

Flight Information Handbook Australia AD2 Supplement Tindal

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Approved: CO 452SQN

Change Summary

Version	Date	Change Description
2411	28 November 2024	 Document Formatting, Spelling, and Grammar changes throughout 11.1.5.3 Added exception to 9SQN local briefing 21.1.1.1 Re-written to more accurately reflect ATC availability 2.1.1.2 Replaced all support services except ARFF with requirement to contact ABOC 2.1.2.4 Clarified 452SQN processes NOTAMs for airspace activation 3.1.3.1 Rewritten for clarity 3.1.3.1 Rewritten for clarity 3.1.3.1 Rewritten for clarity 3.1.3.1 Rewritten for clarity that 452SQN is ROZ approval authority 3.1.1.2 Added no requirement to separate in D209 4.1.2 Added flying fox hazard at sunrise 4.1.2.1 & 4.1.2.2 Reserved pending cancellation of AD2 SUPP AMDT 4.1.2.6 Renamed taxiways with new aiffield layout 4.1.3.2 Removed AAS variations as they are in accordance with FIHA 4.1.4.2 Renamed taxiways with new aiffield layout 4.1.5 Reworded "exit side" to "eastern side" 5.2.1 Ground frequency for Fire Commander is 127.25 5.2.3 Reserved pending cancellation of AD2 SUPP AMDT 5.2.4 Reserved pending cancellation of AD2 SUPP AMDT 5.2.5 Reserved pending cancellation of AD2 SUPP AMDT 5.2.6 I Ground frequency for Fire Commander is 127.25 5.2.3 Reserved pending cancellation of AD2 SUPP AMDT 5.2.4 Reserved pending cancellation of AD2 SUPP AMDT 5.2.5 Reserved pending cancellation of AD2 SUPP AMDT 5.2.6 I Ground frequency for Fire Commander is 127.25 5.3 Reserved pending cancellation of AD2 SUPP AMDT 5.2.7 Jetter and the requirement for chutes to be dropped outside the rumway strip if possible 5.2.8.1.0 Added requirements before allowing runway use with a dropped chute 5.4 Section moved, no content change 6.1.1 renamed MSLP to I&P 6.2.2.2 Added read back requirements to ATC for low approaches 6.3.1.1 Confirmed that no MANPAD threat currently exists at Tindal, IINDIAs are for practice

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1 Introduction

1.1 AD2 Supplement Administration

1.1.1 Compliance

1.1.1.1 Availability

This Flight Information Handbook Australia (FIHA) AD2 Supplement (SUPP) Tindal (YPTN) is deemed Electronic Aeronautical Information (EAI) and is made available for Electronic Flight Book (EFB) use via the Defence Aeronautical Information Service Provider (AISP) AIS-AF.

1.1.1.2 Defence Aviation Safety Regulations (DASR)

This FIHA AD2 SUPP ensures compliance with DASR AO.GEN.05 - *Management* of Orders, Information and Publication (OIP) and DASR. SRoA - Standard Rules of the Air by providing usable, current, portable, and correctly authorised procedures that support flying operations within the specified area of operations.

1.1.1.3 Authority

I

The authority for this FIHA AD2 SUPP is AC SI (OPS) 01-20 Aeronautical Information Management. The approval authority is CO 452SQN. The Sponsor is the FLTCDR 452SQN Tindal Flight (TDL FLT). Endorsement authority is CO 75SQN. CHC helicopters TDL FLT and CO 9SQN are consulted authorities.

1.1.1.3.1 Airspace Authority

The airspace control authority is FLTCDR 452SQN TDL FLT.

1.1.1.4 Definitions

The terms used in this AD2 SUPP are defined in the *Defence Aviation Safety Regulations* - Glossary and Australian Defence Glossary (aviation context)¹. Where terms are specific to this AD2 SUPP only, they are identified within this document.

1.1.1.4.1 Levels

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

1.1.1.4.2 Fast Jets

Throughout this AD2 SUPP, the term "fast jet" will be taken to include the following ACFT types, including all variants unless specifically mentioned otherwise:

- a) F15
- b) F16
- c) F18
- d) F22
- e) F35
- f) Hawk

1. Where a conflict may occur between the DASR Glossary and the ADG, the DASR takes precedence

- g) Lear Jet
- h) PC-21

1.1.1.4.3 TAC C2

Throughout this AD2 SUPP, the term "TAC C2" will be used and refers to any authorised military command and control agency, other than ATC, providing ACFT control. This may include:

- a) GCI/CRU
- b) AEW&C
- c) Foreign Military Control
- d) JTAC/FAC(A)

1.1.1.5 Content

This AD2 SUPP applies to the conduct of flying operations and ATC services at YPTN aerodrome and the aerodrome's supporting airspace. Information contained in this instruction that may have civil application or may enhance overall usability is also provided in the YPTN section of En-Route Supplement Australia (ERSA).

1.1.1.5.1 Local Aircraft

Local ACFT at YPTN are to adhere to the rules and procedures contained within. Local ACFT are considered to be any ACFT from the following units:

- a) 75 Squadron
- b) CHC Helicopters Australia

1.1.1.5.2 Local Briefing

Other aircraft operators may seek approval to be considered local ACFT by contacting 452SQN TDL FLT (ATC) via 452sqntdlflt.plans@defence.gov.au to acknowledge that aircrew are adequately briefed on procedures contained in this document. If required, a local briefing will be made available by 452SQN TDL FLT prior to accepting approval.

1.1.1.5.3 Exception - 9SQN

9SQN procedures are in accordance with the <u>MQ-4C Triton Air Traffic</u> <u>Management Plan</u>

2 General Planning

2.1 Base Support

2.1.1 Support Services

2.1.1.1 ATC Hours

ATC hours are published via NOTAM. Notional hours are nine hours per day Monday to Thursday, seven hours Friday.

2.1.1.1.1 Variation to Hours

TDL ATC operates in order to support locally based and deployed flying squadrons, as well as military exercises and operations as required. Air traffic services (ATS) may be unavailable when there is no planned military flying operations at RAAF Base Tindal or within airspace managed by 452SQN TDL FLT.

2.1.1.2 Airfield Support Services

Support for TDL flying operations is as follows:

- a) **Airfield Rescue and Fire Fighting (ARFF)**: OIC Airbase Operations Flight 17SQN ensures an ARFF response level of CAT 6 is maintained during fast jet flying.
- b) An ARFF response level of CAT 4 will be maintained outside fast jet flying hours. CAT 6 or CAT 8 may be available outside fast jet flying hours with 72 hour prior notice, requests can be made to TDL ABOC on 08 8973 6888 or email tdl.aboc@defence.gov.au. CTAF Frequency 119.7 is monitored by the ARFF section.
- c) For aerodrome lighting (including PAPI) outside tower hours, contact Base Fire on 119.7.
- d) **Other Base Support Services**: Any requests for base support services outside routine working hours are to be sent directly TDL ABOC on 08 8973 6888.

2.1.2 ATC Additions

2.1.2.1 Flying Programs

Squadrons shall ensure a flying program is submitted to 452SQN TDL FLT for all operations within TDL training areas and for any arrivals or departures at TDL. Squadrons shall inform 452SQN TDL FLT of significant changes to the flying program by phone when less than 24 hours notice is given.

2.1.2.2 Priorities

Locally based Air Combat Group (ACG) ACFT will typically receive priority over other military ACFT.

2.1.2.3 ATC Frequencies

YPTN ATC VHF frequencies provide better coverage than UHF frequencies. ACFT are to taxi forward from shelters if communications difficulties are experienced. ATC frequencies are:

- a) Clearance Delivery: VHF 128.1 UHF 241.2
- b) Ground: VHF 135.85 UHF 264.3
- c) Tower: VHF 119.7 UHF 257.3
- d) Approach VHF 120.95 UHF 261.4
- e) Brisbane Centre: 122.6 On Ground (Outside TWR HR)
- f) Guard 243.0
- g) CTAF frequency 119.7 applies outside ATS hours. Aerodrome Frequency Response Unit (AFRU) is enabled on this frequency outside ATS hours.

2.1.2.4 Flight Planning

Requirements for activation of the TDL Restricted Areas (RAs) are identified at a weekly airspace meeting and NOTAMs are processed by 452SQN TDL FLT Plans Cell. Short notice or unusual requirements for airspace activation are to be notified to the FLTCDR 452SQN TDL FLT.

3 Airspace Operations

3.1 Tindal Restricted Areas

3.1.1 Military Operations

3.1.1.1 Relevant Documents

This AD2 SUPP provides specific local airspace information that supports the airspace information in En Route Supplement Australia (ERSA) Facilities, Designated Airspace Handbook (DAH) and relevant aeronautical information charts.

3.1.1.2 Tindal Control Zone and R249AB

452SQN TDL FLT provides a Class C control service within TDL CTR and R249AB.

3.1.1.3 Tindal Training Areas

TDL airspace comprises of RAs and Danger Areas (DAs) depicted in Annex A and listed in paragraph *3.1.1.3.3 Tindal Flying Training Areas*. Activation heights are advised by NOTAM. Some RAs have abbreviated titles for local use in radio transmissions. ACFT in receipt of a clearance to operate in their assigned training areas will operate on area 80 (force) QNH.

3.1.1.3.1 Separation

ATC do not apply separation between locally briefed military ACFT in TDL RAs (excluding R249AB). Those ACFT shall operate IAW MARSA procedures unless otherwise requested through 452SQN TDL FLT or as per the Airspace Control Plan (ACP) when published.

3.1.1.3.2 Clearance Limit

Once established, all ACFT are required to remain within their cleared TDL training area(s) unless:

- a) departing the cleared training area for operations within D209 and D210 (clearance to re-enter the cleared training area not required), or
- b) in receipt of an onwards clearance from ATC.

3.1.1.3.3 Tindal Flying Training Areas

TDL flying training areas consist of:

- a) R225ABCDEF: A095 FL600
- b) R226AB: A095 NOTAM
- c) R228B: FL120 FL180
- d) R238: A035 NOTAM
- e) R250: SFC A095, excluding D209

3.1.1.3.4 High Impact Areas

Areas for ground impact consist of:

- a) Delamere Weapons Range (DWR):
 - i) R211: SFC A095
 - ii) R212: SFC A095
 - iii) R232: SFC NOTAM
- b) Bradshaw Field Training Area (BFTA):
 - i) R268 Koolendong: SFC NOTAM
 - ii) R269 Angalarri North: SFC NOTAM
 - iii) R270 Angalarri South: SFC NOTAM
 - iv) D236AB Coolibah Corridor: SFC A030

3.1.1.3.5 OPS NORMAL

ACFT operations in TDL training areas will be subject to 'OPS NORMAL' time with APP, unless operating with TAC C2,.

3.1.1.4 Supersonic Flight

Supersonic flight is permitted in all TDL RA excluding R238, R249AB and the CTR.

3.1.2 Agricultural Operations

3.1.2.1 Restricted Operating Zones (ROZ)

Low level aerial agricultural operations occur in R250 and R232 on a regular basis. After obtaining airspace user approval, 452SQN TDL FLT will authorise and publish a ROZ to segregate these activities from military flying. If the airspace is required exclusively by military users, 452SQN TDL FLT should be given two business days' notice, in order to inform civil users that ROZs will not be permitted. Military ACFT shall remain clear of ROZs.

3.1.2.1.1 ROZ Notification

75SQN will be notified of approved ROZ with the following parameters; outside these parameters, 75SQN are required to endorse the ROZ prior to approval:

- a) Maximum level of 2000 FT AGL,
- b) Maximum radius of 16NM,
- c) Does not include any portion of R232 when active, and
- d) Does not include Transit Corridors from ROZ to OCTA.

Note: Promulgated ROZ dimensions are vertically separated and laterally segregated from operations outside the ROZ.

3.1.2.2 Visitors Briefing

Visiting military ACFT will be briefed on the ROZ notification parameters prior to use of TDL training areas.

3.2 Tindal Danger Areas

3.2.1 Airspace Use

3.2.1.1 D209 - Victoria Highway Corridor

The Victoria Highway Corridor is established for civil transits anytime. ACFT are not required to obtain a clearance from ATC when transiting within the corridor.

3.2.1.1.1 CTR Airways Clearance

An airways clearance is required to enter TDL CTR.

3.2.1.1.2 Dimensions

The corridor is defined in DAH along the Victoria Highway between Wayside and Research Centre waypoints not above A025. MIL ACFT are not separated from the corridor. The D209 corridor adopts the underlying airspace class of Class G, as such no separation is required within the corridor.

3.2.1.1.3 Frequency

While in the corridor, pilots must maintain a listening watch on 130.2 and broadcast intentions at the nominated reporting points.

3.2.1.1.4 Internal Segregation

ACFT tracking west are to remain north of the Victoria Highway and ACFT tracking east are to remain south of the Victoria Highway.

3.2.1.2 D210

SFC - BCTA 2130 - 1330Z EX PH. Traffic advice on ACFT operating in D210 will only be passed if specifically requested. Pilots should be aware that not all civil or MIL ACFT operating in D210 may appear on the TDL radar or have notified ATC of their presence and intentions.

3.3 Noise Abatement

3.3.1 Tindal Sensitive Noise Areas

3.3.1.1 Katherine River Gorge

Sensitive Area YB/S1 Katherine River Gorge approximately 13 NM NNE TDL. Refer to DAH Section 24 - Military Sensitive Areas for coordinated and vertical limits.

3.3.1.2 Katherine Township

Built up area surrounding TN296/008, including Katherine Hospital - noise sensitive area below A020.

3.3.1.3 Mathison Station

150915.2S 1314151.6E - noise sensitive area. ACFT should remain clear 5 NM radius SFC - A025, unless operationally required.

3.3.1.4 Fly Neighbourly Advice 9 & 10

3.3.1.4.1 For FN 9 Katherine Gorge - Nitmiluk National Park

Pilots operating in the 'wedge' (LATERAL LIMITS: 14 01 09S 132 21 45E, 14 21 14S 132 22 05E then along the minor arc of a circle of 10 NM radius centred on 14 31 16S 132 22 40E (YPTN/AD) to 14 25 06S 132 30 49E, 14 13 17S 132 47 29E, than along the minor arc of a circle of 30 NM radius centred on 14 31 16S 132 22 40E (YPTN/AD) to 14 01 09S 132 21 45E VERTICAL LIMITS: SCF-A025 HOURS OF ACTIVITY: HJ) including Katherine Gorge are to use CTAF 126.7 MHz.

3.3.1.4.2 For FN 10 Edith River Falls - Nitmiluk National Park

Pilots are to monitor/use OPS in the zone unless climbing into TDL CTR.

4 Aerodrome

4.1 Local Aerodrome Procedures

4.1.1 Wildlife Hazards

4.1.1.1 Notify Sightings

Animal and bird hazard exists. Notify all sightings to TDL ATC when active. At other times notify TDL Base Fire on 119.7. Refer to the TDL Aerodrome Manual for more detailed wildlife hazard information.

4.1.1.2 Flying-foxes

The TDL local area has an extremely dense flying-fox population that produces a significant hazard to ACFT operations. The flying-fox hazard will typically start just after sunset and fly across the airfield in a continuous stream and in very high numbers. The most hazardous times are the hour before sunrise and the hour after sunset when the flying-fox concentration peaks. This hazard is most noticeable during the wet season (November to April), but is possible year round. ACG units should not take-off or land at YPTN between sunset to sunset+1hr and sunrise-1hr to sunrise to avoid flying-fox strike.

4.1.2 Taxi Route Requirements

4.1.2.1 RWY 14

Reserved

4.1.2.2 RWY 32

Reserved

4.1.2.3 FADA Taxi Routes

Entry to the FADA is always via TWY KILO, with exit via TWY JULIET for RWY 32 or via TWY LIMA for RWY 14. ACFT taxiing on TWY SIERRA from long landing RWY 14 are to give way to ACFT taxiing on TWY KILO.

4.1.2.4 DSOLA Taxi Routes

Taxi for entry/exit to the DSOLA are:

- a) RWY 14:
 - i) entry via TWY XRAY1
 - ii) exit via TWY WHISKEY
- b) RWY 32:
 - i) entry via TWY WHISKEY
 - ii) exit via TWY XRAY1

The taxi direction on TWY QUEBEC is clockwise. The taxi direction on TWY ZULU is anti-clockwise. Arrows painted on the TWY centreline highlight these directions.

4.1.2.5 Taxi Short

Reserved

4.1.2.6	TWY and Apron Restrictions
	a) TWY KILO is not available to KC-30B, B737 Wedgetail, B737 BBJ and P-8
	b) Taxiways ALPHA6 and ALPHA4 are not available for RWY entrance unless instructed by ATC.
	c) Multi-engine propeller ACFT are not to conduct engine runs on paved apro- due to creation of FOD.
	 d) To preserve RWY grooving, ACFT of MTOW of 25 000 KG or greater requiring 180 degree turns on the RWY, must execute turns at the end of the RWY (beyond the grooved section) unless directed by ATC or NOTAM. ACFT are required to use maximum radius turns.
4.1.3	ACFT Arrestor Systems (AAS)
4.1.3.1	Locations
	Reserved
4.1.3.2	AAS operations
	Reserved
4.1.3.3	Position During Power Failure
	Reserved
4.1.3.3.1	Base Response
	Reserved
4.1.4	Operational Readiness Platforms (ORP)
4.1.4.1	Do Not Use
	Reserved
4.1.4.2	Displaced Threshold
	Reserved
4.1.4.2.1	Risk Management
	Reserved
4.1.4.3	Departures
	Reserved
4.1.4.4	Arrivals
	Reserved

4.1.5 Hot Lane Procedures

4.1.5.1 Response to Emergency Transmission

Hot lane procedures are as follows:

- a) A pilot who requires the use of the Hot Lane is to transmit on Tower frequency "C/S, HOT LANE HOT LANE HOT LANE".
- b) All other ACFT on the RWY are to immediately move to the eastern side of the RWY. ACFT beyond the departure end cable are to expedite taxi to clear the area.
 - c) All airborne ACFT are to initiate a go-around, maintain circuit altitude or proceed as directed by TWR.
 - d) TWR is to raise the departure end hook cable if not already up and acknowledge the emergency ACFT with "C/S, DEPARTURE END CABLE [GOING] UP". Emergency services will then be dispatched.

4.1.6 Significant Weather

4.1.6.1 Expect Instrument Approaches

ATC shall declare and advertise the expectation of instrument approaches whenever the MET conditions are either:

- a) Broken cloud at or below 1900 FT AGL
- b) Visibility is less than 5000 M

4.1.6.2 Significant Wind

Wind (including gusts) of 40 KT or greater observed at TDL will be advised to fast jet squadrons operating ejection capable platforms immediately.

4.1.7 Weapon Arming/De-arming

4.1.7.1 ACFT Safety Points (ASPs)

Reserved

4.1.7.2 Ordnance Loading/Unloading Areas (OLA)

- a) RAAF Base Tindal hosts operational units and squadrons that routinely arm ACFT with Explosive Ordnance (EO). TDL Base Armament Manager (BAM) is the POC for all EO matters.
- b) All activities involving ACFT loaded with EO must be in carried out IAW:
 - i) eDEOP 101 Department of Defence Explosive Regulations
 - ii) AAP 7039.001-1 Management of Explosive Ordnance Activities in the Royal Australian Air Force
 - iii) Applicable AAPs for the ACFT
 - iv) Applicable SIs for the Units/Squadrons operating the ACFT

4.1.7.3 Explosive Ordnance Preparation Areas (EOPAs)

All ACFT explosive ordnance must be prepared in a licensed EOPA. Details of licensed EOPAs at RAAF Base Tindal can be found on the Directorate of Logistics - EO, EO Licenses and Safeguarding Maps Air Force website. TDL BAM is to be contacted prior to any EO preparation activities.

4.1.7.4 Ordnance Loading Aprons (OLAs)

All ACFT EO activities including parking, loading, unloading, arming, and make safe actions must be conducted within a licensed OLA. Details of all OLAs at RAAF Base Tindal can be found on the EO Licenses and Safeguarding Maps Air Force.

4.1.7.5 Forward-Firing Ordnance Loading and Unloading Areas

Reserved

4.1.7.6 OLA Restrictions

Refer to the Defence Explosive Ordnance Service EO Licensing Authority website for details regarding individual OLA restrictions. The BAM is to be contacted prior to any ACFT EO operations.

4.1.8 Military Radar Hazard

4.1.8.1 Hazards of Electromagnetic Radiation to Ordnance (HERO)

A MIL radar operates at position 142934S 1322331E. Possible avionics interruptions or errors may occur within 125 M below 750 FT. ACFT transporting ordnance are to maintain the following minimum distances from the radar, unless ordnance manufacturers specify shorter distances.

- a) HERO susceptible within 250 M below 850 FT.
- b) HERO unsafe within 900 M below 850 FT.

Note: Prior approval required, from the TDL ABOC 24 HR prior to arrival, for ACFT planning to carry HERO susceptible or HERO unsafe ordnance to TDL.

4.1.9 Engine Test Runs

4.1.9.1 Notification

Notification of engine test runs occur as follows:

- a) During CTAF, conduct a radio check with TDL Base Fire on frequency 119.7.
 When ATC is active, conduct a radio check with TDL Ground on frequency 135.85.
- b) Report details of the engine run, including:
 - i) Callsign
 - ii) OLA number/position
 - iii) Expected duration
 - iv) POB
- c) The radio is to be left on and monitored for the duration of the engine run to enable two-way communication with SMC/Base Fire.
- d) Report on the appropriate frequency when the engine run is complete.

5 Abnormal Operations

5.1 Hazardous Conditions

5.1.1 ACFT Recall

5.1.1.1 Notification

When it appears that the weather conditions may become marginal or when hazardous weather or aerodrome conditions exist, ATC must notify the relevant squadron operations who may request ATC to recall squadron ACFT.

5.2 ACFT Emergency Procedures

5.2.1 AAS Operations

5.2.1.1 AAS Engagement

For arrestable ACFT operations, the approach end cable will be raised on request or when arrestable ACFT rejoin NORDO.

- a) In the event of a cable engagement, the RWY will be unavailable for approximately 30 minutes while the ACFT is disengaged and the cable retracted. APP will transmit on 243.0 MHz in addition to promulgated APP frequencies, advising of the cable engagement.
- b) On receiving advice of the closure of RWY 14/32, ACFT captains are to provide the following information to ATC (this information may be relayed through the ACFT's controlling agency or operations):
 - i) Alternative landing requirements at YPTN
 - ii) Latest divert time in UTC and preferred destination airfield
- c) Following a cable arrest, after cancellation of the emergency, the cable party will ascertain from the pilot the ACFT weight and speed at arrest and note the tail number of the ACFT by direct observation.

5.2.2 ARFF Fire Commander

5.2.2.1 Contact on VHF

Upon landing, emergency ACFT may contact the Fire Commander directly on the ground frequency 127.25.

5.2.3 Hot Brake Procedures

5.2.3.1 General Operations

Reserved

5.2.3.2 OLA Operations

Reserved

5.2.3.3 Armed Operations Reserved

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5.2.3.4 Hung HE Ordnance

Reserved

5.2.3.5 ARFF Dispatch

Reserved

5.2.4 Hung Stores Procedures

5.2.4.1 Aircraft Recovery

Reserved

5.2.4.2 Cable Arrests When Aircraft is Carrying Hung Stores

If an ACFT carrying hung stores conducts a cable arrest, only essential personnel are to enter within a 270 M (900 FT) radius until the ACFT has been made safe.

5.2.4.3 Weapons Safe Direction

The weapons safe directions for arming and de-arming are per ASP.

5.2.4.4 Traffic Management Considerations During Hung Stores Procedures

ATC are to consider the following to optimise concurrent operations:

- a) Change of duty RWY to accommodate recovery of Military ACFT. This enables normal operations for subsequent Military arrivals and departures.
- b) Civil ACFT are not permitted to transit 900 FT safety radius. Civil ACFT may depart via an intermediate departure opposite direction, or incur a delay when requesting full length.
- c) Arriving ACFT may be processed via Reciprocal RWY Operations, or otherwise incur a delay and be placed in a holding pattern.

Note: Military ACFT are permitted to transit the associated 900 FT safety radius for Hung Ordnance.

5.2.5 Emergency RWY Procedures

5.2.5.1 RWY 14/32 Not Available

Reserved

5.2.6 Unable To Land

5.2.6.1 Pre-meditated Ejection

The area designated as the premeditated ejection area is a large cleared farming area 6 NM south-east of TDL airfield on extended RWY centreline RWY 14. ACFT captains faced with a premeditated ejection are to:

- a) Position:
 - i) Visually,
 - ii) By TACAN (TN136007), or
 - iii) With radar assistance from APP,
- b) Advise ATC of preferred level and heading for the ejection, and
- c) Advise ATC when ejecting.

5.2.7 Emergency Lighting

5.2.7.1 Notification

Following failure of the permanent RWY lightning, ATC will advise the ABOC and Fire Section. When CTAF is active, Fire Section shall be notified by ACFT on frequency 119.7.

5.2.7.2 Layout of Emergency Lighting

Fire Section will lay out the emergency RWY lightning as follows:

- a) Green lights placed to the left of the approach threshold next to the existing green threshold lights
- b) White lights displaced to every third existing light on the left-hand side, 600 FT apart
- c) Red lights placed both sides of the departure end threshold adjacent to the existing red threshold lights
- d) White lights displaced to every sixth existing light on the right-hand side, 1200 FT apart
- e) Green lights placed to the right of the approach threshold next to the existing green threshold lights

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Directio	on of	lan	din	→ g												

Figure 4 - Emergency RWY Lighting

5.2.7.3 Temporary Taxiway Lighting

Temporary TWY lighting is available. Pilots shall be advised of the layout by NOTAM or Method of Work Plan.

5.2.7.4 Servicing and Maintenance

Fire Section is responsible for servicing and maintaining the portable airfield lights.

5.2.8 Brake Chutes

5.2.8.1 Dropped Chute Procedures

- ACFT intending to deploy brake chute shall advise ATC as soon as possible. Brake or Drogue chutes shall be dropped outside of the RWY strip, if permissible.
- b) Chute pick-up will be effected by a radio-equipped vehicle under the direction of SMC. SMC is to ensure that chutes are removed from the RWY as soon as practicable.
- c) When a chute is on the RWY, use of the RWY is limited to fast jet landings only, provided:
 - i) No chutes are within 3000 FT of the approach end threshold,
 - ii) All chutes are dropped in the cold lane, and
 - iii) Landing ACFT are advised of the location of the drogue chutes.

5.2.9 No Radio (NORDO) Procedure

5.2.9.1 NORDO Recovery

In addition to the standard NORDO re-join procedures outlined in ERSA, whilst operating within TDL airspace, ACFT shall comply with the following:

- a) All ACFT shall be not above A260 by 33 NM TDL.
- b) Single ACFT in VMC are to squawk 7600, remain in VMC and track for initial and pitch or 10 NM final/ARA/TACAN in accordance with the duty RWY nominated on the ATIS.
- c) **Single ACFT in IMC**, or unable to remain VMC, are to squawk 7600 and track to the initial approach fix and re-join via TACAN/ILS/ARA for the duty RWY nominated on the ATIS.
- d) **Formation in VMC**. The NORDO ACFT is to be led back for landing by a serviceable ACFT. The formation lead or shepherding ACFT is to notify the operating agency of the circumstances and join IAW 5.14 b).
- e) **Formation in IMC**. The NORDO ACFT is to be led back for landing by a serviceable ACFT as dictated by weather conditions and fuel available. The formation will track IAW 5.14 c) in a 2 NM in-trail, with the serviceable ACFT leading.

5.3 Chaff/Flare Operations

5.3.1 Restrictions

5.3.1.1 Conduct

Chaff/Flare operations are to be conducted in accordance with AC SI (OPS) 04-05 - Electronic Attack policy.

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5.4 ATC Radar Failure

5.4.1 Restrictions

5.4.1.1 Expect Delays

The use of the TDL radar is the primary means for separation by APP. In the event that the TDL radar is unavailable for any reason, APP may continue to process military and civilian departures and arrivals (including to and from RAs) using the following procedures. Due to the use of these and other approved procedural control techniques, delays can be expected by both military and civilian operators.

5.4.1.2 Traffic Management Plans

Two Traffic Management Plans (TMP), non-radar ATC services - VMC and nonradar ATC services - IMC, are available for use. TMP IMC will be initiated when the cloud is broken at or below 1900 FT AGL, and/or visibility is less than 5000 M.

See Annex B

5.4.1.3 Airspace Activation

Eastern Airspace will not be available during non-radar procedures. Additionally R249 will have a maximum usable level of FL250. If activated, additional temporary RAs may be removed, subject to TDL ATC negotiation with Air Services Australia.

5.4.1.4 Airspace Restrictions

Military ACFT may be given vertical or lateral restrictions in RAs to allow required weather diversions and priority (e.g. MEDEVAC) transits. TDL Approach Supervisor (ASPR) will endeavour to minimise all imposed restrictions on military ACFT.

5.4.1.5 Notification

Non-radar TMPs shall be indicated on the ATIS, by NOTAM (time permitting) and in the event of a radar fail during flying operations, APP shall broadcast on Guard (243.0 MHz) in addition to normal APP frequencies, advice to adopt non-radar procedures, and advise all SQN OPS.

6 Departures and Arrivals

6.1 Flight Rules

6.1.1 Automatic Change of Flight Rules

6.1.1.1 IFR to VFR

ACFT within TDL CTR/R249AB shall be operated in accordance with IFR except:

- a) When VFR operations are requested
- b) For all fast jet arrivals via visual approach, from 8TAC/DME (including initial and pitch arrival)
- c) For all arrivals in VMC tracking via India Arrival, from Top of India
- d) For all arrivals in IMC, excluding IMC Practice/Precautionary Flame Out (PFO), who have advised intention to conduct circuits, from the first touch and go or overshoot
- e) For all arrivals via PFO, IAW 6.3.3.3 Flight Rules
- f) When descending into D209 or D210 from active RA, 1000 FT above the base of the RA.

Note 1: ACFT departing RAs into D209 or D210 are responsible for collision avoidance with other traffic operating in the danger areas.

Note 2: ACFT must inform ATC if they are unable to be VFR at these points.

6.1.1.2 VFR to IFR

ACFT will remain VFR until recleared IFR. Transition to IFR is assumed upon reentering RA from D209 and D210.

6.2 Standard Arrival/Departure Procedures

6.2.1 Airborne Tracking

6.2.1.1 Departure/Arrival Gates

Eleven gates are established to facilitate arrival to and departure from the TDL training areas, based on the TDL TACAN.

- a) BIAK (BIA) TDL320030
- b) TOP GATE (TOP) TDL300030
- c) MOROTAI (MOR) TDL270030
- d) TADJI (TAD) TDL240030
- e) TARAKAN (TAR) TDL200030
- f) BOTTOM GATE (BOT) TDL190030
- g) NADZAB (NAD) TDL150030
- h) MILNE (MIL) TDL090030
- i) WEDGE 1 (W1) TDL285016
- j) WEDGE 2 (W2) TDL260012
- k) WEDGE 3 (W3) TDL200016

6.2.2 Standard Departures

6.2.2.1 Frequency Transfer to Approach

Unless otherwise directed by TWR, ACFT will transfer from the TWR frequency to the APP frequency as soon as practicable after take-off. Automatic transfer should be initiated no later than the lead ACFT reaching 2000 FT.

6.2.2.2 Departure Type

When a departure other than a visual departure is issued, a read back is required.

6.2.2.3 Nominated Heading

ACFT captains may nominate a departure heading or radial by use of the term "RADAR" or "RADIAL" during clearance request. Issue of a requested heading or radial does not release the pilot from the requirement to comply with the issued departure type.

6.2.2.4 Departure Heading

Regardless of departure type ATC will not specify a departure heading to ACFT unless vectoring for separation. Once airborne, prior to 5 TACAN/DME, pilots shall make a single turn onto a steady heading that will enable either one of the following to occur:

- a) Track them direct to the cleared departure gate
- b) Intercept the cleared outbound radial by 10 TACAN/DME
- c) Establish them on their cleared outbound radar heading

6.2.2.5 Mean Line of Advance (MLA)

ACFT requesting to track to a position MLA are able to manoeuvre up to 5 NM either side of nominal forward cleared track, on departure once outside of 10 NM and on arrival up to 10 NM from the airfield.

6.2.3 Standard Arrivals

6.2.3.1 Initial Points (IPs)

IPs are at 2000 FT on the extended centreline of TWY ALPHA at 6.5 NM for RWY 14, and 5 NM for RWY 32, or 3 NM for close initial on either RWY. ACFT are to maintain 2000 FT and track parallel to the RWY through the IP until commencing the pitch onto downwind to ensure deconfliction from circuit traffic. ACFT will be cleared via left, straight, or right initial. ACFT shall report at left/straight/right initial 30 second flying time prior to the IP.

6.2.3.2 Low Approach Procedures

ATC may issue a clearance for a 'LOW APPROACH' which authorises fast jet ACFT to delay commencement of a go-around not later than 50 FT AGL above the landing RWY threshold. RRSS minima will be applied before the clearance is issued.

6.2.4 Tindal Stereo Procedures

6.2.4.1 Standard Use

The TDL Stereo recovery is normally utilised during periods of intense military fast jet operations but may be used by ACFT at any time for recovery or departure. The TDL Stereo plate is located in Facilities and Procedures (FAP) Air Combat Group (ACG). For exercises where the use of the TDL Stereo is mandatory the requirement will be published in the appropriate exercise ACP.

6.2.4.2 Radio Failure During Stereo Recovery

Loss of radio procedures for ACFT recovering via a Stereo are as follows:

- a) Continue to fly the Stereo
- b) Squawk 7600
- c) If IMC:
 - i) From the 15 TACAN arc track to FAF
 - ii) Make straight-in TACAN approach
 - iii) Watch for a green light on final
- d) If VMC:
 - i) Recover through initial via a no radio rejoin
 - ii) Watch for a green light on final

6.3 Non-standard Arrival/Departure Procedures

6.3.1 INDIA Procedures

6.3.1.1 Purpose

INDIA procedures are utilised as training for pre-emptive defence against Man Portable Air Defence Systems when departing and recovering to an airbase.

6.3.1.2 INDIA Departures

Due to noise abatement procedures, INDIA departures are not available when departing from RWY 32. ACFT performing INDIA departures are to comply with the following profile:

- a) ACFT depart in 20 second stream,
- b) Lead ACFT extend to 3 NM upwind before commencing a turn onto outbound/assigned heading, and
- c) All ACFT remain at low altitude (<500 FT AGL) inside of 5 NM and perform unrestricted climb to > 10 000 FT once established outside 5 NM.

6.3.1.3 INDIA Arrivals

The approach is a tactical visual approach through initial via a 10 NM final. Top of descent is referred to as "Top of INDIA". The following procedures are to be used at TDL for INDIA arrivals:

- a) Maintain A160 or above by day, or A110 and above by night, until 10 NM,
- b) Traffic will be passed at top of descent, and
- c) ACFT will descend to 250 FT AGL by day, 1500 FT AGL by night, or assigned level through initial.

6.3.1.4 Radiotelephony

INDIA Procedure use the following radiotelephony:

- a) Departures: When authorising an India departure, ATC will use the phrase "VISUAL DEPARTURE INDIA"
- b) Arrivals: When authorising an India approach, after the ACFT reports 'visual', ATC will use the phrase "CLEARED VISUAL APPROACH INDIA". ACFT may be instructed to 'TRACK VIA INDIA ARRIVAL NOT BELOW (e.g. MSA), REPORT WHEN VISUAL'. For 'offset' India arrivals, the ACFT captain must specify "OFFSET" and nominate and inbound radial on first contact with APP (e.g. "MPIE, OFFEST INDIA, 270").

6.3.2 Emissions Control (EMCON)/No Communication (NOCOM) Procedures

6.3.2.1 Notification procedures

To facilitate EMCON/NOCOM departures at RAAF Base Tindal the following procedures apply:

- a) Formation leader submits request for EMCON/NOCOM using form in *Annex D*, short notice requests by phoning the ASPR on 08 8973 6705
- b) The ASPR will issue the airways clearance including any additional requirements or restrictions.
- c) The ASPR will then email the completed form to 452SQN TDL FLT Briefing.
 - d) Formation lead will check with SQN OPS prior to walking to ensure that there have been no changes to the requested clearance and that the formation has clearance for EMCON/NOCOM procedures

6.3.2.2 Light Signals for EMCON/NOCOM Departures

The following light signals and their meanings are used during EMCON/NOCOM departures:

- a) Steady Green Used to indicate that all ACFT in the formation are 'CLEARED FOR TAKE-OFF' and depart as planned. The green light will be displayed approximately two minutes before roll time to allow for line-up and pre take-off checks to be completed
- b) Steady Red Used to indicate to the formation to hold at their present position and to expect no more than a two-minute delay before departure

6.3.2.3 RWY Separation by Day at Taxi Time

Reserved.

6.3.2.4 RWY Separation by Night at Taxi Time

To reduce the likelihood of a breakdown in RWY separation standards at night, the following procedure is to be followed at taxi time nominated on EMCON/NOCOM sheet:

- a) Military ACFT with a wingspan of 36 M (118 FT) or greater and all civil ACFT are to be held on the ground or in the air by ATC
- b) If a MEDEVAC or emergency ACFT is arriving or departing, ATC is to break NOCOM and advise EMCON/NOCOM ACFT to hold short of the RWY. The formation lead has the option to continue EMCON/NOCOM after the conflict no longer exists

6.3.2.5 Departures by Day

If the formation is ready for immediate departure, the formation lead is to hold at the holding point for the departure RWY and await a light signal from the tower. When 'ready' from the Alert Apron the lead ACFT is to roll forward to the RWY holding point and await a light signal from the tower.

6.3.2.6 Departures by Night

If the formation is ready for immediate departure, the formation lead will hold at the holding point for the departure RWY and show landing light on then await a light signal from the tower. When 'ready' from the Alert Apron the lead ACFT will roll forward to the RWY holding point and show landing light on then await a light signal from the tower.

6.3.2.7 Unserviceablility During EMCON/NOCOM Departures

To indicate an intention to remain on the ground due to unserviceability, the pilot of an ACFT can fold the wings up, raise the canopy, or at night turn on the anticollision lights. After the rest of the formation has departed, the pilot is to break NOCOM with TWR, advise intentions and await further instructions.

6.3.2.8 Frequency Changes During EMCON/NOCOM Procedures

Frequency changes are to occur at the following points:

- a) SMC to TWR occurs approaching the holding point
- b) TWR to APP occurs passing 2000 FT
- c) APP to Operating frequency (TAC C2 not active) occurs entering the operating airspace
- d) APP to TAC C2 10 NM prior to the airspace boundary

6.3.3 PFO/PFL

6.3.3.1 Priority

ATC will assume any request for a PFO or PFL is for training. ACFT conducting a precautionary procedure must declare an emergency to receive priority.

6.3.3.2 PFO/PFL Profiles

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

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

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6.3.3.2.1 High Key (Spiral) Procedure

- a) The high key procedure is conducted overhead the airfield, remaining within the lateral boundaries of the CIRA. Any level may be requested for commencement
- b) Exact trajectory varies by ACFT type and conditions, but high key is always overhead the RWY or on the dead (eastern) side of the circuit and low key is always on the active (western) side of the circuit. Diagram of the typical F35 profile as depicted in Figure 6

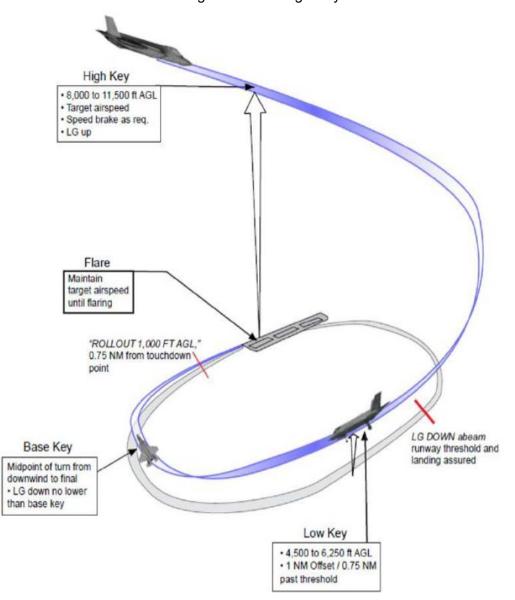


Figure 6 - F35 High Key Profile

- c) If departing from the circuit to high key, the initial turn must be towards the active (western) side of the circuit unless ATC approves otherwise,
- d) Once ACFT reports at High key, ATC will issue:
 - i) Holding instructions
 - ii) "CLEARED VISUAL APPROACH"

- iii) "TRACK VIA THE PFO NOT BELOW (level)"
- iv) Relevant traffic information and, if required, sequencing instructions. *Note: Do not depart high key until authorised by ATC.*
- e) Report "HIGH BASE, THREE GREENS, (*intentions*)" at the base position.

6.3.3.2.2 Straight-in and Random Entry Procedure

- a) Straight-in PFOs are conducted as a straight-in visual approach commencing at 10 NM final, unless a shortened distance is approved by ATC.
- b) Random entry PFOs are conducted from a pilot-nominated position direct to the closest base key for the duty RWY. The closest base key may be on the dead side of the circuit.
- c) Commencement altitude is nominated by the pilot.
- d) ATC will issue:
 - i) Tracking to the commencement point
 - ii) Holding instructions
 - iii) "CLEARED VISUAL APPROACH"
 - iv) "TRACK VIA THE PFO NOT BELOW (level)"
- e) ATC will issue relevant traffic information and, if required, sequencing instructions.

6.3.3.2.3 IMC PFO Procedure

- a) Straight-in or random entry PFOs may be flown in IMC by requesting an 'IMC PFO' approach. This procedure is flown as per the equivalent VMC procedure, except that it is not a requirement to be visual to commence the approach and ATC will use the phrase "CLEARED IMC PFO" in lieu of "CLEARED VISUAL APPROACH",
- b) ACFT will not descend below 2300 FT unless visual. VFR will apply automatically if the ACFT descends below 2300 FT,
- c) If not visual at 2300 FT:
 - i) Stop descent at 2300 FT
 - ii) Track direct to TDL, then upwind via the extended RWY centreline
 - iii) Climb to and maintain 3000 FT by 10 TAC
 - iv) Proceed as instructed by ATC

6.3.3.3 Flight Rules

- a) Except for the IMC PFO procedure, all ACFT conducting a PFO/PFL procedure become VFR once:
 - i) They have requested a PFO/PFL, including requesting tracking to high key, and
 - ii) They have reported visual
- b) Except for the IMC PFO procedure, ATC will not clear ACFT to commence a PFO/PFL procedure until they have reported visual
- For the IMC PFO, ACFT may be cleared to commence the approach in IMC (and therefore remain IFR) but may subsequently become VFR IAW
 6.3.3.2.3 IMC PFO Procedure b).

6.3.3.4 Altimetry

PFO/PFL are flown on TDL QNH.

6.3.3.5 Transition to CIRA

For all profiles of PFO, ACFT shall operate not below 3000 FT until established within 5 TAC TN. Once established, ACFT shall remain within 5 TAC TN and are considered to be operating in the CIRA.

6.3.3.6 Separation Responsibility

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

6.3.4 F35 Chase

6.3.4.1 Procedure

- a) ACFT intending to conduct chase procedures in the CIRA will advise ATC "WITH CHASE" on first contact or otherwise as soon as possible.
- b) If the chase procedure is not available, ATC will advise the chase formation with a reason and the expected delay until chase procedures will be available. The instructor pilot should advise ATC of their intentions.
- c) Chase ACFT shall adopt and remain in close formation.
- d) When on base, the instructor will fly on the outside of the trainee, displacing slightly onto the dead side but will remain within RWS. The chase ACFT is not required to report the status of the undercarriage and nor will it be challenged by ATC. Chase ACFT are expected to execute a go-around and enter the circuit once the trainee lands on a full-stop.
- e) Aircrew will advise "CHASE COMPLETE" when appropriate. If aircrew wish to resume chase procedures the are to make a new request.

Note: All ACFT and personnel on the dead side must be outside the gable markers, during the chase procedure.

7 Training Areas

7.1 Flight Planning

7.1.1 Tindal Restricted and Danger Areas

7.1.1.1 Operations Inside Tindal Airspace

TDL based ACFT are to submit flight plans. Flight plans must include timings, levels, routes, and any NOCOM requirements.

7.1.1.2 Operations Outside Tindal Airspace

Operations outside TDL DAs and RAs will be conducted in accordance with AIP. ACFT planning NOCOM procedures are to nominate the cancellation agency and frequency on the flight plan. Airways clearances will be issued prior to NOCOM commencement and will be subject to a clearance void time.

7.1.1.3 Danger Area 210

Operations in D210 below and adjacent to active RAs do not require specific ATC clearance.

7.2 Airspace clearances

7.2.1 Transiting ACFT

7.2.1.1 Separation With Operations

Clearance for RA operations implies a clearance to operate within the vertical and lateral limits of the RA as promulgated by current NOTAM and it is the responsibility of the user to ensure the applicable airspace buffers of lower and upper operating limits are adhered to. It must be noted that most operations within the RAs are conducted on altitudes using Area QNH with overfliers operating on standard pressure. Requirements or restrictions will be advised directly to the pilot by ATC or passed via TAC C2 when applicable.

Table 2 - Vertical Separation of Military Users Operating on QNH **ABOVE** Transiting ACFT on standard pressure setting

	996 - 1013 hPa	1014 - 1029 hPa	1030 - 1046 hPa
Military supersonic operations	LUL 3000 FT above transit ACFT	LUL 3500 FT above transit ACFT	LUL 4000 FT above transit ACFT
Other operations	LUL 2000 FT above transit ACFT	LUL 2500 FT above transit ACFT	LUL 3000 FT above transit ACFT

Table 3 - Vertical Separation of Military Users Operating on QNH **BELOW** Transiting ACFT on standard pressure setting

	980 - 996 hPa	997 - 1013 hPa	1014 - 1046 hPa
Military supersonic operations	HUL 4000 FT below transit ACFT	HUL 3500 FT below transit ACFT	HUL 3000 FT below transit ACFT
Other operations	HUL 3000 FT below transit ACFT	HUL 2500 FT below transit ACFT	HUL 2000 FT below transit ACFT

7.2.2 Alternate Airspace Radiotelephony

7.2.2.1 Shortened Airspace Abbreviations

The following RAs may be identified in clearances using the following code words:

- a) R225 "ROMEO 5" (or 5 A/B/C/D/E/F, A to F etc as required)
- b) R226 "ROMEO 6" (or 6 A/B as required)
- c) R238 "TINDAL WEDGE"
- d) R250 "LOFA"

7.2.2.1.1 Exceptions

The designators for R211, R212, R228A/B, R232, R268, R269, and R270 shall be used in full to avoid any possible confusion, although R268, R269, and R270 may be referred to as "Bradshaw" when in simultaneous use.

7.2.2.2 Coded Clearances

The following standard airspace blocks may be issued using the following coded clearance:

- a) "Cleared BFM" is a clearance to operate R225D, R238 and R250, all levels.
- b) "Cleared ACM" is a clearance to operate R225BD, R238, and R250, all levels.
- c) "Cleared Falconer" is a clearance to operate R225DF, R232, R238, and R250 all levels
- d) "Cleared Western" is a clearance to operate R225A-F and R250, all levels.
- e) "Cleared Eastern" is a clearance to operate R226A and R226B, all levels.
- f) "Cleared Overhead" is a clearance to operate R249B A050-A260 within 10 TAC TDL and A060 - A260 between 10-30 TAC TDL.

7.2.3 Standard Airspace Procedures

7.2.3.1 Airspace Upper Level

By default, TDL training areas will be activated to an upper level of FL600. If a level restriction is required, it shall be stated in conjunction with the coded clearance.

7.2.3.2 Delamere/Bradshaw RSO

If the phrase 'Delamere [and/or] Bradshaw is with the RSO' is used by ATC, ACFT are to contact the relevant RSO prior to entering the range airspace.

7.2.3.3 Termination of Radar Identification

ATC radar identification will automatically terminate upon one of the following:

- a) Transfer to any non-ATC control agency.
- b) Issued "Frequency changed approved". ATC will continue to provide SARWATCH and a traffic information service.

7.2.3.4 Recovery From Training Areas

All ACFT are required to obtain a clearance from TAC C2/ATC prior to leaving RAs. Recovery from the training areas is to be conducted as follows:

- a) Upon mission completion, ACFT are to squawk their assigned SSR code and advise the airspace surveillance agency that operations are complete,
- b) TAC C2 will clear the ACFT to switch to ATC,
- c) After identification by ATC, ACFT are to report:
 - i) present altitude
 - ii) if visual
 - iii) approach intentions
 - iv) formation type (if not in standard formation)
 - v) ATIS code received
- d) If the pilot does not advise receipt of current ATIS, ATC will only advise:
 - i) duty RWY
 - ii) QNH
 - iii) other information considered significant to fighter operations such as 400 M range activity, EIA etc.

7.2.3.5 TAC C2 Operations

Hot handoffs between APP - TAC C2 - APP are NLT 10 NM from the airspace boundary and NLT 40 NM TDL for recovering ACFT. Hot handoffs will be used whenever TAC C2 is operating, except during emergency abnormal operations or when otherwise agreed by the Domestic Controller and ASPR. The receiving agency may vary ACFT tracking and level as required; any restrictions shall be negotiated prior to frequency transfer.

7.2.3.6 Area QNH

During CRU operations, APP will not provide outbound ACFT with area QNH. TAC C2 shall pass the area or force QNH as applicable. TDL ACD is to notify TAC C2 of the area QNH when releasing airspace

7.2.3.7 Airspace Boundaries

When TDL ATC releases airspace to CRU, CRU operations must remain within the external boundary of the released airspace by a minimum of 2.5 NM, which will be achieved in line with MATS 2.4.3.4.3. Coordinate by the quickest means possible if this separation cannot be maintained.

7.2.3.8 ATC Intra-Unit Procedures

Definitions applicable to this section include:

- a) **Control and Reporting Unit (CRU)**: All ground control agencies and can be either ADF or an allied unit e.g. Merlin, Chamber, Triad and Taipan. Specific operational positions are utilised where appropriate, e.g. Merlin Operations Director (OD)
- b) Airborne Early Warning and Control (AEW&C): Mission crew conducting operations from an airborne AEW&C platform under an airborne callsign e.g. 'Outback'. Specific operational positions are utilised where appropriate, e.g. 'Outback Senior Surveillance and Control Officer (SSCO)'
- c) **Homer:** A control position used during exercises dedicated to point to point coordination between CRU and ATC for recovery

7.2.3.9 Airspace Buffers

A vertical separation buffer is applied between ACFT under control of CRU/ AEW&C and those proceeding IAW an ATC clearance as follows:

- a) CRU-ATC buffer 2000 FT
- b) CRU-ATC buffer (supersonic) 3000 FT

7.2.3.9.1 Additional Buffers

To account for the difference between standard pressure and local QNH above the transition layer, buffers may be applied above or below the flight level as appropriate.

7.3 Circuit Area (CIRA)

7.3.1 CIRA Procedures

7.3.1.1 Circuit Direction

Unless directed otherwise by ATC, circuits are to be conducted on the western side of RWY 14/32.

7.3.1.2 Traffic Information to Pilots

In VMC, traffic information where applicable shall be provided to pilots no later than:

- a) at the initial point
- b) at high key
- c) 5 NM
- d) commencing final of an instrument approach
- e) commencement of descent on INDIA arrivals
- f) after completing the VGAP (36) and prior to pitching into the circuit

7.3.1.3 CIRA Dimensions

The TDL circuit area is an area of 5 NM radius, centred on the ARP, up to and including 2000 FT by day, 2500 FT by night.

7.3.2 Circuit Procedures

7.3.2.1 Military Stream Landing Pattern

Circuit procedures at TDL are in accordance with the stream landing circuit pattern as detailed in MATS. Operating altitudes and circuit direction shall be in accordance with ERSA unless otherwise specified by ATC.

7.3.2.2 Automatic Clearance

ACFT that subsequently operate in the circuit area shall be deemed to be in receipt of a clearance to operate in the circuit area not above 2000 FT by day and not above 2500 FT by night.

7.3.2.3 Visual Go-Around Procedures (VGAP)

The VGAP Procedure is to enable ACFT to go around visually from an instrument procedure where required due to higher priority traffic on final or the RWY, preventing the approach to be continued or a landing clearance to be issued. ATC will use the phrase "GO-AROUND (*left/right*) [AT *position*] CHECK WHEELS" to instruct the ACFT to go-around. ACFT instructed to go-around from a straight-in approach shall adopt the VGAP as follows:

- a) Go-around left/right onto the dead side of RWY 14/32, so as to be displaced 1000 FT from the RWY centreline, or at least overhead TWY ALPHA, as soon as practicable
- By day, climb to, descend to, or maintain 1000 FT until all traffic has been sighted or by night, climb to, descend to, or maintain the 'D' performance category circling MDA of 1250 FT (with accurate QNH) until all traffic has been sighted
- c) Join the circuit pattern or adopt ATC departure instructions, as appropriate

7.3.3 400 Metre Range

7.3.3.1 Activation

If TDL ATC is active the range OIC must notify TDL ATC on frequency, 127.25 MHz, prior to becoming active. They are then to advise ABOC of activation. If twoway radio communication cannot be established, the range OIC must notify ATC on 08 8973 6740 of the range activation and provide a contact number. If the TWR is deactivated, the range must monitor TDL CTAF frequency, 119.7 MHz and make the appropriate CTAF broadcasts.

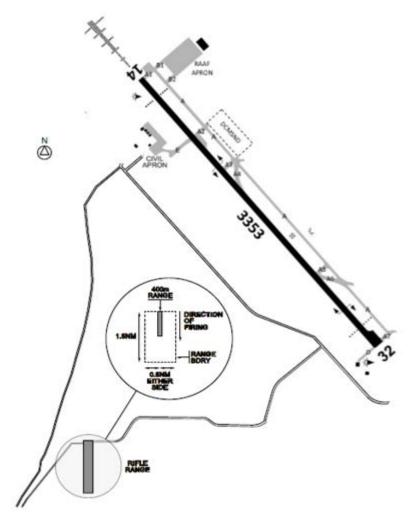
7.3.3.2 Clear of Range

When active, ATC will ensure that notice of activation of the 400 M range is included on the ATIS and all relevant ACFT are advised. ACFT captains receiving direct advice from ATC or advising receipt of the current ATIS shall be responsible for ensuring they remain clear of the range IAW ERSA.

7.3.3.3 Range Safety Distances

Aircraft shall remain clear operating above 2000 FT or lateral avoidance can be achieved by remaining visually outside the pictorially represented area (see diagram) when at or below 2000 FT.

Diagram of 400 M range safety distances



7.3.3.4 Check Fires

If there is a need to authorise ACFT operations below 2000 FT in the area of the range (e.g. Airfield Attack/INDIA Arrival/Use of RWY 09/27), the TSPR is to contact the 400 M range and order 'CHECK FIRE'. The TSPR is to ensure that operations at the range are permitted to resume as soon as possible.

7.3.3.5 Location of Range

400 M range details are:

- a) Orientation: 180/360
- b) Bearing & Range: 205/1.3
- c) GPS Position: 14 32.3S, 132 21.6E

8 CHC Helicopters

8.1 CHC Operations

8.1.1 Airborne Operations

8.1.1.1 SAR Pads

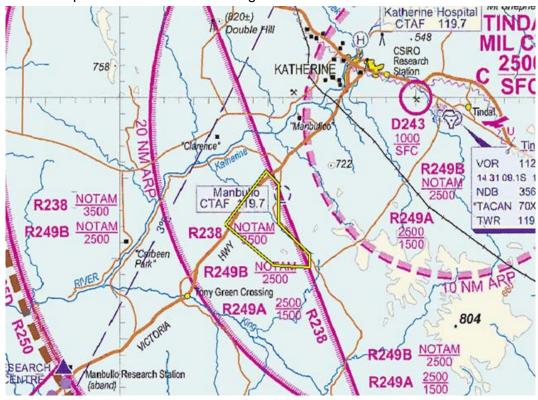
CHC regularly conduct training at various locations around the TDL CTR. Flying and winch training will be contained within 1 NM of the pads, located as follows (approximate bearing and distance from ARP):

- a) PAD1: 186/002
- b) PAD2: 190/001
- c) PAD3: 230/013
- d) PAD4: 233/004
- e) PAD5: 237/013
- f) PAD6: 244/015
- g) PAD7: 288/017
- h) PAD8: 292/014

8.1.1.2 SAR Training Area

An area for flying and winch operations. Defined by lateral limits 143430S 1321000E - 143519S 1321050E – 143747S 1321048E – 143940S 1321256E -144028S 1321255E – 144022S 1321028E – 143749S 1320714E.

Pictoral representation of SAR training area



8.1.1.2.1 Clearance Levels

ACFT operating at a pad or within the SAR Training Area can expect clearance not above 1500 FT by day and not above 2500 FT at night.

8.1.1.3 Operations in Choppers East

No airborne or circuit reports are required from the pilot in command following the initial airborne clearance, except when requested by ATC.

8.1.1.3.1 Choppers East Boundaries

A helicopter area for conducting winch CCTS not above 1000 FT, contained within the following boundaries:

- a) East of TWY ALPHA
- b) West of the Old Stuart Highway
- c) Not beyond THR RWY 14 or THR RWY 32

8.1.2 Ground Procedures

8.1.2.1 CHC Taxi

CHC ACFT are not required to receive taxi instructions when manoeuvring between the SAR hangar and SAR Pads. CHC ACFT shall contact SMC to:

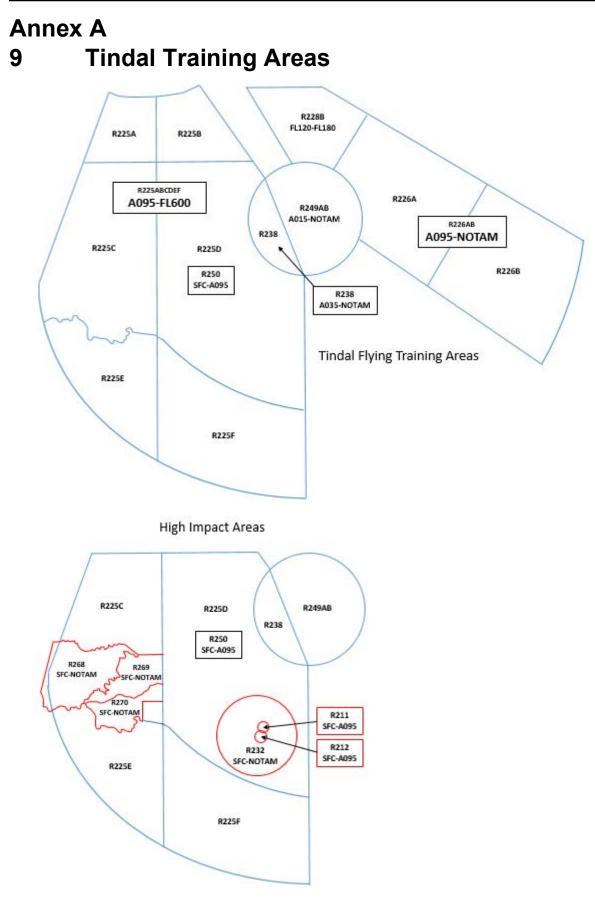
- a) Report POB
- b) Report receipt of ATIS
- c) Request CIRA clearance if required.

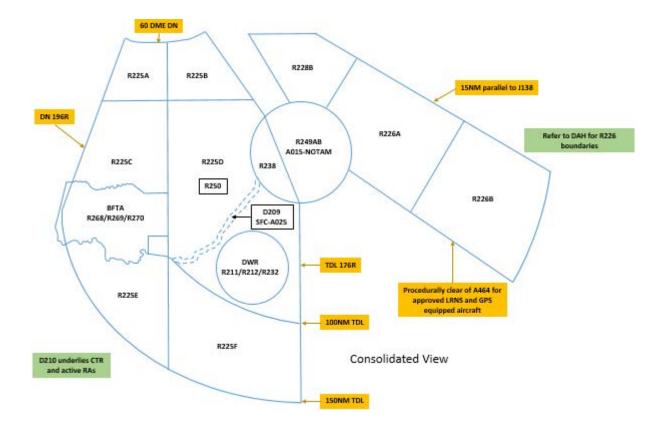
8.1.2.2 Contacting Tower on Departure

Once SMC has recorded all applicable information and is satisfied that the CHC ACFT will not be delayed prior to departure, SMC shall instruct the ACFT contact tower when ready.

8.1.2.3 Contacting Tower on Arrival

When CHC ACFT arrive to the SAR hangar or SAR HLS, they will not receive taxi instructions and shall only contact SMC to report engine shut down.





Annex B

10 Provision of ATC Services Following Loss of Radar Services

10.1 Radar Failure

10.1.1 Immediate Response

10.1.1.1 Expect Delays

The procedures detailed in this amendment will be enforced during a radar outage to ensure that MIL ACFT operations remain supported, while continuing to provide a limited ATS to other ACFT. Aircrew must be aware that the provision of a procedural ATC service at TDL cannot support the same flying rate of effort as per normal ATC, with delays and reduction of sorties likely.

10.1.1.2 Roles and Responsibilities

FLTCDR 452SQN TDL FLT is responsible for:

- a) Mission Risk Profiles (MRPs)
- b) NOTAMs
- c) Reviewing procedural traffic management plans
- d) Procedural ATC training material, including simulations

10.1.1.2.1 TAC C2 Responsibility

TAC C2, when supporting YPTN based flying, is to:

- a) Provide ATC with situation awareness as required
- b) Prioritise and sequence ACFT on Return to base (RTB)

10.1.1.3 Immediate Actions on Radar Failure

Following an unanticipated loss of loss of radar services, ATC will continue to apply separation using procedural and/or emergency separations standards. ATC will initially hold all departures and all airborne ACFT will be informed of the situation on Guard frequency. Once a recovery plan is determined with flying squadron duty supervisors, ACFT will either be recovered to YPTN, established in the training areas, or transferred to another controlling agency.

10.1.1.4 Risk Assessment

 As soon as practicable, an immediate risk assessment will be conducted by a 452SQN TDL FLT executive prior to the continued provision of ATS. If the 452SQN TDL FLT executive determines that ATS can continue, TDL ATC will then commence procedural ATC as outlined in the appropriate Traffic Management Plan (TMP). b) In some instances procedural ATC will not commence immediately. If the 452SQN TDL FLT executive determines that ATS cannot continue, TDL airspace will deactivate until such time as ATC is in a position to provide ATS. It is expected that ATC will resume procedural ATC operations 12-24 hours following the radar failure to prepare new controlling configurations and rosters and allow immediate refresher training to occur. Duty supervisors will be immediately notified with regards to the plan for the provision of procedural ATC.

10.1.2 Planning

10.1.2.1 Airspace

Extant TDL airspace will be used for procedural ATC. The airspace will be activated only to support 75SQN FORGEN or essential military movements. R226 will not be activated. Activation of the TDL wedge will be at the discretion of TDL ATC.

10.1.2.2 Traffic Supported

Priority within CTR and R249A/B will be given to 75SQN FORGEN or essential military movements, and 452SQN TDL FLT will liaise with 75SQN regarding their sortie requirements and flying rates of effort. ATS will also be provided to civil aircraft requiring access to Katherine Airport.

10.1.2.3 Separation

Within TDL CTR and R249 all aircraft will be separated IAW Class C services. Class G services will be provided in any TDL airspace outside the CTR and R249.

10.1.2.4 Fuel

FLTCDR 452SQN TDL FLT shall advise aircraft via NOTAM of the requirement to carry 30 minutes additional holding fuel. FLTCDR 452SQN TDL FLT shall consult with 75SQN about the requirements to carry additional fuel reserves.

10.1.2.5 NOTAM

FLTCDR 452SQN TDL FLT is to release a NOTAM to advise pilots of any restrictions, requirements or conditions as a result of procedural control. NOTAM wording as follows:

'ATS surveillance service only available to aircraft transmitting ADS-B due radar failure. ACFT transmitting ADS-B may be identified and provided position information. Delays can be expected on arrival and departure. Civil ACFT must carry an additional 30 minutes holding fuel. In IMC civil ACFT can expect VOR, RNP, or ILS approach.'

10.1.2.6 Exercises

With the increased risk of radar outage, all YPTN based air exercises should incorporate a no-radar plan as part of their exercises planning. In the event of a radar outage, 452SQN TDL FLT would consult with the required exercise authority to ensure the highest priority exercise aims are achieved with the reduced flying rates ATC is able to support.

10.1.2.7 Roll times

If able, all departures should advise ATC of their roll time (or if they will be ready on reaching the holding point) as soon as possible.

10.1.2.8 ATC Procedures

The following ATC procedures are in place to assist expeditious flow of traffic.

- a) Access to and from R225 and any adjoining RAs should be via gates MOROTAI and TARAKAN. Alternate gates may be issued on request.
- Where able, military aircraft should request or accept PRS to reduce delays. ACFT operating in RAs are to provide 10 minutes notice to ATC/TAC C2 for RTB.
- c) ACFT are not to automatically switch frequency.

10.1.2.9 Reporting

All arrivals shall advise ATC of their estimate for the field on first contact.

10.2 Visual Meteorological Conditions (VMC)

10.2.1 Traffic Management Plan

10.2.1.1 VFR

For the purpose of minimising delays, local sorties should plan or request VFR and remain in VMC when operating within the CTR and R249. MLA tracking is not available.

10.2.1.2 Operations Outside Tindal CTR and RAs

ACFT arriving from, or departing to, civil Class E airspace may operate IFR when operating on a Flight Plan. Fast jet ACFT operating IFR will automatically become VFR on entering the CTR or R249, once they have reported visual. ATC shall initiate this change of category by the phraseology "IFR CANCELLED OPERATE VFR"

10.2.1.3 Traffic Restrictions

The following restrictions apply:

 For aircraft operating in the CTR and/or R249 on APP frequency, traffic will be limited to a maximum of three callsigns not under ADS-B surveillance. A maximum of one of these aircraft will be IFR,

- b) A maximum of one ACFT is permitted to conduct operations, other than departing or arriving, in the CIRA, and
- c) No operations in the overhead.

10.2.1.4 Low level Operations

Low level helicopter and fixed wing operations may be permitted in addition to the above maximum call sign requirements provided they are cleared not above 1000 FT and are:

- a) 1 NM North of the Katherine River
- b) 1 NM East of the Stuart Highway
- c) 1 NM West of the railway line

10.2.1.5 Departure Procedures

For all military departures, the ACFT must establish on the radial for MOROTAI or TARAKAN by 5 TAC. All IFR departures will be via a VISUAL DEPARTURE.

10.2.1.6 Arrival Procedures

All ACFT will arrive via a visual approach via left/right base or straight-in as appropriate. Fast jet arrivals via MOROTAI or TARAKAN are to remain on the inbound radial until 5 TAC and then track as cleared. If traffic permits, visual approach via initial and pitch may be available, but shall not be expected.

10.2.1.7 Vertical Restriction

When the low level civil operations have been approved in the areas described above, all arrivals to RWY 14 are to remain at or above 2000 FT until established in the CIRA, southwest of the Stuart Highway. ACFT will be passed this instruction by ATC.

10.2.1.8 Low level arrival and departure

In some instances, it may be more expeditious for aircraft to depart or recover low level to and from the areas. In these cases, aircraft will be instructed to report established low level prior to leaving their are of operations, or only be cleared to their outbound gate low level.

10.3 Instrument Meteorological Conditions (IMC)

10.3.1 Traffic Management Plan

10.3.1.1 Traffic Restrictions

The following restrictions apply:

- For aircraft operating in the CTR and/or R249 on APP frequency, traffic will be limited to a maximum of three callsigns not under ADS-B surveillance. A maximum of one of these aircraft will be IFR.
- b) No instrument approach training

- c) No circuit operations are permitted
- d) No operations in the overhead
- e) SVFR operations will only be permitted when traffic levels and complexity permit and solely at the discretion of ATC

10.3.1.2 Operations Outside Tindal CTR and RAs

ACFT arriving from, or departing to, civil airspace IFR must submit a Flight Plan.

10.3.1.3 Departure Procedures

All departures to the training areas will be via the DARWIN FOUR or MILIV FOUR departures, or via tracking instructions. If tracking instructions are used, aircraft can expect an instruction to set course within both 5NM, and via the shortest turn. Military ACFT tracking to MOROTAI or TARAKAN can expect to be cleared to do so following a report of passing 3000 FT. Departures on a flight plan will be cleared via most appropriate procedural SID or tracking instructions.

10.3.1.4 Fast Jet Arrival Procedures

All fast jet arrivals via MOROTAI and TARAKAN are to remain on the inbound radial until intercepting the 15 TAC arc and track for the TACAN IAF for the duty RWY. Controllers will apply vertical separation off the IAF, and may use the IAF as a vertical holding stack until another form of separation can be achieved.

10.3.1.5 Civil Holding Procedures

The VOR holding pattern overhead TDL will normally be utilised for holding ACFT as ACFT are able to remain on their inbound radial until the hold. A vertical separation standard must be applied between the TN VOR holding pattern and the TACAN IAF on the 15 TAC arc. Civil ACFT can then expect the VOR approach for the duty RWY.

10.3.1.6 Weather Below TACAN Minima

In the event of weather reducing below TACAN minima, ACFT will recover via appropriate straight in instrument approach. If traffic permits, ACFT may be cleared direct to the IAF for the ILS-Y, ILS-Z, or other approach aid if applicable. If it is not possible to separate ACFT tracking direct to the IAF with other traffic in the CTR, then ACFT will be required to recover via the applicable approach aid commencing overhead TDL, or hold in the training area. Any ACFT commencing an approach via the overhead may be given clearance to track to and hold at the TN VOR.

Annex C 11 Standard Radiotelephony

Condition or Provisions	Phrases			
Locally briefed ACFT clearances				
When the clearance issued is exactly as requested, a readback of the ACFT callsign confirms that the clearance has been acknowledged by the pilot. If any element of the clearance varies from that requested, the clearance shall be prefixed with "AMENDED" and a readback of any amended element is required. If the different clearance is not prefixed with "AMENDED", clarification should be sought.				
Initial clearance to training areas				
Pilots requiring other than the standard departure shall include this in the initial airways request.	(PILOT): TINDAL DELIVERY, (callsign), (gate/radial/radar/[MLA if required]), (level), [<i>type of departure if other than</i> <i>standard</i>]			
	(ATC): "(callsign), TINDAL DELIVERY, CLEARED (gate/radial/radar/[MLA if required]) DIRECT, (level), [<i>departure type</i> <i>if required</i>]"			
	Pilot: "[<i>departure type if required</i>], (callsign)"			
Taxi instructions				
POB only advised if more than one in any element. - Any Roll Time, Stream, or Instrument Trail departure requirement should be advised on taxi. - ACFT shall taxi via the standard taxi routes.	(PILOT): "TINDAL GROUND, (callsign), TAXI (number of ACFT), [POB [if applicable], RECEIVED (ATIS)" (ATC): "(callsign), TINDAL GROUND, TAXI TO HOLDING POINT RUNWAY (number) [alternate route if not standard]" (PILOT): "HOLDING POINT RUNWAY (number), [alternate route if not standard], (callsign)"			
Operating clearance				
Cleared transit altitude/restriction no longer cleared area of operations unless an operat	••			

and read back.

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Phrases			
(ATC): "(callsign), CLEARED ROMEO (operating areas [<i>i.e. ROMEO 5 AND THE LOFA</i>]), AREA QNH, FREQUENCY CHANGE APPROVED" (PILOT): "(operating areas), AREA QNH, (callsign), PUSH (stud/frequency)"			
(ATC): "(callsign), CLEARED ROMEO (operating areas), AREA QNH, DELAMERE and/or BRADSHAW ACTIVE, FREQUENCY CHANGE APPROVED"; (PILOT): "(operating areas), AREA QNH, DELAMERE / BRADSHAW ACTIVE, (callsign), PUSH (stud/frequency)" Note: BFTA may be advised as individual areas if less than the whole is active. NOTAM heights will be passed to pilots on request.			
(ATC): "(callsign), CONTACT (callsign/ frequency)" (PILOT): "(callsign), PUSH (stud/ frequency)"			
 (PILOT): "TINDAL APPROACH, (callsign)" (ATC): "(callsign), TINDAL APPROACH, IDENTIFIED" (PILOT): "(callsign), (in-flights conditions, type of recovery), RECEIVED (ATIS)" (ATC): "(callsign), (clearance/instructions)" (PILOT): "(clearance/instructions), (callsign)" 			
(PILOT): "(callsign)" (ATC): "(callsign), TINDAL GROUND"			
(PILOT): "TINDAL GROUND. (callsign), REQUEST TAXI TO (position) VIA (route)" (ATC): "(callsign), TINDAL GROUND, (instructions)" (PILOT): "(readback if route is different to requested), (callsign)"			

Condition or Provisions	Phrases
Initial Clearance	(PILOT): "TINDAL APPROACH, (callsign, in-flight conditions, intentions), REQUEST INDIA ARRIVAL"
	(ATC): "(callsign), Cleared to Tindal via TOP of INDIA (level)"
When clearance for the approach is available	(PILOT): READBACK
	(ATC): "(callsign), CLEARED VISUAL APPROACH INDIA [traffic], TOP OF INDIA CONTACT TOWER"
	(PILOT): READBACK
When pilot has not yet reported visual	(ATC): "(callsign) TRACK VIA INDIA ARRIVAL NOT BELOW (level)"
	(PILOT): READBACK
Practice and precautionary flameout and	forced landing procedures (PFO/PFL)
Via High Key (Spiral) procedure from outside CIRA	(PILOT): "TINDAL APPROACH, (callsign, in-flight conditions, intentions), REQUEST PFO VIA HIGH KEY"
	(ATC): "(callsign) CLEARED TO TINDAL VIA HIGH KEY (level)"
	(PILOT): READBACK. <i>Pilot to report when visual.</i>
	On receipt of visual report
	(ATC): "(callsign), CLEARED VISUAL APPROAH, AT 10TAC CONTACT TOWER"
	(PILOT): READBACK
	(ATC): "(callsign) TRACK VIA PFO NOT BELOW (level)"
	(PILOT): READBACK
	(PILOT): "(Callsign) [APPROACHING] HIGH KEY"

Condition or Provisions	Phrases
Straight and random entry procedure	(PILOT): "TINDAL APPROACH (callsign, in-flight conditions, intentions), REQUEST PFO VIA (position) (level)"
	(ATC): "(callsign), CLEARED TO TINDAL VIA (position) (level)"
	(PILOT): READBACK. <i>Pilot to report when visual.</i>
	On receipt of visual report
	(ATC): "(callsign), CLEARED VISUAL APPRAOCH, AT 10 TAC CONTACT TOWER"
	(PILOT): READBACK
	or
	(ATC): "(callsign) TRACK VIA PFO NOT BELOW (level)";
	(PILOT): READBACK
IMC PFO procedure	(PILOT): "TINDAL APPROACH, (callsign, in-flight conditions, intentions), REQUEST IMC PFO procedure via straight/random entry procedure (level)"
	(ATC): "(callsign), CLEARED IMC PFO VIA (position), AT 10TAC CONTACT TOWER"
	(PILOT): READBACK
	or
	(ATC): "(callsign) TRACK FOR (position) VIA IMC PFO NOT BELOW (level)"
	(PILOT): READBACK

Annex D 12 452 Squadron Tindal Flight EMCON/NOCOM Details

The completed form, or email containing text copied from this form, shall be emailed to '452SQN TDL FLT Briefing' on DSN.

Requesting Unit: _____ DTG mission departure: _____ Mission POC (name): _____

NOCOM/EMCON (circle application) POC PH: _____

CALLSIGN	No of ACFT	MODE 3	START	ΤΑΧΙ	TAKE-OFF

MARSA with (insert additional callsigns/SQN):

CLEARANCE REQUEST

Gate/Bearing & Distance/Point: _____ Level: ____

Departure Type: VISUAL / TANGO / INDIA / TDL3 (circle one)

DEPARTURE INSTRUCTIONS

ATC require ACFT to be at a specified distance from the field at a specified time in order to guarantee a separation standard with other airspace users. Below are the standard instructions used to achieve this, tick as required:

•	On departure track via shortest distance of turn	
•	Requirement 2 thousand 5 hundred by 5TAC, 3 min from ATD	
•	Requirement 4 thousand by 10TAC, 4 min from ATD	
•	Requirement to be established in the RA ATD + 5 min (TN Wedge ACT)	
•	Requirement to be established in the RA ATD + 10 min (TN Wedge not ACT)	

Any changes must be specifically requested.

Place changes or additional requirements below (such as stream take off, in-trail procedures, formation type, different departure instructions required, etc – filled out by mission lead).

Clearance issued by (ASPR):

Time: