57.75	54 J2	S 31 00.35	E 153 16.50
22	AB3	S 33 36.85	E 153 30.26	55 J3	S 31 00.23	E 152 48.43
23	AB4	S 33 48.92	E 154 02.83	56 J4	S31 33.33	E 152 27.10
24	BC1	S 32 40.64	E 152 27.57	57 SAWR1	S 32 46.00	E 151 51.00
25	BC2	S 32 42.10	E 152 33.27	58 SAWR2	S 32 48.83	E 151 55.55

26	BC5	S 33 22.02	E 154 18.87	59 SAWR3	S 32 46.50	E 152 04.00
27	CD1	S 32 12.97	E 152 41.50	60 SAWR4	S 32 42.00	E 152 04.00
28	CD5	S 32 55.05	E 154 34.77	61 SAWR5	S32 39.50	E 151 57.75
29	DE1	S 31 45.14	E 152 55.03	62 SAWR6	S 32 39.50	E 151 51.00
30 THR30 13’		S 32 48.30	E 151 50.85	68 SLEW 25’	S 32 45.28	E 151 54.87
		B +130° T	R 5.0NM	69 TGT 25’	S 32 45.28	E 151 54.78

7.3 WLM ASPC waypoint data card

EASTERN SOP					
WPT/ELV	**LAT**	**LONG**	**ROUTES**		
70 TREE 52’	S 32 25.35	E 152 24.58	1. MOA	35-25-42-3-41-24-39-40-23-	
IP TREE 43’	B +242° T	R 10.0NM		19-18-8-7-6-5-4-42-25-26-	
71 TGT1 75’	S 32 21.89	E 152 11.00		28-27-29-31-33-32-34-38-	
72 TGT2 7’	S 32 10.77	E 152 30.10		23-6-21-20-36-37-22	
73 TGT3 164’	S 32 23.85	E 152 13.03	2. R586 (H/J)	53-54-55-56-1-9-46-47-53-	
74 TGT4 82’	S 32 26.15	E 152 31.75		24-41-2-1	
75 TGT5 20’	S 32 10.82	E 152 30.67	3.LOFA SAWR	41-24-43-44-45-47-49-50-	
76 TGT6 20’	S 32 06.30	E 152 22.45		52-51-11-50-11-10-48-49-	
77 TGT7 128’	S 32 18.70	E 152 12.20		47-46-9-10-9-1-2-41	
78 TGT8 13’	S 32 23.25	E 152 20.18	4.SAWR	57-58-59-60-61-62-57	
79 TGT9 108’	S 32 24.30	E 152 24.22	SIDS		
80 TGT10 791’	S 31 58.10	E 151 42.93	WYPTS	15-13-14	
			HEXHAM	32 49.51S 151 42.80E	
			SYGNA	32 54.08S 151 48.50E	
			IBADI	32 44.73S 151 57.44E	
81 TGT11 56’	S 32 16.40	E 152 19.72	INTERNAL WYPTs		
82 TGT12 3’	S 32 24.57	E 152 24.88	BC3	S 32 56.75	E 153 11.38
83 TGT13 89’	S 32 20.87	E 152 10.93	BC4	S 33 09.02	E 153 43.87
IP TGT13 236’	B +015° T	R 10.0NM	CD2	S 32 15.02	E 152 46.88
84 TGT14 761’	S 32 12.55	E 151 33.57	CD3	S 32 29.28	E 153 24.67

85 TGT15 315’	S 32 19.15	E 151 41.27	CD4	S 32 41.37	E 153 57.25
86 DUNGOG	S 32 23.96	E 151 45.44	DE2	S 31 47.19	E 153 00.40
87 CAS 49’	S 32 26.00	E 152 10.05	DE3	S 32 01.46	E 153 38.18
88 MAKOR	S 33 06.73	E 151 08.36	DE4	S 32 13.56	E 154 10.76
89 CAPER	S 33 22.75	E 150 56.31	EF2	S 31 19.43	E 153 13.72
90 RUNNA	S 33 15.86	E 150 47.29	EF3	S 31 33.67	E 153 51.52
			EF4	S 31 45.74	E 154 24.11
DIVS					
91 RICHMOND 56’	S 33 36.25	E 150 46.88			
92 TAMWORTH 1296’	S 31 04.65	E 150 50.70			
93 TAREE 13’	S 31 53.27	E 152 30.95			
94 PORT MAC 7’	S 31 26.12	E 152 51 74			
95 COFFS 13’	S 30 19.82	E 153 06.88			
96 MUDGEE 1522’	S 32 33.91	E 149 36.54			
97 DUBBO 919’	S 32 13.09	E 148 34.59			
98 NOWRA 361’	S 34 56.53	E 150 32.67			
99 SYDNEY 13’	S 33 56.66	E 151 10.53			

8 Appendix C: Eastern ASPC priority and sequence card

8.1 MOA ASPC incl. Lightning Corridor

35-25-42-3-41-24-39-40-23-19-18-8-7-6-5-4-42-25-26-28-27-29-31-33-32-34-38-23-6-21-20-36-37-22

8.2 R586

53-54-55-56-1-9-46-47-53-24-41-2-1

8.3 LFAs

41-24-43-44-45-47-49-50-52-51-11-50-11-10-48-49-47-46-9-10-48-49-47-46-9-10-9-1-2-41

8.4 SAWR

57-58-59-60-61-62-57

9 Appendix D: WLM specific RT guide

9.1 RT guide

INITIAL AIRWAYS CLEARANCE	
Requesting a clearance to any Eastern GFTA *ATC will not read back or acknowledge the GFTA(s) nominated in the clearance request unless they are not consistent with ASPC expected for the sortie. †In this example, the only element of the clearance not identical to the initial request is the departure type, which was issued by ATC, but not initially requested by the pilot.	**Pilot** (CALLSIGN) FOR (GATE/), (TRANSIT LEVEL) FOR (GFTAs), REQUEST CLEARANCE *Example: WILLY DELIVERY, HAWKEYE FOR GATE 3, FLIGHT LEVEL 180, FOR ECHO DELTA, REQUEST CLEARANCE* **ATC** (CALLSIGN) CLEARED (GATE/LANE), (LEVEL), [DEPARTURE TYPE]* *Example: HAWKEYE, CLEARED GATE 3, FLIGHT LEVEL 180, VISUAL DEPARTURE* **Pilot** (a read back of elements of the clearance that are identical to the original request is not required) *Example: HAWKEYE, VISUAL DEPARTURE†*
SAWR	**Pilot** (CALLSIGN) FOR SALTASH (HIGH/LOW), (OPERATING LEVEL), TRANSIT (TRANSIT LEVEL), REQUEST CLEARANCE Example: WILLY DELIVERY, LEPD, FOR SALT ASH HIGH, 10000, TRANSIT NOT ABOVE 5000, REQUEST CLEARANCE **ATC** (CALLSIGN) CLEARED SALTASH (RWY 12/30) DEPARTURE, TRANSIT (LEVEL), FOR OPERATIONS IN SALTASH (HIGH/LOW), NOT ABOVE (OPERATING LEVEL), SQUAWK (NUMBER). Example: LEPD, WILLY DELIVERY, CLEARED SALTASH RWY 12 DEPARTURE, TRANSIT NOT ABOVE 5000, FOR OPERATIONS IN SALTASH HIGH NOT ABOVE 10000, SQUAWK 1234

Display ASPC	**Pilot** (CALLSIGN) FOR DISPLAY ASPC, (OPERATING LEVEL), TRANSIT (TRANSIT LEVEL), REQUEST CLEARANCE Example: WILLY DELIVERY, MAPL11, FOR DISLPAY ASPC, 13000, TRANSIT 10000, REQUEST CLEARANCE **ATC** (CALLSIGN) CLEARED OUTBOUND ON THE (RADIAL), TRANSIT (LEVEL), FOR OPERATIONS IN DISPLAY ASPC, NOT ABOVE (OPERATING LEVEL), SQUAWK (NUMBER) Example: MAPL11, WILLY DELIVERY, CLEARED OUTBOUND ON THE 035 RADIAL, TRANSIT NOT ABOVE 10000, FOR OPERATIONS IN DISPLAY ASPC NOT ABOVE 13000, SQUAWK 1234
Standard Instrument Approach Requests	**Pilot** (CALLSIGN), FOR (TYPE OF APPROACH),VIA (POSITION), (LEVEL), REQUEST CLEARANCE Example: WILLY DELIVERY, COGR, FOR TACAN APCH, VIA YOGGI, 3100, REQUEST CLEARANCE **ATC** (CALLSIGN), CLEARED (POSITION), DIRECT, (LEVEL), [DEPARTURE TYPE], SQUAWK (NUMBER) Example: COGR, WILLY DELIVERY, CLEARED YOGGI DCT, 3100, VISUAL DEPARTURE, SQUAWK 1234
Western ASPC Cleared levels are indicated in the STORM 1 and 2 clearances in sections 4.4.1 and 4.5.2	**Pilot** (CALLSIGN), FOR (R560/R570), REQUEST CLEARANCE Example: WILLY DELIVERY, HPST, FOR R560A&B, REQUEST CLEARANCE **ATC** (CALLSIGN), CLEARED STORM 1 , (DEPARTURE TYPE), SQUAWK (NUMBER) Example: HPST, WILLY DELIVERY, CLEARED STORM 1 , SYGNA 1 DEPARTURE, SQUAWK 1234

TAXI CLEARANCE (OUTBOUND)	
Requesting taxi for departure – to holding point **POB will be assumed 1 for all fast jets if not provided. ATC will not read back POB.* *†For expediency, ATC may nominate an intersection departure (e.g. A4 for RWY30 vice A5). If this is not suitable, advise ATC.*	**Pilot** WILLY GROUND, (CALLSIGN), [POB*], RECEIVED (ATIS), REQUEST TAXI *Example: WILLY GROUND, COGR, POB ONE PLUS TWO, RECEIVED ALPHA, REQUEST TAXI* **ATC** (a standard clearance to a RWY holding point will be provided; taxi route may be omitted for ACFT using one-way taxiways (K/L) or standard taxi routes (see 2.6.5))† *Example: COGR, WILLY GROUND, TAXI TO HOLDING POINT ALPHA ONE* **Pilot** (standard read back)
Requesting taxi for departure – to alert apron	**Pilot** WILLY GROUND, (CALLSIGN), [POB*], RECEIVED (ATIS), REQUEST TAXI TO (APRON), [ROLL TIME] *Example: WILLY GROUND, SHOGUN, RECEIVED BRAVO, REQUEST TAXI TO ALERT APRON EAST, ROLL TIME 55* **ATC** (a standard clearance to the requested apron will be provided, taxi route may be omitted for ACFT using one-way taxiways (K/L) or standard taxi routes (see 2.6.5)) **Pilot** (standard read back)
Requesting taxi for departure – from alert apron	**Pilot** (CALLSIGN) [READY], REQUEST TAXI **ATC** (a standard clearance to a RWY holding point will be provided)†
DEPARTURE	
GFTA departure	**Pilot** WILLY APP, (Callsign), (direction of turn or assigned HDG) CLIMBING (assigned) PASSING (alt) **ATC** (Callsign) WILLY APP IDENTIFIED' **ATC** (Callsign) AT (posn/range) CONTACT (agency) (freq)' or '(Callsign) AT (posn/range) CLEARED OPERATING (freq) REPORT OPS NORMAL TIME **Pilot** AT (posn/range),(agency) (freq), (Callsign) or AT (posn/range), (freq), OPS NORMAL TIME (xx), (Callsign)

ARRIVAL	
Visual Recovery After 5 minute RTB advice check in within WILLY APP (typically #5) Include pos/alt if not identified. Include amplification if not for full stop e.g. LAND 2 FOR CCTS/PFO's *Early traffic information will be provided when applicable on ACFT inside 10nm Final, and will include as a minimum ACFT type and position (e.g., A320 8 mile final). On transfer to TWR, more detailed traffic information will be provided.	**Pilot** (agency) (Callsign) DETAIL COMPLETE FOR RTB (angels/FL) CRU/AWE&C (Callsign) (agency) TRACK (instruction/deconfliction) COPIED (angels/FL) CONTACT (ATC agency and freq) **Pilot** (instruction/deconfliction) (Callsign) **Pilot** WILLY (agency) (Callsign) **ATC** (Callsign) WILLY (agency) IDENTIFIED **Pilot** (Callsign) VISUAL, LAND (#) RECEIVED (ATIS) **ATC** (Callsign) TRACK (instruction/restriction) CLEARED VISUAL APP, CONTACT TWR (position) **Pilot** TRACK (instruction/restriction) VISUAL APP TWR AT (position) (Callsign)
Coastal recovery VIS APP clearance implies; • climb NA025 between Stockton Bridge and Nobbys Head • •RWY 30 make a left turn between Stockton Bridge and Nobbys Head then track via left initial • •RWY 12 make a right turn from Stockton Bridge and track via right initial	**Pilot** (Callsign) VISUAL, REQUEST COASTAL CORRIDOR RECEIVED (ATIS) **ATC** (Callsign) CLEARED COASTAL (direction) (instruction/restriction) (traffic) **Pilot** (CLEARED COASTAL (direction) (instruction/restriction) (Callsign) **ATC** (Callsign) CLEARED VISUAL APP RWY (12/30), CONTACT TWR STUD3 LEAVING THE COAST. **Pilot** VISUAL APP (RWY12/30), TWR STUD3 (Callsign)
INSTRUMENT APPROACH	
Approach intentions (following IDENT)	**Pilot** (Callsign) (level), (approach) RECEIVED (ATIS) **ATC** (Callsign), TRACK TO (position), DESCEND TO (level), ADVISE INTENTIONS AFTER THE APPROACH **Pilot** (position), (level), (intentions), (Callsign)

Clearance for approach	**ATC** (Callsign), CLEARED (approach), AT (position) CONTACT TWR STUD 3 **Pilot** CLEARED (approach), TOWER AT (position), (Callsign)
Clearance initially not immediately available	**ATC** (Callsign), TRACK VIA (approach), NOT BELOW (level).' **Pilot** TRACK VIA (approach), (level), (callsign).
CIRA OPERATIONS	
At Initial	**Pilot** (Callsign) (L/R/Straight) INITIAL **ATC** (Callsign) (traffic)
Tracking via Close Initial **On first contact**	**Pilot** (Callsign) (Tracking via CLOSE L/R/) INITIAL **ATC** (Callsign) (traffic)
Visual straight-in	**Pilot** (Callsign) (dist) STRAIGHT-IN APPROACH (gear state) (intentions if not to land) **ATC** (Callsign) (traffic) CLEARED TO LAND CHECK WHEELS **Pilot** LAND (Callsign) THREE GREENS/beeper
Restricted Straight-in (Visual Go Around Procedure)	**ATC** (Callsign), GO AROUND (L/R) AT (position) **Pilot** GO AROUND (L/R) AT (position), (Callsign) **Pilot** (Callsign) GOING AROUND (position) **ATC** (Callsign) (instruction/traffic update if applicable)
Crosswind/On the Pitch calls **A normal circuit and full stop is the assumed. These calls are only required if that is not the case to update traffic/ATC SA. E.g. low level, T+GO.**	**Pilot** (Callsign) (position) (intention)
LANDING/LOW APPROACH CLEARANCE	

Only the lead ACFT reports a relevant position, such as Base, the FAF or 5 miles final.	**Pilot** '(Callsign), (position), THREE GREENS'
Formation landing clearance & gear challenge are issued to lead ACFT for the formation as a whole. Remaining elements shall, in sequence, report gear down and locked and then initiate beeper check.	**ATC** '(Callsign) CLEARED TO LAND [traffic…], CHECK WHEELS' **Pilot** 'LAND (callsign), (callsign) 1, (beeper)' **Pilot** '(Callsign) 2, THREE GREENS, (beeper)'
ATC may anticipate that previous ACFT, although not yet landed, will have landed prior to the ACFT reaching the threshold and reduced landing separation will be in place. In this scenario there are two ACFT ahead also landing and not yet on the RWY. In this scenario there is one ACFT ahead and it is anticipated that the required reduced RWY separation standard will be achieved prior to the subsequent ACFT reaching 200ft for the 'low approach'	**ATC** '(Callsign) CLEARED TO LAND, NUMBER THREE, CHECK WHEELS' **Pilot** 'LAND, NUMBER THREE, (Callsign), (three greens/beeper)' **ATC** '(Callsign) CLEARED LOW APPROACH NUMBER TWO, CHECK WHEELS' **Pilot** 'LOW APPROACH NUMBER TWO, (Callsign), (three greens/beeper)'
TAXI CLEARANCE (INBOUND)	
Vacating the RWY **Formation elements check in individually with Ground as soon as able; do not obstruct the RWY waiting to check-in in formation order. Subsequent formation elements do not need to say WILLY GROUND.* *†Taxi instructions are not issued to Part A ACFT taxiing via one-way taxiways (K/L) or standard taxi routes (see 2.6.5); ATC read back of callsign only constitutes a taxi clearance for these ACFT.*	**Pilot** WILLY GROUND, (CALLSIGN)* *Example: WILLY GROUND, TRIPOD11* **ATC** (CALLSIGN) [TAXI INSTRUCTIONS]† *Example: TRIPOD, WILLY GROUND†* *Example: MAYHEM, WILLY GROUND, TAXI VIA BRAVO*
ARRESTED LANDING	

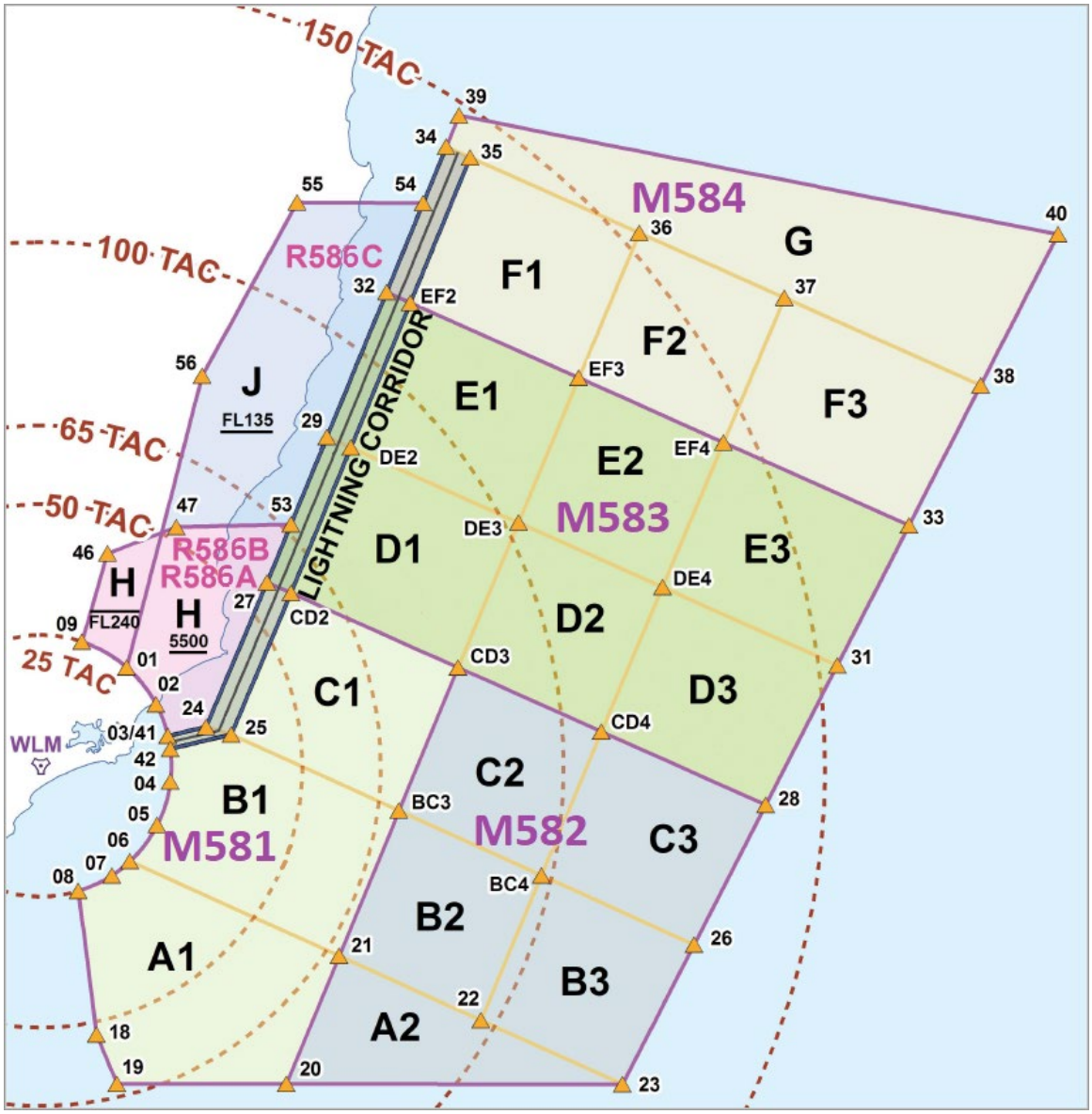
After prior advice to ATC where possible	**Pilot** (Callsign), (BASE *or* FINAL), THREE GREENS, HOOK DOWN **ATC** (*Callsign*), APPROACH END CABLE UP, CLEARED TO LAND, CHECK WHEELS, CHECK HOOK **Pilot** LAND (*Callsign*) THREE GREENS HOOK DOWN

10 Appendix E: ACG CTAF operations

10.1 Departure gates & transit lanes

1 – 029/25 H/W
2 – 050/25 H
3 – 065/25 L3
4 – 088/25 B1
5 – 105/25 B1
6 – 125/25 AB
7 – 135/25 A1
LG – 068/25 Lightning Gate (corridor access)

10.2 ASPC diagram



10.3 ACG CTAF RT guide

1. **PRE TAXI (# 20)**
"*(C2 callsign*), (*type and number of ACFT*) FOR OPERATIONS ASPC (*identifier*), TAXIING IN (*time*)"

2. **TAXI (#3)**
"WILLY TRAFFIC (*number and type of ACFT*) (*callsign*) VFR TAXI FOR RWY (*number*), FOR A DEPARTURE HEADING GATE (*number)* ON RADIAL (*number*) ON CLIMB TO (l*evel*) FEET, WILLIAMTOWN"

3. **LINE UP (#3)**
"WILLY TRAFFIC (*number and type of ACFT*) (*callsign*) LINING UP FOR TAKE-OFF RWY (*number*), (*intentions*) 20 SECONDS BETWEEN PAIRS, WILLIAMTOWN"

4. **TAKE-OFF (#3)**
"WILLY TRAFFIC (*callsign*) ROLLING RWY (*number*) FOR (LEFT *or* RIGHT) TURN OUT, WILLIAMTOWN"
"WILLY TRAFFIC (*callsign*) (*additional formation numbers*) ROLLING RWY (*number*), WILLIAMTOWN"

5. **DEPARTURE (#3)**
"WILLY TRAFFIC (*number and type of ACFT*) DEPARTED (*time*), TURNING (LEFT *or* RIGHT) HEADING (*NUMBER*), JOINING FORMATION, PASSING (*level*), CLIMBING TO (level) WILLIAMTOWN."

6. **RECOVERY, ONCE INSIDE 25NM ON (#3)**
"WILLY TRAFFIC (*number and type of ACFT*) (*callsign*) (*bearing and distance WLM*), (*altitude*) TRACKING FOR INITIAL RWY (*number*) ON DESCENT TO 1500 FEET, CIRCUIT AREA IN FOUR MINS, WILLIAMTOWN"

7. **INITIAL (#3)**
"WILLY TRAFFIC (*number and type of ACFT*) (*callsign*) FIVE MILES TRACKING DEAD SIDE, RWY (*number*). WILLIAMTOWN"

8. **PITCHING (#3) (IF DEEMED SUITABLE IAW 3.2.5)**
"WILLY TRAFFIC (*number and type of ACFT*) (*callsign*) TURNING CROSSWIND RWY (*number*) WILLIAMTOWN"

9. **BASE (#3)**
"WILLY TRAFFIC (*number and type of ACFT*) (*callsign*) BASE RWY (*number*), THREE GREENS WILLIAMTOWN". (*action gear beeper*)
"(*Callsign*) (*formation number*), BASE THREE GREENS" (*action gear beeper*)

10. **LAST FORMATION MEMBER VACATED RWY (#3)**
"WILLY TRAFFIC (*number and type of ACFT*) (*callsign*) RWY VACATED WILLIAMTOWN"

CTAF (#3)	**BN CTR**	**BN CTR**
118.3MHZ (E>8500')	125.7MHZ (G)	120.55MHZ

11 Appendix F: WLM COMMS CARD

Specific frequencies allocated by the AFEMSOC OPTASK COMMS.

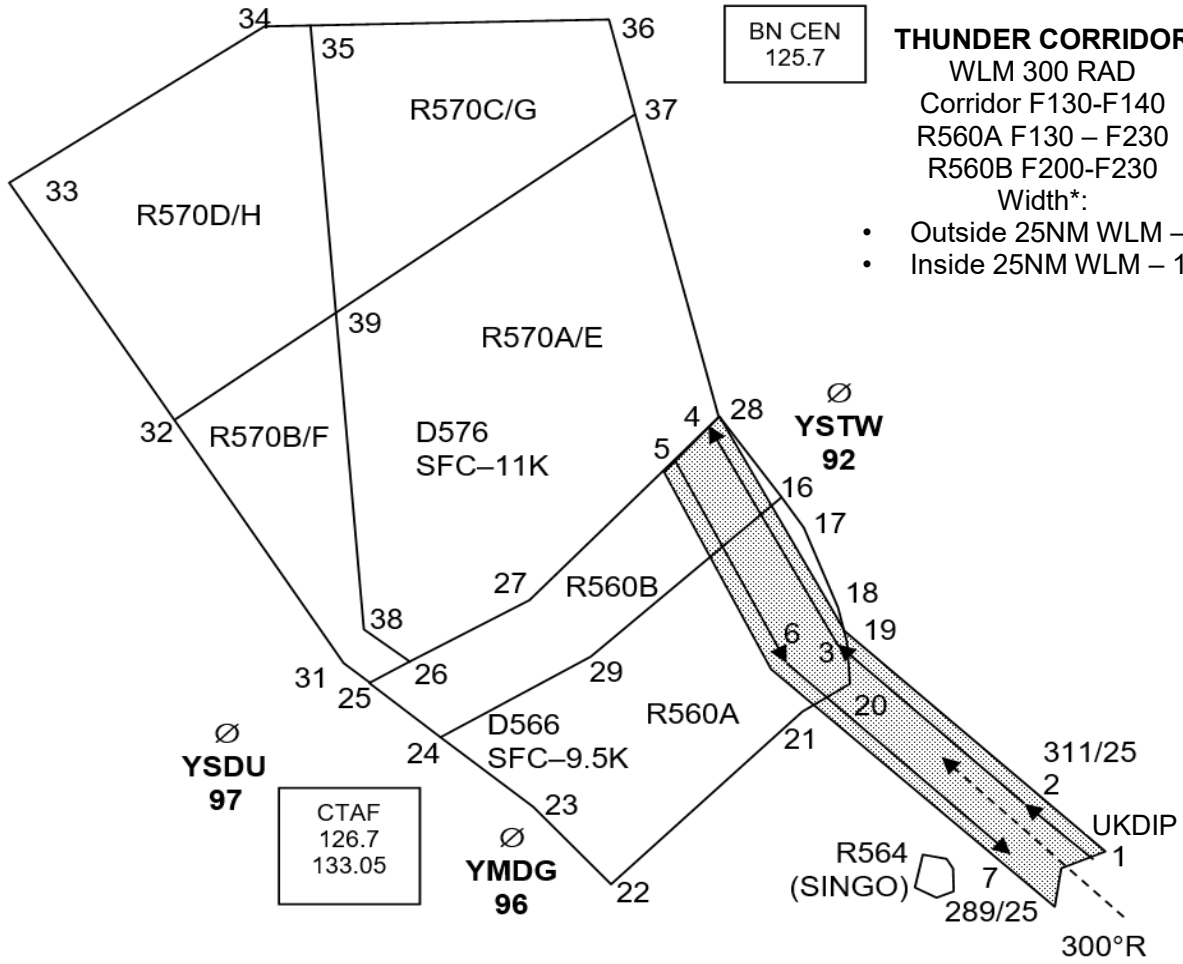
STUD	Agency/ABM DESIG	FREQ (MHz)	STUD	ABM DESG
1/51	Willy Clearance delivery	130.35	23	AQUA 23
2/52	Willy Ground	121.8	24	RUBY 24
3/53	Willy Tower	118.30 (280.90)	25	BRONZE 25
4/54	Willy Approach (low)	135.70 (293.40)	26	AQUA 26
5/55	Willy Approach (high)	133.30 (261.40)	27	RUBY 27
6	ABM Force Marshal	WHITE	28	BRONZE 28
7	Range Primary	260.0	29	AQUA 29
8	Maintenance/Spare	SQN		RUBY 30
9	Willy ATIS	316.1		BRONZE 31

<table>
<tr><td colspan="5">SQN Ops</td><td></td><td>AQUA 32</td></tr>
<tr><td rowspan="3">10</td><td colspan="2">2SQN - EAGLE</td><td>10</td><td>3SQN - BARON</td><td></td><td>RUBY 33</td></tr>
<tr><td colspan="2">4SQN - RAVEN</td><td>11</td><td>2OCU - MAPLE</td><td></td><td>BRONZE 34</td></tr>
<tr><td colspan="2">76SQN - PANTHER</td><td>12</td><td>77SQN - DESPOT</td><td></td><td>VIOLET 1</td></tr>
<tr><td>14</td><td rowspan="6">IAW OPTASK COMMS</td><td>AQUA 14</td><td rowspan="6">ABM NETs 3-6</td><td>C2 COORD</td><td></td><td>VIOLET 2</td></tr>
<tr><td>15</td><td>RUBY 15</td><td>SILVER 1</td><td></td><td>VIOLET 3</td></tr>
<tr><td>16</td><td>BRONZE 16</td><td>SILVER 2</td><td></td><td>YELLOW 1</td></tr>
<tr><td>17</td><td>AQUA 17</td><td>BRASS 1</td><td></td><td>YELLOW 2</td></tr>
<tr><td>18</td><td>RUBY 18</td><td>2SQN DISCRETE</td><td></td><td>YELLOW 3</td></tr>
<tr><td>19</td><td>BRONZE 19</td><td>GREY 1</td><td></td><td>HAZEL 1</td></tr>
</table>

20		AQUA 20		BRASS 2	30	GUARD (121.5)
21		RUBY 21		BROWN 3		
22		BRONZE 22				
OPS Frequencies			**NET**	**MARITIME (DISTRESS)**	**FREQ (MHZ)**	
IAW 81WG IFG	2OCU	Hunter	7	VHF	156.8 (ch.16)	
		Hipshot		HF	2182	
		Hawkeye		**SQN MAINT**		
		Hoodoo		See OPTASK COMMS		
IAW 81WG IFG	3SQN	Cobra	8	**Additional**		
		Raider		SMC	Freq (Mhz)	
		Apache		Willy Ground	127.25	
		Zulu		SALTASH	Freq (Mhz)	
4A	4SQN	Reaper		PRI	260.0	
4B		Raven		SEC	263.9	
IAW 78WG IFG	76SQN	Cougar				
		Leopard				
		Cheetah				

		Bobcat				
		Puma				
		Tiger				
IAW 81WG IFG	77SQN	Shogun	10			
		Warlock				
		Viking				
		Pirate				
Defence Comms Station ‘Canberra Control’						
Distress 5696 USB (H24) 1 – 22868, 2 – 5878, 3 – 9047, 4 – 15962, 5 – 12172 Khz						

12 Appendix G: R560 and R570



THUNDER CORRIDOR
WLM 300 RAD
Corridor F130-F140
R560A F130 – F230
R560B F200-F230
Width*:

- Outside 25NM WLM – 15NM
- Inside 25NM WLM – 14NM

R560 A-B	9.5 – F230
R570 A-D	11k – F350
R570 E-H	33k' - NOTAM
D566 A-B	SFC – 8.5k'
D576 A-D	SFC – 10k'

If QNH <	Reduce highest useable Alt by:
1013	500 ft
997	1000 ft
980	1500 ft
SEQUENCES	
1: RTE	0-1-2-3-4-5-6-7
2: R560	16-17-18-19-20-21-22-23-24-25-26-27-28-16-29-24
3: R570	26-38-35-39-32-33-34-36-28-27-25-31-32-37
4: SINGO	40-41-42-43-44-45-40

12.1 Waypoint data DD MM.MM

HAWK WAYPOINT DATA			WESTERN SOP AND SINGO		
WPT *Elev*	**LAT**	**LONG**	**WPT** *Elev*	**LAT**	**LONG**
0 *WLM 23'*	S 32 47.83	E 151 49.99	37	S 30 06.78	E 150 04.82
1 UKDIP	S 32 39.06	E 151 46.33	38	S 31 51.43	E 149 04.65
2 THNDA GATE	S 32 27.88	E 151 32.22	39	S 30 47.24	E 148 58.21
3 TG3	S 31 54.38	E 150 50.23	40 SING1	S 32 37.48	E 151 08.20
4 TG4	S 31 09.97	E 150 21.38	41 SING2	S 32 38.53	E 151 13.62
5 TG5	S 31 17.13	E 150 13.28	42 SING3	S 32 40.23	E 151 14.87
6 TG6	S 31 58.68	E 150 38.32	43 SING4	S 32 45.73	E 151 14.80
7 STORM GATE	S 32 34.86	E 151 24.65	44 SING5	S 32 46.62	E 151 11.75
8 - 11	SPARE		45 SING6	S 32 46.49	E 151 10.65
12 THR12 *30'*	S 32 47.23	E 151 49.36			
	B: 310T	R: 5NM			
13 VIPCO	S 32 40.88	E 151 48.83			
14 ERVEV 8000'	S 32 33.04	E 152 02.20			
15 OLVEP 13000'	S 32 40.92	E 151 58.39			
16	S 31 24.70	E 150 37.11			
17	S 31 30.49	E 150 41.93			
18	S 31 47.17	E 150 49.75			
19	S 31 53.84	E 150 52.89			
20	S 32 02.71	E 150 52.13			
21	S 32 08.45	E 150 42.09			
22	S 32 43.25	E 149 59.53			
23	S 32 27.76	E 149 42.06			
24	S 32 13.49	E 149 21.41			
25	S 32 02.60	E 149 05.79	87 TIMBO	S 32 10.39	E 151 27.69
26	S 31 58.36	E 149 14.56	88 MAKOR	S 33 06.73	E 151 08.36
27	S 31 45.58	E 149 40.80	89 CAPER	S 33 22.75	E 150 56.31
28	S 31 08.18	E 150 23.43	90 RUNNA	S 33 15.86	E 150 47.29
29	S 31 57.10	E 149 55.03	91 RICHMOND 67'	S 33 36.03	E 150 46.85
30 THR30 13'	S 32 48.30	E 151 50.85	92 TAMW'TH 1335'	S 31 05.03	E 150 50.80
	B: 130T	R: 5NM	93 TAREE 38'	S 31 53.32	E 152 30.83
31	S 31 58.30	E 148 59.64	94 PORT MAC 15'	S 31 26.15	E 152 51.80
32	S 31 08.88	E 148 21.82	95 COFFS 18'	S 30 19.23	E 153 06.98
33	S 30 20.70	E 147 45.72	96 MUDGEE 1545'	S 32 33.75	E 149 36.67
34	S 29 48.61	E 148 42.12	97 DUBBO 935'	S 32 13.10	E 148 34.58
35	S 29 48.49	E 148 52.45	98 NOWRA 400'	S 34 56.93	E 150 32.22
36	S 29 47.36	E 149 59.01	99 SYDNEY 21'	S 33 56.77	E 151 10.63

Figure 15 Western and Singleton waypoint data

13 Appendix H: SSR code allocation

Unit	Callsign		Code
2OCU	Hunter	x1	5201
		x2	5202
		x3	5203
		x4	5204
	Hipshot	x1	5205
		x2	5206
		x3	5207
		x4	5210
	Hawkeye	x1	5211
		x2	5212
		x3	5213
		x4	5214
	Hoodoo	x1	5215
		x2	5216
		x3	5217
		x4	5220
	Talon	x1	5203
		x2	5204
	Toxin	x1	5207
		x2	5210
	Tripod	x1	5201
		x2	5202
	Hydrant	x1	5205
		x2	5206
	Maple	11	5213
		12	5214
		13	5215
		14	5216
		15	5217
		16	5220
		17	5207
		18	5210

Unit	Callsign		Code
76SQN	Cougar	x1	5221
		x2	5222
		x3	5223
		x4	5224
	Leopard	x1	5225
		x2	5226
		x3	5227
		x4	5220
	Cheetah	x1	5231
		x2	5232
		x3	5233
		x4	5234
	Bobcat	x1	5235
		x2	5236
		x3	5237
		x4	5240
	Puma	x1	5241
		x2	5242
		x3	5243
		x4	5244
	Tiger	x1	5245
		x2	5246
		x3	5247
		x4	5240
	Panther	20	5240
		21	5241
		22	5242
		23	5243
		24	5244
		25	5245
		26	5246
		27	5247
		28	5240
		29	5241

Unit	Callsign		Code
3SQN	Cobra	x1	5250
		x2	5251
		x3	5252
		x4	5253
	Raider	x1	5254
		x2	5255
		x3	5256
		x4	5257
	Apache	x1	5260
		x2	5261
		x3	5262
		x4	5263
	Zulu	x1	5264
		x2	5265
		x3	5266
		x4	5267
	Baron	11	5264
		12	5265
		13	5266
		14	5267

Unit	Callsign		Code
77SQN	Shogun	x1	5750
		x2	5751
		x3	5752
		x4	5753
	Warlock	x1	5754
		x2	5755
		x3	5756
		x4	5757
	Viking	x1	5760
		x2	5761
		x3	5762
		x4	5763
	Pirate	x1	5764
		x2	5765
		x3	5766
		x4	5767
	Despot	11	5764
		12	5765
		13	5766
		14	5767

Unit	Callsign		Code
75SQN	Magpie	x1	5730
		x2	5731
		x3	5732
		x4	5733
	Blackbird	x1	5734
		x2	5735
		x3	5736
		x4	5737
	Condor	x1	5740
		x2	5741
		x3	5742
		x4	5743
	Buzzard	x1	5744
		x2	5745
		x3	5746
		x4	5747
	Classic	11	5734
		12	5735
		13	5736
		14	5737

Unit	Callsign		Code
4SQN	Reaper	x1	5770
		x2	5771
		x3	5772
		x4	5773
	Mayhem	x1	5772
		x2	5773
		x3	5770
		x4	5771
	Raven	x1	5771
		x2	5773
		x3	5770
		x4	5772
	Snoopy	x1	5773
		x2	5772

Unit	Callsign		Code
ARDU TEF WLM	Sigma	x1	6436*
		x2	6437*
	on loan from 453SQN		

Unit	Callsign		Code
SAR	Choppa	21	6430