Flight Information Handbook Australia

AD2 Supplement Pearce (YPEA)

Version 14

Effective 26 November 2026

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Change Summary

Version	Date	Change Description
14	26 November 2026	1.2.3.d - CHC endorsement authority as the Chief Pilot
		1.5.b - RSAF local aircraft definition reworded
		1.6.5 - Specified Pearce TACAN identifier
		2.3 - Removed - Circuit Areas VMA
		2.3.2 - Reworded Gingin Circuit area definition
		2.4.6 - PTA Golf - clarified FL200 or A190
		2.8.2.3 and 2.8.3.2 and 2.8.4.4 - Proximate change to overflying
		2.8.4.4 - Removed ELFA as part of the TMA
		2.8.5.2 - Removed - Avon Valley outside of the TMA definition
		2.11.3 - Base hazards - removed
		3.2.2 - ATC assumed POB of two
		3.2.4.2 - 2FTS Solo restrictions in the CIRA
		3.3.3.1 - SVFR - Specified if due cloud or visibility
		3.5 - Frequency Allocation - 2FTS From common frequencies
		3.6.5 - VFR Stream Departures for Hawk - Incorporated amendment
		3.6.5.1 - Stream Departure requirements - Incorporated amendment and reworded some conditions
		3.8.5 - Provision of Traffic Info - Removed
		3.8.6 - Tactical Segregation Principles - Edited
		3.13.1.c - Reworded for ambiguity
		3.14.2.5 - Local Training Operations during Exclusive periods - amended
		4.2.1.4 - RT POB on taxi if other than two

Version	Date	Change Description
		4.2.3.9 - ABCP changed to ABOC
		4.4.6 - Express Lane - Contacting App vice CENR
		4.5.2.9 - Added requirement for early notification for Ops Recoveries and Opposite direction pitch
		4.5.4.8.2 - Changed minimum to maximum - correction
		4.5.6.2 - Proximate changed to relevant traffic
		4.5.6.2 - added ‘relevant’ traffic
		4.5.2.6 - Updated Initial and Pitch and Deadside maps
		4.5.7 - IFR converting to VFR at initial - removed - listed elsewhere
		4.6.7.5 - Reworded to include runway numbers in take off clearance.
		4.9.5.1 - ATC ALDIS lamp procedures - Removed
		4.10 - Chaff / Flare Operations - Removed
		4.11 - RT guide - Safety Alert - correction
		4.11 - RT guide - removed note regarding DTI

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1 Introduction

1.1 Standardisation

1.1.1 Amendments

Proposed amendments to Pearce FIHA AD2 SUPP should be processed as per the arrangements for RAAF Pearce BSI (OPS). The exception being that the 453SQN Pearce FLTCDR is responsible for amending the AD2 SUPP or issuing AD2 SUPP Amendments.

1.1.2 Publications

The following publications have significant impact flying operations at RAAF YPEA and YGIN and this document, they are subject to AIRAC:

a) En-route Supplement (ERSA) – YPEA and YGIG;

b) Departure and Approach Procedures (DAP) – YPEA and YGIG;

c) Flight Information Publication (FLIP) Terminal – YPEA and YGIG; and

d) AIP Map (affecting YPEA airspace).

1.1.3 Separation

Approval must be gained from the appropriate military authority prior to amending any separation standards that vary from the MATS.

1.2 Publishing Authority

1.2.1 Approval Authority

FIHA AD2 SUPP approval authority is CO 453SQN.

1.2.2 Sponsor

The sponsor is the Senior Air Traffic Controller YPEA - FLTCDR 453SQN PEA FLT.

1.2.3 Endorsement authorities

Endorsement authorities are:

a) CO No 2 Flying Training School (2FTS);

b) CO 79 Squadron (79SQN);

c) OC RSAF 130 Squadron (130SQN); and

d) CHC Chief Pilot.

1.3 Applicable Documents

FIHA AD2 SUPP is prepared in accordance with the following documents

a) AC SI(OPS) 01-*20* *Aeronautical Information Management;*

b) (DASR) AO.GEN.05 – *Management of Orders, Information and Publication* (OIP); and

c) DASR.SRoA – *Standard Rules of the Air*.

1.4 Purpose

FIHA AD2 Supplements provide operational airspace, planning, flying, abnormal operations and ground procedures that are directly related to aircraft operations at an aerodrome and the associated airspace.

This FIHA AD2 SUPP YPEA is deemed Electronic Aeronautical Information (EAI) and is made available for Electronic Flight Bag (EFB) use via the Defence Aeronautical Information Service Provider (AISP) AIS-AF.eFIHA AD2 Supplements are available via the AIS-AF FIHA AD2 Supplements.

This FIHA AD2 SUPP ensures compliance with Defence Aviation Safety Regulations by providing usable, current, portable and correctly authorised procedures that support flying operations within the specified area of operations.

1.5 Use

Local aircraft at YPEA and YGIG are to adhere to the rules and procedures contained within. Local aircraft are considered to be any aircraft from the following units:

a) 2FTS;

b) RSAF 130SQN and RSAF STDS SQN;

c) 79SQN; and

d) CHC Helicopters Australia.

Other aircraft operators may seek approval to be considered local aircraft by contacting 453SQN PEA FLT (ATC) via pea44wg.twrspr@defence.gov.au (Tower) and pea44wg.aprspr@defence.gov.au (Approach) to acknowledge that aircrew are adequately briefed on procedures contained in this document. If required, a local area briefing will be made available via 453SQN PEA FLT prior to accepting approval.

1.6 Definitions

1.6.1 Terms

The terms used in this AD2 SUPP are defined in the Defence Aviation Safety Regulations – *Glossary* and *Australian Defence Glossary*. Where terms are specific to this AD2 SUPP only, they are identified within this document.

1.6.2 Aerodrome Procedures

RAAF Base Pearce and RAAF Base Gingin, within the context of promulgating procedures, share a high degree of commonality. Unless a procedure is specifically identified as being restricted to either Pearce or Gingin by the addition of the aerodrome name in the procedure title, the procedure applies to both aerodromes.

Specific aerodrome procedures are prefixed with ‘Gingin/YGIG/GIG’ or ‘Pearce/YPEA/PEA.’

1.6.3 Primary duty runway

The primary duty runway is the first (or only) runway recorded on the Pearce ATIS.

1.6.4 Levels

All levels referred to in this AD2 SUPP are in feet AMSL, unless otherwise specified.

1.6.5 Pearce TACAN

All radials and distances referred to in this standing instruction are based on the Pearce TACAN 112.8 75X unless otherwise stated.

1.7 Content

This AD2 SUPP applies to the conduct of flying operations and ATC services at YPEA aerodrome and the aerodrome’s supporting airspace. Information contained in this instruction that may have civil application or may enhance operational awareness is also provided in the YPEA section of Enroute Supplement Australia (ERSA).

2 Airspace

2.1 Controlled and Special Use Airspace (SUA)

RAAF Pearce airspace comprises the following areas that are defined in the DAH, Section 13 and depicted on VNC-5, ERC L8, ERC TAC 4 and Perth VTC.

a) **R153ABCD.** Eastern Low Flying Area (ELFA) and the Pearce Terminal Manoeuvring Area (PEA TMA);

b) **R155AB.** Pearce CIRA, Gingin CIRA, PEA TMA, overland sections of Pearce Training Area (PTA) Alpha and the Outer Manoeuvring Area (OMA), PTA Foxtrot, Northern and Western Low Flying Areas (NLFA and WLFA) and part of PTA Bravo and Charlie;

c) **R156.** PTAs Bravo and Charlie;

d) **M161.** PTA Golf;

e) **M166.** Over water portion of PTAs Alpha and PEA TMA;

f) **M170A/B.** Southwest portion of PTA A27 Outer. RAAF useable levels are 4500FT to FL245.

   i) When M170A is activated from SFC-NOTAM, the area is reserved for naval operations or exercises, and is not available for RAAF flying training unless a shared level is coordinated. When activated from 4500FT-NOTAM, RAAF flying training may be conducted.

g) **M171A/B.** PTA Delta;

h) **M147 A/B/C.** Lancelin Bombing Range;

i) **D193.** Outer Low Flying Area (OLFA);

j) **D197.** Small arms weapons firing within PTA Foxtrot and the Pearce TMA;

k) **D198.** Over water portions under PTAs Alpha and Delta; and

l) **D199.** WAXA airspace.

2.2 Terminal Airspace

2.2.1 Pearce Terminal Manoeuvring Area (TMA)

The TMA is depicted in Figure 2. 1 and exists to facilitate the separation and sequencing of aircraft departing and arriving at both PEA and GIG.

2.2.1.1 Lateral limits

The lateral limits of the PEA TMA are defined as that portion of R155A/M166/R153 enclosed by a 20TAC arc, from the southern boundary of R153 west to the intersection of the southern boundary of M166 and the 20TAC arc, then clockwise along the 20TAC arc to the southern boundary of R153. Vertical limits are SFC to 5000FT in that portion coincident with R155A/M166, and SFC to CTA steps in R153.

2.2.1.2 Contents

the PEA TMA contains:

a) Pearce Circuit Area (PEA CIRA);

b) Gingin Circuit Area (GIG CIRA);

c) PTA Foxtrot;

d) ELFA; and

e) Avon Valley low flying corridor.

Note: The VFR coastal lane, which extends from SFC – 2000FT, penetrates the lateral confines of the TMA but are not considered part of it. Aircraft are not to enter the TMA without a specific clearance from ATC (an initial airways clearance to re-enter Pearce restricted areas on low level NAVEXs does not include the TMA).

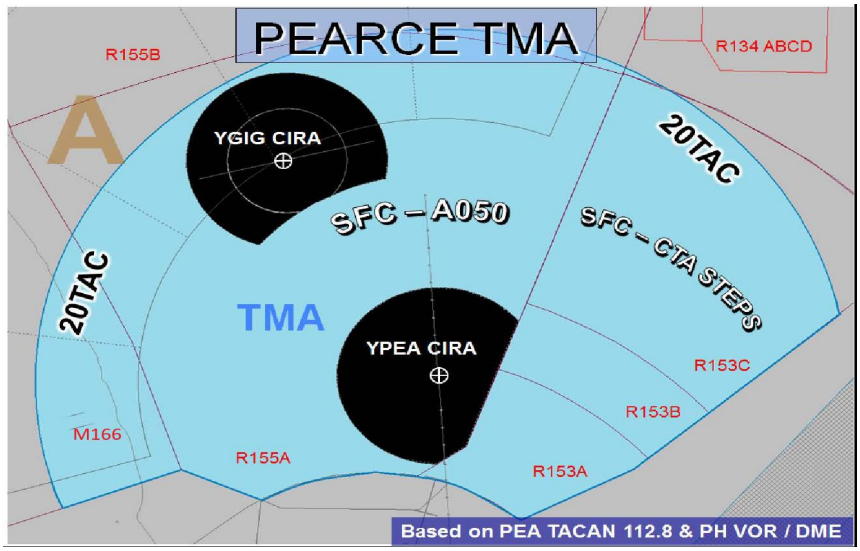
2.2.2 Separation with CTA

Aircraft are to maintain a 1.5NM buffer from the boundary of civil CTA, except when aircraft are operating within:

a) the Gnangara Release IAW Para 2.6.2; and

b) PEA CIRA IAW Para 2.3.1

Figure 2. 1 - Pearce TMA



2.3 Circuit Areas

2.3.1 Pearce CIRA

The Pearce circuit area is defined below and depicted in Figure 2. 2.

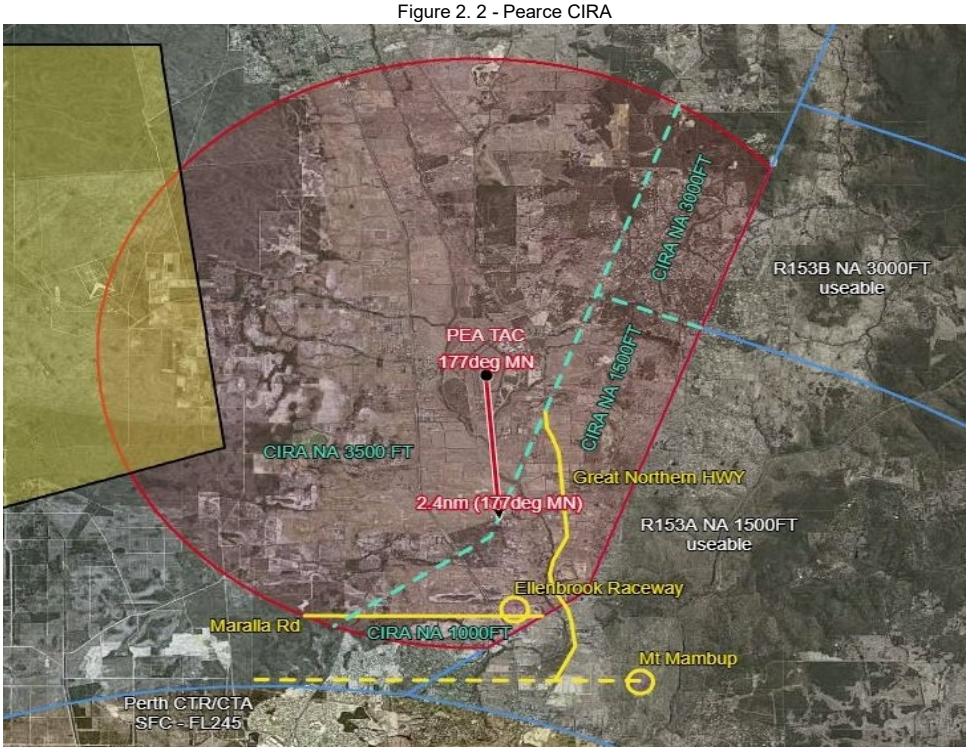
a) **Lateral limits**. A circle of 5NM radius centred on the Pearce ARP entirely within R155A;

b) **Vertical limits.** SFC-3500FT; and

c) Aircraft must maintain a 1.5NM buffer from the boundary of civil CTA and/or remain at least 500FT below overlying civil control steps except:
   i) Aircraft may visually position south of Maralla Road NA 1000FT, but no further south than an east-west line through Mt Mambup.

d) Aircraft may not manoeuvre further than 2.4 TAC PEA upwind of runway 18L, above 1500FT.

Figure 2. 2 - Pearce CIRA



2.3.2 Gingin CIRA

The Gingin circuit area is defined as:

a) **Lateral limits**. Within 5NM of GIG ARP, outside 12TAC PEA; and

b) Vertical limits. SFC-3500FT

2.4 Pearce Training Area (PTA)

2.4.1 PTA Alpha

PTA A is shown in Figure 2. 3 and defined reference PEA TAC PEA254045 position clockwise along the 45 TAC arc to the 022 radial, south along the 022 radial to 15TAC, then anti-clockwise along the 15TAC arc to the 254 radial, and then west along the 254 radial to 45 TAC. Useable levels are 5000FT to A120, except PTA A27 (3000FT to 10 000FT).

2.4.1.1 Sub divisions

PTA Alpha is sub-divided by the Wannamal and Alkimos Lanes, and by the 278 and 330 radials to form a total of five training areas, each of 24 degree splay. Each sub-area is referred to by its centre radial, rounded to the nearest 10 degrees. Each sub-area can be further dissected by the PEA 30TAC arc to form an Inner and Outer area.

2.4.1.2 PTA A27 outer

Aircraft in PTA A27 Outer may leave and re-enter Pearce SUA as required in that portion that is coincident with class G airspace.

2.4.1.3 Restrictions

Operations within PTA A may have restrictions placed on them, described at Para 3.8.8, due:

a) Operations with another military aircraft occupying the same PTA;

b) Gingin ‘NDB High’ operations – affects PTA A32 and A34;

c) Activation of Bindoon Extended – affects PTA A01;

d) Activation of Army and Navy restricted airspace:
   i) Bindoon Army Range (R134 A/B) – affects PTA A01 (Outer);
   ii) Lancelin Range (M147) – affects PTA C (West) and PTA D (North); and
   iii) Western Australian Exercise Airspace (WAXA) – affects PTA A27(Outer), and PTAs D-G.

e) civil RPT movements along:
   i) civil trans-oceanic air route T12, Figure 2. 4 – affects PTA A27;
   ii) AVNEX and OTLED Standard Instrument Departures – affects PTA A27; and
   iii) Rottnest Island – Jurien Bay route W14 – affects PTA A27, A29 and A32, and PTAs C and D.

Figure 2. 3 - PTA A

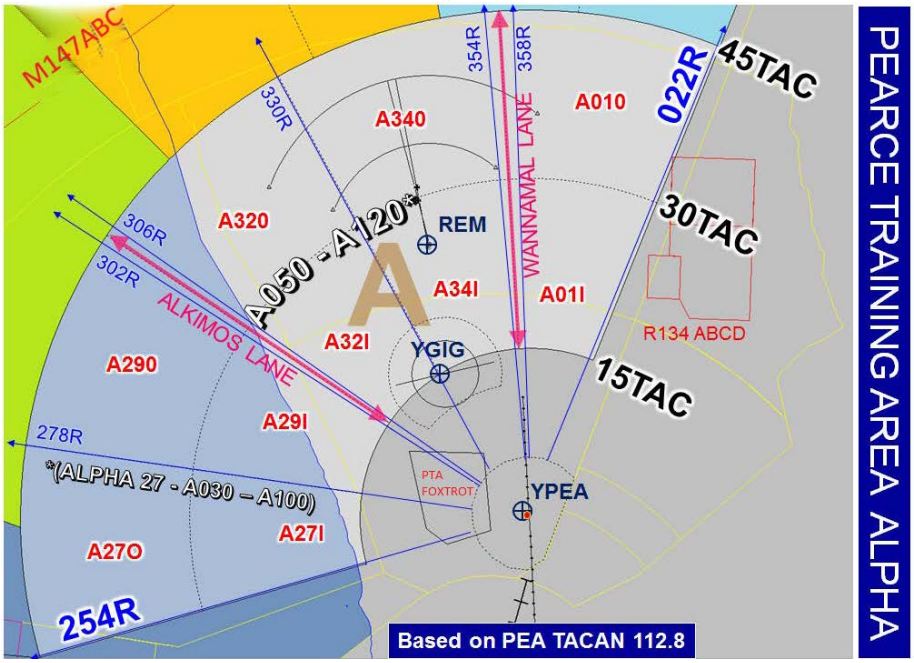
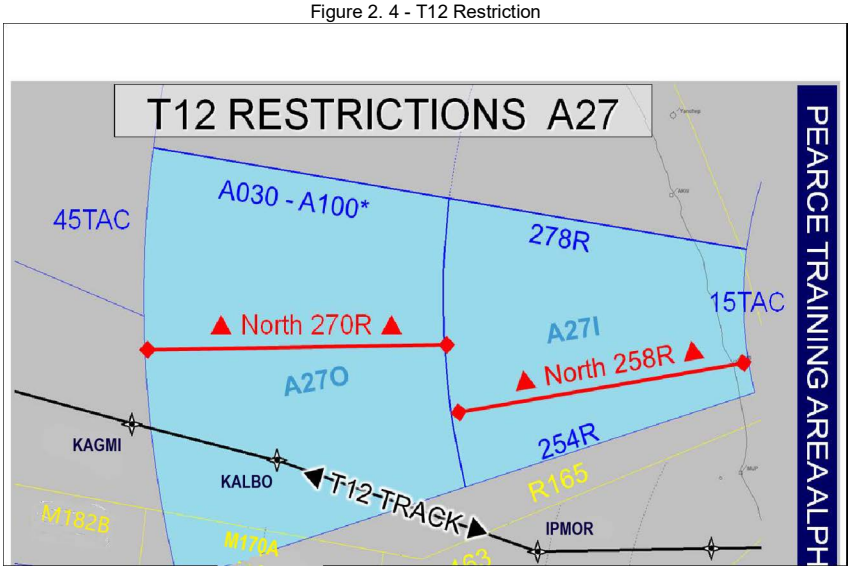


Figure 2. 4 - T12 Restriction



2.4.2 PTA Bravo

PTA Bravo exists from the PEA350045 position north along the 350 radial to 73TAC then clockwise to the 021 radial, then south along the 021 radial to 45 TAC and anticlockwise along the 45TAC arc to the 350 radial. Useable levels are 5000FT to FL150. PTA B is internally sub-divided into quadrants by the PEA 005 radial and the 60TAC arc.

2.4.3 PTA Charlie

PTA Charlie exists from the PEA315045 position north along the 315 radial to 73 TAC then clockwise along the 73TAC arc to the 350 radial, then south along this radial to 45TAC, and anti-clockwise along the 45TAC arc to the 315 radial. Useable levels are 5000FT to FL150. PTA C is internally sub-divided into quadrants, delineated by the PEA 335 radial and the 60 TAC arc.

2.4.3.1 M147 active

Does not include M147 Lancelin Air Weapons Range when activated.

2.4.4 PTA Delta

PTA Delta exists from the PEA315045 position north-west along the 315 radial to 120DME PH then anti-clockwise on the 120 DME PH arc to the PH(VOR) 290 radial, then south-east along the radial to 45TAC and then clockwise on the 45TAC arc to the PEA315045 position. Usable levels are SFC to FL300. PTA D is internally dissected by the 295 radial to form Delta North and Delta South. Aircraft operating below 2000FT are outside Pearce SUA and may encounter aircraft not in communication with ATC. Aircraft cleared to operate in PTA Delta may leave and re-enter Pearce SUA as required.

2.4.4.1 VFR Coastal Lane or M147 active

PTA Delta does not include the VFR Coastal Lane or portions of M182 or M147 when activated, as per Para 3.8.8.

2.4.4.2 Civil transits

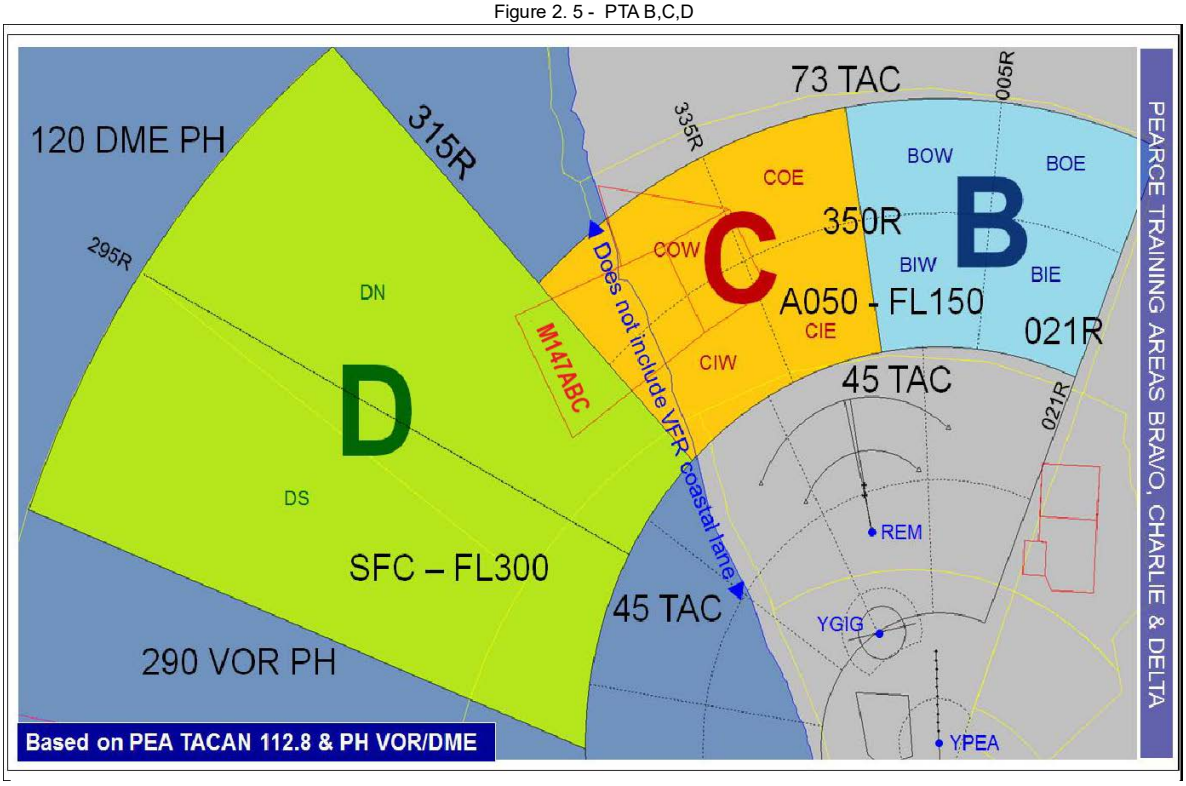
2.4.4.2.1 OTKUN-BUVEL track

Unpressurised civil flights may transit on the W14 between OTKUN (Rottnest Island) and BUVEL (Jurien Bay) as detailed in ERSA FAC – Pearce. Further details appear at Para 3.8.8.

2.4.4.2.2 T12 Track

Use of airspace containing trans-oceanic air route T12 may be requested from PEA Centre.

Figure 2. 5 - PTA B,C,D



2.4.5 PTA Foxtrot

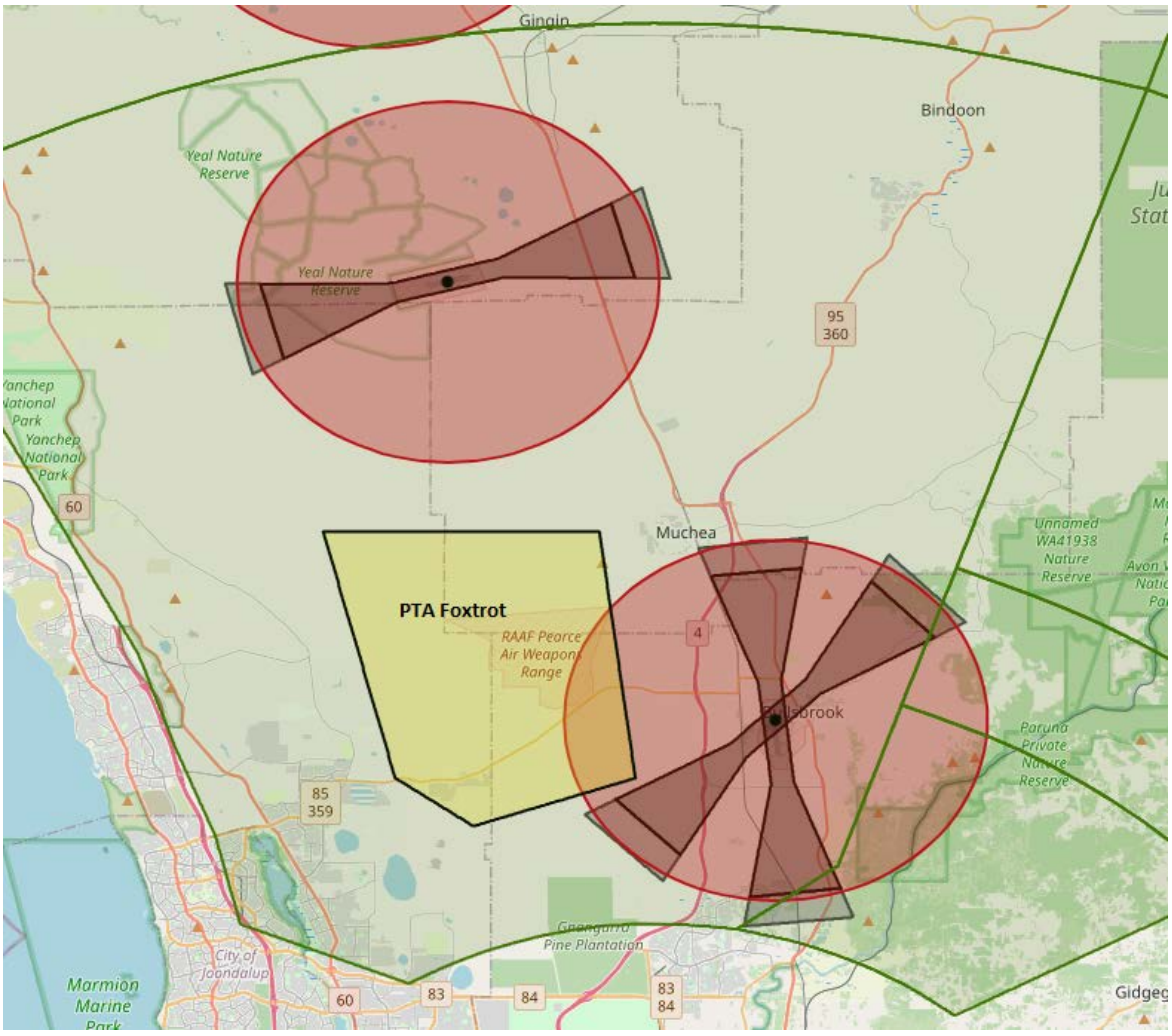
PTA Foxtrot is primarily used for practice air-to-ground training for Pearce units. PTA Foxtrot can also be activated as an emergency handling area / premeditated ejection area. Detailed lateral limits are: 31 34 50S, 115 48 20E - 31 34 50S, 115 56 00 E - 31 41 40 S, 115 57 00 E - 31 43 00 S, 115 52 30E - 31 41 40S, 115 50 20E - 31 34 50S, 115 48 20E. Usable levels are from SFC to A120. Figure 2.4.5.2 refers

2.4.5.1 PTA Foxtrot notification

PTA Foxtrot will be promulgated via the weekly Flying Planning Conference, and will be published on the ATIS when active.

PTA Foxtrot can also be activated at short notice for Emergency handling and pre-meditated ejections.

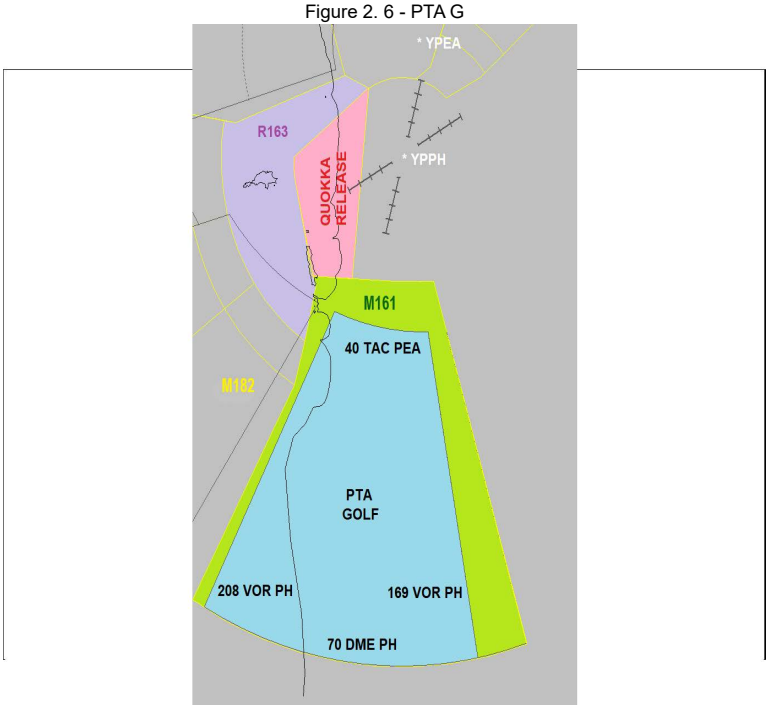
2.4.5.2



2.4.6 PTA Golf

PTA Golf is from position PH (VOR) 208 radial at 40TAC PEA, south-west along this radial to 70DME PH, then anti-clockwise on the 70DME PH arc to the PH (VOR) 169 radial, then north along this radial to 40TAC PEA, and then clockwise along the 40TAC PEA arc to the PH (VOR) 208 radial. Usable levels are 7000FT to FL200 or A190. PTA G may be internally sub-divided into quadrants by the PH (VOR) 185 radial and the PH 50DME.

Figure 2. 6 - PTA G



2.5 Lanes and Gates

Transits to/from outer PTAs may be made via one of four Departure/Arrival Lanes as depicted in Figure 2. 3. General handling exercises, and operations on silent/traffic frequencies are not permitted within these areas. Aircraft may be permitted to depart the centre radial once above A120/below 5000FT. Transit through vacant portions of PTA A may also be offered en route. The lanes are:

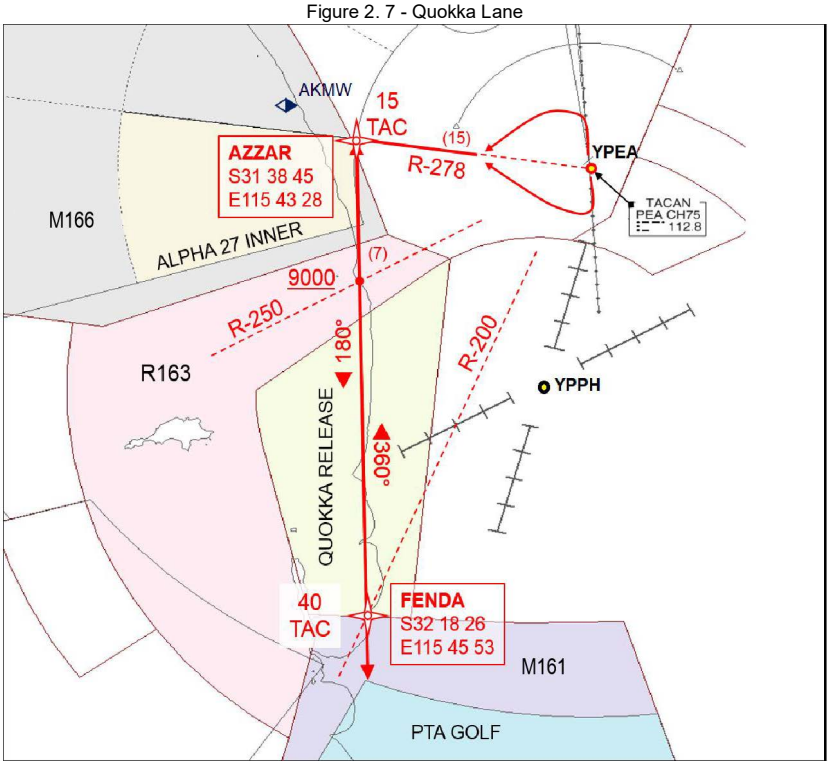
a) **Wannamal Lane.** The Wannamal Lane is centred on the 356 radial, and extends between the 354 and 358 radials, from 15-45TAC. Vertical limits are 5000FT- A120. Operations in PTAs B or C normally route via the Wannamal Lane. Position 'Northgate' is situated at 15TAC in the Wannamal Lane;

b) **Alkimos Lane**. The Alkimos Lane is centred on the 304 radial, and extends between the 302 and 306 radials, from 15-45TAC. Vertical limits are 5000FT- A120. Operations in PTA D normally route via the Alkimos Lane. Position 'Westgate' is situated at 15TAC in the Alkimos Lane;

c) **Mullaloo Lane**. The Mullaloo Lane is situated in R163, and extends between the 248 and 233 radials, from 12-40TAC. Vertical limits are 5000FT- A120. Operations in WAXA airspace/PTA G route via the Mullaloo Lane. Position 'Southgate' is situated at 12.5 TAC in the Mullaloo Lane; and

d) **Quokka Lane**. The Quokka Lane connects AZZAR, situated on the 278 radial at 15TAC Pearce, with a north south line to FENDA, situated on the 200 radial 40TAC Pearce and is pictured in Figure 2. 7. The vertical limits are 9000FT – A140, and a requirement exists to reach 9000FT by the 250 radial Pearce on departure.

Figure 2. 7 - Quokka Lane



2.6 Airspace Releases

2.6.1 The MERLO Release

The MERLO comprises civil airspace above R153 A and B, and that portion of the PTH TMA within approximately 9-10TAC, SFC – 4000FT, as depicted in Figure 2. 8.

2.6.1.1 7 TACAN arc

The MERLO exists primarily to facilitate 7TAC arc approaches to Runway 36 ILS/ TACAN, due to its design the MERLO also facilitates visual approaches to Runway 36 within 7TAC.

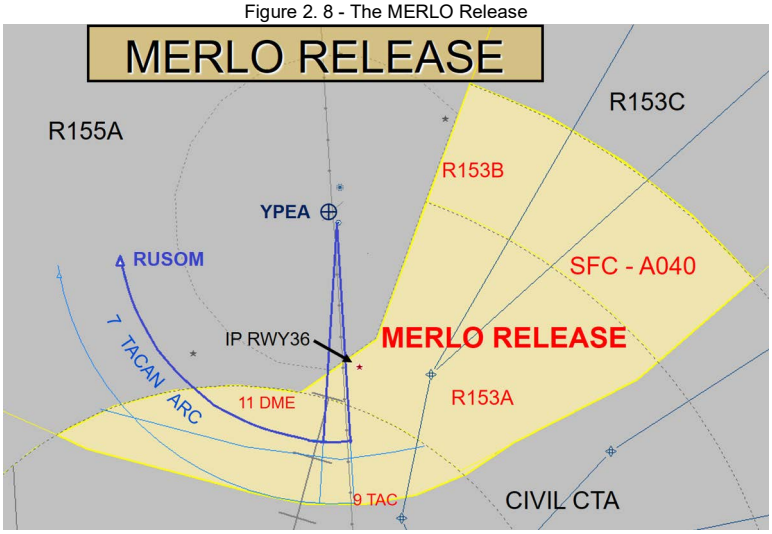
2.6.1.2 Availability

The MERLO may be released to Pearce ATC IAW WA MATS Supp. The MERLO is only available when the Perth TMP is on the North-East Plan (Perth Runways 03 and 06 in use). When Pearce is duty Runway 36 and no status is present on the Pearce ATIS then the MERLO can be presumed as available.

2.6.1.3 The MERLO release not available

When the MERLO release is not available instrument approaches to Runway 36 will be denied or delayed. The Pearce ATIS will include the phrase ‘MERLO Release not available’.

Figure 2. 8 - The MERLO Release



2.6.2 The Gnangara Release (GNA)

The GNA comprises civil airspace within 11DME PTH, SFC-1500FT depicted in Figure 2. 9.

2.6.2.1 Availability

The GNA will be released to Pearce ATC when the MERLO is not available and Runway 36 is required for VFR recoveries to PEA.

2.6.2.2 Use

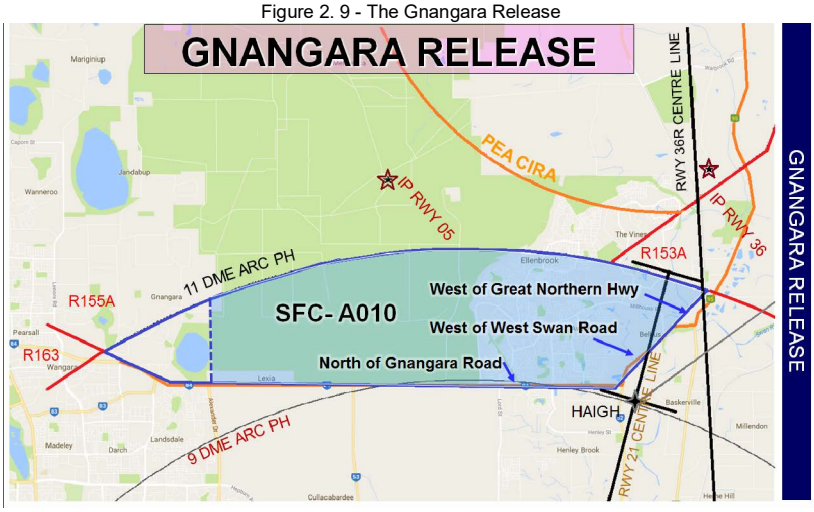
The GNA exists to facilitate aircraft positioning for a visual approach to Runway 36.

a) Aircraft operating visually within the GNA are not required to remain 1.5NM clear of the southern boundary, but must remain at least 500FT below overlying civil airspace, NA 1000FT;

b) Aircraft can contain their operations within the GNA by remaining visually:
   i) east of Gnangara Lake;
   ii) north of Gnangara Rd;
   iii) north and west of the West Swan Road and Great Northern Highway; and
   iv) at/or below 1000FT.

c) the GNA is not available during Pearce Tower Airspace Only activation.

Figure 2. 9 - The Gnangara Release



2.7 Outer Manoeuvring Area (OMA)

The Outer Manoeuvring Area is defined as that airspace within the lateral confines of R155AB outside the PEA TMA with vertical limits from SFC-A050, depicted in Figure 2. 10.

Facilitates the sequencing and separation of aircraft:

a) transiting or conducting lower level training activities below PTA A;

b) entering/departing the NLFA and WLFA; or

c) conducting air work at the Remote Navaid Facility (REM).

Note: The VFR coastal lane, which extends from SFC-A020, is not considered part of the OMA.

Figure 2. 10 - OMA Low Flying Areas (LFA)

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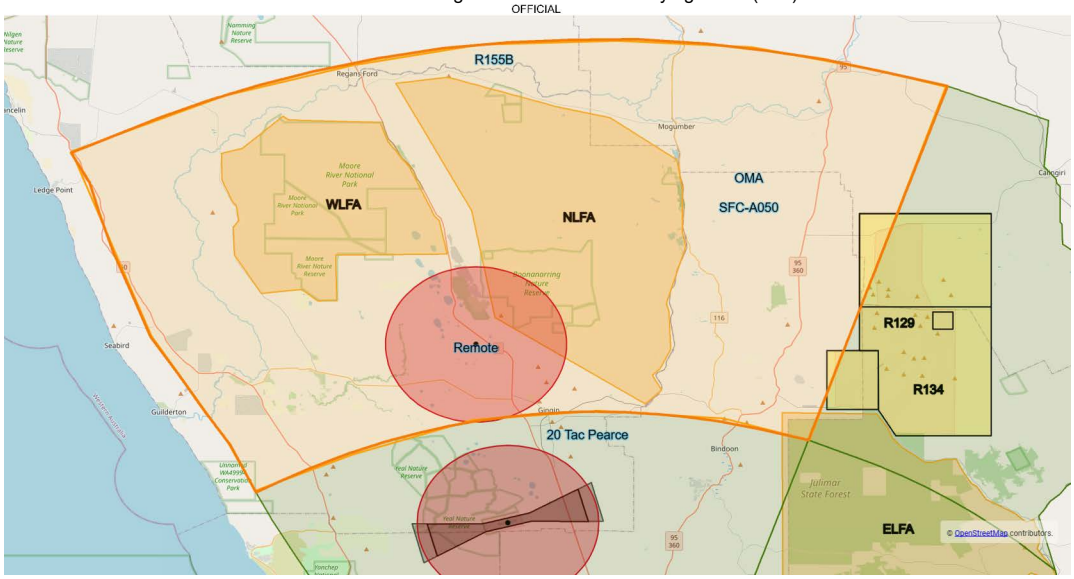


2.8 Low Flying Areas (LFA)

There are five designated LFAs for training operations at Pearce. The vertical limits of the LFAs are SFC-2000FT, except the Outer LFA, which is SFC-4000FT.

2.8.1 General procedures

General operating procedures relevant to LFAs are located at Para 4.7.5.

2.8.2 Western Low Flying Area (WLFA)

2.8.2.1 Dimensions

From the Brand Highway at 1NM north of the Wannamal Road West intersection, a line west along the southern edge of the nature reserve, then south along the edge of the nature reserve to Beermullah Road West. Westward along Beermullah Road West to Cowalla Road, thence north along Cowalla Road to Orange Springs Road. North along Orange Springs Road to a fire break at 31 01 30S 115 37E. South-east and east along the firebreak to the Brand Highway at 31 02S 115 43 30E, thence south along the Brand Highway to 1NM north of Wannamal Road West intersection. Depicted in Figure 2. 11.

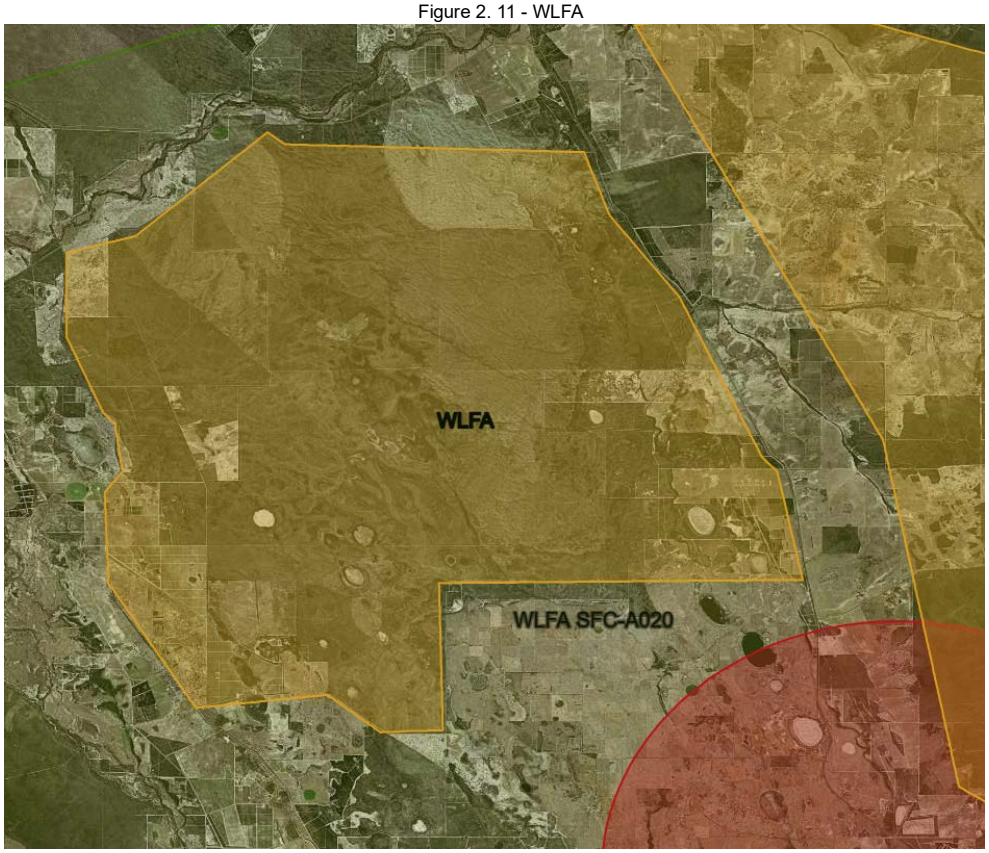
2.8.2.2 Noise-sensitive area

Aircraft are not to enter or exit the Western LFA at the north-east corner due to noise-sensitive areas.

2.8.2.3 Overflying traffic

Pilots are to exercise vigilance on entry/exit for traffic overflying the WLFA on REM instrument approaches, holding patterns, or on low-level navigation flights.

Figure 2. 11 - WLFA



2.8.3 Northern Low Flying Area (NLFA)

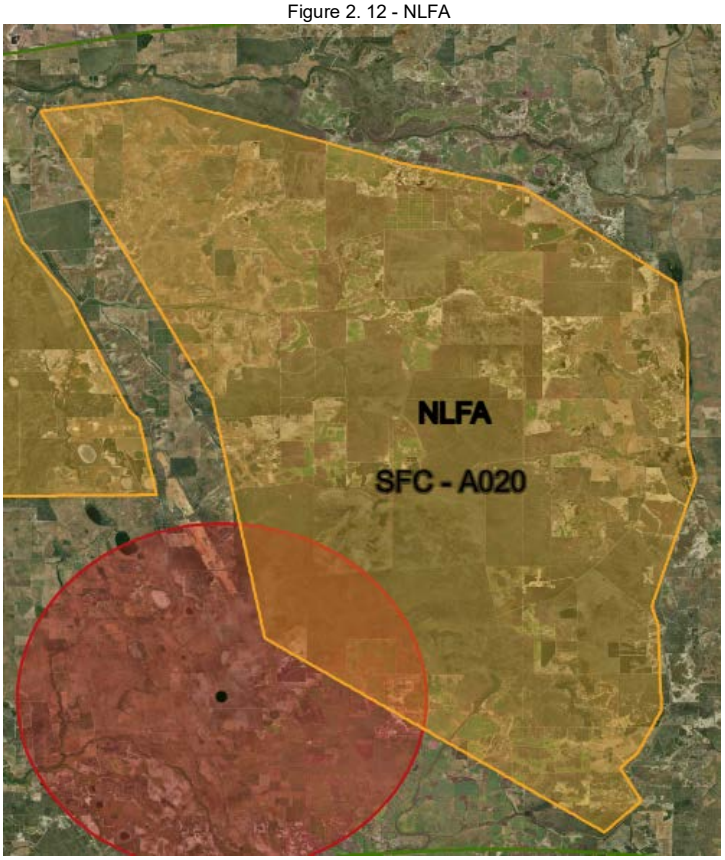
2.8.3.1 Dimensions

NLFA is from the point on the railway line immediately north of Mooliabeenie Airfield, north along the railway line to 2NM short of Mogumber. A straight line to a point 2NM west of Mogumber on the road to Regans Ford, thence west along the road to a point 3NM short of Regans Ford. South along the ridge line parallel to the Brand Highway to abeam Beermullah Airfield, thence a straight line to the railway line north of Mooliabeenie Airfield. Depicted in Figure 2. 12.

2.8.3.2 Overflying traffic

Pilots are to exercise vigilance on entry/exit for traffic overflying the NLFA on REM instrument approaches, holding patterns, or on low-level navigation exercises.

Figure 2. 12 - NLFA



2.8.4 Eastern Low Flying Area (ELFA)

2.8.4.1 Dimensions

The ELFA is from the junction of the Bindoon Road and the Miling - Clackline railway line, south along the railway line to the northern edge of the Avon Valley. West along the Avon Valley to adjacent Bald Hill and North West to a position 31 33.5S 116 09.5E. North along the fence-line to a point where the fence turns east, thence a straight line to Bindoon Road at Bindoon Abandoned Airfield. East and south-east along Bindoon Road to the Miling - Clackline railway line. Depicted in Figure 2. 13.

2.8.4.2 Clearance for the Avon Valley

Aircraft require a separate clearance to fly in the Avon Valley.

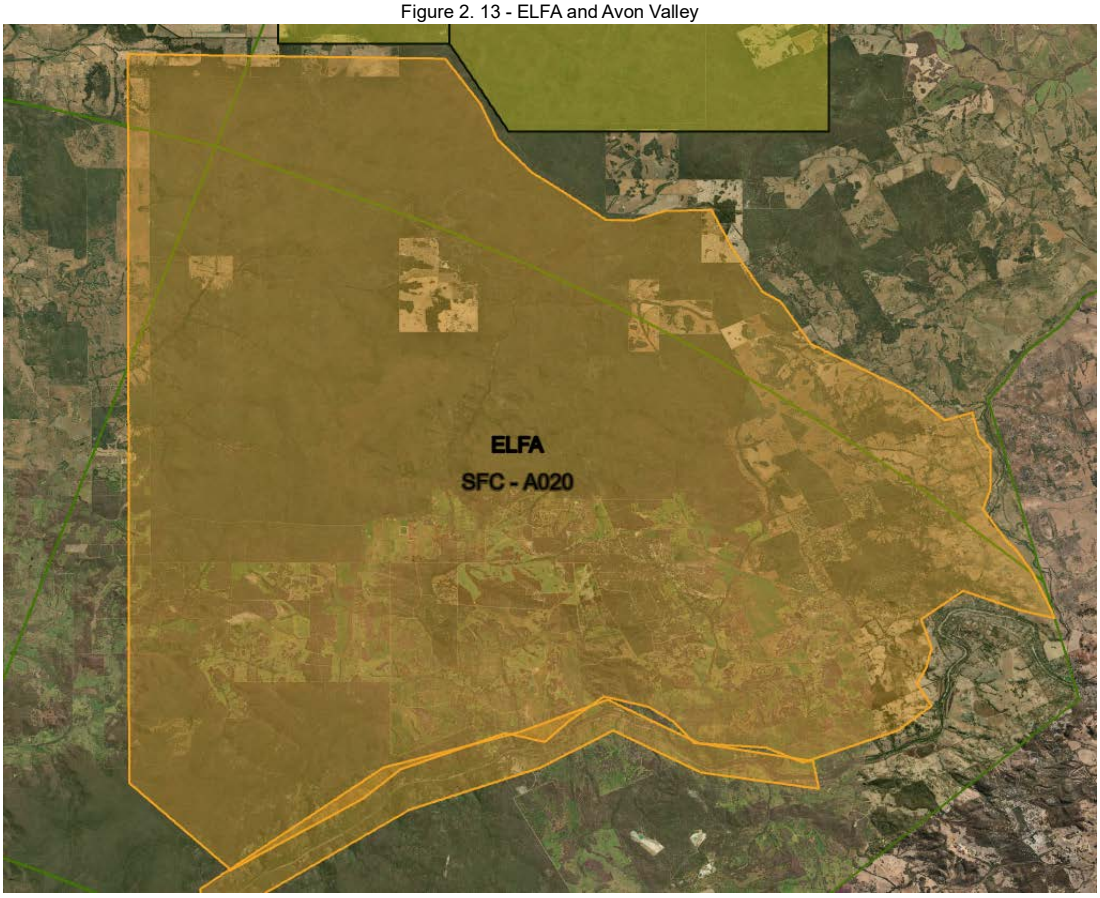
2.8.4.3 Proximate airspace

Pilots must be cognisant of the proximity of R134 immediately north of the low flying area and the vertical limits of available airspace in R153.

2.8.4.4 Overflying traffic

Pilots are to exercise vigilance on entry to/exit from the ELFA SW boundary for traffic holding at GUNOK.

Figure 2. 13 - ELFA and Avon Valley



2.8.5 The Avon Valley

The Avon low flying corridor extends from SFC-1500FT and is available for recovery purposes to YPEA from Toodyay to the Avon/Chittering Valley intersection, YPEA 095005, position VALLEY, depicted in Figure 2. 13.

2.8.5.1 Proximate Airspace

Pilots must be aware of R153 vertical limits on recovery.

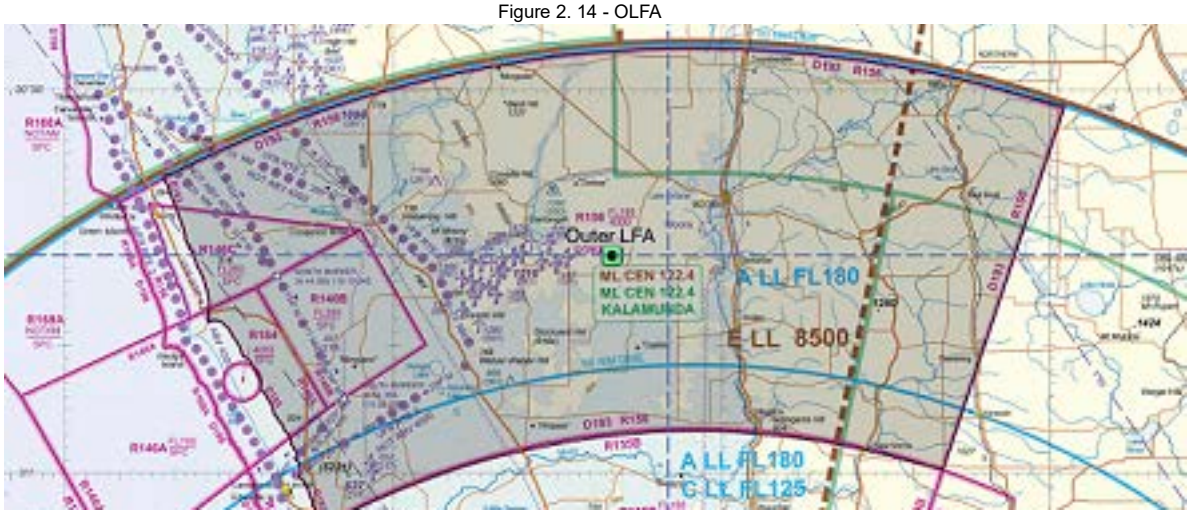
2.8.5.2 Arrivals via the Avon

For Arrivals Via the Avon Valley see Para 4.5.2.8.

2.8.6 Outer Low Flying Area (OLFA)

The Outer Low Flying Area exists outside Pearce restricted areas, and within the confines of D193, from SFC-4000FT.

Figure 2. 14 - OLFA



2.9 Other Airspace Configurations

2.9.1 Multi-ship Formation Training Area (MFTA)

The MFTA is established to facilitate sanitised airspace for multi-ship formation training, or low-level aerobatics training.

2.9.1.1 Dimensions

The MFTA is that airspace within the lateral confines of the NLFA and extends from SFC-5000FT.

2.9.1.2 Exclusive use

Activation of exclusive use is to be notified on the PEA ATIS and on relevant ATC/silent frequencies.

Note: Instrument approaches to the Remote via the eastern arcs (and associated holding to the east) are not available during MFTA activation.

2.9.2 Pearce Tower Only Airspace

On the rare occasion Pearce is required to provide Tower control services without Approach services, a portion of R155A will be activated by NOTAM within 10NM of Pearce, excluding Perth CTR, SFC-base of civil CTA steps.

2.9.2.1 Civil control steps

Aircraft are to remain at least 500FT below overlying civil control steps.

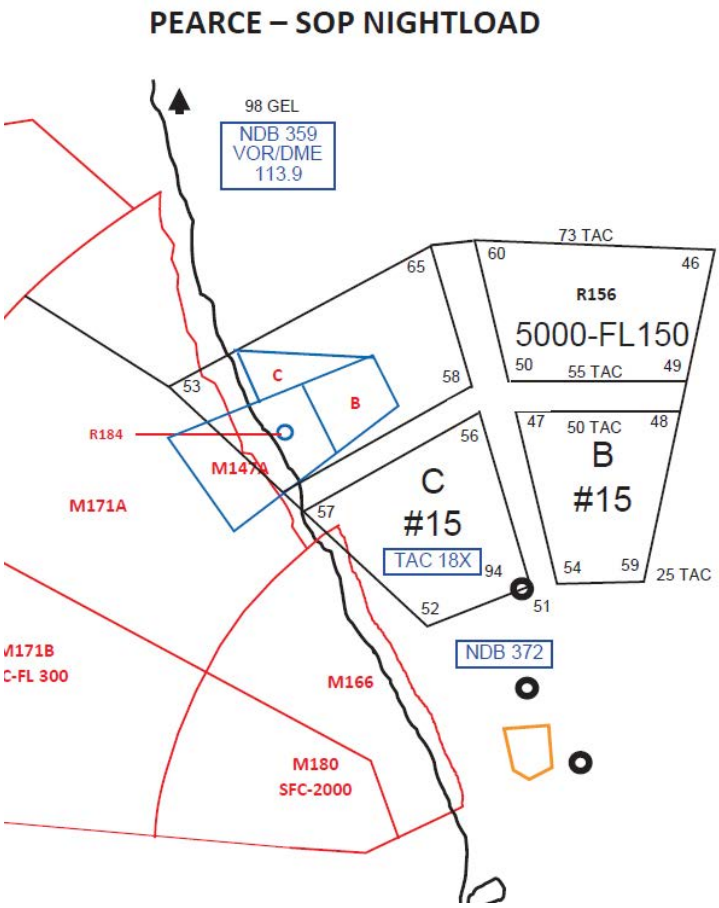
2.9.2.2 Further information

Further information can be found at WA MATS Supp.

2.9.3 Nightload Airspace

Nightload Bravo and Charlie,airspace is depicted at Figure 2. 15 and are available for coincident Night IFR operations. Airspace portions are divided in ‘Inner’ and ‘Outer’ areas which are procedurally separated from each other in the same titled airspace. Airspace clearances will be prefixed with the phrase “NIGHTLOAD”.

Figure 2. 15 - Nightload Airspace



2.9.3.1 Operating Levels

The operating levels of the Nightload Airspace portions are the following:

a) Nightload Bravo - 5,000ft to FL150;

b) Nightload Charlie - 5,000ft to FL150;

2.9.3.2 Transiting Airspace Portions

When cleared for both Inner and Outer portions of Nightload airspaces transits between the two portions are available at the following levels:

a) Nightloads Bravo & Charlie - 5,000ft to FL150;

2.9.4 Night IFR Alpha

Night IFR Alpha is divided into four IFR areas based upon the PEA TACAN and depicted in Figure 2. 16. Operating altitudes are 6000FT to A120 in A30, A33 and A36, and 5000FT to 10 000FT in A26.

2.9.4.1 Use

Night IFR Alpha is incompatible with Nightload areas Bravo Inner, Charlie Inner, Delta Inner and regular PTA A operations. Night IFR Alpha is not available for day flying operations.

2.9.4.2 Traffic frequency

Aircraft operating in Night IFR Alpha will be cleared onto the traffic frequency IAW extant PTA A procedures.

2.9.4.3 Directed Traffic Information (DTI)

The areas are procedurally separated and as such, will not receive a DTI service as per Para 3.8.1.13. PLNR shall monitor them for compliance with training area boundaries and pass traffic as required on aircraft in proximity to Night IFR Alpha.

2.9.4.4 Gates

To assist in separation and efficiencies for aircraft tracking to and from Night IFR Alpha, four gates for the individual areas (in brackets) have been created and can be requested as follows:

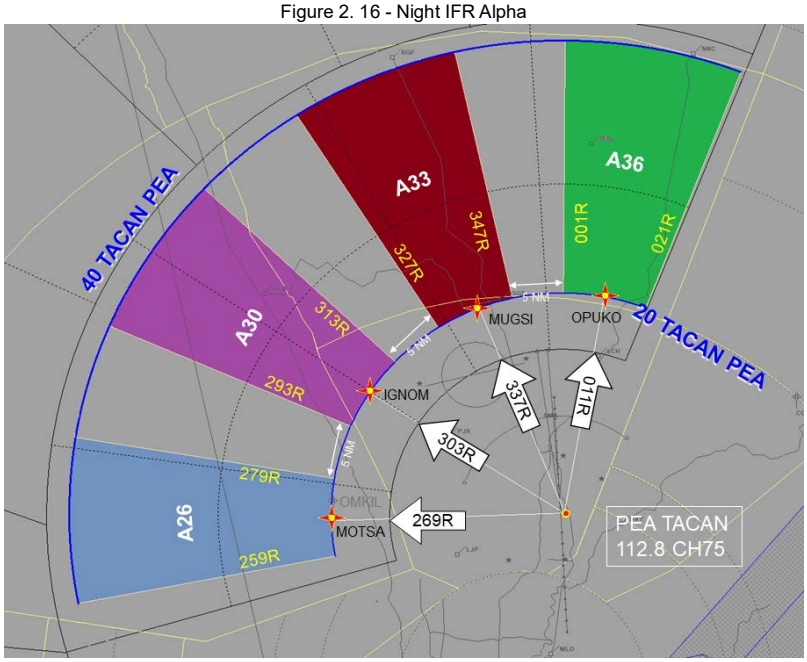
a) MOTSA (A26) located at PEA269020 (31 41 16.39S 115 37 37.93E);

b) IGNOM (A30) located at PEA303020 (31 29 56.15S 115 41 06.21E);

c) MUGSI (A33) located at PEA337020 (31 22 11.33S 115 51 21.66E); or

d) OPUKO (A36) located at PEA011020 (31 20 39.80S 116 04 54.18E).

Figure 2. 16 - Night IFR Alpha



2.10 Weapons Ranges

2.10.1 M147 A/B/C Lancelin (LNX)

LNX is the preferred venue for surface to air training activities, except those that require use of a remote bomb scoring facility. Should inclement weather or a concurrent booking render Lancelin unsuitable/unavailable, limited operations may be conducted within PTA Foxtrot. However, use of PTA Foxtrot is to be strictly rationalised owing to the resultant disruption to traffic in the PEA TMA. See DAH Section 13.

2.10.2 Small Arms Ranges

Several small arms ranges are contained within the lateral boundaries of PTA Foxtrot, which act independently of AWR activities and are depicted in Figure 2. 17.

2.10.2.1 D197

A military small arms range from SFC-1500FT.

2.10.2.2 The Ammo Box

Two civil small arms ranges, operated by the Wanneroo Shooting Club and the West Australian Rifle Association, to the northwest of D197. The area containing these civil small arms ranges, which extends from SFC to 1500FT is known as the ‘Ammo Box’. RAAF Pearce aircraft should permanently avoid the Ammo Box as small arms activities do not require promulgation by NOTAM.

Figure 2. 17 - D197 and 'The Ammo Box'



2.10.3 Bindoon Extended

Bindoon Extended is situated in the northeast portion of R155AB, within the lateral confines of PTA A01 from SFC-A120 as depicted in Figure . It may be activated for exclusive use to facilitate Close Air Support (CAS) tasking at the Bindoon Military Range (R134).

2.10.3.1 Boundaries

The airspace boundaries are defined as follows:

Latitude	Longitude	Elevation (FT)
S31°02'43	**E116°19'04**	**735**
S31°01'08	**E116°12'45**	**636**
S31°00'09	**E116°02'30**	**584**
S31°09'17	**E116°03'13**	**571**
S31°22'34	**E116°11'12**	**787**

2.10.3.2 Civil airspace boundaries

Aircraft operating within Bindoon Extended must remain at least 1.5NM from civil class C airspace boundaries.

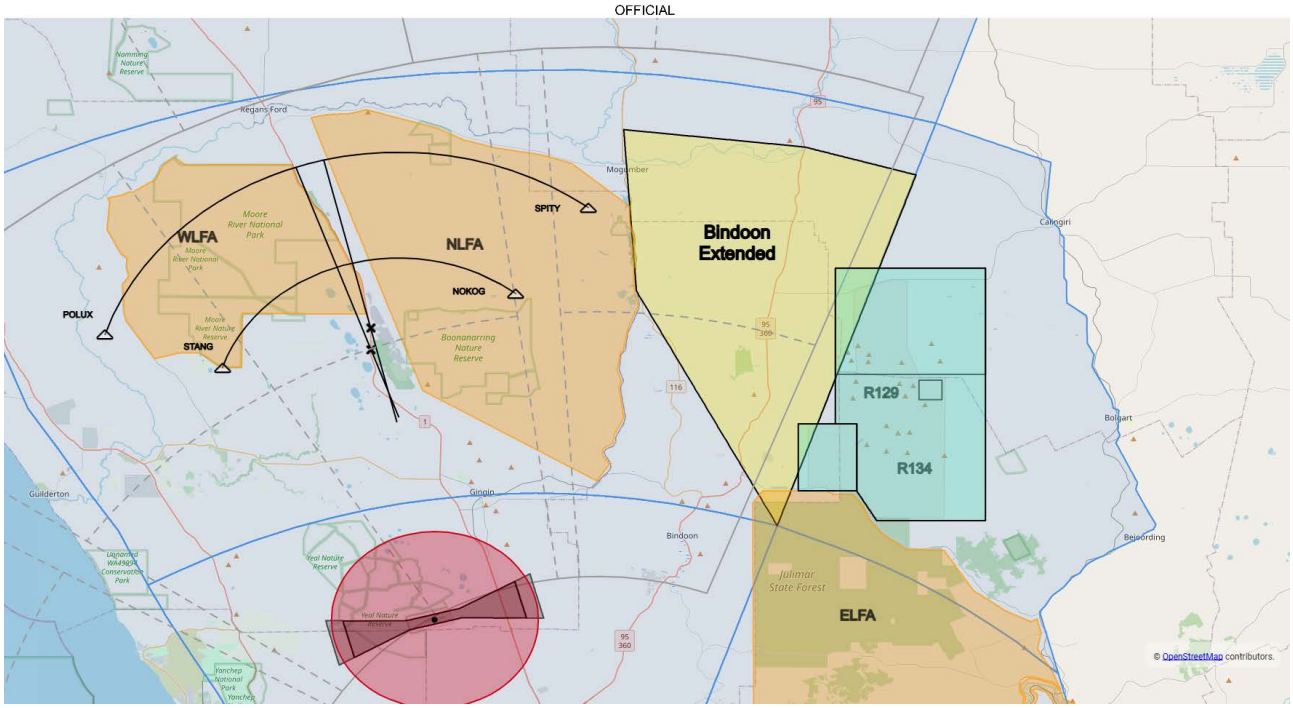
2.10.3.3 Notification

Activation of Bindoon Extended is to be notified on the PEA ATIS and all relevant ATC/ silent frequencies.

2.10.3.4 Concurrent operations

Concurrent operations within PTA A01 or within that portion of the OMA coincident with it are not permitted

2.10.3.5 Bindoon Extended Map



2.11 Other Areas of Operational Significance

2.11.1 Hawk Release

Portions of civil controlled airspace within the lateral confines of, and above, R155AB and R156 may be released to PEA ATC for higher level operations in PTA A and C. Requests for operations within the Hawk Release can be made to any PEA ATC position and a short delay should be expected while the release is coordinated. The Hawk Release is defined as follows:

2.11.1.1 Class E within the Hawk Release

The Hawk Release does not include the Class E portion of airspace from 65-90DME PH, between FL160 and FL180. VFR aircraft may operate within this airspace without an ATC clearance and without communicating with ATC. Prior to entering the Hawk Release, PEA ATC will provide a traffic statement regarding any observed aircraft in Class E airspace. Aircraft in the Hawk Release will be “cleared to leave and re-enter controlled airspace” allowing them to transit from PTA C to the Hawk Release, through the Class E portion of airspace. When the Hawk Release is activated, ML CEN will broadcast a traffic statement to all VFR aircraft operating in Class E airspace for their awareness of the Hawk Release operations.

2.11.2 Supersonic Flight

Over water supersonic flight (at speed greater than M0.95) may be conducted parallel to or away from land at a distance of more than 25NM from landfall.

Supersonic flights heading towards land may be conducted at a distance of more than 50 NM from landfall.

2.11.3 Noise Sensitive Areas

The following noise sensitive areas are to be avoided wherever possible:

a) Joondalup Hospital - avoid by 1NM or 1000FT AGL;

b) Gingin Freshwater Lobsters (BRG 305 1.7NM from the REM) - avoid direct over-flight of ponds below 1000FT;

c) South Perth Zoo - avoid by 1000FT AGL or 0.5NM, with the area most sensitive at night. If flying in the vicinity of the South Perth Zoo (Perth Water or to the south for fly pasts etc), the Perth Zoo is to be advised of the activity. Zoo management will normally remove Zoo keepers from cages of bigger animals during the flying activity;

d) Northern Coastal suburbs of Perth, including Quinns Rocks, Yanchep and Two rocks – avoid overflight below 2000FT AGL or continuous operations in proximity below 5000FT;

e) Township of Walkaway, approximately 12NM South East of Geraldton – avoid over-flight below 2000FT or continuous operations in proximity below 5000FT;

f) Woodridge Estate, approximately 5NM east of Guilderton township – avoid continuous aerobatics over the estate; and

g) Penguin and Seal Islands (near Rockingham) – avoid by 1NM or 1000FT AGL.

2.11.4 Hazardous Areas

The following significant hazardous areas are to be avoided:

a) Gas pipeline venting stations at Right Initial Runway 18 and Left Initial Runway 36 - NB 500FT AGL;

b) Pinjar Gas Turbine Power Station (31.32S 115.49E) 5nm south-west of Gingin airfield - avoid by 1NM or 500FT AGL; and

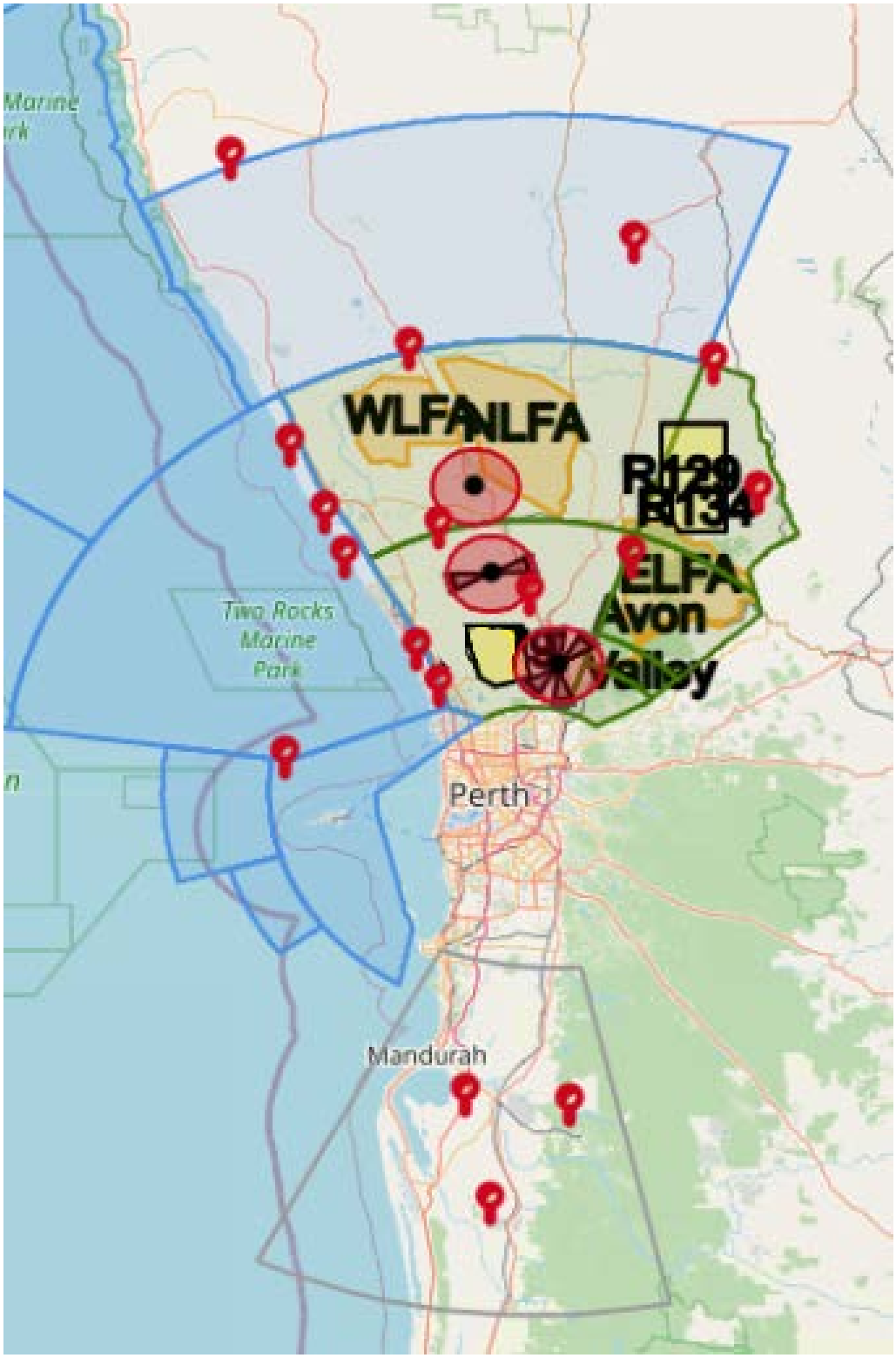
c) The following locations are situated on the Dampier to Bunbury Natural Gas Pipeline and continuously vent gas. Avoid direct over flight of these locations below 1000FT AGL:
   i) 140KM south of Karratha, 5KM west side of North West Coastal Highway;
   ii) 30KM west of NWCH at Nanutarra road house;
   iii) 130KM east of NWCH at Exmouth turn of (Minilya road house) Lyndon Station;
   iv) 20KM north of Gascoyne Junction;
   v) 100KM east of NWCH at Hamelin Pool;
   vi) 70KM east of NWCH, 30KM north of state barrier fence;
   vii) 50KM east of Geraldton, 5KM north of Mullewa Rd;
   viii) 10KM east of Brand Highway, 10KM south of Eneabba; and
   ix) On east side of Brand Highway, 30KM north of Gingin.

2.11.5 Pearce Airspace Infringement Hot spots

Due to the proximity of Pearce to adjacent civil airspace, airspace infringements by unauthorised aircraft are a constant hazard. Pilots must exercise increased vigilance when operating in the vicinity of airspace infringement hot spots. Figure 2.21 shows known infringements into Pearce Restricted Airspace as of May 2026.

Figure 2. 18 - Pearce SUA Airspace Infringements

Note: Map updated every 6 months with data from 453SQN PEA FLT ASO


WLFA
NLFA
R129
R134
ELFA
Avon
Two Rocks
Marine
Park
Perth
Mandurah

3 Planning

3.1 Visiting Aircraft Procedures

Non-local operators deploying to RAAF Pearce for exercises or operations must be briefed by 453SQN PEA FLT on local airspace and procedures prior to commencement of flying operations. To book a local brief email both Tower and Approach Operations Commanders 453sqnpeatwr.opscdr@defence.gov.au and 453sqnpeaapr.opscdr@defence.gov.au prior to arriving at YPEA.

3.2 Flight Planning

3.2.1 Flight plans

Aircrew must submit flight plans for all sorties (including local operations) via NAIPS and may include the intended training area in the comments section. In exceptional circumstances flight plans for local sorties may be lodged by phone with Pearce Approach.

3.2.2 Persons on Board (POB)

For all 2FTS, 79SQN and 130SQN aircraft, ATC will always assume a POB of 2 unless specifically told otherwise.

3.2.3 Visiting Aircraft

Visiting aircraft operating within the WAXA airspace should insert comments in field 18 of the flight plan stating either:

a) Fleet Support operations in M182; or

b) RAAF operations in M182.

3.2.4 Callsigns

All aircraft operating from Pearce must submit flight plans, using the callsigns listed in MATS. ADS-B identifiers should match these callsigns.

3.2.4.1 Exception

Due to a limitation in the RSAF PC-21 ADS-B fit, RSAF formations may still flight plan local Pearce sorties using nomenclature consisting of three letters and two numerals, Where possible, the callsigns listed in MATS should be used.

3.2.4.2 2FTS Solo Callsign restrictions

2FTS solo trainee sorties with the call signs, **Cygnett**, **Sierra** or **Dugite** are unable to fly High Speed as per 3.8.7.5, even at ATC request. Additionally, the above callsigns are not authorised to conduct orbits in the CIRA, whether for spacing or runway change.

3.3 Flight Category

3.3.1 VFR Flight

Pilots should operate under VFR in the training area unless weather dictates otherwise.

3.3.2 IFR Flight

IFR operations should be minimised to those necessary for instrument departure and arrival, and transits to/from the training area.

3.3.2.1 IFR Flight Delay

If an IFR clearance is delayed due to traffic congestion, captains may elect to proceed VFR by adding the term 'VFR' to their clearance request.

3.3.3 Special VFR operations (SVFR)

To facilitate the departure and arrival of VFR flights, aircraft captains may request a Special VFR (SVFR) clearance.

3.3.3.1 SVFR Restrictions

The following restrictions apply to SVFR operations:

a) In a LFA – one SVFR callsign allowed;

b) At Gingin – no more than four SVFR aircraft in the circuit; and

c) At Pearce – no more than two SVFR due cloud and/or visibilityaircraft in the circuit.

3.3.3.2 Continuous SVFR circuits

Approval for continuous SVFR circuits are at ATC discretion.

3.4 Flight Following

The following services are provided in respect of flight following.

3.4.1 IFR category

Aircraft operating under IFR will use full reporting procedures and are to maintain a listening-watch on the ATC frequency relevant to the area of operations.

3.4.2 VFR category

VFR category aircraft will use full reporting procedures until established in their training area whereupon they can expect a clearance to a silent/traffic frequency. Aircraft are not to depart a PTA until in receipt of an onwards airways clearance.

3.4.3 Gingin CTAF Operations

When the GIG CIRA is not subject to tower control, ‘OPS NORMAL’ calls to PEA ATC are required at 30 minute intervals. ATC are to pass details of known GIG traffic to aircraft approaching the GIG CTAF before entry. Further information at Para 4.6.8.2.

3.4.4 Low level operations

Low level operations do not allow ATC to maintain a SARWATCH by continuous surveillance monitoring due to the poor radar coverage. Pilots or ATC may nominate a time such as an OPS NORMAL or estimate.

3.5 Frequency Allocation

Local flying units are allocated the following frequencies and callsigns.

Unit	Callsign Series	UHF	VHF
2FTS	**QFI 01-70** **Student 600 Series**		VIPER OPS 134.8 MAINTENANCE 119.5 FORM COMMON 1 133.1 FORM COMMON 2 126.2 FORM COMMON 3 118.8 FORM COMMON 4 120.7 FORM COMMON 5 135.425 FORM COMMON 6 119.7 FORM COMMON 7 134.6
79 SQN	**QFI 01-30** **Student 80-90 Series**	343.10 Phoenix Ops 246.90 Form Common 262.50 Form Common 263.30 Form Common	395.35 Maintenance (FM)
130 SQN	**QFI 800** **Student 700 & 900 Series**	265.10 Form Common 292.60 Form Common 338.80 Form Common 392.875 Armaments 398.125 Maintenance	135.125 Eagle Ops 135.575 Form Common 136.725 Form Common

ATC 453SQN PEA FLT are allocated the following frequencies.

Position	Stud	Frequency
Pearce Airways Clearance Delivery (Pearce Delivery)	**01**	**134.10**
Pearce Ground	**02**	**127.25**
Pearce Tower	**03**	**118.30**
Pearce Approach	**04**	**130.20**
Pearce Centre - North (Pearce Centre)	**05**	**135.90**
Pearce Centre - West (Pearce Centre)	**06**	**123.30**
Pearce ATIS	**09**	**136.4 / 316.10**
Gingin Ground	**12**	**267.00**

Position	Stud	Frequency
Gingin Tower	**13**	**118.50**

PTA Silent/Traffic Frequencies Allocated to Pearce Training Areas.

PTA	Stud	Frequency
PTA Alpha	**14**	**261.80**
PTAs Bravo and Charlie	**15**	**263.20**
PTAs Delta and Golf	**16**	**260.70**
PTA Foxtrot	**16**	**260.70**
OCEAN	**21**	**285.55**

3.6 Transponder Procedures

3.6.1 Serviceable transponder

A serviceable transponder is required for flights in military restricted areas.

3.6.2 General procedures

General formation transponder procedures are contained in FIHA

3.6.3 Separate codes

Separate IFF codes should be issued to each element of a formation operating as a separate entity, such as conducting snake climb departure, a lost-contact drill or for each entity requiring DTI services. Further formation procedures can be found at Para 4.12.

3.6.4 Turning off transponder

ATC must be notified when transponders are turned off for training purposes.

3.6.5 VFR stream departure (Hawk aircraft only)

A local variation to FIHA ENR 1.1 Section 16 – ADF Formation Flights is applicable to Hawk aircraft. When Primary Surveillance Radar (PSR) is available Hawk VFR Stream departures must comply with the following requirements:

a) Two element formation – the lead aircraft shall squawk normal and the trail element shall squawk standby;

b) Greater than two element formation – the lead aircraft and last element shall squawk normal until established in formation;

c) Formation lead shall advise APP on first contact if utilising the procedure by use of the phrase “closing to (formation type)”;

d) For two element departures the advised ‘formation type’ is to be established within 15NM of the departure aerodrome

e) The variation is not applicable when departing into civil controlled airspace.

3.6.5.1 When PSR is not available, ATC may be able to process the stream departure using methods other than ATS Surveillance System Separation. Where an alternate separation standard cannot be applied and PSR is not available, Hawk aircraft will be advised that formation elements must squawk normal during departure or be delayed on the ground.

3.7 Altimetry Procedures

3.7.1 Pearce QNH

Pearce QNH should be retained when operating above 10 000FT, up to a maximum of A140 in PTAs A, B and C including transit to outer training areas through R155AB or R156. Flight at higher levels should be made with reference to QNE 1013HPA. Aircraft may use the full vertical extent of PTAs D & G when operating on local QNH.

3.7.2 Outside Pearce airspace

Sorties involving flight outside Pearce administered airspace must use standard altimetry procedures.

3.7.3 Gingin QNH

During periods of Gingin ATC activation, GIG QNH must be used within the GIG circuit area. PEA QNH must be used during GIG CTAF operations except as per Para 4.6.8.

3.8 Separation and Segregation

Separation and Segregation at Pearce is based on a multi-layered approach, with defences applied in the following order:

1) Airspace segregation - internal division of Pearce administered airspace by horizontal and/or vertical boundaries;
2) Preflight deconfliction/airspace apportionment;
3) Pilot position broadcasts, traffic awareness/alert systems, and provision of traffic information by ATC to facilitate aircrew situational awareness;
4) ATC tactical separation/segregation, including conflict resolution and positive control;
5) See-and-avoid/alerted see-and-avoid applied within the circuit areas; and
6) ATC avoiding action.

3.8.1 Definition

3.8.1.1 Separation

Separation is the act of ensuring aircraft maintain a prescribed minimum distance from other aircraft or objects. Separation requirements are defined in MATS. Variations to separation standards in MATS are applied at Pearce in accordance with FIHA.

3.8.1.2 Segregation

Segregation is the application of procedural measures between aircraft where no separation requirement exists. Segregation is deliberate by nature and designed to resolve or reduce potential conflicts with airspace users, provided all aircraft operate as expected or as instructed. Segregation methods may be passive such as internal airspace divisions, or active such as ATC sequencing of arrivals through the TMA/OMA.

3.8.1.3 Pearce specific segregation criteria

Pearce specific segregation criteria is defined as:

a) 500FT vertically, or

b) 2NM laterally.

3.8.1.4 Sighted traffic

When aircraft reports ‘traffic sighted’ the aircraft captain assumes avoidance responsibility and may apply a reduce segregation criteria of:

a) 500FT vertically, or

b) 600M laterally.

3.8.1.5 Proximity

Aircraft are considered to be in proximity when their current or projected flight paths may bring them into conflict.

3.8.1.6 Pearce specific proximity

Pearce Specific Proxmity is defined as traffic that has already or is predicted to come within:

a) 3NM laterally, or

b) 1000FT vertically.

Note: This term isn't used in the circuit area.

3.8.1.7 Conflict

Aircraft are considered to be in conflict when they are converging without sighting traffic, and the safety of the aircraft maybe compromised.

3.8.1.8 Pearce SUA specific conflict

In Pearce SUA conflict is defined as convergence within:

a) 2NM laterally; and

b) 500FT vertically.

3.8.1.9 CIRA specific conflict

In the PEA and GIG circuit area, conflict is regarded as convergence of aircraft inside:

a) 500FT vertically; and

b) 500FT laterally.

3.8.1.10 Low Level Navigations Routes

Low-level navigation routes that are planned within 10nm and 30 minutes of each other require a deconfliction contract, as detailed in Para 3.8.3.2.

3.8.1.11 Conflict resolution

Conflict resolution involves deliberate actions taken to achieve alternative flight paths that would avoid aircraft coming into conflict.

3.8.1.12 Traffic information

Traffic information is issued by ATC to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route off flight, and to help the pilot avoid a conflict. It is intended to assist the pilot in visually acquiring traffic so that they may assume sole avoidance responsibility, and/or to assist pilot endeavours to facilitate deliberate deconfliction of flight paths.

3.8.1.13 Directed Traffic Information (DTI)

DTI is a Pearce specific service providing relevant traffic information to VFR aircraft operating in PTA A, on other aircraft operating in, or transiting through, PTA A.

3.8.1.14 Commencement and duration of DTI

DTI should commence as soon as proximate traffic is observed or conflict is considered likely and is to continue until either:

a) pilot reports ‘traffic sighted’ and therefore assumes avoidance responsibility, or

b) the aircraft are no longer in proximity.

Note: ATC radar information is predictive in nature, and does not always adequately display rapid or random changes in flightpath, particularly in the vertical plane. Therefore ‘proximate’ parameters are offered as minimum guidance for initiating DTI, and may be increased for high aircraft performance categories or when monitoring unpredictable/abrupt manoeuvres.

3.8.1.15 Alerted see-and-avoid

Alerted see-and-avoid is a procedure where the pilot, having been alerted to the existence and approximate location of other aircraft in a recognised traffic pattern, seeks to sight that traffic in order to avoid it. Entry in a pattern requires the pilot to sight all relevant preceding aircraft, and thereby assume avoidance responsibility. Alerted see and avoid principles are used in the PEA and GIG circuit areas, as further explained in Para 4.6.5.

3.8.1.16 Safety Alert and Avoiding Action

ATC Safety Alert and Avoiding Action will commence in accordance with MATS.

3.8.2 Airspace Separation and Segregation

3.8.2.1 Class D service

IAW MATMAN, Class D services are provided in Pearce SUA and associated civil airspace releases, when under control of Military ATC. Traffic must be passed when aircraft are in proximity as defined in Para 3.8.1.5.

3.8.2.2 Civil aircraft

453SQN PEA FLT will provide a Class C service to all civil aircraft excluding civil aircraft transiting R156, R163, M166 and M171A on the OTKUN (Rottnest Island) and BUVEL (Jurien Bay) track below 5000FT, and up to 10 000FT on request, who will receive a Class D service.

3.8.2.3 VMC Criteria.

Aircraft operating in Pearce SUA are to apply Class C VMC criteria at all levels.

3.8.2.3.1 Pearce and Gingin circuit areas

Class D VMC criteria apply in the Pearce and Gingin circuit areas.

3.8.2.4 Airspace segregation within PTAs

3.8.2.4.1 Internal sub-divisions

Internal sub-divisions within PTAs facilitate efficient airspace use and evenly distribute traffic, reducing the possibility of conflict between aircraft.

3.8.2.4.2 PTAs assumed occupied

ATC will clear an aircraft to operate within a PTA, but do not recognise internal subdivisions as being procedurally segregated. Therefore pilots should assume all PTAs encountered en route to intended destination are occupied and avoid them unless cleared for track shortening. Transit along boundaries of occupied PTA A segments is discouraged unless approved by ATC.

3.8.2.4.3 Approaching a PTA

Approaching a PTA or sub-division, ATC must clear the aircraft to operate on silent/ traffic frequency and are to advise the number of other aircraft in the area if already occupied.

3.8.2.4.4 Broadcasting intentions

Aircraft must broadcast their intended area and level on silent/traffic frequency prior to entering the PTA. An aircraft that is number one in the PTA is cleared to use the entire PTA. As subsequent aircraft approach the PTA, all callsigns must specify a sub-division(s) to operate in exclusively prior to entry. Aircraft must make an advisory departure call on silent/traffic frequency, including sub-area, level and intentions, and arrange an onwards clearance, all prior to leaving the area. Aircraft in PTA A must await confirmation from DTI before changing frequency.

3.8.2.4.5 Remaining within PTA

Pilots are expected to remain within their allocated PTA until issued an onwards clearance from ATC, or are in receipt of traffic information in the case of VFR aircraft transiting between PTA sub-divisions. Shared boundaries with adjacent training areas do not guarantee segregation, and so require pilots to both maintain a high degree of vigilance, and to minimise operations on or near area boundaries.

3.8.2.4.6 DTI

ATC may intervene with DTI should another aircraft be observed crossing an airspace boundary and/or in the controller’s opinion, aircraft will come into proximity whilst each remains in its allocated area. In such circumstances affected aircraft should initially turn toward the centre of their respective training airspace in an effort to expedite traffic resolution.

3.8.2.5 IFR training area operations.

PTA operations should normally be conducted under VFR, however airspace operations under IFR may be requested if inclement weather is encountered in a PTA.

3.8.2.5.1 IFR block

An IMC height block for transit should be requested and allocated prior to completion of the nominated instrument departure. Activation of a PTA as an IFR block requires application of separation standards to that airspace, thus an airspace restriction must be imposed along any airspace boundary shared with another IFR airspace block as follows:

a) A reduction of available airspace of 2NM either side of a common arc;

b) A reduction of 2 deg either side of a common radial in PTAs B, C, and D;

c) A reduction of 3 deg either side of a common radial in PTA A Outer and PTA G; and

d) lack of remaining airspace would normally preclude activation of contiguous PTA A Inner airspaces.

3.8.2.5.2 Observing restrictions

Aircraft operating under IFR must observe PTA airspace restrictions (even if VMC is encountered) until IFR is cancelled. IFR aircraft can expect to remain on the relevant control frequency unless specifically directed to Traffic/Silent frequency

3.8.3 Preflight Deconfliction and Airspace Apportionment

3.8.3.1 PTA allocation

Airspace is to be specifically allocated to each callsign by unit duty supervisors/ flight authorises. Flying units are to ordinarily assign only one callsign per PTA sub-division within a given time frame. Additional callsigns can only share airspace if a dedicated deconfliction plan has been arranged and communicated to all crews involved.

3.8.3.2 Deconfliction of low navigation sorties

Planned low navigation exercises should be discussed at the Weekly Flying Programming Conference (WFPC), and units should deconflict high intensity training waves if necessary.

3.8.3.2.1 Deconfliction contract

It is the aircraft captain's responsibility to ensure that all potential conflictions are identified, and a deconfliction contract is brokered with any crew that can penetrate a defined low navigation confliction zone. This area is defined by a timing and tracking tolerance which is applied to each aircraft as follows:

a) 10nm either side of planned track; accounting for each aircraft accumulating up to 5nm lateral navigational error and conducting planned diversion training;

b) +/- 30 minutes timing deviation from planned route timings to provide longitudinal separation and accounting for each aircraft accumulating up to 15 minutes timing variation arising from the combined effects of aircraft unserviceability, revised departure time, ATC delays, weather, etc;

c) 10nm/30 min constitutes the minimum parameters for identifying low navigation conflictions, and relies on each aircraft remaining within tolerances of 5NM/15 minutes. Crews may use greater dimensions if greater operational flexibility is desired, and compose deconfliction contracts accordingly; and

d) A 15NM lateral allowance is to be applied in the case of 79SQN tactical navigation exercises involving 'bounce' aircraft which assumes up to 10nm cross-track tactical manoeuvring.

3.8.3.2.2 Responsibility

The party assuming avoidance responsibility, and the deconfliction levels for each party, a minimum of 500FT vertical segregation, allowing for variations in terrain elevation, are to be mutually agreed. The avoiding aircraft is to climb to the deconflicted level prior to closing to within 5NM of the conflicting track, and may return to low level once:

a) radio contact is established and it is confirmed that all aircraft will remain at least 5NM clear;

b) visual contact has been made between the aircraft and no conflict exists; or

c) the avoiding aircraft has progressed 5NM laterally clear of the conflicting track.

3.8.3.2.3 Notification

Notification of planned low navigation exercises is to be included at each unit's morning brief or flight authorisation, with further details to be made available through squadron operations. Ongoing changes or additions to a unit's routes or timings are to be passed to all other flying units.

3.8.3.2.4 Reschedule

Crews embarking on low navigation legs that have not brokered a deconfliction contract are to reschedule to allow deconfliction to occur.

3.8.3.2.5 Through LFA

Where low navigation routes penetrate LFAs, crews should broadcast intentions on the appropriate frequency prior to entry, and deconflict in real time if necessary.

3.8.3.2.6 Agricultural operations

Aerial agricultural operations (crop spraying) shall be notified through PEA AIROPSCOORD Because agricultural pilots may not be radio equipped /monitoring an air-to air frequency, or under high workload, military aircraft conducting low level exercises should plan to avoid promulgated agricultural aircraft spraying operations.

3.8.4 Use of SSR Transponder and Traffic Awareness/Alert Systems

3.8.4.1 In the circuit

To facilitate aircraft fitted with automated traffic awareness/alert systems, all aircraft must squawk Normal in the circuit.

3.8.4.2 No discreet code

Aircraft that have not been issued a discreet SSR code are to squawk 5000.

3.8.4.3 Reliance on TCAS/ABSD

Crews are cautioned about over-reliance on TCAS/ADSB systems as they are not 100% accurate or reliable, and do not necessarily detect all threats. Automated systems should not supersede the pilot's own mental situational awareness model derived from listen-out and alerted lookout techniques.

3.8.5 Provision of Traffic Information

3.8.5.1 PEA/GIG CIRA

The Tower Controller is to pass traffic information to aircraft about to take-off in accordance with Para 4.3.3, and upon first contact with arriving aircraft as detailed at Para 4.5.6.

3.8.5.1.1 Further ATC action

Provision of this information service does not absolve ATC of the obligation for continuing to take all possible action to ensure ongoing segregation is maintained. Issuance of further traffic information, or control/tracking instructions to sequence and separate/segregate traffic may be required until either the pilot reports 'traffic sighted' or else ATC advises that the traffic is clear.

3.8.5.2 PEA TMA/OMA

ATC should pass relevant traffic information to all VFR/SVFR aircraft entering the TMA/OMA on any proximate traffic as defined in Para 3.8.1.5.

3.8.5.2.1 Cleared for a visual approach

Aircraft cleared for a visual approach can expect to be allocated an arrival sequence number if appropriate, with a requirement to report sighting or remain segregated, with any traffic likely to come into conflict.

3.8.5.3 PTA A

A DTI services should be provided to aircraft operating on ‘traffic’ frequency in PTA A. Notwithstanding, avoidance responsibility remains with the pilot, who must practice thorough lookout at all times and operate within their assigned area regardless of flight category.

3.8.5.3.1 Commencing DTI

DTI should commence in accordance with Para 3.8.1.4

3.8.5.3.2 Formation DTI

A formation that splits and operates as an individual aircraft entity’s squawking on an individual IFF code will require an individual DTI service. This DTI service may cease when wingmen select IFF to standby when re-forming the formation. Formation leaders are responsible for internal deconfliction whilst wingmen squawk standby.

3.8.6 Tactical Segregation Principles

Segregation of aircraft is a joint pilot-ATC responsibility. The following principles are applied in addition to minimum requirements specified by MATS:

a) ATC must provide traffic information on all relevant traffic upon entry to the CIRA, TMA and OMA, and as required in PTAs;

b) To facilitate safe and efficient traffic flow ATC may assign an aircraft an arrival sequence number (in any region of Pearce airspace) with a requirement to report sighting and follow preceding/ converging traffic, or issue a requirement to remain clear of opposite direction/crossing traffic. Control/tracking instructions may be subsequently issued to facilitate sequencing;

c) Unless the relevant traffic has been sighted, pilots should initiate deconfliction in order to ensure a minimum of 500FT vertical clearance from other aircraft is achieved prior to closing within 2NM. Deconfliction actions therefore need to consider the rate of closure with potentially conflicting traffic;

d) Further traffic information should be periodically passed by ATC until the pilot reports ‘traffic sighted,’ or else the traffic has been confirmed as clear. This may be ascertained from an ATC advisory broadcast, from a position report made by the other aircraft, or through the provision of/pilot-initiated request for further traffic information;

e) Once proximate traffic is sighted, the pilot must maintain a minimum distance of 500FT vertically and/or 600M (2000FT) laterally from other aircraft; and

f) Provision of traffic information does not absolve ATC of the obligation to continue taking all possible action to ensure ongoing separation/segregation is maintained. The controller is to initiate avoiding action should traffic remain unsighted and, in their judgment, a confliction appears likely.

3.8.7 Alerted See-and-Avoid Principles

Segregation of traffic in the circuit pattern is a joint ATC/pilot responsibility based on ‘alerted see and- avoid’ principles as described in Para 3.8.1.6.

3.8.7.1 Joining the circuit

Aircrew are responsible for ensuring deconfliction before joining the circuit by taking off, entering the pitch, turning crosswind, proceeding through High Key, or joining downwind. Aircrew must consider the type of circuit and intended Runway when assessing spacing from other traffic. Position calls should be made as soon as practicable at the aforementioned points, when entering the base turn, or at 4nm final.

3.8.7.2 Preceding traffic on base turn

Aircraft captains assigned an approach or landing clearance with preceding traffic ahead must keep preceding traffic forward of their 3/9 line during the base turn.

3.8.7.3 IFR in the circuit area

IFR approaches or departures are not positively separated from VFR aircraft in the circuit area and IFR pilots must therefore maintain situational awareness of VFR traffic, and exercise thorough lookout whenever clear of cloud.

3.8.7.4 PFL

Alerted see-and-avoid procedures are not applied to aircraft positioning for a Practice Forced Landing until they have reported at High Key. Above High Key within the CIRA, segregation may be achieved by using a lateral boundary, such as remaining on opposite sides of the Runway centreline.

3.8.7.4.1 No lateral boundary

If no convenient lateral boundary is available, Tactical Segregation Procedures found in Para 3.8.5 should be applied.

3.8.7.5 Standard speeds

Situational awareness in the TMA/OMA will be assisted by predictable movement. An advisory call of ‘high speed’ or ‘low speed’ must be made if operating outside the speed ranges listed in the following table:

Aircraft Type	Cruise/Decent IAS	Climb IAS	Glide IAS
PC-21	200 - 240	190 +/- 10%	140 +/- 10%
HAWK	300 - 400	250 - 350	190 +/- 10%

Note: This rule precludes published instrument approach/holding procedures. However, if aircraft are flying unorthodox speed profiles this shall be communicated to ATC as early as possible.

3.8.7.5.1 High speed PFL

Requests for high speed PFL must be specifically made.

3.8.7.5.2 Practice Flameout TACAN

Practice Flameout TACAN approach (PFO TAC) is automatically recognised as a high-speed profile.

3.8.8 Airspace Restrictions

3.8.8.1 Operations necessitating restrictions

Operations may necessitate restrictions to operations within PTAs in order to ensure separation/ segregation, such as:

a) Competing airspace activities;

b) Activation of Defence SUA; and

c) Civil transits through Pearce administered airspace.

3.8.8.2 Gingin NDB operations above 4000FT

Restrictions to the lowest useable level may be applied to portions of PTA A that overlay the GIG NDB holding, approach, and missed approach track during GIG NDB operations that extend above 4000FT. ATC will re-issue the airways clearance of affected aircraft in PTA A to ensure separation or segregation is maintained as applicable.

3.8.8.3 Activation of Bindoon Extended

When Bindoon Extended (Para 2.10.4) is activated, local training operations within PTA A01, or within that portion of the OMA coincident with it, are not permitted.

Note: Aircraft operating in Bindoon Extended must remain at least 1.5NM from civil class C airspace boundaries.

3.8.8.4 Navy and Army administered restricted areas

Local Navy and Army restricted areas (not under Pearce administrative control) can infringe on PTAs when activated, as follows:

a) **Activation of Western Australian Exercise Airspace (WAXA).** Sections of WAXA restricted areas are co-incident with PTA D. When activated for naval activities, such exercises/operations in the WAXA take precedence over RAAF training operations up to promulgated altitudes. M170A and M182B infringe the south-western corner of PTA A27 (Outer). During periods of exercise activation, ATC will impose a higher lowest useable level in PTA A27, or else confine operations to within 40 TAC in PTA A27;

b) **Activation of Bindoon Army Range.** Bindoon Restricted area R134 A/B infringes PTA A01 (Outer) between 31 and 35TAC. When active, ATC will restrict operations in PTA A01 (Outer) to the west of the 020 radial; and

c) **Activation of Lancelin Bombing Range**. Army, Navy, or Air Force may conduct live ordnance delivery at Lancelin bombing range (Para 2. 17). Upper levels of activated airspace may extend into PTAs C and D. Non-participating aircraft are to confine training to those PTA sub-areas not affected by activation of Lancelin range.

ATC maintain responsibility for establishing separation between IFR aircraft and the above areas. ATC will advise VFR aircraft of restricted areas that infringe on training areas. For VFR aircraft, the responsibility for maintaining separation/de-confliction lies with the pilot, except PTA Alpha where separation will be established by the above method. ATC will endeavour to use the least restrictive form of separation between lateral or vertical solutions.

3.8.8.5 Deconfliction with civil air routes

Civil VFR and IFR aircraft may be cleared to transit PTAs under ATC control, or on recognised air routes, as follows:

a) **Civil air route T12 (transoceanic – Perth VOR)**. T12 is situated south of PTA D, and penetrates the southwest corner of PTA A27 (Outer). ATC should pass estimates of known civil transits to the relevant squadron operations centre to facilitate necessary pre-flight and real time deconfliction, and must actively manage separation of military traffic from civil transits along this route, including a requirement for military aircraft to operate north of the 258 radial within PTA A27 Inner, or north of the 270 radial in PTA A27 outer. Pearce-based units should plan to avoid PTA A27 (Outer) during known periods of T12 activity. See Figure 2. 4;

b) **Perth AVNEX and OTLED departures**. Deconfliction with Perth Standard Instrument Departures (SIDs) has resulted in designation of PTA A27 from 3000FT-10 000FT. This includes the portion coincident with the PEA TMA (restrictions may be imposed when IFR holding is conducted at MUGOB); and

c) **W14 OTKUN (Rottnest Island) – BUVEL (Jurien Bay) track**. Unpressurised civil flights may transit via the W14 track between OTKUN and BUVEL as detailed in ERSA FAC – Pearce. ATC is to provide traffic information to all affected military aircraft in PTAs A27/29/32 and PTAs C and D, along with any altitude and/or radial restrictions that will apply for the duration of the transit. ATC will minimise the effect where possible by descending civil aircraft to 5000FT.

3.9 Mean Line of Advance (MLA)

In order to optimise sortie efficiency, aircrew may request MLA manoeuvring. Approval of MLA is subject to ATC workload.

3.9.1 MLA criteria

The following criteria are to be observed for MLA operations:

a) The MLA clearance must include an intended track-to point;

b) MLA manoeuvring is not permitted through occupied PTAs unless internal deconfliction has been arranged;

c) MLA manoeuvring is not permitted within or through a circuit area;

d) MLA within the PEA TMA/OMA affords lowest priority and is generally not available. When approved, aircraft are to avoid airfield approach paths, especially ingress tracks to initial and instrument approach arcs/instrument finals at published altitudes, whilst manoeuvring;

e) Speed controls are not imposed on MLA aircraft; and

f) Pilots must exercise increased vigilance and listen-out for other aircraft, as traffic information will be less accurate given the random nature of MLA manoeuvres.

3.9.2 MLA limits

Limits of MLA manoeuvres are as follows:

a) Aircraft must remain within 3NM of the mean track between the point MLA is granted and the approved track-to point;

b) Aircraft heading must not vary more than 90 degrees from the mean track;

c) Aircraft are not to retreat across an airspace boundary that has already been crossed;

d) MLA only defines lateral manoeuvring. Aircraft must request a block level if desired. However, an extant block level clearance is not rescinded should MLA be subsequently approved; and

e) ATC may impose additional restrictions on MLA aircraft, or rescind the MLA clearance, commensurate with traffic conditions.

3.10 Navigation Exercises

3.10.1 Navigation Track Tolerances

To gain maximum benefit from RAAF/RSAF navigation training sorties, the following tracking tolerances have been agreed with CASA to:

a) a maximum of 20NM either side of track;

b) a maximum radius of 20NM from the turning point; and

c) a maximum of 12degrees either side of the nominated IFR track when tracking via a navigation aid.

3.10.2 Stream NAVEX Procedures

The following procedures apply where stream NAVEX turn points lie outside R/T range:

a) The callsign of the aircraft ahead and behind are to be noted on each aircraft's navigation proforma:

b) Each aircraft is to monitor the broadcasts of the preceding and following aircraft; and

c) ATC may request an aircraft to relay information to other aircraft in the stream.

3.10.3 Navigation Routes Through LFAs

3.10.3.1 Broadcast on appropriate frequency

Aircraft conducting low navigation exercises through the low flying areas (LFAs) should broadcast on the appropriate ATC frequency.

3.10.3.2 Through the OLFA

Aircraft transiting the OLFA should broadcast intentions on the relevant FIS frequency and monitor PEA CENN if possible in order to deconflict with both civil and military aircraft.

A high degree of vigilance is required as low level communications may be poor, and civil non-radio equipped aircraft may be present in the OLFA.

3.10.4 IFR High Navigation Departures

3.10.4.1 To the south

High level 'land away' navigation exercises departing to the south may route direct from PEA to either MANDU, SOLUS or CANRI.

3.10.4.2 Pearce for Pearce

PEA for PEA high level navigation exercises must remain outside civil Class C airspace within 36 DME of Perth and should plan IAW ERSA.

3.10.4.3 Via the Quakka Lane

ATC may issue an incremental climb in order to deconflict military departures from civil traffic or military transits in the Quokka Lane

3.10.4.4 To the north and north east

High level navigation exercises (above 9000FT) departing to the north and north-east must initially remain west of the PEA 016 radial until 65 TAC, due to arriving civil traffic at PTH.

3.10.5 Low Level Navigation Exercises

3.10.5.1 Through R155B from the North

Low level NAVEX sorties through R155B from the north are to broadcast their arrival with transit of N/W LFA intentions on #05. CENN will reply with a positive traffic statement, either 'no traffic' or provide the relevant traffic.

3.10.5.2 Through R153 from the East

Aircraft returning from low level NAVEX sorties through R153ABCD from the east, should first attempt to contact CENN on #05 for airways clearance. If contact cannot be made, aircraft may switch to #04 and broadcast intentions to transit the ELFA.

3.10.5.3 Blanket clearance

Aircraft returning from low level NAVEX sorties are permitted to enter Pearce restricted airspace subject to the following blanket clearance:

a) enter via flight planned route;

b) operate VFR not above 3000FT; or not above 2000FT when entering R155B from the north;

c) remain outside civil class C airspace; and

d) remain outside the Pearce TMA.

Note: Aircraft require a separate clearance to enter the Pearce TMA.

3.10.5.3.1 Through OMA and LFAs

A high degree of vigilance is required when transiting the OMA and LFAs owing to poor low level communications.

3.11 Reduced Runway Separation Standards (RRSS)

3.11.1 Not available

RRSS are not available on 18R/36L.

3.11.2 Wet runway

RRSS may be used between 2FTS, 130SQN and 79SQN aircraft when the Runway is wet with the exception of 2FTS Solo trainee Flights using a Cygnet, Sierra, or Dugite callsigns. RRSS procedures on a wet Runway can be applied to Cygnet, Sierra, or Dugite callsigns as preceding aircraft only; they are not authorised to land behind another aircraft.

3.11.3 Hot lane procedures

The COLD lane for Runway 18/36 is on the east side of the Runway and on the south side for 05/23 and 08/26.

3.11.3.1 Moving to the COLD lane

Aircraft should move to the COLD lane as soon as possible when under control.

3.11.3.2 130SQN and 2FTS Solo trainee flights

ATC will not apply RRSS to 130SQN Solo trainee aircraft or 2FTS Solo trainee aircraft using a Cygnet callsign when the solo trainee is the aircraft behind. Additionally, due to hot lane procedure restrictions ATC will not apply RRSS to hawk aircraft behind 130SQN Solo trainee aircraft or 2FTS Solo trainee aircraft using a Cygnet callsign.

3.12 Formation Procedures

3.12.1 Identifying lead aircraft

In order for ATC to separate and segregate standard formations, the lead aircraft must be identified.

3.12.2 Lead aircraft change

Formations must advise ATC when the lead aircraft has changed and squawk their assigned SSR code.

3.12.3 Default formation type

Standard formation shall be the default formation type for locally based PEA aircraft. Aircrew will only advise ATC when they are in a formation type other than standard.

3.12.4 2FTS individual SSR codes

To facilitate lead changes, ATC at the clearance delivery stage should issue 2FTS with individual SSR codes for formation members as follows:

a) Two aircraft formation – SSR code for each aircraft;

b) Three or four aircraft formation - SSR code for aircraft #1 and #3; or

c) Greater than four aircraft formation – as requested by formation lead.

3.13 PTA Foxtrot

When active PTA Foxtrot consumes a significant portion of the PEA TMA, and encroaches on the PEA CIRA.

3.13.1 General procedures

The following procedures support the practice of utilising PTA Foxtrot while simultaneously allowing non-related flying operations in the PEA TMA:

a) Rate of effort restrictions detailed at RAAF Pearce BSI(OPS) 1-2 are to be applied;

b) PTA Foxtrot activation must be broadcast on the Pearce ATIS along with the lowest level available for over-flight;

c) ATC must append ‘PTA Foxtrot active’ to the initial clearances of all VFR aircraft operating within the Pearce TMA and circuit area; and

d) Any aircraft conducting pre-planned Air to Ground training must be VFR (SVF will not be available) while established in PTA Foxtrot.

3.13.2 PTA Foxtrot Separation

Required radar separation standards cannot always be achieved between PTA F and departing/ arriving IFR aircraft. Consequently, unless another form of separation is applied:

a) Non-locally based aircraft must not depart from Runway 23 and must conduct an ILS to Runway 18 or 36. Aircraft must be established on the localiser prior to the OM to ensure separation with PTA F;

b) **IFR departures** permitted are as follows:
   i) Runway 18: PEA SID (Radar), GUNOK SID;
   ii) Runway 36: PEA SID (Radar), WAMAL SID, GUNOK SID. Non local aircraft departing on a PEA SID (Radar) must be issued with a heading on or east of Runway heading;
   iii) Runway 05: PEA SID (Radar), WAMAL SID, GUNOK SID; and
   iv) Runway 23: Nil.

c) **Local IFR arrivals**. The published RNP, TACAN and LOC/ILS approach to Runway 18 is only available via the eastern IAF and arc, or via straight-in final. Radar vectors to final approach remains available for Runways 23 and 36. Published missed approach procedures for these Runways are not available. RNP and TACAN Approaches to Runway 05 are not available. NDB approaches to Pearce are not available.

3.13.3 PTA Foxtrot Cancellation or Suspension

3.13.3.1 Due Cloud

Operations within PTA F may be canceled or suspended by ATC when cloud is present below 10nm MSA. The Approach Supervisor is to contact the range aircraft on Stud #16 to terminate range operations and issue any instructions to aircraft. Pearce TWR Supervisor is to keep the APP Supervisor informed of any changing weather conditions.

3.13.3.2 Due Calibration Flights

PTA F cannot be activated for air to ground training activities during Pearce Navigation Aid calibration flights. Calibration flights (usually conducted by AUSCAL callsigns) will receive priority over any Pearce flying operations.

3.14 2FTS Graduation Flypast

3.14.1 Aerial Display

2FTS conducts aerial displays over RAAF Pearce for each pilots' course graduation parade.

3.14.1.1 Aerial Display Stages

The parade is usually preceded by a low-level PC-21 aerobatics display. Flypasts during the parade usually involve a formation of PC-21 aircraft passing overhead the parade ground at five critical stages of the ceremony:

a) the arrival of the Hosting Officer;

b) the arrival of the Reviewing Officer (REVO);

c) the Advance in Review Order;

d) the march-past of the parade; and

e) a bomb-burst manoeuvre as the REVO departs.

3.14.1.2 Flypast Timings

Flypast timings are carefully managed against a pre-scripted format by the 2FTS Timing Coordinator (TYCO) to ensure airborne events occur precisely at critical junctures of the parade. Other units may also be involved in fly-past activities, replacing one of more of the PC-21 flypasts.

Note: Further details of flypast activities are found at 2FTS SI (OPS) 3-8.

3.14.2 Coordination

3.14.2.1 Confirmed Timings

2FTS should pass advice of confirmed parade timings and airspace requirements to PEA AIROPSCOORD at the Weekly Flying Programming Conference in the week preceding the parade, in accordance with RAAF Pearce BSI(OPS) 1-2: Flying Programming Coordination.

3.14.2.1.1 NOTAM Requirement

PEA AIROPSCOORD should arrange a NOTAM advising of aerodrome closure to all nonparticipating aircraft between these times except in the event of an airborne emergency. Noise abatement procedures should be promulgated on the Base Weekly Flying Program.

3.14.2.2 Airspace Reservation

The PEA and GIG CIRAs and TMA should be reserved for exclusive use for display/ flypast participants from the commencement of the pre-parade aerobatics display until the conclusion of the last fly-past/bomb burst manoeuvre and formation recovery.

3.14.2.3 Flight Rules

VOODOO and AERO operate on VFR flight plans.

3.14.2.4 Non-2FTS Aircraft

When non-2FTS aircraft are involved in graduation activities, the formation is responsible for inter-unit liaison, including operational/safety briefings covering aspects such as:

a) parade/air activity timings;

b) ATC and inter-formation communications frequencies and procedures;

c) holding areas/altitudes;

d) in-flight deconfliction of holding/ingress/egress; and

e) and recovery procedures.

3.14.2.5 Local training operations

Non-participating aircraft are not permitted to operate in the TMA, PEA CIRA or GIG CIRA during promulgated exclusive periods, unless in an emergency. Once flypast aircraft have landed, access to the TMA, excluding the PEA CIRA, may be permitted until the parade has concluded.

3.14.2.6 Noise abatement

All aircraft, including those participating in parade support activities, must have departed Pearce prior to parade commencement, and may not recover until the parade has ended. Visiting aircraft should be held as directed by Pearce ATC during times of airfield closure.

3.14.2.7 Practice Day

A day prior to the graduation parade AERO and VOODOO will conduct a practice sortie. Exclusive use of PEA CIRA and the TMA will be booked for AERO while the formation conducts practice in the PTA/MFTA. Following the AERO practice the VOODOO will hold to the west and practice its graduation bomb burst profile over YPEA, then recover via an OPS recovery.

3.14.3 Communications

Due to the complexity of the flypast procedure specific co-ordination process are in place.

3.14.3.1 Callsigns

The 2FTS low-level aerobatics display aircraft (AERO) uses a generic 2FTS (Viper) callsign while formations will use a generic 2FTS formation call sign VOODOO.

4 Operations

4.1 Operating Priority

The order of priority for operations at Pearce and Gingin is as follows:

1) Emergency aircraft;
2) Declared Minimum Fuel;
3) OPS recoveries;
4) Departures requiring a roll time;
5) Aircraft conducting syllabus flying tests (Tango callsign);
6) Instrument traffic (for full stop);
7) Landings;
8) Touch and go circuits;
9) Departures; and
10) Instrument traffic (for overshoot, missed approach or touch and go).

4.2 Aerodrome

The YPEA Aerodrome Manual provides general aerodrome information.

4.2.1 Taxi Routes

4.2.1.1 Standard taxi routes

Standard taxi routes are used for local aircraft departing or entering the 2FTS/79SQN flight line.

4.2.1.2 Taxiway Echo

Aircraft taxing for Runway 05 or landing Runway 23 should taxi via Taxiway Echo during day operations only.

4.2.1.3 Deviations

Deviations from these routes may be made if dictated by safety or Air Traffic Control.

4.2.1.4 2FTS Pearce and Gingin Taxi Procedures

Pearce. On receipt of a taxi clearance all PC-21 aircraft in the front line (shelters 1-20) will turn right out of the lines. Non-BPC aircraft will exit the 2FTS lines via the southern invert. Aircraft requiring stationary checks will turn right into the backline positions. Once checks are complete, onwards taxi clearance will be requested and aircraft will taxi out via the centre invert. Pearce Ground will control flow at the southern and centre inverts as required.

Present taxi RT remain extant. RT for the backlines is as follows:

a) Pearce Ground (callsign), [POB if other than two], received (ATIS), request taxi for 2FTS backlines.

b) (Callsign), 2FTS backlines, request further taxi.

Figure 4. 1 - 2FTS Taxiout



4.2 - 2FTS Taxi in



Gingin. Stationary checks may be completed at the holding point. To enable traffic flow, aircraft may request to ‘enter the eastern/western holding bay’.

Figure 4. 2 -
2FTS Taxi Gingin



4.2.2 Operation Readiness Platforms (ORP)

Pearce utilities ORPs on the Eastern side of Runway 18L and 36R. Specific rules exist about the use of these platforms.

4.2.2.1 Conditions for occupation

Military aircraft, Ground Support Equipment (GSE), vehicles and personnel may occupy the ORP under the following conditions:

a) an instruction to 'ENTER THE ORP' must be obtained from ATC prior to entering;

b) aircraft, GSE, vehicles and personnel must be parked in the ORP no closer than 8m from the extended edge of the Runway edge, marked by the yellow dashed line;

c) the only aircraft permitted in the ORP are PC-21, HAWK, F18 and F35; and

d) all personnel working in the ORP must be briefed on the dangers of working within the Runway strip IAW RAAF Pearce SI(OPS) 1-8.

4.2.2.2 Take-off and landing while ORP occupied

Aircraft take-off and landing operations may continue whilst the ORPs are occupied provided that:

a) the departing/landing aircraft has a maximum wingspan of 40.5M or less;

b) the visibility is 5000M or greater;

c) the cloud ceiling is 1000FT or greater;

d) TWR has advised visiting arriving aircraft that the approach and/or departure end ORP is in use;

e) TWR has advised visiting departing aircraft that the departure end ORP is in use; and

f) for foreign military aircraft landing/departing, they are locally briefed.

4.2.2.3 Aircraft requiring vacant ORP

If landing/departing aircraft require the ORP to be vacant, as much notice is to be provided to ATC to avoid delays.

4.2.3 Low Visibility Procedures (LVP)

LVP's are enforced when visibility on any part of the manoeuvring area is insufficient for ATC to exercise control on the basis of visual surveillance.

4.2.3.1 ATC measures

ATC should initiate measures in accordance with the low visibility procedures below as well as MATS.

4.2.3.2 Assessing RV

When visibility reduces below 1500M as observed from the Tower the TSPR should request a Fire Officer or ATCO to conduct regular inspections of the Runway to determine RV. The TSPR should instruct the Fire Officer or ATCO to proceed to the green threshold lights of the duty Runway and view the Runway side lighting.

4.2.3.3 Calculating RV

Runway edge lights are spaced at 60M intervals. RV is calculated IAW the following table:

RV	Number of Lights Seen
500M	**8**
800M	**13**
1200M	**20**
1500M	**25**
2000M	**33**

4.2.3.4 RV less then 500M

When RV is less than 500M, it should be reported on the ATIS as ‘less than 500M’.

4.2.3.5 Runway/Taxiway Inspections

The TSPR should ensure RV calculations and Runway inspections are conducted no more than 15 minutes prior to each aircraft movement and a taxiway inspection as soon as practicable.

4.2.3.6 Ground movements

SMC must limit control to no more than three aircraft on the manoeuvring area.

4.2.3.6.1 Further restrictions

IAW MATS, this is to be further restricted to no more than one aircraft when visibility is less than 550M.

4.2.3.7 Tower access road

In addition to these restrictions, use of the tower access road that crosses taxiways Bravo and Echo is restricted to essential operations only.

4.2.3.8 Formation considered one aircraft

For the purposes of this order a formation is considered to be one aircraft.

4.2.3.9 Notification

The TSPR should notify PEA AIROPSCOORD, all SQN OPS and the ABOC of low visibility procedures and to keep usage of the Tower access road to a minimum.

4.2.3.10 Use of Runway

Operations are to be restricted to Runway 18/36.

4.2.4 Aircraft Arrestor Systems

Pearce has M34B barrier nets on Runway 18L. Gingin has M34B barrier nets Runway 26/08.

4.2.4.1 Barrier normal position

The M34B barrier nets are to be left in the lowered position for all operations.

4.2.4.2 Hawk brake chute operations

If use of the brake chute is planned, ATC must be notified by 79SQN Operations or the aircraft as soon as practicable. Once a brake chute has been deployed the affected Runway is closed to all aircraft, except 79SQN aircraft conducting a full stop, until the chute has been retrieved.

4.2.5 Engine Ground Run Operations

On weekends or after hours, advise:

a) Fire section by telephone on (08) 9571 7666;

b) ATC by telephone on (08) 9571 7442; or

c) If no answer from ATC, adopt CTAF procedures.

4.2.5.1 Noise abatement procedures

RAAF Base Pearce will observe the following limits for engine ground run operations:

a) Monday to Friday - 0700hrs-1900hrs no restrictions (preferred hours for full power engine runs). If no night flying, full power engine runs permitted 1900hrs-2200hrs;

b) Monday to Friday - if night flying in progress from any unit at Pearce no restrictions until 2300hrs or the cessation of night flying whichever occurs first;

c) Idle power engine runs are permitted for up to one hour after the conclusion of night flying, but all engine runs to cease by 0001hrs;

d) On weekends and public holidays engine runs may be conducted between 1000hrs and 1700hrs only if essential to meet the next day’s flying program;

e) On weekends and public holidays engine runs may be conducted during the period a unit has been authorised to conduct flying operations; and

f) Maintenance engine runs above 80% power are not to be conducted in the flightline or aircraft shelter area. Full power engine runs are only to be conducted in authorised engine run up areas.

4.2.5.1.1 Exceptions to Noise Abatement Procedures for Engine Ground Run Operations

If a maintenance organisation believes that there is a special case for an engine run, outside the promulgated hours, each special case should be processed by the maintenance manager to the CO, CFI or XO of the flying unit involved. The request shall then be forwarded to the ABXO (through PEA AIROPSCOORD on (08) 9571 7004 or (08) 9571 7120) for approval.

4.2.6 Movement of Vehicles and Personnel on Airfield Surfaces

All movement on the taxiways and runways is prohibited except when proceeding under specific clearance from ATC by two way radio communications on the applicable Vehicle Movement Control frequency or by telephone on (08) 9571 7442 for Pearce and (08) 9575 8002 for Gingin.

4.2.6.1 General access

Only Service vehicles and personnel engaged in aircraft maintenance and handling, air movements duties, ATC duties, or Duty Instructor duties, are allowed general access to the aircraft parking areas and surrounding aprons.

4.2.6.2 Other vehicles and personnel

Drivers of other vehicles and personnel requiring access to these areas, emergency vehicles excepted, are to obtain permission from the Airside Access Manager IAW RAAF PEARCE BSI (OPS) 01-08 Airside Access Control.

4.2.6.3 Additional access

During specific periods such as exercises, the Airside Access Manager may provide authority for additional access or limit access to the airfield and tarmac areas.

4.2.6.4 Emergency vehicles

Emergency vehicles responding to an emergency require authorisation to enter the airfield movement areas when the ATC Tower is active.

4.2.6.5 Pedestrian Access

Beyond the flight-line areas must be specifically authorised.

4.2.6.5.1 Exceptions

The only exceptions to this are 2FTS Duty instructors and Meteorological Office staff. These personnel are familiar with operations on the airfield and use ‘right of way’ principles when crossing the intervening taxiway. When proceeding to the tower or Meteorological monitoring station personnel are required to wear high visibility vests and utilise hearing protection.

4.2.6.5.2 2FTS duty instructors

2FTS Duty Instructors, when proceeding to the Control Tower for duty, may walk directly from 2FTS to the tower via the path between the centre invert from Taxiway Alpha to the 2FTS carports, to the ATC facility.

4.2.6.5.3 Meteorological Office staff

Meteorological Office staff when proceeding to the Meteorological monitoring station may walk or use a bicycle to access the station via the northern invert from Taxiway Alpha.

4.3 Departure

4.3.1 Airways Clearances

4.3.1.1 Area of operations

Aircrew must advise area of operations and departure profile to ACD, who will issue an appropriate airways clearance and SSR code.

4.3.1.2 Maintenance Test Flights (MTF)

Aircrew must advise ACD they are conducting a MTF in their clearance request. ACD must readback MTF to acknowledge.

4.3.1.3 Simulated emergencies on departure

Aircrew must contact ATC via phone to coordinate if they intend on conducting a simulated emergency on departure.

4.3.1.4 Departing GIG

4.3.1.4.1 ATC staffed

When ATC is staffed; advise ATC upwind one circuit prior to departure to allow the tower controller to arrange an airways clearance.

4.3.1.4.2 CTAF

During CTAF. Aircrew must remain in the CIRA and contact Pearce Clearance Delivery, who will direct the pilot to the next ATC agency when controller workload permits. Notwithstanding, all aircraft must contact Pearce Approach prior to departing the GIG CIRA to receive departure instructions.

4.3.2 Lineup Clearances

A departing aircraft may be lined up on a Runway in front of an aircraft on final approach to the same Runway provided:

a) aircraft on instrument final or straight-in visual approach are more than 3nm from the threshold; and

b) there is no circuit traffic between the base turn point/low key and the threshold of the Runway.

4.3.2.1 Continuous 18R/36L operations

Aircraft may be lined up on Runway 18L/36R whilst operations continue to Runway 18R/36L.

4.3.3 Departure Traffic Information

ATC must pass relevant traffic information to departing aircraft when:

a) Issuing a take-off clearance, including traffic:
   i) in the circuit pattern;
   ii) on dead-side;
   iii) tracking for High Key; and
   iv) ahead on departure.

b) First contact with APP/CENN, departing aircraft must receive traffic information on any relevant traffic in accordance with Para 3.8.5.

4.3.3.1 Pilot initiated deconfliction

Pilots are to initiate deconfliction measures such that aircraft can be avoided by 2NM laterally and/or 500FT vertically.

4.3.3.2 Delay on the Runway

Aircrew should advise of any anticipated delay on the Runway beyond the usual line-up checks or formation run-up procedures, indicating number of seconds required before rolling for take-off.

4.3.4 Departure Clearance from CIRA

4.3.4.1 Following circuit operations

Aircraft departing after continuous circuit operations require an onwards clearance. This is to be requested upwind during the last circuit prior to departure.

4.3.4.2 Departing GIG CIRA CTAF

Aircraft operating GIG CIRA CTAF must secure an onwards clearance prior to departing the CIRA. Aircraft must then transmit a departure call with intentions on first contact with Pearce Approach (APP).

4.3.5 Departure Turn

Unless cleared otherwise by the Tower controller, the initial turn when departing Pearce or Gingin must be flown in the standard circuit direction and remain clear of the circuit pattern.

4.3.5.1 Remaining clear of Perth CTA

In accordance with WA MATS Supp, aircraft operating within PEA restricted areas must remain 1.5NM laterally clear of the common boundary with Perth CTA (except VFR aircraft operating in the Gnangara Release). As a guide, when departing RWY 18, a turn within 3NM should achieve this.

4.3.5.2 Non-standard turn-out

Aircrew should consider non-standard turn-out where a departure turn that conforms to the circuit direction is likely to create a conflict with arrival profiles.

4.3.6 IFR Departures

When departing IFR aircraft must use:

a) a published Standard Instrument Departure (procedural or radar);

b) missed approach procedure;

c) departure on track or a specified radial;

d) visual departure; or

e) formation trail or ‘snake-climb’ procedure.

4.3.6.1 Canceling IFR

Pilots should cancel IFR as soon as practicable once the departure is complete and VMC can be maintained.

4.3.6.2 Requesting an IFR departure

The onus is on the pilot to request an IFR departure when weather conditions are marginal. A no- notice request to change to IFR category on departure may involve some delay, and requires the pilot to retain responsibility for obstacle clearance whilst below Minimum Vectoring Altitude.

Note: Turnout distances may be prescribed in published IFR procedures, the angle of climb may be increased above published minimum gradients at pilot discretion in order to vertically segregate from circuit traffic.

4.3.6.3 GUNOK SID

Due to the proximity of civil CTA the following procedures apply to the published departure:

a) default altitude assignment of 3000FT will initially be issued, with progressively higher altitudes assigned commensurate with CTA steps; and

b) GUNOK departures from Runway 18 may incur significant delays due to civil traffic coordination. The aircraft captain may alternatively elect to conduct the SID as low as 1500FT visual until clear of R153A, or else nominate an alternative SID.

4.3.6.4 Radial Departures

Subject to ATC clearance, an IFR departure may be made from Pearce on any radial provided aircraft can remain clear of:

a) occupied portions of PTA A;

b) the Gingin CIRA;

c) PTA F (when active); and

d) civil controlled airspace (unless specifically cleared).

Note: Aircraft are not to leave the departure radial in IMC without a clearance.

Figure 4. 3 -

4.3.7 WAXA Departures

WAXA departures are considered High or Low.

4.3.7.1 Low Departure

Departures not above 5000FT. Tracking should be via AKMW or over non built up areas. Descent to low level should be available once established over water.

4.3.7.2 High Departure

Departures above 5000FT. Tracking should be via IPMOR (PEA245028) at 6000FT. IFR aircraft may request the Mullaloo SID for departure.

4.3.8 In-Trail Procedures

4.3.8.1 2FTS and 79SQN

On advising ACS in-trail procedures have commenced 2FTS and 79SQN aircraft will establish a 2NM trail, unless otherwise specified to ATC.

4.3.8.2 130SQN and Visiting Aircraft

130SQN and visiting aircraft will specify distance or time in-trail to ACS on first contact.

4.3.9 Formation Snake Climb Procedure

Formation Snake Climb Procedure can be used when weather conditions do not allow a formation takeoff, and/or a rejoin prior to entering IMC on departure.

4.3.9.1 VMC rejoin assured

This procedure should only be used when a VMC rejoin on top of cloud is assured, otherwise elements are to be issued separate take-off and departure clearances.

4.3.9.2 Procedures

Snake climb profiles must be carefully briefed and flown, with both a specific climb airspeed and power or rate of climb nominated. The following procedures apply:

a) **IFF frequencies**. All formation elements must be issued separate IFF codes for departure. Element leaders are required to read back their assigned code. Formation elements are to squawk normal until VMC on top, visual with all preceding elements, and the leader has canceled IFR;

b) **Tracking profile.** Formation elements should commence the takeoff roll at successive pre-briefed intervals. The initial turn after takeoff must be initiated in accordance with published procedures. The formation leader is not to initiate turns onto subsequently assigned vectors until all elements have acknowledged the instruction. Trailing elements should then initiate turns at successive pre-briefed intervals. Successive heading changes airborne must not to exceed 90°. All turns must be rate one;

c) **Climb profile.** The formation leader is to initially call passing 2000FT, and every 1000FT thereafter on climb (Hawk and 2FTS every 2000FT). Advisory calls will normally be done on squadron common, but may coincide with a call to ATC. Trailing elements are to maintain a minimum of 500FT vertical separation with the preceding element at all times, until both visual and cleared to rejoin to close formation. Successive climbs after a formation level off are to be initiated simultaneously by all formation elements. The last element is to comply with any ATC instruction to report level passing or maintaining - all other ATC clearances and instructions to formation trail elements should be read back on formation common frequency, with the formation leader responding to ATC on behalf of the formation; and

d) **Unable to rejoin.** If VMC on top cannot be achieved the formation leader should notify intentions to ATC, who will issue separate clearances as required to each element.

4.3.10 Frequency Change

4.3.10.1 Change to Approach

Aircraft must automatically contact APP once clear of the circuit pattern, and prior to departing the CIRA. For local sorties the intended area of operations should be advised upon first contact with APP.

4.3.10.2 Change to Traffic/Silent frequency

Approaching the PTA, ATC may clear the aircraft to ‘Silent’ or ‘Traffic’ frequency, and advise if the area is currently occupied. An advisory broadcast must be made on Silent/ Traffic frequency prior to PTA entry.

4.3.10.3 Hawk Aircraft coded clearance when operating in PTAC and OLFA

Hawk aircraft that are cleared to PTA C and wish to operate in the OLFA (D193) may do so without informing ATC provided adherence to the following stipulations:

a) "Cleared Silent" instruction by ATC is considered a coded clearance.

b) The aircraft must be VFR.

c) Aircraft may LRE PTA C as required and operate within the lateral confines of the OLFA only.

d) The aircraft captain is responsible for monitoring the CTAF frequency.

e) The aircraft captain must make a broadcast on the CTAF frequency prior to entering the OLFA and are responsible for their own traffic de-confliction with any reported or observed traffic.

f) The aircraft captain is responsible for attaining the area QNH (not from Pearce ATC).

g) Aircraft captains *may* nominate an OPSNORMAL time with Pearce ATC prior to entering PTAC.

4.4 Transiting

Unless specified otherwise, hemispherical cruising levels appropriate to flight category should be used wherever possible for transit. Aircraft must observe any transit level restrictions until established in the PTA.

Note: clearance to switch to Silent/Traffic frequency prior to entering the PTA does not rescind transit level restrictions.

4.4.1 To and from designated training area

Aircraft may transit to/from their designated training area:

a) via a Standard Instrument Departure;

b) via a VFR Lane;

c) over, under or around via a side radial occupied PTAs (unless internal de-confliction has been arranged);

d) through unoccupied PTAs/sub-areas once ATC have confirmed the area is clear; and/or

e) under ATC radar vectors via the TMA/OMA or used/unused portions of PTAs.

4.4.2 Minimise transit time

Aircraft are expected to minimise time spent transiting where possible.

4.4.3 Speed requirements in PEA TMA/OMA

Situational awareness in the TMA/OMA will be assisted by predictable movement. An advisory call of ‘high speed’ or ‘low speed’ should be made if operating outside the speed ranges listed at Para 3.8.7.5.

4.4.4 Vacating levels

A level that has been vacated by the pilot has effectively been released to ATC for re-assignment to another aircraft. To that end, a level-off from a climb/descent should be advised to ATC, and a reversal of vertical profile requires an amended clearance.

4.4.5 PTAs assumed occupied

Transiting aircraft should consider all PTAs occupied and remain clear unless ATC direct otherwise.

4.4.6 Low level recovery from PTA D

Aircraft recovering low level from PTA D are to comply with the following procedure to avoid instrument approach paths at OCEAN:

a) Squawk ATC assigned code and attempt to contact PEA Centre;

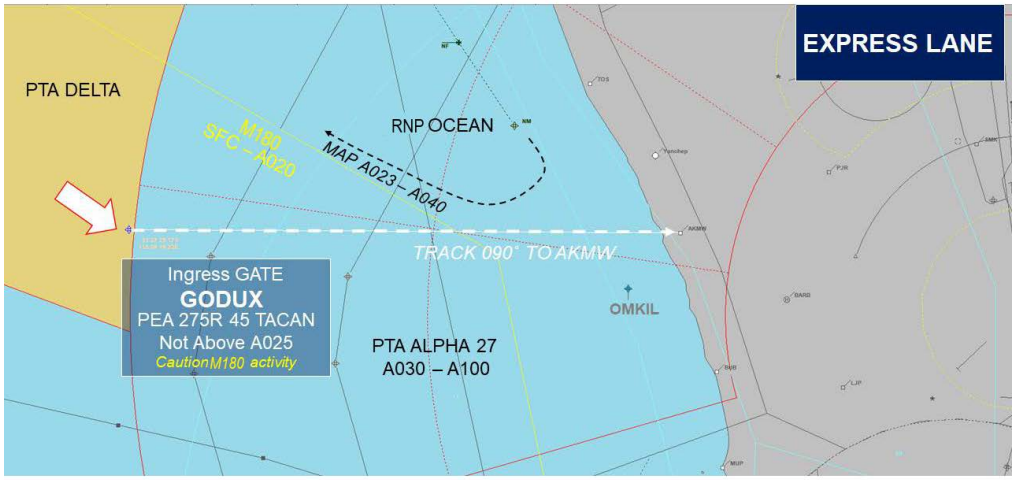
b) Establish at or below 2500FT prior to departing PTA D via GODUX;

c) Track 090 degrees to AKMW. If not in communication with ATC, contact PEA Approach #4 approaching AKMW;

d) Aircraft must be in receipt of an airways clearance from ATC prior to entering the TMA; and

e) Procedure is depicted at Figure 4. 4 and is known as the EXPRESS LANE.

Figure 4. 4 - Express Lane Recovery



4.4.7 Routing to outer PTAs

Routing to outer PTAs will normally be made via the Wannamal, Alkimos or Mullaloo Lanes unless vertical clearance from PTA A can be assured.

4.4.8 Route of flight

ATC may omit a route of flight in clearances to avoid lengthy clearances for local aircraft operating wholly within Pearce SUA. In doing so, it is expected that aircraft will track the shortest route possible, avoiding occupied airspaces such as LFAs, the PEA and GIG CIRAs, and noise sensitive areas.

4.4.9 PTA Departure and Transit Profiles

4.4.9.1 Abbreviated Clearances

Transit to or between PTAs may be granted via an abbreviated airways clearance. For brevity the clearance does not require the dimensions of the PTA to be issued/read back as such dimensions are inherent in definitions contained in Para 2.3.2.

4.4.9.2 En route altitude restrictions

Any en route altitude restrictions are to be observed until established in the destination PTA, even if the aircraft is released to silent/traffic frequency prior to reaching the PTA. Once established in the PTA and cleared silent/traffic, aircraft may manoeuvre within the full extent of the defined PTA airspace.

4.4.9.3 Clearance to PTA A

ATC may issue an abbreviated clearance containing at a minimum the area of operations and a transit block level 5000FT – A120 (5000FT – 10 000FT for PTA A27):

a) Aircraft should expedite climb through 5000FT where practicable to depart the TMA;

b) Aircraft must avoid en route occupied PTA segments (routing via the nearest practicable transit Lane or side radial);

c) Once established in the transit block aircraft may manoeuvre vertically within it as required, but require a specific re-clearance to subsequently depart the block;

d) Where routing via a transit lane or side radial is not practicable, aircraft may request transit via the OMA or above PTA A; and

e) Once established in the destination PTA, aircraft are cleared to operate over the full extent of defined airspace.

4.4.9.4 Clearance to PTA B, C or D

ATC may issue an abbreviated clearance containing at a minimum the area of operations and a transit altitude (nominally A120).

a) Aircraft should expedite climb through 5000FT where practicable to depart the TMA/ OMA;

b) Aircraft must avoid en route occupied PTA segments via the applicable transit Lane until reaching A125 and in two-way communication with CEN. Aircraft may then track direct to their PTA. If PTA A is occupied to a higher level, aircraft will track via the applicable transit Lane or underneath PTA A.

c) A block level for transit above PTA A may be issued on request subject to ATC requirements. Where routing via a Lane or transit above PTA A is not practicable, aircraft may request transit via the OMA;

d) Lane departure prior to 25 TAC will assist in deconfliction with opposite direction traffic on recovery. Routing past occupied portions of PTA B, C or D must be via a side or centre radial unless entering from above / below; and

e) Once established in the destination PTA and cleared to silent frequency, aircraft are cleared to operate over the full extent of defined PTA airspace.

4.4.9.5 Clearance to PTA G

ATC will issue a full clearance.

a) Aircraft should expedite climb through 5000FT to depart the TMA and transit initially at assigned altitude (nominally 6000FT) via the Mullaloo Lane or Quokka Lane (nominally A140); and

b) Aircraft are required to remain within R163 until established inside PTA G, typically via the 40 TAC arc. Track shortening through Perth CTA via the ‘Quokka Release’ may be available over water at or above.

4.5 Arrival

4.5.1 Departing from the Area of Operation (AO)

4.5.1.1 Visiting aircraft departing from AO

Aircraft are not to depart the exercise areas until in receipt of an airways clearance from ATC. Pilots are to squawk their ATC assigned code prior to contacting ATC for a clearance.

4.5.1.2 Transit profiles

If being vectored, responsibility for separation rests with the controller. Aircraft should comply promptly to an ATC direction to descend, but aircrew may request ‘descent when ready’ (this does not relax the requirement to avoid occupied PTAs).

4.5.1.2.1 VSA tracking requirements

Aircraft conducting a visual approach (VSA) should avoid instrument approach paths, and not enter a CIRA until positioning for the run-in to initial.

4.5.1.3 Training areas

Before departing the training area aircraft must make an advisory call on silent/ traffic frequency, providing position, level and intentions. Aircraft operating on a Traffic frequency must receive DTI acknowledgment before changing frequency. Aircraft must then contact ATC, advising level, intentions and receipt of ATIS, and secure an onwards clearance prior to departing the assigned training area.

4.5.1.4 Recovery from PTA A

Aircraft cleared to Pearce/Gingin on a visual approach may route past occupied portions of PTA A either via the Wannamal or Alkimos Lane, or else via the OMA, unless cleared via unoccupied PTA segments. IFR ACFT should be cleared at a level commensurate with ATC separation requirements.

4.5.1.5 Recovery from PTA B, C or D

Aircraft should expect to be cleared to Pearce at 4500FT. Aircraft should be established at this level prior to departing the PTA to assist with deconfliction from PTA A. Alternatively, aircraft may request clearance for a high transit, nominally A130.

4.5.1.6 Transits from PTA G

Aircraft should expect to be cleared to Pearce initially at A130, routing via the 40TAC arc to the Mullaloo Lane. Track shortening through Perth CTA via the “Quokka Release’ will normally be available over water between 9000FT and A130 depending on other traffic.

4.5.1.7 Recovery from Gingin

Prior to departing GIG aircraft are to first secure an onwards airways clearance (coordinated by GIG TWR when manned, otherwise obtained from Pearce Delivery during CTAF operations). During CTAF operations aircraft are to establish communications with PEA APP prior to departing the CIRA boundary, by means of an airborne report.

4.5.1.8 Arrivals from navigation routes

Full details regarding navigation sortie arrivals appear at Para 3.10.

4.5.1.9 Arrivals from the WAXA

Low level arrivals may be cleared not above 5000FT via AKMW (VFR) or via OMKIL (IFR). Higher level arrivals may be cleared via OMKIL at 6000FT or above or vectored for recovery. Higher transits are also available via either the Alkimos or Mullaloo Lanes or a PTA A side radial.

4.5.1.10 PTA Foxtrot Recovery Procedure.

Before departing PTA F aircraft are to maintain VFR and contact PEA APP for clearance.

4.5.2 Recovery to the CIRA

4.5.2.1 Arrival Type

Aircraft should rejoin by one of the following arrival types:

a) Visual approach (VSA) via:
   i) Initial;
   ii) Dead-side descending rejoin;
   iii) High Key, low key, or displaced key position for the duty Runway
   iv) Straight in approach;
   v) Overhead; or
   vi) for aircraft commanded by a post-graduate pilot, any other position when cleared.

b) a published instrument approach procedure.

4.5.2.2 Tracking requirements.

ATC may clear direct to an airfield, or alternatively/subsequently issue a clearance to track to a specific point.

4.5.2.2.1 Clear of CIRA

Aircraft must remain clear of all CIRA until on the relevant tower frequency and positioning for initial.

4.5.2.2.2 Perth CTA

Aircraft are to remain at least 1.5NM from the Perth CTA boundary in accordance with Para 2.2.2

4.5.2.2.3 MERLO Not Available

In the absence of the MERLO Release, aircraft rejoining to Runway 36 must remain north of Mt Mambup whilst positioning for right initial.

4.5.2.2.4 Gingin Circuit Area

Aircraft conducting a visual approach to Pearce require specific approval to transit via the GIG CIRA.

4.5.2.3 Altitude requirements

Aircraft conducting a visual approach (VSA) should avoid instrument approach paths wherever possible. Instrument approach traffic will be passed to VSA aircraft, who shall remain vertically clear until traffic is sighted IAW tactical segregation procedures detailed at Para 3.8.6.

4.5.2.3.1 Climbing for PFL

Subsequent climb to position for PFL may be available up to FL150 within R155AB, but must be specifically requested. Aircraft cleared into the PEA or GIG CIRA may use the full vertical extent of available airspace upon entry.

4.5.2.3.2 Below civil CTA

At all times aircraft are to remain at least 500FT below civil CTA steps when established in R153.

4.5.2.4 Change to Tower frequency

Aircraft must advise ATC when switching to Tower.

4.5.2.4.1 Automatic Frequency Change Points

Automatic change-over points are as follows:

a) via initial – at 7NM from the airfield on the run into initial (Exception for right initial Runway 36 pilots will be directed by ATC to switch to TWR);

b) via PFL– approaching 5nm and 4000FT on descent;

c) when joining via a leg of the circuit – 5NM; or

d) via any other track–as advised.

4.5.2.5 Sequence Responsibility

The Approach controller is responsible for sequencing aircraft to 5NM final or the IP for all arrivals before releasing aircraft to contact Tower frequency.

4.5.2.6 Rejoins via initial

Procedures for a visual approach (VSA) via initial are in accordance with FIHA.

a) Aircraft may position for the initial ingress direction of their choice, unless specifically instructed by ATC to track for left/right/straight initial. Ingress tracks are depicted in Figure 4.5 for Pearce and Figure 4. 6 for Gingin;

b) Achieve wings level, on track and on height by 30 seconds to run to the IP, and make the initial call on tower frequency;

c) Turn at a point sufficient to achieve appropriate dead-side spacing as depicted in Figure 4. 7 for Pearce and Figure 4.8 for Gingin;

d) After passing the IP aircraft should climb or descend as required on the dead-side leg to achieve circuit altitude by abeam the landing threshold;

e) Aircraft rejoining must give way to all circuit aircraft, which must be identified prior to the pitch/ turning crosswind;

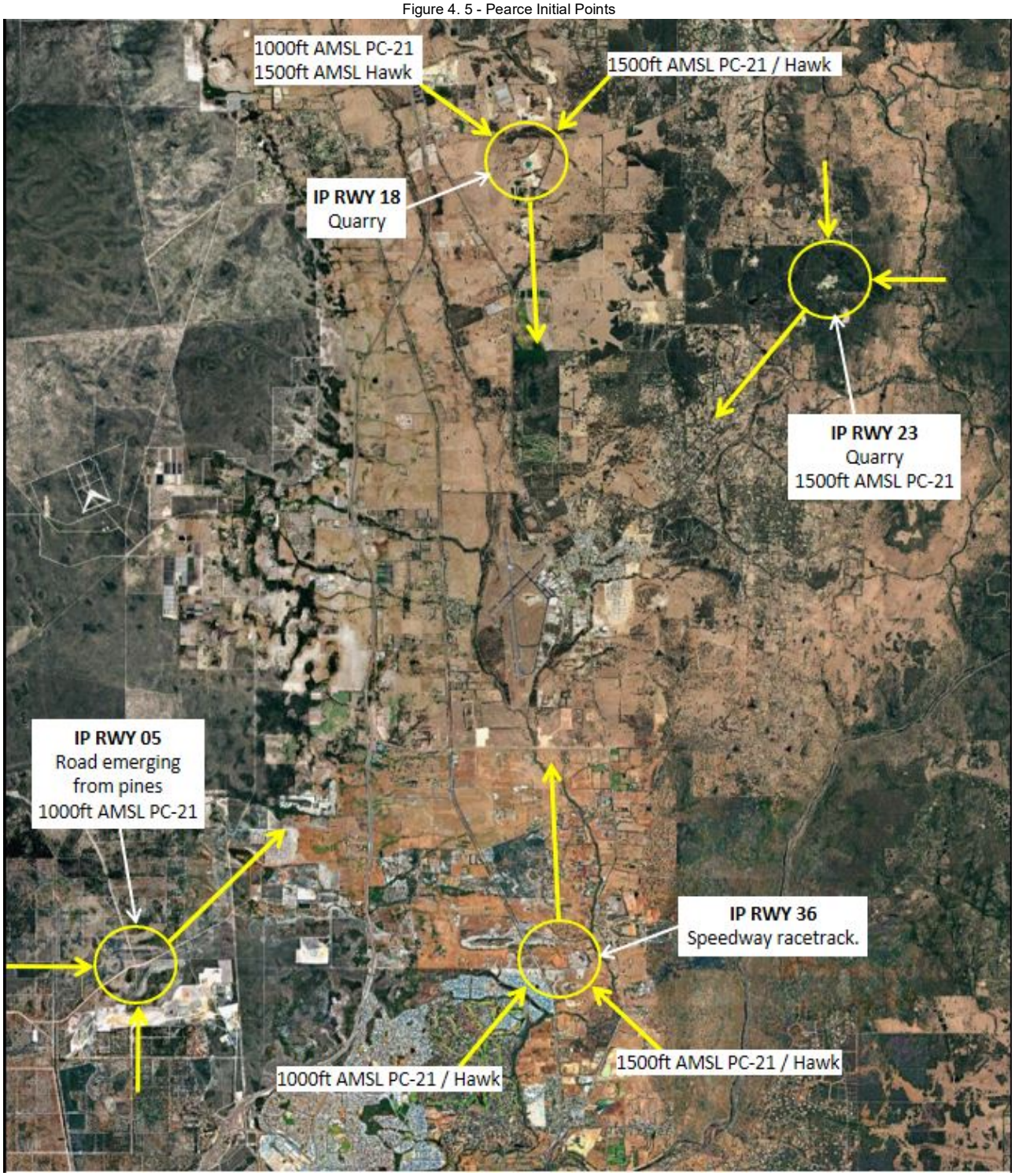
f) If unable to pitch into the circuit, VSA aircraft must notify TWR and turn away from the Runway to reposition for initial not above 1500FT;

g) When the Merlo release is not available, aircraft positioning for right initial Runway 36 must operate NA1500FT and remain north of an east-west line through Mt Mambup;

h) All aircraft tracking for initial Runway 36 will be provided with a boundary monitoring service by ATC.Visiting aircraft are to proceed IAW ATC instructions; and

i) If a confliction exists at the IP, the conflicting aircraft should turn away from the flow of traffic (left when on left initial, right when on right initial) and advise ATC. An orbit must be approved by ATC.

Figure 4. 5 - Pearce Initial Points



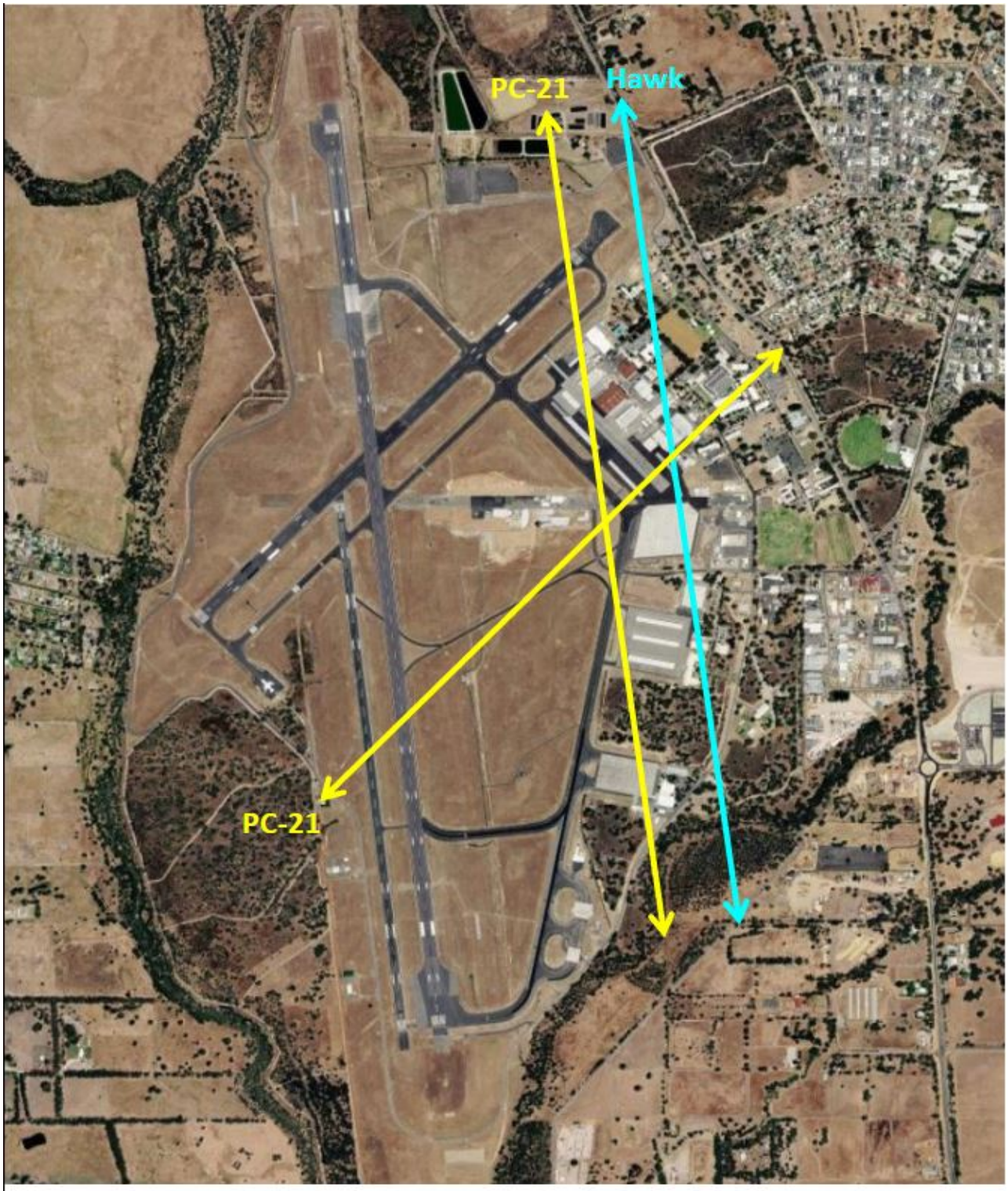


Figure 4.7 Pearce dead side ground tracks.

Figure 4. 6 - Gingin Initial Points



Figure 4.6 Gingin initial points.

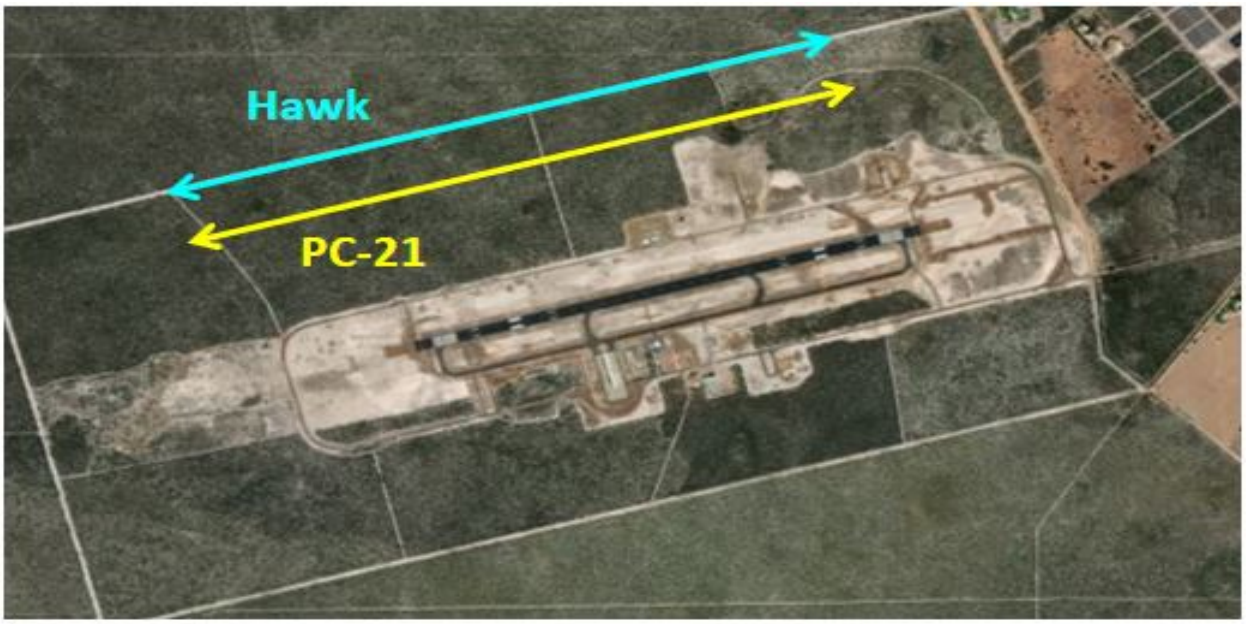


Figure 4.8 Gingin dead side ground tracks.

4.5.2.6.1 IP altitudes

The following table lists standard altitudes for arrival via initial points:

Pearce							Gingin	
Runway	36		18		23	05	08	26
INITIAL	LI	RI	LI/SI	RI				
PC-21	1000	1500	1500	1000	1500	1000	1000	1500
HAWK	1000	1500	1500	1500	1500	1000	1500	1500

4.5.2.6.2 Low initial/low pitch

The following considerations apply to low-level initial and/or pitch:

a) To conduct a low pitch, the above-listed IP altitudes apply;

b) Descent should be commenced after initial, and TWR advised;

c) Low level circuit altitude should be achieved on dead-side prior to reaching abeam the landing threshold;

d) If a conflict exists with instrument or straight-in approach traffic, aircraft may descend prior to the IP and report ‘low L/R initial’;

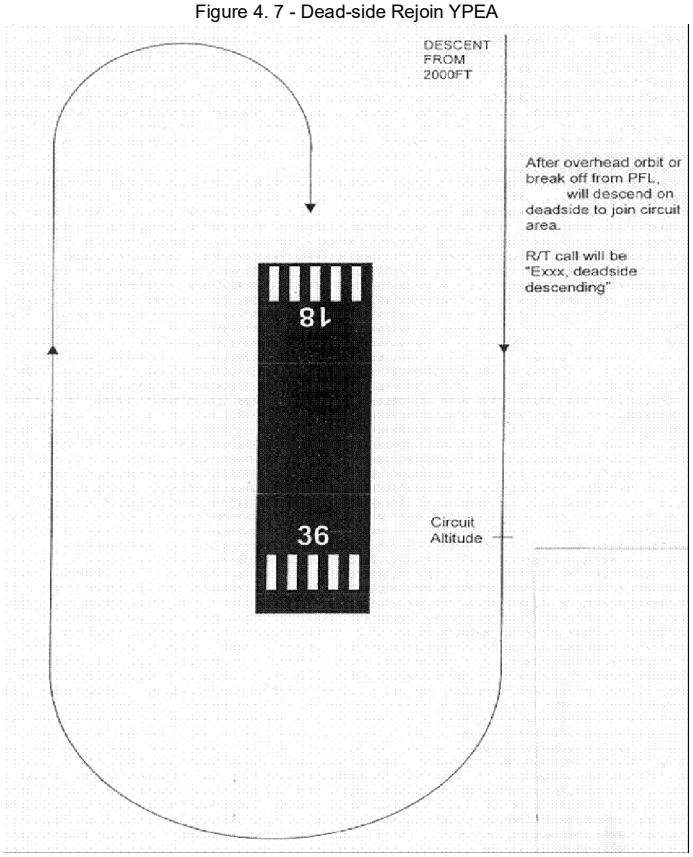
e) Minimum height is 300FT AO; and

f) Owing to the proximity of Perth Airspace to the south of Pearce, the preferred option for Hawk aircraft arriving for Runway 18 is a low pitch.

4.5.2.7 Dead-side descending rejoin

130SQN RSAF solo students are required to periodically depart the circuit and rejoin via a dead-side descending rejoin.

Figure 4. 7 - Dead-side Rejoin YPEA



4.5.2.8 Recovery to PEA Via the Avon Valley

The Avon Valley is described in Para 2.8.5 and operations are subject to the following requirements:

a) A prior specific clearance from ATC is required;

b) All transits should be from east to west;

c) A maximum of three aircraft/formations are permitted in the valley at any one time;

d) Higher performance category aircraft must not enter the Avon Valley until a preceding lower performance category aircraft has departed. Simultaneous fixed and rotary-wing operations are not permitted;

e) Aircrew must remain cognisant of the civil CTA steps above R153, particularly if positioning for a PFL at Pearce.

4.5.2.8.1 Entry to the CIRA

Aircraft entering from the Avon Valley should climb approaching visual reporting position VALLEY, intersection of the Avon and Chittering Valleys, and report intentions to ATC acquire a clearance prior for entry to the CIRA. It is recommended availability of the Merlo Release be confirmed by listening to the PEA ATIS prior to departing the Avon Valley.

a) **Runway 05.** Aircraft may be cleared to track south of PEA through the PEA CIRA to position for right initial or straight-in approach Runway 05;

b) **Recovery to Runway 18/23.** From VALLEY aircraft should track north/north east and position for visual approach; and

c) **Recovery to Runway 36.** Once cleared into the PEA CIRA, the change to TWR frequency is to be made as soon as possible.

4.5.2.9 Ops Recovery Procedure

OPS recovery procedure may be adopted to recover aircraft for full stop only to Pearce Runway 18/36 when the primary duty Runway is 05/23, or if requested by a formation leader, to recover to the primary duty Runway if there is a large number of aircraft in the circuit. The following procedures are to be employed:

a) Recovering aircraft should plan for ops recovery to Runway 36 during Runway 05 operations, and ops recovery to Runway 18 during Runway 23 operations;

b) TWR is to ensure that aircraft conducting continuous circuits are established not below 1500FT by the time OPS recovery aircraft reach the initial point;

c) OPS recovery aircraft are to confirm their OPS recovery clearance with Tower on first contact and be established not above 1000FT before entering the circuit area; and

d) Aircraft departing and full stop landings preceding the OPS recovery should not be restricted if the Tower controller assesses that there is no conflict with the OPS recovery's pitch into the circuit or on the Runway.

e) Any request for Ops Recovery and / or opposite direction Pitch need to be made with ATC prior to switching to TWR.

4.5.2.9.1 Holding aircraft

Aircraft holding NB 1500FT should continue making advisory calls when going around from base and when turning crosswind.

4.5.2.10 Rejoin via Precautionary/ Practice Forced Landing (PFL)

4.5.2.11 Precautionary forced landing

Aircraft rejoining via a Precautionary Forced Landing are to declare a PAN or MAYDAY as required.

4.5.2.11.1 Practice forced landing

Aircraft conducting a practice forced landing are not required to declare an emergency. PFL patterns are depicted in Figure 4. 8.

4.5.3 Clearance to High Key

A clearance to HK from the circuit for a 2FTS aircraft is a coded clearance that allows the aircraft to operate within the standard lateral dimensions of the PEA or GIG CIRA to an upper limit of 4000FT AMSL. Once the aircraft descends and is through Low Key (LK), the aircraft is automatically re-cleared to operate the standard CIRA dimensions of not above 3500FT AMSL. Further operations at HK must be requested.

Figure 4. 8 - RAAF PC-21 PFL Pattern

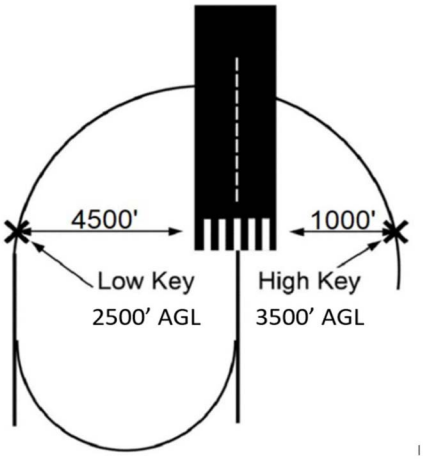


Figure 4. 9 - 130SQN PC-21 PFL Pattern

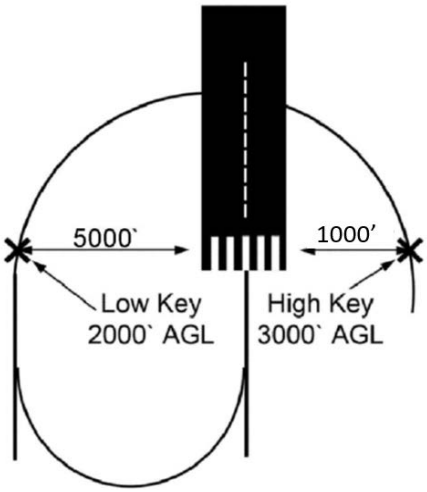
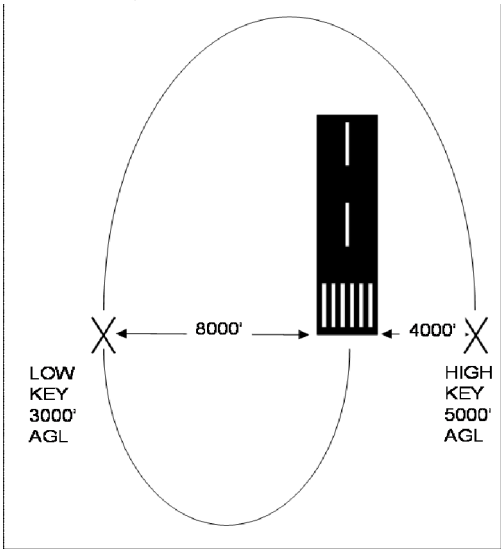


Figure 4. 10 - HAWK PFL Pattern



4.5.4 Instrument Approach Procedures

4.5.4.1 For a full stop landing

Approaches terminating with a full stop landing to the primary duty Runway may be flown at Pearce.

4.5.4.2 Requiring a missed approach

Approaches requiring a missed approach should be conducted at either Gingin or the Remote Navigation Facility (REM).

4.5.4.3 Positioning for

The clearance ‘position for’ permits tracking by any suitable route to a fix or facility. ‘Track to/track direct’ implies direct tracking to the fix or facility, and a sector entry as appropriate.

4.5.4.4 Instrument approaches to Pearce

Instrument approaches should be made to the primary duty Runway. Provided a clearance is available, any approach serving that Runway may be used. Recovery via a TACAN, ILS or RNP approach will normally be either via the IAF or IF. The following conditions apply to Pearce instrument approaches:

a) **TACAN Y - Runway 36R approach.** The TACAN Y - Runway 36R approach is the primary training TACAN approach for Runway 36. Aircraft must remain within 8TAC on the arc in order to avoid the Perth airspace boundary 8.5NM south of Pearce;

b) **ILS Y - Runway 36R approach.** The ILS Y - Runway 36R approach must be flown in **VMC by day only.** Aircraft are to remain within 8TAC on the arc in order to avoid the Perth airspace boundary 8.5NM south of Pearce;

c) **TACAN Z - Runway 36R approaches.** This approach is only available during ‘expect instrument approach’ conditions, and at ATC discretion (subject to Perth traffic). Full stop landings only are permitted. Practice TACAN Z - Runway 36R approaches and missed approaches may be conducted at the REM; and

d) **PEA NDB approach.** Conduct of PEA NDB procedures is subject to coordination with the Approach Supervisor prior to flight. Locally based aircraft can be expected to commence the procedure from 4000FT to be segregated from PEA circuit operations. Once internal coordination between APP and TWR is completed aircraft can then expect to be restricted to an MDA of 2000FT to avoid conflict with initial traffic on Runway 18/36. TWR will cancel this restriction when able. The standard frequency transfer point to TWR is when turning inbound.
   i) If a positive ATC instruction is not received at 4TAC, aircraft captains are to commence either a missed approach or overshoot, being mindful of other circuit traffic through initial; and
   ii) Pilots should not expect to be vectored south of Gnangara Road, unless specifically assigned a ‘visual’ radar vector.

4.5.4.5 RWY36 Instrument approaches in IMC

IAW WA MATS SUPP, Pearce ATC must not depart aircraft that increase the use of RWY 36 instrument approach when Perth is operating to the South-West Plan during IMC.

Aircraft being sequenced for RWY36 instrument approaches must be for full stop landing.

4.5.4.6 Instrument Approaches to Gingin

The Gingin NDB is the primary NDB training approach within the PEA TMA. The Gingin NDB may be flown as a 'high' procedure. Once a request for a Gingin NDB is received, Approach will determine traffic levels in the Gingin circuit area before clearing aircraft for either approach. R/T phraseology for the two approaches is identical apart from the qualifier 'high' that must be read back for a high procedure. The 'high' procedure should be flown at the published altitudes +2000FT (including the MAP) under the following circumstances:

a) during GIG Exclusive Use periods; and

b) whenever the TWR Supervisor decides traffic levels are such that the standard NDB pattern will disrupt circuit operations or compromise safety.

Note: Non-standard NDB approaches at Gingin, such as approaches for other airfields, can cause increased conflict with normal operations and are not permitted.

4.5.4.7 Use of landing light

Due to the possibility of conflict between circuit aircraft and aircraft on instrument approaches or straight-in visual approaches, pilots are to select the landing light ON approaching final descent during instrument or straight-in approaches.

4.5.4.8 Instrument approach conditions

Instrument approach conditions are considered to exist at Pearce or Gingin when:

a) cloud is broken or overcast below 2500FT; or

b) visibility is less than 5000M.

4.5.4.8.1 Instrument approach conditions within the next 15 minutes

When instrument approach conditions are encountered at Pearce or Gingin, or anticipated within the next 15mins, the following procedures are to be employed:

a) Pearce Tower should liaise with Approach to determine the expected duration of instrument approach conditions, and any holding requirements and then;
   i) broadcast conditions on ATIS; and
   ii) advise all aircraft on Ground and Tower frequencies, and

b) Approach Control Services (ACS) should broadcast on all control and silent frequencies that Pearce is at expect instrument approach conditions, advising any holding requirements; and

c) Gingin Tower should advise:
   i) Aircraft on Ground and Tower frequencies
   ii) Squadron OPS at Gingin if applicable.

4.5.4.8.2 Recovery during instrument approach conditions

Once instrument approach conditions are broadcast, the recovery of aircraft in the PTAs is at each flying units' discretion. As a guide ATC can recover, at a maximum, 15 aircraft per hour. Initial holding will be determined using this minimum recovery rate.

4.5.5 Pilot Intentions

4.5.5.1 PEA and GIG Arrivals

Unless otherwise advised, the default intentions of an aircraft will be for full stop. Aircraft will advise intentions such as ‘for circuits’, on first contact with PEA or GIG TWR. Example RTF includes: ‘(Pearce/Gingin) TWR (callsign) (L/R/straight) initial (RWY) for circuits.’

4.5.5.2 The Remote and OCEAN

When conducting approaches at the Remote or OCEAN, aircraft will pass their intentions following the MAP to PEA Centre at 8TAC or NI IAW extant procedures. Example RTF includes: ‘(callsign) (8 TACAN/ NI) for the missed approach thence (intentions).’

4.5.5.3 Hawk NDB Approaches

Hawk aircraft will pass PEA Approach their intentions once cleared for an NDB or when overhead outbound. Example RTF includes: ‘(callsign) overhead outbound NDB (RWY) for the missed approach thence (intentions).’

4.5.6 Traffic Information to Arrivals

4.5.6.1 Approach control

The Approach controller should provide relevant traffic information to aircraft cleared for VSA, detailing all relevant traffic ahead for initial, High Key, or conducting an instrument or straight-in approach, prior to authorising transfer to TWR frequency.

4.5.6.2 Tower control

On first contact the TWR controller must pass relevant traffic information to arriving aircraft as follows:

a) **'# Through Initial,'** includes traffic through initial but not yet pitched. A formation through initial is passed as formation type (e.g. pair/formation of four through initial);

b) **'# Circuit,'** includes:
   i) final traffic inside 4TAC/ 4NM(not cleared for full stop);
   ii) traffic through High Key; and
   iii) traffic on the pitch or established in the circuit but not cleared for full stop.

c) **'# through 8TAC,'** Traffic through 8TAC via instrument final or straight-in approach but not yet inside 4TAC;

d) **'# NDB final,'** Aircraft established inbound on NDB procedure;

e) **'# on final for full stop,'** Aircraft in receipt of a landing clearance and inside 4TAC / 4NM;

f) **'# tracking for High Key,'** PFL aircraft inside 5 TAC/5NM from airfield; and

g) **'# departing,'** Aircraft cleared for take off, on the take-off roll, or airborne inside the normal circuit traffic pattern. Includes 18R/36L departures. Departing traffic may be omitted to straight in arrivals.

4.5.6.2.1 Precise traffic information

On request, ATC may pass more precise traffic information, including the number and position of aircraft on each leg of the circuit.

4.5.6.2.2 Descending from High-key

Aircraft should report at High Key when intending to descend onto downwind, along with location and/or altitude when a non-standard profile is being flown. ATC will state the number of aircraft on downwind.

Note: Aircraft that have completed the base turn call are not included as downwind traffic provided by ATC.

4.5.7 CIRA Clearance

When aircraft recover for continuous circuit operations:

a) Arriving VFR aircraft are automatically re-cleared to operate in the Pearce or Gingin circuit area once established inside the CIRA;

b) Arriving IFR aircraft should cancel IFR, preferably by 4NM final, but no later than when crossing the upwind threshold, and are then automatically re-cleared to operate VFR in the circuit area Aircraft with a specific requirement to remain IFR in the circuit, or requesting an onward instrument departure, must advise Tower;

c) An IFR formation intending to carry out individual activities in the circuit area must notify Tower on first contact; and

Note: aircraft wishing to conduct continuous circuits under IFR in the GIG CTAF must advise APP before changing frequency.

4.6 Circuit Area

4.6.1 Circuit profiles

Circuit profiles are shown below:

Runway	CCT Type	RSAF PC-21	RAAF PC-21	HAWK
Pearce	Normal	1200	1200	1600
	Low Level	NB 700	NB 700	NB 600
	Glide	2200	2700	3100
Gingin	Normal	1300	1300	1700
	Low Level	NB 800	NB 800	NB 700
	Glide	2300	2800	3200

4.6.1.1 Low-level circuits

The minimum altitude for low-level circuits is 300FT AO by day, and published circling minima at night.

4.6.1.2 Hawk flapless approach

Hawk aircraft do not conduct flapless circuits, but instead position for a 5NM straight-in approach. Pilots are to request clearance to conduct a flapless approach from Tower. The Hawk should remain on Tower frequency unless advised otherwise.

4.6.2 General Procedures

4.6.2.1 CIRA Clearance

ATC may issue an abbreviated clearance for the CIRA, aircraft cleared 'Circuit Area' are cleared to operate within the vertical and lateral limits of the respective CIRA defined in Para 2.3.1 and Para d.

4.6.2.2 Venue for circuit training

In order to ensure efficiency of training and operations at Pearce, Gingin is used as the primary circuit training airfield. Unless aircrew have a requirement to use Pearce, circuit training should be conducted at Gingin.

4.6.2.3 PFL training

PFL training, including introduction to the PFL pattern, displaced key positions, practice flameout TACANs, and high speed PFLs should also be conducted at GIG in preference to Pearce whenever possible.

4.6.2.4 Right of way

Aircraft ahead in the circuit pattern have right of way. Aircraft entering the PFL/circuit pattern are responsible for avoiding circuit aircraft, and must remain visually clear of preceding traffic by at least 500FT vertically and/or 600M (2000FT) laterally.

4.6.2.5 Upwind and crosswind

Aircraft should turn crosswind as soon as practicable in order to stay within visual range of other aircraft, and to promote efficient circuit operations, ideally during climb to standard or glide circuit altitude.

4.6.2.5.1 Delayed crosswind

The crosswind turn may be delayed sufficiently to:

a) create spacing behind preceding traffic;

b) to push into a strong headwind; and/or

c) to make allowance for a short downwind profile (e.g. glide circuit).

Note: Caution extending upwind of runway 18 as this can force following/deadside aircraft into Perth CTA.

4.6.2.5.2 'Upwind glide'

An advisory call of 'upwind glide' must be made to indicate that a longer upwind leg will be flown. If operationally required ATC may advise that the glide circuit is not available.

4.6.2.5.3 Glide circuits to main runway

Glide circuits on the runway 18 configuration may be conducted to runway 18L. Pilots conducting glide circuits are to call "crosswind glide, 18L/Full stop" when turning crosswind.

4.6.2.5.4 Extending beyond 1.5nm

Aircraft are not to arbitrarily extend beyond 1.5NM upwind unless directed by ATC.

4.6.2.5.5 'Crosswind long'

When a long crosswind turn is made, a 'crosswind – long' call is to be made.

4.6.2.5.6 Pitching long

Aircraft joining the circuit should normally pitch before the upwind threshold unless avoiding other traffic. If pitching beyond 2NM from upwind threshold, "on the pitch – long" is to be broadcast.

4.6.2.6 Base turn procedure

4.6.2.6.1 Extended base turn

To prevent a chain reaction on following aircraft, aircraft should not extend the base turn point to gain increased separation on aircraft ahead.

4.6.2.6.2 Turning base

Aircrew are to commence base RT on downwind as soon as practicable after passing abeam the landing threshold, and are to turn base at the correct, wind-adjusted base turn point for the intended Runway.

4.6.2.6.3 Going around

If the crew is unable to complete all base RT (including read-back requirements) and visually identify preceding traffic, or assesses that the aircraft cannot turn base at the correct point due to preceding traffic, the aircraft is to go around from downwind / base and manoeuvre as required to remain clear of and behind preceding traffic.

4.6.3 Non Standard Circuit Operations

4.6.3.1 Advising ATC

Aircrew must advise ATC when extending via a circuit leg and/or conducting glide, low level, slow/ high speed circuits. ATC is not required to acknowledge.

Aircrew must advise and receive acknowledgment from ATC when:

a) conducting a practice and advice of climbing away;

b) operating at non-standard CCT heights; and

c) climbing/descending at non-standard rates.

4.6.3.2 Runway Change

When ATC notifies a change of Runway, solo/mutual students may be required to depart the circuit pattern for initial or high key.

4.6.3.3 Circuit Saturation

When there are six aircraft conducting continuous circuits, the Tower controller will broadcast the phrase 'circuit saturated' to arriving aircraft. In this case, arriving traffic must either conduct a full-stop landing or seek a clearance to depart the circuit.

4.6.3.4 Clearance required

Aircrew must request and receive a clearance from ATC for the following procedures:

a) high key;

b) displaced high key;

c) opposite direction circuits;

d) Runway other than the primary duty Runway; and

e) any other non-standard or irregular operations outside the normal circuit pattern.

4.6.4 Night Flying

Night flying is any flying conducted in the period between last and first light, and has the following additional requirements:

a) Runway 18R/36L has no lighting and is not available for night operations. Runway 18L/36R is to be used;

b) Continuous circuits are limited to six aircraft in the circuit pattern at one time;

c) Dissimilar aircraft types are permitted to conduct night arrivals and departures during continuous circuit operations;

d) Dissimilar aircraft types may not conduct continuous Night Flying circuits;

e) Student solo circuit sorties may only be conducted only when a single unit is conducting continuous circuit operations;

f) Taxiway Echo should be avoided at night due to lack of lighting; and

g) After landing, aircraft are to report ‘Runway vacated’ on Tower frequency once clear of the active Runway.

4.6.5 Alerted See and Avoid

Segregation of traffic in the circuit area is a joint ATC/pilot responsibility based on predictable movement and 'alerted see-and-avoid' principles, as follows:

a) The pilot makes an advisory position call at a recognised circuit entry position, when turning crosswind, or when approaching the base turn;

b) ATC responds to aircraft arriving with traffic information (4.4), and passes traffic with a takeoff clearance (3.3) An arriving pilot must sight all preceding traffic in order to enter the pattern, or else remain outside the pattern;

c) For pilots arriving via High Key, the process of building situational awareness should begin on first contact with TWR, whereupon ATC will provide preliminary traffic information. The mental model should be subsequently refined with each circuit call received. When calling for circuit entry at high key, aircrew are reminded that aircraft that have completed the base turn call are not included as downwind traffic provided by ATC;

d) ATC responds to base turn traffic with sequencing information on traffic ahead. Circuit aircraft should not enter the base turn before all base RT, including read-back requirements, is complete, and the crew have sighted and can remain clear of preceding traffic;

e) Aircraft joining via the base leg of the circuit should make the base call prior to intercepting the normal base turn profile when still clear of other circuit traffic and/or aircraft on extended final (i.e. approximately 4 track miles from touch down);

f) Aircraft assigned an approach or landing clearance with traffic ahead are to keep preceding traffic forward of the 3–9 line;

g) Alerted see-and-avoid procedures are not applied to aircraft positioning for a Practice Forced Landing until they have reported at High Key. Prior to reaching High Key within the CIRA, segregation may be achieved by using a lateral boundary (e.g.remaining on opposite sides of the Runway centreline) or, if no convenient lateral boundary is available, tactical segregation criteria detailed at PLN 8.7 are to be applied;

h) Tactical segregation parameters detailed at Para 3.8.6 do not apply to aircraft joining via initial, as sequencing of arrivals is managed by APP. Furthermore, segregation with other traffic is facilitated by following a prescribed dead-sidetrack and altitude and flying at standardised speeds;

i) Aircraft unable to complete the base turn call, acknowledge sequencing requirements, and visually identify all preceding traffic should abandon the approach and advise going around from downwind/base, manoeuvring as required to remain behind preceding traffic. Aircraft are to advise ATC if unable to remain behind the preceding traffic; and

j) IFR departure and approach procedures are not positively separated from VFR circuit area traffic. IFR pilots must therefore exercise vigilance when ever operating clear of cloud and be prepared to manoeuvre clear. Whilst turnout distances may be

prescribed in published IFR departure procedures, the angle of climb may be increased above published minimum gradients at pilot discretion in order to vertically segregate from circuit traffic.

4.6.6 Low Approaches

Aircraft are not to descend below 200FT AGL unless cleared for landing, touch-and-go or low-approach.

4.6.6.1 Clearance

Qualified pilots may be cleared for a low approach (not below 50FT AGL) by day only, provided that:

a) in the opinion of the Tower controller the first 2000FT of Runway will be clear at the time the overshooting aircraft crosses the threshold; and

b) clearance is obtained prior to reaching 200FT AGL.

4.6.6.2 Definition of Qualified Pilot

For the purposes of complying with para 4.6.6.1, Dugite callsigns are not considered to be qualified pilots. ATC shall not approve Dugite callsigns to conduct low approaches.

4.6.7 Unique Runway Procedures

4.6.7.1 Circuit direction

The following circuit directions apply at Pearce:

a) Runway 18L, 18R and 23 – right hand circuits; and

b) Runway 05, 36L and 36R – left hand circuits.

4.6.7.1.1 Opposite direction circuits

Aircrew may request opposite direction circuits, but traffic complying with normal circuit procedures have priority.

4.6.7.2 Preferred Runway

The preferred Runway at Pearce is Runway 18. Should PC-21 crosswind limits be exceeded on Runway 18/36, or solo limits during solo/mutual operations, Runway 05/23 should be the primary duty Runway.

4.6.7.3 Parallel Runway operations

2FTS, 79SQN, 130SQN (RSAF) and CHC SAR aircraft only may conduct simultaneous operations to Runway 18L/36R and Runway 18R/36L. There is no specified minimum longitudinal separation between aircraft operating to the parallel runways, but aircraft ahead must not be overtaken by following aircraft. To alleviate R/T congestion, the ‘RWY’ prefix not required during parallel Runway operations.

4.6.7.4 Concurrent use of Runways

Concurrent use of Runways by specific vehicles and aircraft is permitted at Pearce, and may be cleared to enter the sealed surface of Runway 18L/36R or Runway 18R/36L concurrently with aircraft operations to the parallel Runway. Those vehicles are:

a) Emergency;

b) ATC Ranger;

c) 79SQN Drogue vehicles; and

d) Vehicles authorised by the Tower Supervisor.

Note: refer to Special Procedures in En-route Supplement Australia for the Pearce parallel Runway policy)

4.6.7.5 Takeoff

Aircraft must take-off from Runway 18L/36R unless directed otherwise.

4.6.7.6 Touch and go

All Hawk operations should be flown on Runway 18L/36R. PC-21 aircraft should conduct touch-and-go landings on the parallel Runway. Variations to this are to be advised on the pitch/ crosswind turn/at High Key, and included in the base turn call.

4.6.7.7 Full stop

All full stop landings should be flown to Runway 18L/36R. If essential, a full stop landing to Runway 18R/36L may be requested in the pitch/crosswind/High Key call, and this is to be nominated in the base turn call. In this case full Runway separation standards will apply, and except in an emergency, touch-and-go traffic will have priority. Aircraft landing on Runway 18R/36L require a specific clearance to cross Runway 18L/36R, and should remain on Pearce Tower frequency until clear of Runway 18L/36R.

4.6.7.8 Upwind

VFR aircraft should ensure that they do not converge with the adjacent Runway or traffic on its extended centreline.

4.6.7.9 Crosswind

Aircrew are to be familiar with PEA CIRA visual manoeuvring boundaries depicted at Figure 2. 2, particularly those bordering civil airspace to the south/east, and turn crosswind accordingly.

4.6.7.10 Base turn R/T

In addition to standard base R/T, ATC must include sequencing information on preceding aircraft flying to the parallel. This information includes:

a) landing sequence number (the number of preceding aircraft approaching the nominated Runway); and

b) number of aircraft ahead (includes aircraft for the nominated and the adjacent Runway)
   i) Aircrew are not required to read back the number ahead for the adjacent Runway; and
   ii) ATC will state the intended Runway in the clearance (including the L/R designator), which must be read back.

4.6.7.11 S-turns

An S-turn is defined as a base turn that extends beyond the far side of the Runway surface. S-turns are not permitted under any circumstances. Aircraft must initiate an immediate go around as soon as an S-turn becomes likely or apparent.

4.6.7.12 Go around/overshoot

Aircraft conducting a go-around or overshoot may track along the Runway centreline. If necessary to avoid and/or maintain sight of preceding traffic, aircraft may track to the dead side of the Runway. If avoiding traffic operating to Runway 18L/36R, aircraft going around from an approach to Runway 18R/36L must not track to the east of the parallel Runway, but may track to the live side of the Runway.

4.6.7.13 Use of Runway 18/36 by 79 Squadron

HAWK aircraft do not normally use Pearce Runway 05/23 for recoveries or continuous circuit operations. When Runway 05/23 is the primary duty Runway, the following considerations apply:

a) Hawk departures from Runway 18L/36R may be sequenced with circuit traffic operating on Runway 05/23;

b) Hawk arrivals to 18L/36R may be sequenced with circuit traffic operating on Runway 05/23 using Ops Recovery procedures;

c) The primary duty Runway may be changed to Runway 18/36 (if conditions are within PC-21 crosswind/solo crosswind limits);

d) Hawk aircraft wishing to conduct continuous circuits should do so at Gingin. Should Gingin be unavailable, Hawk aircrew should advise on taxi or at the earliest opportunity on recovery. The primary duty Runway may then be changed to Runway 18/36 at ATC discretion. The following considerations apply:
   i) PC-21 aircraft must either conduct circuit operations to Runway 18/36 or else land/depart;
   ii) HAWK aircraft may be held as instructed by ATC, awaiting completion of PC-21 operations to Runway 05/23; and
   iii) PC-21 aircraft requiring Runway 05/23 (due to crosswind) for departure or full-stop landing are to advise ATC as early as possible. Circuit operations to Runway 18/36 are to be suspended or sequenced to allow PC-21 departures and arrivals under such circumstances.

4.6.8 Gingin Circuit

4.6.8.1 Circuit direction

Circuit direction at GIG:

a) Runway 08 – right circuits; and

b) Runway 26 – left circuits.

4.6.8.2 Gingin CTAF procedures

The following CTAF procedures apply in the Gingin circuit area:

a) The Pearce ATIS includes the duty Runway at Gingin, based on observed wind at Pearce. Pilots are to advise ATC if the actual wind at Gingin favours the opposite Runway;

b) When conducting instrument training at GIG during GIG CTAF and PEA airspace is active, accurate GIG QNH can be requested from PEA APP;

c) Standard radio calls are required in the circuit, however, the phrase 'Gingin Traffic' and the Runway number may be omitted after the initial call;

d) Aircraft captains are responsible for self-initiating landing gear down check tones; and

e) PEA Delivery will hold SARWATCH for aircraft that are operating in the GIG CTAF. 30 minute OPS NORMAL times can be nominated to either PEA APP (Stud 4 prior to entry) or PEA Delivery (Stud 1 on/after entry) and will be canceled when GIG TWR activates, the aircraft departs GIG and contacts the APP frequency or notifies PLNR that they have landed at GIG.

f) An onwards clearance must be secured before departing the GIG CTAF IAW Para 4.3.1.4.

4.7 Area

4.7.1 Flight Rules

Unless cleared otherwise, aircraft are to operate VFR in all areas.

4.7.1.1 Inclement weather

Pilots unable to maintain VFR in their allotted training area should either arrange an alternative training area through their unit operations officer, or else request an IFR/ SVFR training block from ATC. SVFR clearances are not available in training areas that are contained within airspace classified as Military Operating Areas.

4.7.1.2 IFR Operations

Aircraft requiring IFR operations must obtain a clearance from ATC. If taxiing IFR, the clearance is implicit in the airways clearance. If changing category from VFR to IFR, an IFR clearance will include the instruction to 'operate IFR'.

4.7.1.3 Change of Category

VFR aircraft requesting IFR services must maintain VMC until specifically cleared 'operate IFR', regardless of subsequent ATC instructions - including radar vectoring or clearance for an instrument approach procedure. The onus is on the pilot to maintain VMC until cleared IFR, and to advise ATC immediately if this is not possible while complying with ATC instructions.

4.7.2 Pearce Training Areas

4.7.2.1 Highest useable level in PTA A

Training operations above PTA A up to FL150 may be granted by ATC.

4.7.2.2 Lowest useable level in PTA A

Operations can be extended down as far as surface level, provided such operations do not penetrate any CIRA or active restricted areas, or create a hazard to other airspace users.

4.7.2.3 Operations below PTA A

Aircraft extending training operations below PTA A may be required to monitor the relevant ATC frequency, or pass operations normal calls at intervals specified by ATC. Approval, including operations in airspace portions co-incident with the PEA TMA, is subject to ATC discretion.

ATC prioritise controlled operations for aircraft in the Outer Manoeuvring Area over military aircraft wishing to extend operations below PTA A.

4.7.2.4 Restrictions to available PTA airspace

Competing airspace activities may necessitate restrictions to operations within PTAs. Full details appear at Para 2.4.1.3.

4.7.2.5 Real-time changes to training airspace allocation or adjustment to area timings

Aircraft wishing to make airborne changes to airspace allocation/timings are to follow guidance contained at RAAF Pearce BSI(OPS) 1-2. Procedures for multiple callsigns occupying a PTA are contained at Para 3.8.3. In accordance with RAAF Pearce BSI(OPS) 1-2, pilots desiring a change of training airspace are to observe the following procedure:

a) Pilots must contact squadron operations for a new airspace allocation;

b) An advisory broadcast must be made on Silent/Traffic frequency stating intentions and await ATC response (if operating on Traffic frequency).In this case the DTI controller may either pass relevant traffic information, or direct a change to CEN/ APP;

c) Aircraft must not depart the initial sub-area until allocated a new sub-area and in receipt of traffic information/ATC instructions; and

d) An advisory broadcast should be made on Silent/Traffic frequency when established in the new sub-area.

4.7.3 The Outer Manoeuvring Area (OMA)

The OMA exists to facilitate the sequencing and separation of aircraft transiting or conducting lower level training activities below PTA A.

4.7.3.1 Control procedures

Procedures for controlling aircraft in the OMA are identical to those employed in a Terminal Manoeuvring Area.

4.7.3.2 Shared level

5000FT is a ‘shared level’ as it can be occupied by both an aircraft operating within PTA A, or by an aircraft under ATC control in the TMA or OMA

4.7.4 The Remote ILS/ TAC Facility (REM)

REM is located within the OMA 1NM west of Beermullah airfield (PEA 338/025). The REM is fully IFR certified/calibrated, and approaches can be flown to the published minima in IMC.

4.7.4.1 Aircraft permitted

Only Pearce-based training aircraft are permitted to conduct REM approaches.

4.7.4.2 Approaches during daytime

Aircraft should plan to fly daytime practice TACAN and ILS approaches at the Remote ILS/TAC facility.

4.7.4.2.1 Available times

Approaches are not permitted after 1700 AWST for noise abatement.

4.7.4.3 Direction of approaches

The standard direction for remote approaches should be from the north. A requirement to conduct approaches from the south (due to reported wind conditions) will be advised on PEA ATIS.

4.7.4.4 Other airfield approaches

ATC may approve other airfield instrument approaches to be flown at the REM. Such approaches are to be flown VFR or IFR visual below the REM 25NM MSA.

4.7.4.5 Gingin Freshwater Lobster Farm

Direct overflight of ponds located at Gingin Freshwater Lobster Farm, BRG 305 1.7NM from the REM, is to be avoided below 1000FT.

4.7.5 Low Flying Areas

LFA operations in Pearce designated low flying areas (Para 2.8) are subject to the following conditions:

a) Pilots engaged in low flying are to minimise as far as possible over-flying homes and livestock, and are to avoid promulgated sensitive areas. Towns are to be overflown not below 1000FT vertically or 1NM horizontally. Open cut mines are to be avoided by 1nm; and

b) Low flying along any major road on the periphery of low flying areas is prohibited.

4.7.5.1 Transiting LFAs

Entry and exit to/from PEA restricted areas is subject to ATC clearance. Aircraft cleared through LFAs on low-level navigation exercises should broadcast intentions on the appropriate frequency prior to entering a LFA.

4.7.6 Operations at Unlicensed and Emergency Airfields

Beermullah (BMH), Mooliabeenie (MBE), and Bindoon Hill are unlicensed airfields within the Pearce RA.

4.7.6.1 Serviceability

These airfields are not subject to regular maintenance, nor is vehicular access controlled.

4.7.6.2 Operations

Operations at these airfields are subject to the following procedures and restrictions:

a) Subsequent aircraft intending to operate at an abandoned airfield will be given traffic information on preceding aircraft. ATC do not sequence aircraft at these airfields;

b) Aircraft should monitor the appropriate Pearce ATC frequency (Pearce Centre at Beermullah, Mooliabeenie, Bindoon and Bindoon Hill);

c) As far as practicable, practice flame-out TACAN approaches should be flown to the REM Navaid/ Beermullah airfield; and

d) Circuit training at Beermullah airfield should be minimised due to its proximity to the REM.

4.8 Helicopter Operations

Unless reacting to a SAR, the SAR helicopter will operate to the following procedures for VFR operations, when VMC does not exist IFR rules apply.

4.8.1 VFR departures

The CHC helicopter is to adopt the following profiles on departure from a helipad, taxiway, or Runway.

Initial transition to forward flight preferably into wind or aligned with the duty Runway, then fly in accordance with departure instructions whilst.

a) **By day.** Remain NA 500FT to the west of Pearce or, NA 1000FT to the east of Pearce, until 5TAC PEA, then climb to cleared level. ATC may issue '*altitude restriction within 5TAC PEA canceled'* and the aircraft may climb to its cleared level as required;

b) **Night unaided**:
   i) Task area to the west. — parallel to Runway direction to 1000FT, then turn as cleared; normal transit is 2500FT; or
   ii) Task area to the east — parallel to Runway direction to 1500FT, then turn as cleared; normal transit is 3000FT.

c) **By night aided (NVG).** Fly as cleared. Normal transit is 2500FT to the west and 3000FT to the east.

4.8.2 VFR arrivals

The CHC helicopter is to adopt the following profiles on arrival to a helipad, taxiway, or Runway:

a) **By Day.** Fly as cleared with a requirement within 5TAC PEA to remain NA 500FT to the west and NA 1000FT to the east of Pearce;

b) **Night unaided.** The aircraft will join a straight-in approach outside 5NM and descend from LSALT on the PAPI. The aircraft will overshoot on short final for the landing area; or

c) **Aided Arrivals (NVG).** On visually aided approaches the aircraft will return to the airfield at LSALT (weather permitting) and descend as required in accordance with the cleared level. Once established within 3NM Pearce, track as directed for the landing area.

4.8.3 Helicopter Training Areas

Helo East and Helo Northwest are established for day and night helicopter training, including NVG training. Clearance to operate Helo Northwest includes both A and B subdivisions, unless restricted by ATC. Helicopters operating in Helos Northwest should expect to operate on CENN frequency.

4.8.3.1 Altitudes

4.8.3.1.1 Helo Northwest

Helo Northwest from surface to 2500FT.

4.8.3.1.2 Helo East

Helo East surface to 3000FT.

4.8.3.2 Gates

The following entry and exit gates will be utilised for transit:

a) Gate Alpha–YPEA297005;

b) Gate Bravo –YPEA352005;

c) Gate Charlie–YPEA065006; or

d) Valley for arrivals only.

Figure 4. 11 - Helo North West

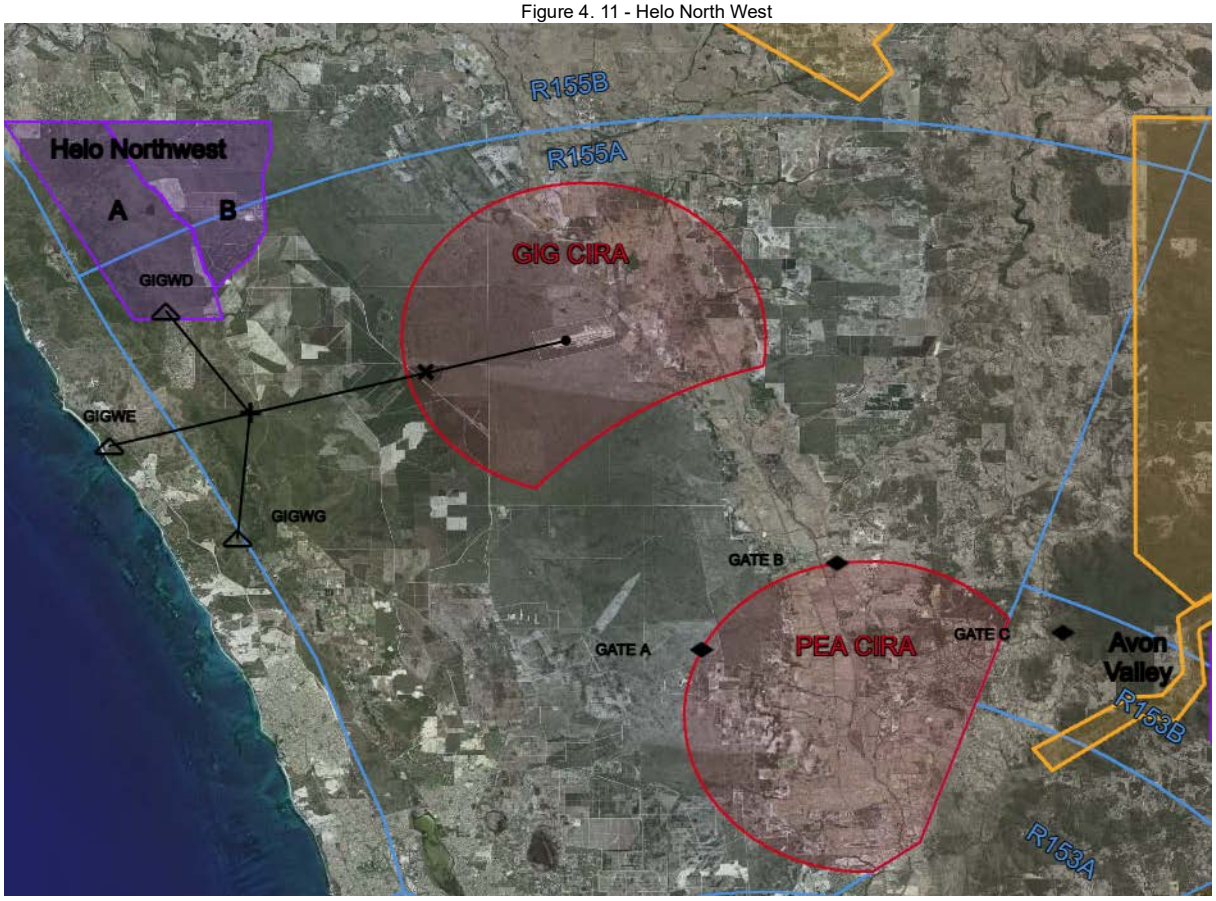
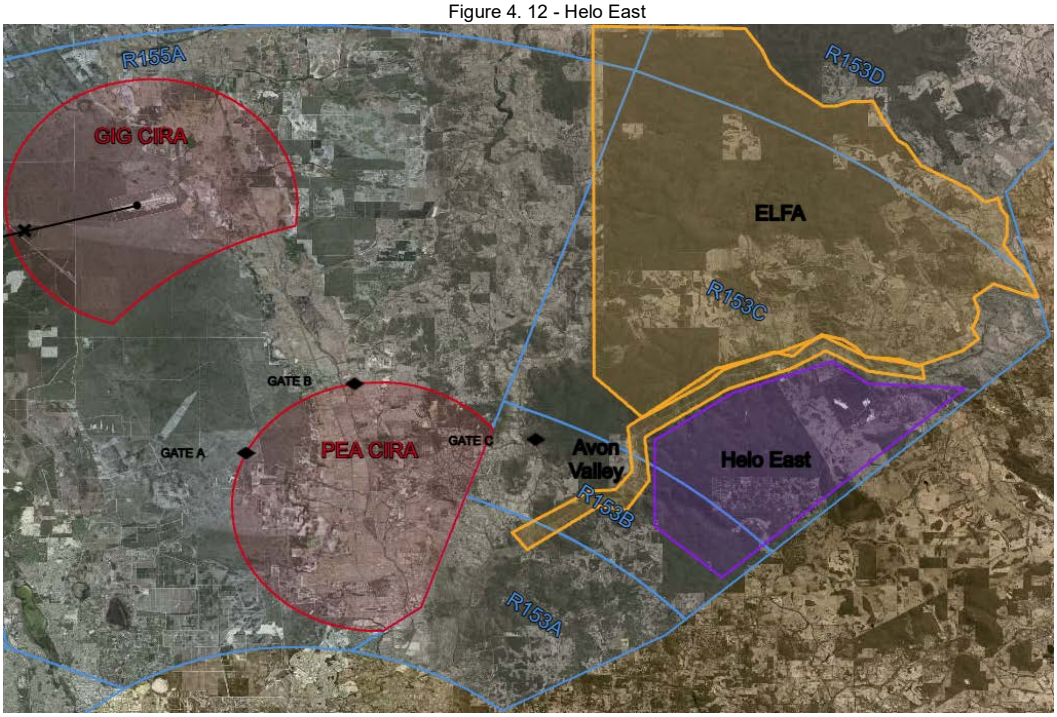


Figure 4. 12 - Helo East



4.8.4 Ground Effect

Upon receipt of a pilot report of an aircraft operating ‘in ground effect’, ATC will not treat the aircraft as airborne for the purpose of separation.

4.8.5 Listening Watch

Helicopters may request to operate on listening watch.

4.8.5.1 Conditions

During the conduct of listening watch, the pilot may operate within the lateral confines of an assigned area no higher than the cleared level, and is not required to report airborne or on the ground. The following conditions apply:

a) Conditions permitting, request/clearance phraseology is:
   i) clearance request ‘(CALLSIGN), REQUEST LISTENING WATCH [AREA]’; and
   ii) clearance approval ‘(CALLSIGN), LISTENING WATCH APPROVED’.

b) The pilot must continuously monitor the ATC frequency; and

c) ATC may cancel the listening watch at any time using the phrase ‘(CALLSIGN) RESUME FULL REPORTING’.

4.9 Abnormal Operations

4.9.1 Emergency Procedures

When an aircraft is rejoining under a PAN or MAYDAY, the Tower controller is to make a general broadcast to all circuit aircraft advising that an emergency aircraft is rejoining by transmitting:

a) “All stations emergency aircraft (c/s)”

b) Position and intentions.

4.9.1.1 Priority for Emergency Aircraft

Emergency aircraft are to be given landing priority. All aircraft in the circuit area should endeavour to adjust traffic patterns accordingly.

4.9.2 Forced Landing Runway Selection

Captains should use Runway 18/36 if possible, and are to carefully consider the following adverse factors if considering landing on Runway 05/ 23:

a) Runway 23:
   i) High terrain on approach, with attendant visual and meteorological effects;
   ii) Runway gradient approximately 0.6% down to the southwest;
   iii) Unfavourable under-run, comprising a ditch, a major highway, a fence and another ditch;
   iv) Unfavourable over-run, comprising a substantial creek and trees; and
   v) Proximity of base complex and domestic areas to the left.

b) Runway 05:
   i) Unfavourable under-run area comprising a substantial creek and trees, and built up areas in proximity;
   ii) A strong wind shear usually exists in the latter stages of the approach;
   iii) Unfavourable over-run area, comprising a ditch, a fence, a major highway and another ditch; and
   iv) Proximity of base complex and domestic areas to the right.

4.9.3 Emergency Handling and Ejection Area

PTA F is the approved area for stricken aircraft to process in-flight emergencies and to conduct visual external inspections. It is also the pre-meditated ejection area for Pearce at PEA285005, ideally heading 340ºM.

4.9.4 Radio Failure

In addition to the requirements of ERSA Emergency procedure Pearce based aircraft experiencing a complete loss of radio should act in accordance with the following procedures.

4.9.4.1 Total radio failure on the ground

If an R/T failure occurs whilst taxiing, aircraft should taxi as required but no further than the limit of the last clearance. If unable to taxi safely:

a) attempt to attract the attention of the tower (at night use landing lights and/or strobe lights) and then:
   i) look for a light signal from the tower to indicate taxi instructions;
   ii) wait for a ‘follow me’ vehicle; or
   iii) shut down, render ejection seats safe, and attempt to attract the attention of the Tower (at night use aircraft lights or aircrew torch to identify position).

4.9.4.2 Total radio failure airborne

In the first instance aircraft should attempt to re-establish ATC communications using a secondary radio/emergency intercom system. If unsuccessful, aircraft should proceed as per ADF AIP, FLIP–FIHA, and GPA.

4.9.4.3 Monitor NDB

NDB equipped aircraft should monitor the PEA NDB if possible for voice instructions from ATC.

4.9.4.4 Avoid PTAs

Aircraft attempt to return to Pearce while avoiding PTAs (i.e. via an arrival lane, the OMA or along PTA A side radials if necessary). Aircraft should continue to make radio transmissions ‘in the blind.’ Recovery profile is dictated by flight rules category, as detailed in the following paragraphs.

4.9.4.5 IFR No-Radio Recovery

Aircraft should attempt to return to Pearce via a visual approach in VMC conditions as per Para 4.9.4.4. If this is not possible the following procedures is to be used:

4.9.4.5.1 TACAN Equipped

Using the TACAN:

a) Track to the IAF for the ILS/TAC for the last known duty Runway at the last assigned level, or the lowest level of an assigned IMC training block (but not below 4000FT);

b) Conduct a sector entry and holding pattern. Once in the holding pattern, aircraft may descend as required to begin the approach from 3000FT;

c) Conduct the ILS/TAC approach and, when visual, look for a green light from the tower to confirm landing clearance; and

d) Once clear of the Runway, look for a green light from the tower to indicate taxi clearance to the lines, or wait for a follow-me vehicle.

4.9.4.5.2 Non-TACAN Equipped

Without using the TACAN:

79SQN (HAWK)

a) track to overhead the Gingin NDB at the last assigned level, or the lowest level of the assigned IMC training block (but not below 5000FT);

b) Conduct a sector entry and holding pattern for the last known duty Runway;

c) Once in the holding pattern descend as required to begin the Gingin NDB approach to the last known duty Runway from 4000FT; and

d) Position to land/circle as required and, once visual, look for a green light from the tower (if manned) to confirm landing clearance;

e) Once clear of the Runway, look for a green light from the tower (if applicable) to indicate taxi clearance to the lines

2FTS (PC-21)

a) Track to the Northern IAF for the Gingin RNAV for the last known duty Runway at the last assigned level, or the lowest level of an assigned IMC training block (but not below 4000FT);

b) Conduct a sector entry and holding pattern. Once in the holding pattern, aircraft may descend as required to begin the approach from 2800FT;

c) Conduct the RNAV approach and, when visual, look for a green light from the tower (if manned) to confirm landing clearance; and

d) Once clear of the Runway, look for a green light from the tower to indicate taxi clearance to the lines.

130SQN (PC-21)

a) Track to the 15NM IAF for the ILS/LOC RWY18 at the last assigned level, or the lowest level of an assigned IMC training block (but not below 5000FT);

b) Conduct a sector entry and holding pattern. Once in the holding pattern, aircraft may descend as required to begin the approach from 4000FT;

c) Conduct the ILS approach and, when visual, look for a green light from the tower to confirm landing clearance; or

d) Circle for the last know duty Runway if not RWY18; and

e) Once clear of the Runway, look for a green light from the tower to indicate taxi clearance to the lines, or wait for a follow-me vehicle.

4.9.4.6 VFR No Radio Recovery.

If an R/T failure is experienced airborne, select VHF and advise Control, Approach or Tower and obtain approach and/or landing instructions. If no success, proceed as follows:

a) Rejoin via initial at standard altitudes (not below MSA by night), rocking the wings when on dead side by day and flash landing light by night;

b) Fly a normal circuit pattern;

c) On base/final, look for a green light from the tower to indicate landing clearance;

d) If no green light is observed:

e) Go-around from base/overshoot from final (maintain not below circling minima at night) and fly past the tower on deadside (between Tower and Runway):
   i) rocking wings by day, or
   ii) slowing to gear speed and flashing landing lights by night.

f) Continue for a low level or a normal circuit and landing; and

g) Look to the Tower for a green light on finals for a landing clearance.

4.9.5 Total Electrical Failure Airborne

The following procedure is to be used if all electrical power sources fail:

a) Rejoin via initial at standard altitudes (not below MSA by night);

b) rocking the wings when on dead side (by day);

c) When established in the circuit area (circling area at night), descend to circling minima;

d) Overshoot from base to fly past the tower on the dead side, (between tower and Runway), rocking wings;

e) Continue for a low level or normal circuit and landing; and

f) Look to the tower for a green light on finals for a landing clearance.

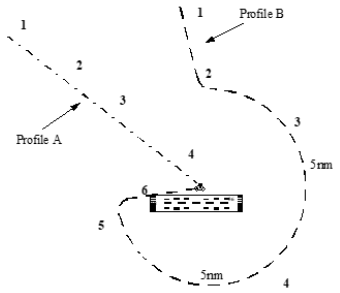
4.9.6 Flameout TACAN approach

Flameout TACAN approach is available to IFR aircraft in distress or suffering equipment malfunction.

4.9.6.1 Conditions

A practice flameout TACAN Approach can be flown in VMC, or IMC not below 3000FT.

Figure 4. 13 - Flameout TACAN Profiles



Profile A	Profile B
HAWK Flameout TACAN	
(1:1 + 1) 1. Home at 190KIAS and complete checklist actions. 2. At 1:1+1 select 15º ND and accelerate to 350KIAS. 3. Approaching 1:1 profile select 10º ND to maintain the 1:1 profile. 4. Descend to not below 10 NM MSA. If; a. Visual - use high speed FL techniques. b. Not visual - abandon aircraft.	Not applicable
PC21 Flameout TACAN	
(< 1:1) 1. Home at 140 KIAS and complete Forced Landing checks. 2. At 1:1 profile accelerate to 240 KIAS. Monitor the profile to maintain 1:1. 3. Descend to not below 10 NM MSA. 4. If; a. Visual - use high speed FL techniques. b. Not visual - abandon aircraft.	**(> 1:1)** 1. When Forced Landing checks are complete accelerate to 240 KIAS. Adjust attitude to achieve 1:1 profile. 2. If required intercept and maintain the 5 TAC arc. 3. At 5000FT turn toward the TACAN using 30° AoB and descend to not below 10nm MSA. 4. If; a. Visual - use high speed FL techniques. b. Not visual - abandon aircraft.

4.9.6.2 Arc Direction

Due to airspace restrictions to the east, aircraft are to arc to the west of Pearce.

4.9.7 Aircraft IMC at MDA

If fuel is insufficient for further approach or diversion configure as appropriate for pre-meditated ejection. If possible under radar control track to PTA F PEA285005.

4.9.7.1 TACAN inoperative

If at Gingin and TACAN inoperative, turn onto heading 190º for tracking to PTA F.

4.9.8 Aeromedical Emergency

Aeromedical emergency aircraft returning should request that the aircraft be met on landing by Medical.

4.9.9 Solo student emergency

ATC should advise the Duty Instructor of the emergency, or Viper Ops and Duty Supervisor in the case of a 2FTS student.

4.9.10 Hot Brakes

Aircraft experiencing a hot brakes malfunction shall vacate the runway onto the most suitable taxiway and commence management of the malfunction there. ATC will manage the flow of traffic around the affected taxiway.

4.9.10.1 Multiple Hot Brakes

If more than one aircraft has hot brakes ATC will advise aircrew of any taxiway restrictions and ensure subsequent aircraft maintain a 100M clear area.

4.9.11 Emergency and Recovery crews

Emergency and recovery crews may need to approach an aircraft while its engine is running, the fire controller is to signal for the aircrew to place their hands on their heads. This action is to ensure aircrew do not inadvertently activate aircraft controls/services which may endanger rescue crews. Aircrew are to keep their hands on their head at all times until the fire controller signals that emergency crews are clear of the aircraft.

4.9.12 SAREX Frequencies

The RAAF training frequency for SAREXs is 245.1 MHz. Practice PRC-90 radios have the beacon and primary voice mode selected to this frequency. 282.8 MHz is still incorporated for on-scene communications. When a SAREX has been declared, pilots are to monitor 245.1 MHz in lieu of 243.0 MHz. 245.1 MHz is to be used for initial contact with survivors, then 282.8 MHz is to be used for all on scene communication as per normal. All other procedures are the same as those for ‘no duff’ SAREXs.

4.9.13 Calibration Activities

When calibration activities are required to be conducted for NAVAIDS at Beermullah Remote facility, the airspace required by the calibrator aircraft shall be sanitised by ATC and regarded as exclusive use. This will typically preclude any military operations in the OMA over land below 5000FT AMSL. Calibration activities at PEA and GIG are mutually exclusive of military operations and will be planned to occur when no local military flying is programmed. Concurrent calibration and military operations at PEA/GIG will lead to delays and reduced activities in the TMA.

Note: 453SQN PEA FLT will promulgate a NOTAM for the period of any calibration activities.

4.10 Local Radio Telephony Procedures (RTF)

Reference to Runway 18 L/R and Runway 36 L/R throughout RTF is only required during parallel Runway operations. Use of parenthesis, () and [], is consistent with ADF GPA GEN 3.4. Pilot readbacks and acknowledgments are as per FLIP GPA. Aircrew requests and expected ATC clearances are detailed below for standard Pearce operations. Readbacks are to be IAW extant publications.

PHASE AND FREQUENCY	CONDITIONS	PHRASE
AIRWAYS CLEARANCE (LOCAL SORTIE)		
Airways clearance: Stud 1, Pearce Delivery	Prior to taxi for VFR departure(localoperations): *(Pilot)* (ATC)	 Pearce Delivery, (callsign), for ([circuits, then] PTA/sub-area/LFA/GIG), [(level)], request clearance. (callsign) Pearce Delivery, cleared ([circuit, then] PTA/ LFA/GIG) [via Wannamal/Alkimos/ Mullaloo Lane] [(level)], squawk (SSR code).

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Airways clearance: Stud 1, Pearce Delivery	Airborne in Gingin CTAF and prior to departure (Gingin ATC not manned): *(Pilot)* (ATC) (Pilot) (ATC) Note: Use of auxiliary radio recommended to facilitate listening watch on CTAF while arranging airways clearance.	 Pearce Delivery, (callsign), Gingin CTAF. (callsign), Pearce Delivery. (callsign), for (PTA/sub-area/LFA/ visual approach Pearce, etc), request clearance. (callsign) Pearce Delivery, (airways clearance/ instructions), contact stud (ATC agency).

PHASE AND FREQUENCY	CONDITIONS	PHRASE
DEPARTURE		
Airways clearance: Stud 1, Pearce Delivery Notes: *Where a specific departure is not requested, ATC will issue a RADAR departure. Request for a departure radial other than via a Departure Lane requires aircraft to remain vertically clear of occupied portions of PTA A. Where a specific departure altitude is not requested, ATC will endeavour to issue standard transit altitude. ** applies to a radial departure via a radial other than a Departure Lane.	For IFR departure: (Pilot) (ATC)	 Pearce Delivery, (callsign), [IFR] for (PTA/sub-area/ destination), [(SID/ [(xxx)radial]/visual) departure] [(level)],* request clearance. (callsign), Pearce Delivery, cleared to (PTA/destination) [via (Wannamal/Alkimos/ Mullaloo) Lane/(xxx) radial]/ [(SID/ visual) departure], (level) [by 15 TAC**], squawk (SSR code).
SID complete: Stud 4, Pearce Approach	Remaining IFR for operations in a training area: (Pilot) (ATC)	 (callsign), SID complete, request IFR operations in (PTA/sub-area). (callsign), cleared (PTA/sub-area)[block dimensions], [Frequency requirements].*

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Hand off during transit to outer PTA (B-G)/OMA: Stud 5, Pearce Centre	(Pilot)	Pearce Centre, (callsign), [Wannamal/Alkimos/ Mullaloo Lane], (level) for (PTA/sub-area).
	(ATC)	(callsign), Pearce Centre, [above/below (altitude)]* cleared direct (area). * *altitude requirement issued to remain clear of occupied PTA/sub-areas.*

PHASE AND FREQUENCY	CONDITIONS	PHRASE
PEARCE TRAINING AREA OPERATIONS		
Approaching PTA: Stud 4, Pearce Approach (PTA A); or Stud 5/6, Pearce Centre (PTA B-G)	(Pilot) If PTA unoccupied	(callsign) approaching (PTA/ sub-area).
	(ATC)	(callsign), cleared (traffic/ silent).
Entering training area: Area traffic/silent frequency	If PTA occupied: (ATC)	(callsign) (number) in (PTA)
	(Pilot)	(callsign) for (PTA sub-division) [above/below (altitude)/between (DME/ radials)].
Note: 1. For Stud 14 – Planner monitors aircraft initial call on frequency, but will not respond. If no call heard ATC will initiate a comms check.	(ATC)	(callsign), cleared (silent/ traffic).
	(Pilot)	(callsign) enters (PTA/sub-area) (altitude) [number 2, deconfliction contract with other PTA sub-area traffic]. i.e. “Eagle 820 enters Charlie, 14,000” “Phoenix 71 enters Charlie, number 2, 14,000” “Eagle 820 operating Charlie Inner West” “Phoenix 71 operating Charlie Inner East” “Viper 12 enters A32 Inner 6,500”

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Departing PTA: Area traffic/silent frequency	(Pilot)	(callsign) departing (PTA/ sub-area), (level) for (intentions), received (ATIS code). i.e. “Eagle 820 departs Charlie Inner West for Gingin, on descent to 4,500 received (ATIS code)” Note: Phoenix 71 is now free to use PTA C unrestricted.
Directed traffic information: PTA traffic/silent or ATC frequency	(ATC) (Pilot) (Pilot)	(callsign 1), traffic (callsign 2), (bearing), (distance), (level). (callsign), [turning (direction)/(climbing/ descending)], looking. (callsign 1/callsign 2), traffic sighted.
Safety Alert: PTA traffic/silent or ATC frequency:	*(ATC)* (Pilot) (Pilot)	(callsign 1) Safety alert , traffic (callsign 2), (bearing) (distance) (level), suggest (heading/altitude) immediately. (callsign 1) (turning/ climbing/descending). (callsign 1/callsign 2) traffic sighted.

PHASE AND FREQUENCY	CONDITIONS	PHRASE
VISUAL APPROACH		
Departing PTA A: Stud 4, Pearce Approach Departing PTA B-C: Stud 5 Pearce Centre (North) Departing PTA D-G: Stud 6 Pearce Centre (West) Notes: 1. Prior to contacting ATC, departing aircraft are to announce intentions on traffic/silent frequency. Aircraft in PTA A are to await acknowledgment or instructions from 'Planner' prior to changing frequency. Aircraft are then not required to restate their intentions on first contact with APP/CENR.	Prior to departing PTA/sub-area: (Pilot) (ATC) (Pilot) (ATC)	Pearce (Approach/Centre), (callsign) (PTA/sub-area/ position) (level). (callsign), Pearce (Approach/Centre). (callsign) for visual approach (Pearce/Gingin) (via High Key/straight-in approach/ downwind/ etc), received (ATIS). (callsign), track to (PEA/ GIG) (level).

PHASE AND FREQUENCY	CONDITIONS	PHRASE
2. Aircraft transiting from PTA B-G or Class G airspace are to report current position and level on first contact with Pearce Approach * ATC may additionally pass traffic information and sequencing instructions, including number in the approach sequence, and traffic to sight and follow	(ATC)	(callsign), cleared visual approach (PEA/GIG) via [Wannamal/ Alkimos/ Mullaloo Lane], [left/right/ straight] initial/High Key/ straight-in approach/ downwind (RWY).*
	(Pilot)	cleared visual approach (PEA/GIG) via [Wannamal/ Alkimos/Mullaloo Lane], [left/right/straight] initial/High Key/straight-in approach/ downwind (RWY)
	If not flying at standard speed:	(callsign).
	(Pilot)	(callsign) (hi/slow speed).
	(ATC)	(callsign) [approved/ maintain standard speed] .
	If PTA F active:	
	(ATC)	(callsign) PTA F active.
		(callsign).
Approaching Pearce/Gingin CIRA: Stud 4	Automatic change to tower frequency	
	(Pilot)	(callsign) switching (tower).
	Frequency change directed by ATC	
	(ATC)	(callsign), contact (Pearce Tower stud 3/Gingin Tower stud 13/Gingin CTAF stud 13).
	(Pilot)	Stud (3/13), (callsign).

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Entering CIRA: Stud 3/13	Joining via initial: (Pilot)	(Pearce/Gingin) TWR (callsign) [high/low/close] (L/R/straight) initial (RWY).
	(ATC)	(callsign), Pearce/Gingin TWR, [(number) tracking for High Key], [(number) through initial], [(number) on final], [(number) circuit], [(number) on base/final for full stop], [(number) departing] [circuit saturated*], [no traffic]. i.e. VIPR12, Pearce Tower, 1 through initial, 1 through 8 TAC, two circuit, 1 on final for full stop.
Entering CIRA: Stud 3/13	(Pilot) * if circuit saturated	(callsign) [for low pitch] [for full stop/departing for (position/area)*].
	Joining via High Key: (Pilot)	(Pearce/Gingin) TWR, (callsign), (distance) (quadrant) (level), tracking for High Key (RWY).
	(ATC) ** detailed traffic will be given if required and/or segregation put in place	(callsign), Pearce/Gingin TWR, [(number) tracking for High Key**], [(number) through initial], [(number) on final], [(number) circuit], [(number) on base/final for full stop], [circuit saturated*], [no traffic].
	(Pilot)	(callsign).

PHASE AND FREQUENCY	CONDITIONS	PHRASE
	Joining via non-standard position (e.g. Low Key, base/crosswind/downwind):	
	(Pilot)	(Pearce/Gingin) TWR, (callsign), (distance) (quadrant) (level), tracking for (position), (RWY).
	(ATC)	(callsign), Pearce/Gingin TWR, [(number) tracking for High Key], [(number) through initial], [(number) on final], [(number) circuit], [(number) on base/final for full stop], [circuit saturated*], [no traffic], report at (position).
	(Pilot)	(callsign).
Entering CIRA: Stud 3/13	RSAF dead-side descending from 2500FT overhead the airfield:	
	(Pilot)	(callsign), dead-side descending.
	(ATC)	(callsign) [cct traffic information]
	Joining via formation Ops recovery:	
	(*Pilot)*	Pearce TWR, (callsign) [high/low/close] (L/R/ straight) initial, (RWY), Ops recovery.
	(ATC)	(callsign) Pearce Tower [(number) circuit established not below 1500] [(number) for full stop].
	(Pilot)	(callsign).

PHASE AND FREQUENCY	CONDITIONS	PHRASE
CIRCUIT OPERATIONS		
Entering the circuit: Stud 3, Pearce Tower / Stud 13, Gingin Tower	Via pitch: (Pilot)	(callsign), on the pitch [long] [(glide/flapless/low-level/ slow approach)] [full-stop].
	Via High Key: *(Pilot)*	(callsign), High Key (RWY), [altitude**] [high speed**] [full stop]. ** *only required for non-standard PFLs*
+Number of aircraft reported as downwind traffic does not include those aircraft beyond abeam the landing threshold that have made the base turn call.	(ATC)	(callsign), (number) downwind+/ no downwind traffic.
	(Pilot)	(callsign) [orbiting/re-positioning High Key].
	Via displaced High Key/ Low Key: (Pilot)	(callsign), [displaced High Key (quadrant, range)/Low Key] (RWY), [fullstop].
	(ATC)	(callsign), (number) downwind+/ no downwind traffic.
	(Pilot)	(callsign).

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Entering the circuit: Stud 3, Pearce Tower / Stud 13, Gingin Tower	Via downwind/crosswind/ base:	
	(Pilot)	(callsign), (circuit leg) (RWY), [full stop].
	(ATC)	(callsign), (number) downwind/ no downwind traffic.
	(Pilot)	(callsign).
	Upwind	
	(Pilot)	(callsign) upwind, glide
	Crosswind	
	(Pilot)	(callsign), crosswind [glide/ flapless/low-level/slow approach] [long] [full-stop], [RWY L/R*] *only required for approach to non-standard RWY

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Established in the circuit: Stud 3, Pearce Tower/ Stud 13, Gingin Tower Notes: 1. The “number ahead” is not read back. 2. Once RWY number is correctly read back for ‘continue approach or ‘sequence number’ it is not required for subsequent transmissions.	Base turn *(Pilot)* Landing clearance available: (ATC) Runway not available: *(ATC)* If aircraft on base sequenced behind instrument traffic for the missed approach > 1NM from touchdown: (ATC) (Pilot)	(callsign), (high/low) base, 3 greens, [(touch and go / for the option)], [RWY (number L/R)**]. **only required for non-standard RWY. (callsign), [RWY] [L/R] cleared (touch-and-go/to land [(number) on]/for the option), [(number) ahead], check wheels. (callsign), [RWY] [number [L/R]], (sequence number), continue approach/at the minima go around, [(number) ahead], check wheels. (callsign), [RWY [number [L/R]], (sequence number) to instrument traffic at (distance) miles for the missed approach, [(number) ahead], check wheels. [RWY [number [L/R]], (sequence number), (continue/go-around at the minima/touch and go/land/ cleared the option), (callsign), (gear tone).
Pilot initiated overshoot:	(Pilot)	(callsign), going around [from (high/low) base].

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Low Approach:	Prior to 200FT AGL on final: *(Pilot)* *(ATC)* (Pilot) If low approach not available: (*ATC)* (Pilot)	(callsign), request low approach. (callsign), cleared low approach. Low approach, (callsign). (callsign), negative, at the minima go around. At the minima go around, (callsign).
Aborted take-off/touch-and-go:	(Pilot)	(callsign), aborting, [barrier, barrier, barrier].
Engine Failure After Take Off (EFATO):	(Pilot)	(callsign), [circuit position*], practice. * if other than upwind
Emergency turn-back:	(Pilot)	(callsign), (circuit position), PAN/MAYDAY, turn-back (RWY), gear to come/3 green

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Departure from circuit pattern to High Key	(Pilot)	(callsign) [circuit position] request [L/R turn for] High Key [level]* * if other than standard altitude
	High Key available	
	(ATC)	(callsign) [make L/R turn] cleared to High Key; or
	High Key not available	
	(ATC)	(callsign) [remain in the circuit/traffic (callsign, position, level tracking for High Key)].
	(Pilot)	(callsign), [traffic sighted]
	(ATC)	(callsign) [make L/R turn] cleared to High Key, number 2 to (traffic)
	(Pilot)	(callsign), number 2 High Key

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Practice 'No radio' Procedure:	Upwind	
	(Pilot)	(callsign) next circuit, request no radio procedure.
	(ATC)	(callsign).
	Turning crosswind/on the pitch	
	(Pilot)	(callsign) transmitting blind, crosswind/on the pitch, [full stop].
	(ATC)	Transmitting blind and on the NDB, (callsign) observed turning crosswind (RWY).
	Turning Base	
	(Pilot)	(callsign) transmitting blind, base three greens.
	(ATC)	Transmitting blind and on the NDB (callsign) observed turning base, cleared to land (RWY), check wheels.
Note: Should ATC issue any other clearance than 'cleared to land', the pilot must read back the clearance.	(Pilot)	(callsign). {Pilot then initiates landing gear check tone} Note: ATC transmits the green light signal.
Aircraft receiving IFR service: Stud 4, 5 or 6 as appropriate.	At Initial Approach Fix	
	(Pilot)	(callsign), (fix), (level), sector (number) entry.

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Instrument final: Stud 3, Pearce Tower/ Stud 13, Gingin Tower/ Gingin CTAF/ Stud 5, Pearce Centre (for Remote approaches)	TACAN/ILS final: *(Pilot)* (ATC) At 4 TACAN (Pilot) NDB final: (Pilot) (ATC) <

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Practice Flame-out TACAN: Stud 4, Pearce Approach/ Stud 5, Pearce Centre	(Pilot)	(callsign), [(position)] (level), for practice flameout TACAN on the (Pearce/ Remote) (radial), received (ATIS).
	(ATC)	(callsign) [identified], operate IFR, track via PFO TAC on the (Pearce/ Remote) (radial) not below (level), report cancelling IFR.
	When visual *(Pilot)*	(callsign) visual, [cancel IFR], (intentions).
	(ATC)	(callsign) [IFR cancelled, operate VFR] (clearance/ instructions).
OPERATIONS IN LFA/ AT UNLICENSED AIRFIELD		
Departing PTA for unlicensed airfield/LFA/ Avon Valley: Area silent frequency:	Prior to departing*:* (Pilot)	(callsign) departing (PTA/ sub-area) (level) for (intentions).
Stud 4 (ELFA/Avon, Bindoon Abandoned); Stud 5 (WLFA, NLFA/MFTA, Beermullah, Mooliabeenie)	(Pilot)	Pearce (Approach/Centre), (callsign), (PTA/sub-area) (level).
	(ATC)	(callsign), PEA (Approach/ Centre).
	(Pilot)	(callsign) for (LFA/airfield) received (ATIS), will call ops normal (time).
	(ATC)	(callsign), (number) in (LFA)/at (airfield), (QNH), (report entering).

PHASE AND FREQUENCY	CONDITIONS	PHRASE
Departing unlicenced airfield/LFA: Stud 4/5 as appropriate	(Pilot)	Pearce (agency) (callsign) [(level)] departing (location) for (intentions) received (ATIS*). * if nominating recovery
Departing Avon Valley: Stud 4, Pearce Departures	(Pilot)	(callsign), VALLEY (level), (intentions). …then as per visual approach R/T phraseology

STANDARD RTF FOR FORMATION OPERATIONS			
CONDITION	**LEADER**	**WINGMEN**	**ATC**
Note: Silent Area frequencies are not to be used for inter-plane chatter.			
Initial formation check-in on all ATC frequencies:	(callsign) 1. * formation leader to advise number of aircraft in formation after callsign in first call to PEA DEL.	(callsign) 2,3,4.	
Taxi clearance request:	* formation leader to advise number of aircraft in formation after callsign in first call to PEA GND, and POB on each aircraft..		
Airborne:	* formation leader to advise formation type if not a standard formation after callsign in first contact with PEA Approach, Centre (North) and Centre (West).		

STANDARD RTF FOR FORMATION OPERATIONS			
CONDITION	**LEADER**	**WINGMEN**	**ATC**
Landing clearance: Stud 3/13 Note: Wingmen are to respond sequentially as soon as possible after lead's gear tone. Note: ATC will acknowledge the formation when the last wingman has checked gear tone.	(callsign), base/ finals/3 TAC (number) greens [RWY] [number (#)] (land/ continue), (callsign) 1 (beeper).	(callsign)2/3/4 etc (number), three greens, (beeper).	(callsign), [number (#)] (RWY) [(number) ahead] (cleared to land/ continue), check wheels. (callsign).
SNAKE CLIMB/ TRAIL DEPARTURES			
CONDITION	**LEADER**	**WINGMEN**	**ATC**
Airways clearance: Stud 1, Pearce Delivery	Pearce Delivery, (callsign) (number) aircraft, IFR for (area), (departure), (snake climb), [request squawk for (callsigns)/(trail elements)], request clearance. cleared to (area), (departure/ routing instructions), (level), squawk (code 1) , (callsign) 1.	*All wingman/trail element calls given on formation common frequency, except read back of SSR code, or when formation instructed by ATC to report level passing or maintaining . [(SSR code -2), (callsign) (2/3)].	(callsign), Pearce Delivery, cleared to (area)(departure/ routing instructions), (level), (callsign) 1 squawk (code -1), [(callsign) (2/3) squawk (code -2)].
Take off clearance: Stud 3, Pearce Tower	[[L/R] (HDG) [amended altitude], take off, (callsign).	[[L/R] (HDG)], [amended altitude], (callsign) 2/3.	(callsign), [assigned heading][turn(L/R) (HDG)], [amended altitude] cleared for take off.

STANDARD RTF FOR FORMATION OPERATIONS			
CONDITION	**LEADER**	**WINGMEN**	**ATC**
Airborne report: Stud 4, Pearce Approach	Pearce Approach, (callsign), in-trail turning (L/R) (HDG), passing (level), climbing to (level).		(callsign) , Pearce Approach, (identified/verify level/not yet identified), (instructions).
Change of vector:	(callsign) In trail (L/R) (HDG) .	(L/R) (HDG) (callsign) 2/3.	(callsign), in trail turn (L/R) (HDG).
Change of assigned altitude:	(callsign) In trail climb / descend (altitude).	(altitude), (callsign) 2/3.	(callsign), in trail climb to (altitude).
Cancelling IFR:	(callsign), cancel IFR. (routing and level instructions), (callsign).		(callsign), IFR cancelled operate VFR, cleared (routing and level instructions); (callsign) 2/3 squawk standby.

PHRASE AND FREQUENCY	CONDITIONS	PHRASE
BRAKE CHUTE DEPLOYMENT		
Stud 3, Pearce Tower/ Stud 13, Gingin Tower:	On first contact with Tower and subsequent calls during visual approach via initial:	
	(Pilot)	(Pearce/Gingin) TWR, (callsign), (L/R/straight) initial (RWY), brake chute.
	(Pilot)	(callsign) on the pitch, full stop, brake chute.
	(Pilot)	(callsign) base three greens, brake chute.
	During visual straight-in approach:	
	(Pilot)	(Pearce/Gingin) TWR, (callsign) 5 miles straight-in approach (RWY), full stop, brake chute.
	(Pilot)	(callsign) 4 miles, 3 greens, brake chute.
	During instrument approach:	
	(Pilot)	(Pearce/Gingin) TWR, (callsign) [(8 miles (TACAN/ ILS) finals/turning inbound (NDB approach)], full stop, brake chute.
	(Pilot)	(callsign) 4 miles, (number) greens, brake chute.

PHRASE AND FREQUENCY	CONDITIONS	PHRASE
TAXI AFTER LANDING		
Stud 2, Pearce Ground/ Stud 12, Gingin Ground.	(Pilot)	(Pearce/Gingin) Ground, (callsign).
	If not required to cross active RWY on taxi back (ATC)	(Callsign), (Pearce/Gingin) Ground.
	If required to cross active RWY on taxi back (clearance to dispersal available)	or
	(ATC)	(callsign) Pearce Ground, [at (holding point identifier) cross-Runway (number)].
After landing on RWY 18R or 36L Stud 3, Pearce Tower	If required to cross active RWY on taxi back (clearance to dispersal not available)	or
	(ATC)	(callsign) Pearce Ground, taxi to holding point (identifier), hold short Runway (number).
	Prior to vacating RWY 18R/ 36L: *(Pilot)*	(callsign), request cross Runway (18L/36R).
Vacating Runway at night.	(Pilot)	(callsign), Runway vacated.

PHRASE AND FREQUENCY	CONDITIONS	PHRASE
ENGINE GROUND RUN OPERATIONS		
Pearce Tower Manned: Pearce Ground, Stud 2 (121.6 MHz)	(Maintenance)	Pearce Ground, (aircraft number) maintenance.
	(Pearce Ground)	(aircraft number) maintenance.
	(Maintenance)	(Aircraft number), engine run (position of the run), (approx duration of run), POB (number of persons on board the aircraft). Will advise when run complete.
On completion of engine ground run.	(Maintenance)	Pearce Ground, (aircraft number) maintenance (ground / engine) run completed.
	(Pearce Ground)	Roger
Pearce Tower unmanned: (CTAF procedures apply). Before commencing ground run transmit an “All Stations” call on VHF 118.3.	(Maintenance)	All stations Pearce CTAF, (aircraft type), (tail number), engine run, (position of the run), (approximate duration of the run), POB (number of persons on board the aircraft).
	On completion of the run. (Maintenance)	All stations Pearce CTAF, (aircraft type), (position), engine run completed.
Emergency procedures for FIRE or OVERHEAT indication.	(Maintenance)	PANPAN PANPAN PANPAN, (aircraft type) maintenance, (nature of emergency), (intentions).