



Northern Territory Manual of Air Traffic Services Supplementary Procedures

Procedure

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Version 28

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Airservices Australia

ATC Stand 1 Headquarters 44 Wing

ATTENTION

Temporary amendments may apply

Change summary

Northern Territory Manual of Air Traffic Services Supplementary Procedures Version 28: Effective 17 September 2023		
Location of change	ocation of change Change description CR	
1.1	Update of abbreviations and acronyms	28618
2.3.6.1	Corrected typographical error. No change to content.	
2.3.11.2	Amended to stipulate coordination between DN ATC and BN SM1.	
2.3.11.3	Amended to stipulate coordination between DN ATC and BN SM1.	
2.3.26.3	Amended to stipulate coordination between DN ATC and BN SM1.	
2.3.26.4	Amended to stipulate coordination between DN ATC and BN SM1.	
3.4.1	Change from BN SM to BN SM1 for clarification.	
3.5.1.2	Clarification of coordination	
3.6.1	Specification of BN SM1	
4.9	Replace Flightwatch with Information	

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View change summaries for the previous six months

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1 Definitions

1.1 Abbreviations and acronyms

Abbreviation	Definition
ANM	Arnhem Sector
APP	Approach Radar Control
ASPR	Approach Supervisor
ARA	Arafura Sector
ATM Director	Air Traffic Management Director
BFTA	Bradshaw Field Training Area
BN	Brisbane
BN ATC	Brisbane Air Traffic Control
BN SM1	Brisbane Shift Manager Aisle 1
Cease Fire	Weapon Firing is stopped and weapons unloaded
Check Fire	Weapons Firing is stopped
CNG	Canning Sector
COG	Cobourg Sector
COP	Coordination Point
CRU	Control and Reporting Unit
DAR and DN	Darwin
DLB	Darwin Logistic Battalion
DN APP	Darwin Approach Radar Control
DN ATC	Darwin Air Traffic Control
FLTCDR	Flight Commander
FXP	Fleet Exercise Program
KIY	Kimberley Sector
KNLG	Knuckeys Lagoon (radar)
KTN	Katherine Sector
MAAA	Military AAR and AEW&C Areas
ML	Melbourne
NAVCOMMSTA DN	Naval Communications Station (RAN Darwin)
OIC	Officer in Charge
PLNR	Planner
RBTA	Robertson Barracks Training Area

Abbreviation	Definition
RCO	Range Control Officer
RSO	Range Safety Officer
SS	System Supervisor
STO	Senior Training Officer
STR	Sturt Sector
TASMIS	Training Area Safety and Management Information System
TDL and TN	Tindal
TN APP	Tindal Approach Radar Control
TN ATC	Tindal Air Traffic Control
Tops	ATC Group responsible for ATS in airspace abutting Darwin and Tindal airspace
TRT	Territory Sector
TSPR	Tower Supervisor

Note: See also <u>Manual of Air Traffic Services (MATS) (NOS-SAF-2000)</u> Part 1 Definitions

2 Operational context

2.1 Airspace administration

2.1.1 Purpose

This document:

- a) describes airspace management procedures (including operating procedures and services to be provided to participating and non-participating aircraft);
- b) nominates the airspace arbiter; and
- c) describes the role of the airspace administrator.

2.1.2 References

The primary reference for airspace and air route information is the <u>Designated Airspace Handbook (DAH) (ATS-MAN-0039)</u>.

2.1.3 Prohibited, Restricted and Danger area (PRD) administration

All Defence administered airspace and PRD area change proposals are centrally managed through the Joint Airspace Control Cell (JACC).

The Control Authority, as per the Designated Airspace Handbook (e.g. FLTCDR 452SQN DAR FLT), is responsible for coordinating any changes to airspace for which they are responsible with the JACC.

Direct requests to establish temporary Defence PRD areas to the JACC via email adf.airspace@defence.gov.au.

Direct requests for temporary civil airspace to the OAR.

2.1.4 Primary user

The 'primary user' is the airspace administrator who will establish a priority for the use of the airspace.

The primary user must only provide access to other users if the administrator's commitments allow. This may mean the total exclusion of other airspace users.

Note:

- 1) Due to the restrictive nature of this function, the role of primary user is seldom applied by airspace administrators.
- 2) As an airspace administrator, Airservices normally performs the role of 'airspace coordinator'.

2.1.5 Airspace coordinator

As airspace coordinator, the airspace administrator will:

- a) designate airspace for its own use;
- coordinate access to other airspace users in a manner which minimises overall inconvenience and, as far as practical, will evenly spread the inconvenience among all users;
- c) make every effort to accommodate activities, and adjust procedures and facilities to achieve this; and
- d) consider the effect of airspace decisions on general and military aviation activities for which airspace is not specifically designated and provide for such activities within the airspace as far as practical. Alternatively, minimise airspace activation to reduce its effect on other airspace users.

2.1.6 Arbiter

The arbiter provides services and the daily management of the airspace and operates in accordance with the agreed procedures promulgated in MATS Supplementary Procedures (MATS Supp).

The various airspace administrators must reach agreement on the management of the designated airspace and operations within it.

The Arbiter does not need to be a direct employee of the airspace administrator.

2.2 Area of responsibility

The area of responsibility for airspace and airspace management covered by these procedures is:

23 00 00S 107 00 00E, 12 00 00S 107 00 00E, 12 00 00S 123 20 00E, 09 20 00S 126 50 00E, 07 00 00S 135 00 00E, 08 49 58S 138 00 00E, 26 00 00S 138 00 00E, 26 00 00S 129 00 00E, 23 00 00S 129 00 00E, 23 00 00S 107 00 00E.

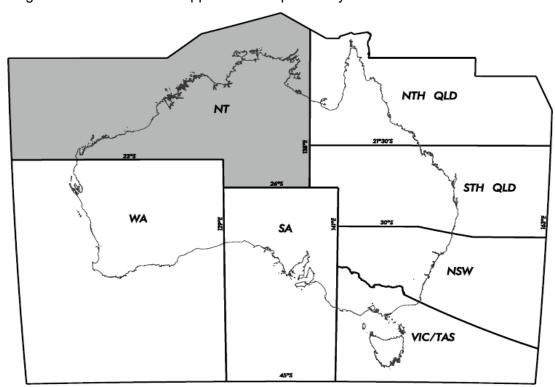


Diagram of the NT MATS Supp area of responsibility:

Figure 2.1 Area of responsibility

2.3 Airspace management and release responsibilities

2.3.1 NOTAM publication

2.3.1.1 Management cell hours of operation

When a NOTAM is required, contact via email:

- a) Darwin: dar.airspacecell@defence.gov.au; and
- b) Tindal: tdl.airspacecell@defence.gov.au.

If unable to contact via email, call 452SQN DAR/TDL Airspace Management cells between:

- a) 0730 to 1600 CST Monday to Thursday; and
- b) 0730 to 1400 CST Friday on the numbers provided in <u>5 Contact numbers</u>.

2.3.1.2 NOTAM requests

The requesting authority must submit NOTAM requests as per clause <u>2.3.1.1</u> <u>Management cell hours of operation</u> no later than one business day prior to the requested activation time unless otherwise stated in this document.

2.3.1.3 Tindal Restricted Areas - upper level

Excluding R249, activate adjoining TN Restricted Areas with a common upper level.

2.3.2 R203A/B Kangaroo Flats - firing

Item	Details
Controlling authority	Army RCO Kangaroo Flat (primary user)
NOTAM responsibility	452SQN DAR Airspace Management Cell
Activation	R203A+B: is owned by DN APP until released to the Army. R203B: Provide sufficient notice to activate airspace through the contractor who must advise 452SQN DAR.
	Include firing times in UTC and the upper limit (including appropriate assessed firing activity buffer). The contractor must send the NOTAM request to 452SQN DAR.
Communicate	Between DN APP and RCO by phone. Do not commence firing until contact is made between RCO and DN APP.
At least 15 min prior to commencement of firing	RCO must notify DN APP that 'firing will commence at [time] local'. Note: DN APP will then release R203A/B to the RCO.
When firing has ceased	The RCO must release R203A/B to DN APP
If the range is or may be fouled	Any agency may arrange an immediate check fire through the relevant agency
When emergency transit is required	DN APP must arrange an immediate check fire through the relevant agency
On confirmation of the check fire	DN APP resumes control of the airspace and may allow aircraft through it

2.3.3 R211 Delamere - joint defence facility

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (primary user)
Activation	NOTAM

2.3.4 R212 Delamere - joint defence facility

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (primary user)
Activation	NOTAM

2.3.5 R215 Pine Gap - joint defence facility

Item	Details
Controlling authority	Australian Chief of Security (RAAF primary user)
Activation	H24. Entry is not available
If infringed	 Advise one of the following (in preferred order): 1) Australian Chief of Security; 2) the Deputy Chief of Facility; or 3) Australian Federal Police Protective Services.
	Note: Alice Springs Tower will normally do this when open.

2.3.6 R224 A/B Mount Bundey - air weapons firing

Item	Details
Controlling authority	Army RCO Mt Bundey (primary user).
NOTAM responsibility	Army RCO (submission, cancellation or any amendments required).
Activation	Army RCO must send the NOTAM request to the NOF as soon as practicable. Where practicable, NOTAM promulgation required eight hours prior to activation time.
Communicate	Between BN ATC and RCO by phone. RCO must establish contact with BN ATC prior to airspace activation.
If the range is or may be fouled	Any agency may arrange an immediate check fire through the RCO.
When emergency transit is required	BN ATC must arrange an immediate check fire through the RCO.
On confirmation of the check fire	BN ATC must resume control of the airspace prior to allowing aircraft to transit.

2.3.6.1 Airspace releases

When R224A/B is NOTAMed and	Then
The airspace (or portion of) is released by Army RCO Mt Bundey to BN ATC and is required for further operations within the same NOTAM period.	BN ATC will inform DN ATC of the airspace release.
Airspace has been released to BN ATC and is required back for further military operations.	Provide at least 30 minutes notice whenever possible. BN ATC must return the airspace to the Mt Bundey RCO and coordinate the details of aircraft transiting the airspace. BN ATC will inform DN ATC that the airspace has been resumed by the RCO.
The airspace is no longer required for military operations.	Army RCO Mt Bundey must review or cancel the NOTAM.

2.3.7 R225 A/B/C/D/E/F Tindal - military flying

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (primary user)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM R228A/B and R225 A/B/C/D/E/F may be activated concurrently provided that BN, TN and/or DN have adequate surveillance coverage to ensure surveillance separation from R228A/B and R225 B/D.
	If R225 A or B activated, TN PLNR shall notify DN PLNR and DN shall request from BN applicable portions of the DARWIN WEDGE if Darwin to R225 transits are to occur.

2.3.8 R226 A/B Tindal - military flying

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	Airspace available with less than eight hours notice provided the Controlling authority contacts BN ATC for availability. To facilitate the short notice activation, lateral or vertical restrictions may apply which will be facilitated by voice release of the required volume of airspace to BN ATC.
	Tindal will submit a NOTAM with immediate effect after coordinating with BN ATC.

2.3.9 R228 A Mount Bundey - military flying

Item	Details
Controlling authority	452SQN DAR FLT FLTCDR
NOTAM responsibility	452SQN DAR Airspace Management Cell
Activation	NOTAM R228A and R225 A/B/C/D/E/F may be activated concurrently provided that BN, TN and/or DN ATC have adequate surveillance coverage to ensure surveillance separation from R228A/B and R225 B/D. R228A shall not be activated concurrently with R251.

2.3.10 R228 B Mount Bundey - military flying

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM R228B and R225 A/B/C/D/E/F may be activated concurrently provided that BN, TN and/or DN ATC have adequate surveillance coverage to ensure surveillance separation from R228A/B and R225 B/D.

2.3.11 R230 A/B/C/D/E/F Darwin - military operations

Item	Details
Controlling authority	452SQN DAR FLT FLTCDR (primary user) The RAN has priority for use of R230 B and C.
NOTAM responsibility	452SQN DAR Airspace Management Cell
Activation - firing activity	 FXP Cell (for naval activity) or airspace user must: 1) advise 452SQN DAR Airspace Management Cell to publish NOTAM; 2) include portions of R230 required, firing times and the upper limit (including appropriate assessed firing activity buffers); and 3) advise DN ATC when activity is cancelled.
Activation - flying activity	 The airspace user must: 1) advise 452SQN DAR Airspace Management Cell to publish NOTAM; and 2) include portions of R230 required, activity times and the vertical limits of airspace required.

2.3.11.1 Airspace releases

When R230 is NOTAMed and	Then
No coordination is received.	DN ATC must consider the airspace active as per NOTAM.
Only parts are activated.	Where possible, accommodate the transit of military ACFT into the remaining parts by negotiating an airspace release through CTA between BN ATC, and DN and ASPRS.
The airspace is released by the controlling authority (CRU or Australian Naval Ships) to DN ATC and is required for further operations within the same NOTAM period.	Airspace may be released by DN ATC to BN ATC: 1) beyond 40 NM Darwin; and 2) within 40 NM Darwin above FL180. The remainder must be retained by DN ATC until required.
Airspace has been released to BN ATC and is required back for further military operations.	Provide at least 30 minutes notice whenever possible. BN ATC must return the airspace to the military and coordinate the details of aircraft transiting the airspace.
The airspace is no longer required for military operations.	DN ATC must review or cancel the NOTAM.

2.3.11.2 Firing - commencement and cessation

When R230 is NOTAMed and	Then
Prior to commencing firing	The airspace user must confirm that the NOTAM is published.
Australian Naval Ship is the controlling authority	 The airspace user must contact DN ATC advising: a) contact telephone number for ship; b) Restricted Area or part of Restricted Area (if applicable) to be used; c) firing start and finish time in UTC; d) level to which firing will be conducted; and e) request clearance by ascertaining any restrictions to firing commencement. Note: Serial numbers or firing request numbers etc are not required. If communications with DN ATC cannot be established, arrange an alternate link via NAVCOMMSTA DN. When required, NAVCOMMSTA must relay details between Australian Naval ships and DN ATC.
At least 15 minutes prior to NOTAM activation	DN ATC must contact BN SM1 to:1) advise the airspace resumption time; and2) receive details of transiting aircraft.
Prior to airspace activation	DN ATC must advise Australian Naval ship when firing may commence.
If the range is or may be fouled	Any agency may direct the immediate cessation of activity through DN ATC.

When R230 is NOTAMed and	Then
When firing is completed	The airspace user must advise DN ATC and release the airspace. DN ATC must: 1) resume responsibility for airspace; 2) advise BN SM1; and 3) follow procedures to release or cancel the airspace.

2.3.11.3 Military flying training, air gunnery/missile firing, bombing

When R230 is NOTAMed and	Then
Prior to commencing activity	The airspace user must confirm that the NOTAM is published.
30 minutes prior to activity	The airspace user must contact DN ATC to: 1) advise airspace resumption time; and 2) determine any restrictions to activity commencement.
Prior to airspace activation	DN ATC must contact BN SM1 to: 1) advise airspace resumption time; and 2) receive details of transiting aircraft. DN ATC must release airspace to the user and advise: 1) the time of release; 2) useable levels; and 3) any transiting aircraft.
If the range is or may be fouled	Any agency may direct the immediate cessation of activity through DN ATC.
On completion of activity	The airspace user must advise DN ATC and release the airspace. DN ATC must: 1) resume responsibility for the airspace; 2) advise BN SM1; and 3) follow procedures to release or cancel the airspace.

2.3.12 R232 Delamere – military flying, air gunnery, missile firing and bombing

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (primary user)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM
Prior to commencing activity	Do not commence any activity on the range until TN ATC releases R232 to the RCO.
When an aircraft intending to operate within R232 taxies at YPTN or YPDN.	TN/DN ATC must provide the RCO with aircraft details
On completion of activity	The RCO must release R232 to TN ATC
If the range is or may be fouled.	Any agency may arrange an immediate check fire through the RCO
When emergency transit is required.	TN ATC must arrange an immediate check fire through the RCO
On confirmation of the check fire.	TN ATC will resume control of the airspace prior to allowing aircraft to transit

2.3.13 **R235 - Alice Springs**

Item	Details
Controlling authority	Senior OPSO1 RSU RAAF (primary user)
Activation	NOTAM

2.3.14 R238 Tindal Wedge - military flying activity

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM. R228A/B and R238 may be activated concurrently provided that BN, TN and/or DN have adequate surveillance coverage to ensure surveillance separation from R228A/B and R238

2.3.15 R241 Tindal - military flying activity

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM. Airspace only to be activated for HQAC endorsed military exercises in consultation with the Joint Airspace Control Cell. Airspace activation is to be supported by publication of an AIP SUP.
	R241 may only be activated in conjunction with R253

2.3.16 R244 Tindal - military flying activity

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM. Airspace only to be activated for HQAC endorsed military exercises in consultation with the Joint Airspace Control Cell. Airspace activation is to be supported by publication of an AIP SUP.
	R244 may only be activated in conjunction with R245 and R225AB.

2.3.17 R245 Tindal - military flying activity

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM. Airspace only to be activated for HQAC endorsed military exercises in consultation with the Joint Airspace Control Cell. Airspace activation is to be supported by publication of an AIP SUP. R245 may only be activated in conjunction with R225AB.

2.3.18 R247 Tindal - military flying activity

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM. Airspace only to be activated for HQAC endorsed military exercises in consultation with the Joint Airspace Control Cell. Airspace activation is to be supported by publication of an AIP SUP.

2.3.19 R248 Tindal - military flying activity

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM. Airspace only to be activated for HQAC endorsed military exercises in consultation with the Joint Airspace Control Cell. Airspace activation is to be supported by publication of an AIP SUP.

2.3.20 R249AB Tindal - military flying activity

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM

2.3.21 R250 Tindal – military flying (chaff and flares only)

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (primary user)
NOTAM responsibility	452SQN TDL FLT Airspace Management Cell Include 'Excluding D209' in the NOTAM
Activation	NOTAM

2.3.22 R251 Tindal - military flying activity

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM. Airspace only to be activated for HQAC endorsed military exercises in consultation with the Joint Airspace Control Cell. Airspace activation is to be supported by publication of an AIP SUP. R251 may only be activated in conjunction with R245 and R225BD.
	R251 shall not be activated concurrently with R228A. Additionally, R251 shall not be activated in excess of 90 days per calendar year, unless approved by AsA.

2.3.23 R252AB Tindal - military flying activity

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM. Airspace only to be activated for HQAC endorsed military exercises in consultation with the Joint Airspace Control Cell. Airspace activation is to be supported by publication of an AIP SUP. R252B may only be activated in conjunction with
	R252A and R241. Activation of R252AB above FL280 shall not be in excess of 90 days per calendar year, unless approved by AsA.

2.3.24 R253 Tindal - military flying activity

Item	Details
Controlling authority	452SQN TDL FLT FLTCDR (Airspace Coordinator)
NOTAM responsibility	452SQN TDL Airspace Management Cell
Activation	NOTAM. Airspace only to be activated for HQAC endorsed military exercises in consultation with the Joint Airspace Control Cell. Airspace activation is to be supported by publication of an AIP SUP.
	R253 may only be activated in conjunction with R225 CEF and R264HKJ.

2.3.25 Tindal - CTR

Item	Details
Primary user	RAAF

2.3.26 R264 A/B/C/D/E/F/G/H/J/K Darwin - all military operations

2.3.26.1 Firing and flying

Item	Details
Controlling authority	452SQN DAR FLT FLTCDR (primary user) The RAN has priority for use of R264 A and B
NOTAM responsibility	452SQN DAR Airspace Management Cell When R264 E and H are activated include in the NOTAM: 'EXCLUDING D257'
Activation - firing activity	 FXP Cell (for naval activity) or airspace user must: advise 452SQN DAR Airspace Management Cell to publish NOTAM; include portions of R264 required, firing times and the upper limit (including appropriate assessed firing activity buffers); and advise DN ATC when activity is cancelled.
Activation - flying activity	 The airspace user must: advise 452SQN DAR Airspace Management Cell to publish NOTAM; and include portions of R264 required, activity times and the vertical limits of airspace required.

2.3.26.2 Coordinating airspace management and release

When R264 is NOTAMed and	Then
No coordination is received.	DN ATC must consider the airspace active as per NOTAM.
Only parts are activated.	Where possible, accommodate the transit of military ACFT into the remaining parts by negotiating an airspace release through CTA between BN ATC, and DN and ASPRS.
The airspace is released by the controlling authority (CRU or Australian naval ships) to DN ATC and is required for further operations within the same NOTAM period.	Airspace may be released by DN ATC to BN ATC: 1) beyond 40 NM Darwin; and 2) within 40 NM Darwin above FL180. The remainder must be retained by DN ATC until required.
Airspace has been released to BN ATC and is required back for further military operations.	Provide at least 30 minutes notice whenever possible. BN ATC must return the airspace to the military and coordinate the details of aircraft transiting the airspace.

When R264 is NOTAMed and	Then
The airspace is no longer required for military operations.	DN ATC must review or cancel the NOTAM.

2.3.26.3 Firing - commencement and cessation

When R264 is NOTAMed and	Then
Prior to commencing firing.	The airspace user must confirm that the NOTAM is published.
Australian Naval Ship is the controlling authority.	 The airspace user must contact DN ATC advising: a) contact telephone number for ship; b) Restricted Area or part of Restricted Area (if applicable) to be used; c) firing start and finish time in UTC; d) level to which firing will be conducted; and e) request clearance by ascertaining any restrictions to firing commencement. Note: Serial numbers or firing request numbers etc are not required. If communications with DN ATC cannot be established, arrange an alternate link via NAVCOMMSTA DN. When required, NAVCOMMSTA must relay details between Australian Naval Ships and DN ATC.
At least 15 minutes prior to NOTAM activation.	DN ATC must contact BN SM1 to: 1) advise the airspace resumption time; and 2) receive details of transiting aircraft.
Prior to airspace activation.	DN ATC must advise Australian Naval Ship when firing may commence.
If the range is or may be fouled.	Any agency may direct the immediate cessation of activity through DN ATC.
When firing is completed.	The airspace user must advise DN ATC and release the airspace. DN ATC must: 1) resume responsibility for airspace; 2) advise BN SM1; and 3) follow procedures to release or cancel the airspace.

2.3.26.4 Military flying training, air gunnery/missile firing, bombing

When R264 is NOTAMed and	Then
Prior to commencing activity	The airspace user must confirm that the NOTAM is published.
30 minutes prior to activity	The airspace user must contact DN ATC to: 1) advise airspace resumption time; and 2) determine any restrictions to activity commencement.
Prior to airspace activation	DN ATC must contact BN SM1 to: 1) advise airspace resumption time; and 2) receive details of transiting aircraft. DN ATC must release airspace to the user and advise: 1) the time of release; 2) useable levels; and 3) any transiting aircraft.
If the range is or may be fouled	Any agency may direct the immediate cessation of activity through DN ATC.
On completion of activity	The airspace user must advise DN ATC and release the airspace. DN ATC must: 1) resume responsibility for the airspace; 2) advise BN SM1; and 3) follow procedures to release or cancel the airspace.

2.3.27 R268 Koolendong - firing

Item	Details
Controlling authority	Army RCO Koolendong (primary user) Arrange all bookings through TASMIS
NOTAM responsibility	452SQN TDL Airspace Management Cell as advised by Army RCO.
Activation	NOTAM

2.3.28 R269 Angalarri North - firing

Item	Details
Controlling authority	Army RCO Angalarri - North (primary user) Arrange all bookings through TASMIS
NOTAM responsibility	452SQN TDL Airspace Management Cell as advised by Army RCO.
Activation	NOTAM Note: Activate D236A for full NOTAM activation period.

2.3.29 R270 Angalarri South - firing

Item	Details
Controlling authority	Army RCO Angalarri - South (primary user) Arrange all bookings through TASMIS
NOTAM responsibility	452SQN TDL Airspace Management Cell as advised by Army RCO.
Activation	NOTAM Note: Activate D236B for full NOTAM activation period.

2.3.30 Managing R268/R269/R270

Item	Details
Communicate	 Between TN ATC and RCO by phone; or If unable, liaise with 452SQN TDL OPS FLTCDR. Do not commence firing until contact is made between RCO and TN ATC.
When an aircraft intending to operate within R268/269/270 taxies at YPTN or YPDN.	TN/DN ATC must: 1) provide the RCO with aircraft details; and 2) release the airspace to the RCO.
When firing has ceased.	The RCO must release the areas to TN ATC.
If the range is or may be fouled.	Any agency may arrange an immediate check fire.
When emergency transit is required.	TN ATC must arrange an immediate check fire.
On confirmation of the check fire.	TN ATC resumes control of the airspace and may allow aircraft through it.

2.3.31 R801, R802A/B, R803A/B, R804A/B, R805A/B, R806A/B, R807A/B, R808A/B, R809A/B, R810A/B, R811 Curtin - Military Flying

Item	Details
Controlling authority	Defence JACC
Activation	NOTAM

2.3.32 Curtin - CTR

Item	Details
Primary user	RAAF

2.3.33 R850A/B, R851A/B/C, R852A/B, R853A/B, R854A/B, R859A/B/C, R860A/B/C, R861A/B, R862A/B, R863A/B, R864A/B, R870A/B Learmonth - military flying/firing

Item	Details
Controlling authority	Defence JACC
Activation	NOTAM

2.3.34 Learmonth CTR

Item	Details
Primary user	RAAF

3 Normal operations

3.1 System configuration

3.1.1 Combining and decombining sectors

KTN must advise:

- a) DN PLN when combining or decombining with COG; and
- b) TN PLN, when active, when combining or decombining with TRT or COG.

3.1.2 System Coordination Points (COPs)

System coordination of aircraft arriving or transiting DN/TN airspace is completed by AFTN EST message at a defined/default COP or on activation of a Flight Data Record, whichever is the later.

3.1.2.1 TN COPs

Defined COP between BN and TN	TN
Default COP	30 NM TN SFC to FL280 inclusive
EST parameter	30 minutes
XFL	CFL

3.1.2.2 DN COPs

Defined COPs between BN and DN			
ACKER	AGUST	ALLEE	BEDUG
DONYA	DN	FILLY	GATOR
GUSNU	HELLI	HODDA	JACKI
NOKUN	JOSHU	MOTRU	JULUP
DAGAK	LAKUP	LOUIE	NATAL
OPUDA	ОСТОВ	IBOMU	RUSKA
NUBKO	LEVRI	MASRA	WOOFA
VEGPU	ZAARS		

Default COP	40 NM DN
EST parameter	30 minutes
XFL	CFL, or FL120 when the CFL is greater than FL120

3.2 Common traffic management procedures

3.2.1 Hand-off and traffic information

Brisbane ATC will:

- a) identify aircraft prior to entering DN/TN airspace;
- b) advise DN/TN APP of aircraft that are not identified; and
- c) provide DN/TN APP with any traffic restrictions for IFR aircraft before frequency transfer.

Complete a radar hand-off by 10 NM from the lateral boundary.

Note: Radar hand-offs to TN APP are not required for aircraft with nil coordination requirements.

Radar hand-offs to DN APP are not required for aircraft entering DN CTA from Class G airspace.

3.2.2 Clearance and separation responsibility

3.2.2.1 Separation from Restricted Areas for BN ATC

DN/TN APP may accept responsibility for separating aircraft from Restricted Areas when requested by BN ATC.

3.2.2.1.1 RVSM separation

Do not apply RVSM separation when providing services on TN/DN APP.

BN ATC may apply RVSM separation when responsible for aircraft transiting Restricted Areas.

3.2.2.2 Clearance through Restricted Areas

Refer requests for transit clearance through active Restricted Areas to the relevant RAAF Authority. The authority must separate approved transiting aircraft from military operations.

When aircraft remain on BN ATC frequencies, BN ATC is responsible for separating transiting aircraft.

3.2.3 Amended clearance around Restricted Areas and Batchelor

3.2.3.1 Separation from Restricted Areas

Where diversions are required through controlled airspace, DN/TN APP may clear aircraft via the amended radial to a point 5 DME beyond the active airspace boundary, then direct to the next waypoint or destination as required.

The table below lists the tracks / radials reference the DN or TN VOR you may assign to aircraft to provide a 5 NM surveillance buffer with the Restricted Areas:

Restricted Area	Direction	Amended route
R226 AB	North	TN 018R
	South	TN 124R (TN – MIGAX)
R228 A	North	DN 100R
	South	DN 136R
R228 B	West	TN 329R
	East	TN 038R
R225 ACE / R268	West	DN 202R (DN – FOZZI)
		DN – FOZZI - TGT
R225 BDF	DN - TN	DN 143R (DN – LAKUP – ANGED – TN)
	TN - DN	TN 322R (TN – ANGED – LAKUP – DN)
	TN - South	TN 168R (TN – GREGA)
R224AB	North	DN 104R
	South	DN 130R
	Vertical	FL(xxx) x 49DME DN
R230 ABC	West	DN 346R
	East	DN 046R
R230 DEF	West	DN 022R
	East	DN 085R
R251	East	TN354R
R252A	East	TN097R
R252B	East	TN164R
R264 ABCD	North	DN 294R
	South	DN 239R
R264 EFG	North	DN 263R
	South	DN 206R
R264 HJK	North	DN 230R
	South	DN 183R

3.2.3.2 Separation from Batchelor Parachuting Area standard release

Where diversions are required through controlled airspace, DN APP will clear aircraft via the amended radial to a point 5 DME beyond the active airspace boundary, then direct to the next waypoint or destination as required.

The table below lists the tracks reference the DN VOR you may assign to aircraft to provide a 5 NM surveillance buffer with the area:

Standard Release	Direction	Amended route
Batchelor Parachuting Area	East	DN 152R
	West	DN 182R
	Vertical	FL(xxx) x 29DME DN

3.3 Darwin traffic management procedures

3.3.1 Darwin approach

DN APP is responsible for air traffic services within:

- a) CTA within 40 NM radius of DN up to and including FL180; and
- b) active Restricted Areas R228A, R264 A-K and R230 A-F.

3.3.1.1 Separation of arriving and departing traffic

Darwin APP is responsible for separating departing aircraft from arriving aircraft within 40 NM Darwin.

3.3.2 Airspace releases

3.3.2.1 Standard airspace releases

The following table lists the standard releases available within Darwin Restricted Areas.

Note: Level coordination is not required for standard releases.

Standard release name	Dimensions and use	
Darwin CTA	40 NM radius centred on S12 25.4 E130 54.4 (DN DME). 20 minutes notice required.	
	Vertical limits: FL180 - FL240 DN APP highest usable level: FL240 COG lowest usable level: FL250.	

Standard release name Dimensions and use **DARWIN Wedge East/West** EAST Lateral limits: 13 05 12S 131 00 00E then along the counter clockwise arc of a circle of 40.00NM radius centred Note: This release allows on 12 25 24S 130 54 23E (DN/DME) to 13 01 38S 131 12 military aircraft to 04E 13 18 21S 131 23 42E then along the clockwise arc of transit between Darwin a circle of 60.00NM radius centred on 12 25 24S 130 54 and R225A/B without 23E (DN/DME) to 13 25 24S 131 00 00E, 13 05 12S 131 coordination and flight 00 00E planning. WEST Lateral limits: 13 03 27S 130 41 17E then along the counter clockwise arc of a circle of 40.00NM radius centred on 12 25 24S 130 54 23E (DN/DME) to 13 05 12S 131 00 00E 13 25 24S 131 00 00E then along the clockwise arc of a circle of 60.00NM radius centred on 12 25 24S 130 54 23E (DN/DME) to 13 22 17S 130 34 07E, 13 03 27S 130 41 17E Vertical limits: FL130 - FL240 DN APP upper usable level: FL240 DN APP lower usable level: FL130 COG lowest usable level: FL250 COG highest usable level: FL120.

3.3.3 Runway assignment - Darwin

DN ATC must advise COG:

- a) of the main duty runway and any changes; and
- b) any non-duty runway RNAV SIDs when the runway changes.

3.3.4 Departures from Darwin

3.3.4.1 Standard assignable levels

Assign departures from Darwin FL180 or the flight planned altitude/level, whichever is lower.

Exception: If Darwin and KNLG radars are not available at BN and/or DN - assign departures from Darwin FL130 or the flight planned altitude/level, whichever is lower.

Track departing IFR aircraft to the coordinated point and ensure separation with other traffic and active Restricted Areas.

Unless otherwise advised, DN APP will separate aircraft with active Restricted Areas until BN ATC has established an alternate separation standard.

Note: Tracking instructions are not required when aircraft are on an RNAV SID.

3.3.5 Arrivals to Darwin

3.3.5.1 Standard assignable levels

Assign arrivals to Darwin FL120 or the flight planned level, whichever is lower.

Exception: If Darwin and KNLG radar(s) are not available at BN and/or DN - assign arrivals to Darwin FL140 or the flight planned altitude/level, whichever is lower.

3.3.5.2 Issue STARs/approaches

BN ATC must:

- a) issue STAR clearances to IFR aircraft with approved SCNS at or above A100; and
- b) reclear incorrectly flight planned aircraft at or above A100:
 - i) if SCNS approved, via a STAR arrival/fix; or
 - ii) if not SCNS approved, via the nearest STAR feeder fix in accordance with the Darwin ERSA Flight Planning Requirements.

3.3.5.3 STARs and runway changes

When a runway change will occur:

- a) DN APP must coordinate tracking details for aircraft within 60 NM; and
- b) BN ATC must issue new STAR clearances to eligible aircraft beyond 60 NM DN.

3.3.5.4 Emergency or MEDEVAC priority

BN ATC may clear arriving emergency or MEDEVAC priority aircraft direct to ALLEE, GATOR, WANGI or SUDAG then direct to the DN VOR instead of issuing a STAR.

3.3.5.5 Sequencing

DN APP is responsible for:

- a) managing aircraft arrivals into DN; and
- b) providing flow control instructions to COG when necessary.

COG must issue flow control instructions to provide a sequence of 4 minutes at 50NM DN between aircraft:

- a) above A100 on the identical track or STAR; and
- b) at A100 on the identical track or STAR.

Note: Sequencing is not required between aircraft at A100 with those above.

DN APP may provide COG with sequence instructions for the Final Approach Fix (ie. LAPAR, NASUX etc). In doing so this will cancel any previously issued flow control established and coordinated for 50NM DN as described above.

A DN APP flow control instruction of MAX SPEED includes a cancellation of speed restrictions at and below A100.

3.4 Tindal traffic management procedures

3.4.1 Airspace transit/release/deactivation of Restricted Areas

TN ATC must:

- a) advise DN PLN and BN ATC when transits can be accommodated; and
- b) voice coordinate airspace releases/deactivations to BN SM1/DN PLN as appropriate.

3.4.2 Procedural coordination and separation

3.4.2.1 BN ATC responsibilities

BN ATC must provide TN APP with procedural coordination and separation for aircraft entering TN Restricted Areas.

Note: TN APP cannot identify ADS-B coupled aircraft.

3.4.2.2 Separation around TN areas

Apply procedural separation, or 5 NM ATS surveillance system separation with TN Restricted Areas.

3.4.2.2.1 Surveillance Separation with R251 and R252A/B

In line with <u>MATS</u> 2.4.3.4.2, the military control agency for R251 and R252A/B will apply an appropriate buffer inside the restricted area boundary that permits BN ATC to apply 2.5NM surveillance separation with these restricted areas in accordance with <u>MATS</u> 10.2.2.1.

3.4.2.3 TN ATC responsibilities

TN ATC must provide STR/ANM/KIY/CNG Sectors with procedural separation unless an alternative separation standard is coordinated.

3.4.3 Activation with less than 8 hrs notice

TN CTR and R249AB (HUL FL280) may activate at short notice provided a supporting NOTAM is issued.

Minimum of 30 minutes notification will be allowed for the activation of R249.

3.4.4 Coordinate Restricted Areas/airspace releases

When TN Restricted Areas will be activated or deactivated, or an airspace is being released, coordinate with the affected units and advise:

- a) the activation or deactivation details; and
- b) any relevant traffic.

3.4.5 Departures from Tindal

3.4.5.1 Standard assignable levels

Assign departures from Tindal FL180 or the flight planned altitude/level, whichever is lower.

3.4.5.2 Separation responsibilities

TN APP shall separate departing aircraft from other aircraft coordinated by BN ATC until radar handoff unless otherwise negotiated.

3.4.6 Arrivals at Tindal

3.4.6.1 Standard assignable levels when A100 to FL125 is controlled

Aircraft operating above FL125 shall be assigned FL120:

- a) Assigned FL120, if remaining in CTA on descent; or
- b) Be cleared to leave and re-enter on descent to FL120 with a traffic statement, if the aircraft will enter TN airspace through a lateral boundary.

3.4.6.2 Standard assignable level when A100 to FL125 is not controlled

BN ATC shall instruct aircraft to leave controlled airspace descending and provide a traffic statement. TN ATC is responsible for providing the onwards clearance.

3.4.7 Relay of coordination

TN ATC may request KTN to relay coordination to the relevant unit when a direct line is not available.

3.5 Conditions and exceptions to MATS coordination

3.5.1 BN/DN coordination

Note: Standard assignable levels do not need to be coordinated.

3.5.1.1 DN APP to all ATC units

Coordinated item	Parameter	Conditions and exceptions
a) Callsign;b) Tracking point/SID;c) Level; and	At taxi	Not required for VFR aircraft that will operate at or below A095. After taxi coordination, advise BN
d) SSR code.		ATC when the departure will be delayed by more than 30 minutes.
		Cancellation of SID restriction at or above FL140 shall be coordinated to BN prior to instructing aircraft.
Aircraft deviations	Before transfer to BN	

3.5.1.2 Airspace Amendment/Activation DN APP to BN

DN APP Supervisor shall coordinate any amendments or activations to Darwin airspace (<u>as defined in 3.3.1</u>) via phone to BN SM1. If DN APP Supervisor is not staffed, DN APP shall advise COG.

3.5.1.3 KTN to DN PLN

Coordinated item	Parameter	Conditions and exceptions
Nil		Coordination not required for aircraft entering DN airspace from Class G airspace unless specified within this table.
Aircraft deviations	Before transfer to DN APP	Only required for aircraft deviating from the flight plan by more than 10 NM.
 a) Callsign; b) Estimate direct to the DN VOR (if available); c) Tracking point; d) Assigned level; and e) SSR code. 	At taxi or as soon as possible	Required when aircraft taxi or depart within 90 NM YPDN.
	Before transfer to DN APP	Coastal surveillance flights landing at Darwin.

3.5.1.4 COG to DN PLN

Coordinated item		Parameter	Conditions and exceptions
a) b)	, _ , , , , , , , , , , , , , , , , , ,	Prior to 70 NM DN	When a FF time has been assigned to the aircraft, include the phrase 'Flow Controlled'.
0,		At taxi or as soon as possible	Required when aircraft taxi or depart within 90 NM YPDN
	DN407 (R11) or DN448 (R29) for aircraft via a papa STAR;	Before transfer to	Coastal surveillance flights landing at Darwin
	iii) Assigned level when below FL120; and	DN APP	
d)	SSR code.		
Aircraft deviations		Before transfer to DN APP	

Example 1: QFA01 VEGPU [Number] Alpha, LAPAR 02, 5555.

Example 2: JST55 VEGPU [Number] Alpha LAPAR 06, flow controlled, 6666.

3.5.1.4.1 Traffic planning assistance

Where possible, coordinate arriving aircraft to DN ATC as soon as possible after issuing the STAR clearance to assist DN ATC traffic planning.

3.5.2 BN/TN coordination

Note: Standard assignable levels do not need to be coordinated.

3.5.2.1 BN ATC to TN PLN

Coordinated item	Parameter	Conditions and exceptions	
Nil		Coordination is not required for aircraft operating at or below FL125 entering TN CTR or R249AB.	
a) Callsign;b) Estimate;c) Tracking point;d) Assigned level; ande) SSR code.	Prior to: a) 50 NM from the airspace boundary for radar identified aircraft; or b) 15 minutes from the airspace boundary for all other aircraft.	For aircraft above FL125 arriving TN or requesting to transit through TN Restricted Areas. Note: You may issue clearances through R249AB above FL125 unless advised otherwise.	
a) Callsign;b) Estimate;c) Tracking point;d) Level; ande) SSR code.	Prior to five minutes from the airspace boundary.	For aircraft in Class G airspace requesting to transit through TN Restricted Areas, excluding R249AB.	
Aircraft deviations	Before transfer to TN APP	Coordination is not required for aircraft operating at or below FL125 entering TN CTR or R249AB	

3.5.2.2 TN ATC to BN ATC

Coordinated item	Parameter	Conditions and exceptions
a) Callsign;b) Tracking point;c) Level; andd) SSR code	At taxi	Not required for VFR aircraft. After taxi coordination, advise BN ATC when the departure will be delayed by more than 30 minutes. BN shall coordinate restrictions and traffic for aircraft requesting above A100 to TN.
a) Callsign;b) Estimate;c) Tracking point;d) Assigned level; ande) SSR code.	Prior to: a) 50 NM from the airspace boundary for identified aircraft; or b) 15 minutes from the airspace boundary for all other aircraft.	For aircraft requesting to transit through TN Restricted Areas into Class A and E airspace. When an aircraft requests an amended clearance, BN ATC must coordinate to other affected BN sectors.
Aircraft deviations	Before transfer to BN	

3.6 CRU operations

3.6.1 CRU permitted

CRU operations are permitted in:

- a) CTA released by BN ATC;
- b) DN and TN Restricted Areas;
- c) Temporary Restricted Areas; and
- d) Danger areas.

CRU must advise DN/TN ATC when their operations are complete.

DN/TN ATC must:

- a) arrange NOTAM cancellation; and
- b) advise BN SM1.

3.6.2 Airspace release to CRU

CRU must request airspace releases via the DN/TN ATC as appropriate.

Coordinate and log the lateral and vertical dimensions of all airspace releases.

3.6.3 Boundary separation

CRU operations must remain within the released airspace by a minimum of 2.5 NM, which will be achieved in line with <u>MATS</u> 2.4.3.4.3.

Coordinate by the quickest means possible if this separation cannot be maintained.

3.6.4 Radio failure

When an aircraft cleared through an active Restricted Area has a radio failure, or a radar return is observed to have entered restricted/reserved areas, DN/TN ATC must:

- a) resume the airspace from CRU; or
- b) instruct CRU to restrict activities to assure separation from the cleared track of the aircraft with radio failure.

3.7 Military AAR and AEWC Airspace (MAAA) operations

3.7.1 Airspace and service

AIP ENR section 5.2 lists the defined volumes for MAAA operations.

Provide services within these volumes as per the extant airspace classification.

3.7.2 Approving MAAA operations up to the boundary of Restricted Areas

Instruct AEW&C and tanker aircraft to operate up to the boundary of adjoining Restricted Areas:

AEW&C and tanker clearance request	ATC response
(callsign) REQUEST CLEARANCE TO OPERATE IN (MAAA designator) (levels). MARSA WITH AIRCRAFT WITHIN (Restricted Area designator).	(callsign) CLEARED TO OPERATE IN (MAAA designator) (levels). MARSA WITH AIRCRAFT WITHIN (Restricted Area designator).

Note: All aircraft manoeuvring will be contained within the MAAA.

3.7.3 Approving MAAA operations to enter adjoining Restricted Areas

AEW&C and tanker clearance request	ATC response
Request clearance to exit the MAAA and enter the adjoining Restricted Area.	(callsign) CLEARED TO EXIT (MAAA designator) FOR (Restricted Area designator).

Note: AEW&C/Tanker aircraft manoeuvring for the Restricted Area will be contained within the MAAA and maintain MARSA with aircraft within the Restricted Area.

3.7.4 Approving aircraft within Restricted Areas to operate in adjoining MAAA

AEW&C and tanker clearance request	ATC response
(callsign) REQUEST CLEARANCE TO EXIT (Restricted Area designator) to OPERATE IN (MAAA designator) (levels).	(callsign) CLEARED TO OPERATE IN (MAAA designator) (levels).
If tanker receives request for refuel aircraft to exit the Restricted Area and enter the MAAA:	(callsign) CLEARED TANKING OPS (MAAA designator).
(callsign) REQUEST TANKING OPS (MAAA designator). (Number of receiving aircraft).	ATC is not required to issue MARSA clearances to the tanker or receiving aircraft.

Note:

- 1) The tanker will relay the clearance to the aircraft involved.
- 2) All aircraft will operate MARSA.
- 3) All manoeuvring will be contained within the MAAA and the Restricted Areas.

The tanker will use the phrase 'TANKING OPS COMPLETE' to advise ATC when the receiving aircraft have re-entered the Restricted Area.

3.7.5 Coordination between Civil ATC and Military Authorities

Coordination is not required when AEW&C and Tanker aircraft within an MAAA:

- a) require entry into the adjoining Restricted Area; or
- b) will operate MARSA.

3.7.6 Communications

BN ATC must maintain primary communications with aircraft operating within an MAAA.

3.7.7 SAR responsibility

Scenario	SAR responsibility
Aircraft operating within military Restricted Areas and receiving aircraft involved in AAR within a MAAA.	Military
AEW&C/Tanker aircraft operating within a MAAA.	BN ATC

When a military aircraft declares an emergency on the civil frequency, relay the details to DN/TN ATC as appropriate.

4 Business continuity

4.1 Tindal radar not available in BN Centre

Apply the following when TN CTR and/or R249 are active and the TN radar is not available in BN Centre. BN ATC will advise TN PLN when TN radar is not available in BN Centre Coordinate any additional procedures as circumstances require.

4.1.1 Establish departure on track

TN APP must:

- establish departing aircraft entering civil CTA on the planned track by 30 NM TN unless coordinated; and
- b) ensure departing aircraft entering Class G airspace are within 5 NM of planned track and tracking direct to the first waypoint or destination:
 - i) by 30 NM TN; or
 - ii) before passing A100.

4.1.2 Separation/traffic information for Tindal traffic

4.1.2.1 TN APP

- 1) TN APP must provide traffic information:
 - i) when there is less than 15 NM between aircraft by radar; and
 - ii) before transferring the aircraft.

Note: Consider IFR aircraft entering KTN airspace and on tracks diverging by less than 15 degrees to be on the same track for traffic information purposes.

2) Coordinate with BN ATC when able to apply radar separation.

4.1.2.2 BN ATC

BN ATC must advise TN APP of any tracking restrictions.

4.1.3 Coordination and frequency transfers

4.1.3.1 TN APP

Coordinate departure times to BN ATC within two minutes of the departure time.

Append the following instruction when transferring an aircraft '(callsign) [IDENTIFICATION TERMINATED] [CONTROL SERVICE TERMINATED], CONTACT BN CENTRE WITH PRESENT LEVEL AND ESTIMATE FOR (next waypoint/destination)'.

4.2 Darwin and KNLG radars not available in BN Centre

Apply the following procedures when Darwin and KNLG radars are not available in BN Centre. Coordinate any additional procedures as circumstances require.

4.2.1 No SIDs or STARs

Do not issue RNAV SIDs or STAR clearances when a surveillance service cannot be provided. Use the phrase 'SUSPEND DARWIN SIDS/STARS'.

4.2.2 Establish departures on track

DN APP must:

- a) establish departing aircraft entering civil CTA on the planned track by 30 NM DN; and
- b) ensure departing aircraft entering Class G airspace are within 5 NM of planned track and tracking direct to the first waypoint or destination by the Class G boundary.

4.2.3 Separation/traffic information for Darwin arrivals and departures

4.2.3.1 DN APP

Apply the following procedures:

- a) Coordinate with BN ATC:
 - i) if you can apply radar separation; or
 - ii) prior to manoeuvring an aircraft that is not in your airspace off its coordinated track.
- b) Separate outbound aircraft from coordinated inbound aircraft at or below FL130;
- Apply procedural separation between aircraft entering COG airspace on tracks diverging by less than 15 degrees. Coordinate the separation standard with COG; and
- d) When there is less than 15 NM between aircraft by radar provide traffic information to aircraft entering Class G airspace on tracks that diverge by less than 15 degrees before transferring the aircraft to KTN.

4.2.3.2 COG

Apply the following procedures:

- Separate aircraft inbound to DN at or below FL130 from coordinated outbound aircraft;
- b) Advise DN APP of any tracking restrictions; and
- c) Advise DN APP when you can accept a radar hand-off.

4.2.4 Coordination and frequency transfer

4.2.4.1 DN APP

Coordinate departure times to BN ATC within two minutes of the departure time.

When transferring to BN ATC, append the following instruction to the transfer instruction: '(callsign) IDENTIFICATION TERMINATED, CONTACT BN CENTRE WITH PRESENT LEVEL AND ESTIMATE FOR (next waypoint/destination)'.

4.2.4.2 COG

COG must coordinate as 'on climb' when the aircraft has not yet reached the assigned level.

Initiate radar hand-offs when aircraft are identified using TN radar.

4.2.4.3 DN, KTN and COG

Determine when an aircraft will call on your frequency using the following table:

Transferring sector	Receiving sector	Transfer based on	
DN APP	KTN	Boundary of DN CTR	
KTN	DN APP		
DN APP	COG	30 NM DN	
COG	DN APP	60 NM DM	

4.3 Darwin and KNLG radars not available in BN and DN

Apply the following procedures when radar is not available in BN and DN. Coordinate any additional procedures as circumstances require.

4.3.1 No SIDs or STARs

Do not issue RNAV SIDs or STAR clearances when a surveillance service cannot be provided. Use the phrase 'SUSPEND DARWIN SIDS/STARS'.

4.3.2 Separation/traffic information for Darwin arrivals and departures

4.3.2.1 DN APP

Apply the following procedures:

- a) Separate outbound aircraft from coordinated inbound aircraft at or below FL130;
- b) Apply procedural separation between aircraft entering COG on tracks diverging by less than 15 degrees. Coordinate the separation standard to COG; and
- c) When there is less than 10 minutes between aircraft, provide traffic information to aircraft entering Class G airspace on tracks that diverge by less than 15 degrees before transferring the aircraft to KTN.

4.3.2.2 COG

Apply the following procedures:

- Separate aircraft inbound to DN at or below FL130 from coordinated outbound aircraft; and
- b) Apply procedural separation between aircraft entering DN APP airspace on tracks converging by less than 15 degrees. Coordinate the separation standard DN APP.

4.3.3 Coordination and frequency transfers

4.3.3.1 DN APP

Coordinate departure times to BN ATC within two minutes of the departure time.

When transferring to BN ATC, append the following to the transfer instruction: '(callsign) CONTACT BN CENTRE WITH PRESENT LEVEL AND ESTIMATE FOR (next waypoint/destination)'.

4.3.3.2 BN ATC

KTN must provide estimate, level and SSR code for all IFR aircraft entering DN CTA from Class G airspace.

COG must coordinate aircraft as 'on climb' when the aircraft has not yet reached the assigned level.

Append the following to the transfer instruction: '(callsign), CONTACT DN APP WITH PRESENT LEVEL AND INBOUND RADIAL'.

4.3.3.3 DN APP, KTN and COG

Determine when an aircraft will call on your frequency using the following table:

Transferring sector	Receiving sector	Transfer based on	
DN APP	KTN	Davindam, of DN CTD	
KTN	DN APP	Boundary of DN CTR	
DN APP	COG	40 NM DN	

4.4 Darwin and KNLG radars not available in DN

Coordinate traffic management procedures when DN ATC does not have access to DN and KNLG radar information and BN Centre does.

Note: This is considered to be a highly unlikely event. No procedures are required.

4.5 ADATS Darwin failure

Problem	Likely effect on Tops	Likely effect on DN ATC	Contingency Plan
DN RDP failure	Reduced capacity of DN ATC may require BN ATC to hold aircraft.	 a) Possible reduced radar coverage; and b) May have synthesised radar returns but no correlation (DRA). 	Apply traffic management procedures, e.g. holding, speed control, and restricting departures.
DN FDP failure	Reduced capacity of DN ATC may require BN ATC to hold aircraft.	a) No code correlation;b) Possibly no radtag; andc) No retention of flight plan.	 a) Apply traffic management procedures; and b) Full voice coordination including SSR code.
Total DN voice switch failure	 a) No intercoms with DN ATC; b) Holding of aircraft inbound to Darwin; c) Aircraft in Darwin airspace calling on Brisbane frequencies; and d) Very high workload possible. 	a) No intercoms; andb) No air-ground.	 a) Apply traffic management procedures; and b) Use listed phone numbers for coordination.

4.6 ADATS Tindal failure

Problem	Likely effect on Tops	Likely effect on TN ATC	Contingency Plan
TN RDP failure	Nil	Loss of radar picture	TN ATC to select DRA and local radar 02. Continue normal operations.
TN radar sensor/line failure to BN ATC	a) Loss of TN radar feed; andb) Reduced radar coverage due to having KNLG radar feed only.	Nil	Apply traffic management procedures. Full procedural coordination between BN and TN ATC.
TN radar sensor/line failure to TN ATC	Reduced capacity of TN ATC may require BN ATC to hold aircraft.	Reduced radar coverage due to having DN radar feed only.	Apply traffic management procedures and procedural separation.

Problem	Likely effect on Tops	Likely effect on TN ATC	Contingency Plan
TN radar sensor/line failure to BN and TN ATC	Loss of TN radar feed. Reduced capacity of TN ATC may require BN to hold aircraft.	Reduced radar coverage due to having DN radar feed only.	Apply traffic management procedures and procedural separation.
TN FDP failure	Reduced capacity of TN ATC may require BN to hold aircraft.	a) No code correlation;b) Possibly no radtag; andc) No retention of flight plan.	 a) Apply traffic management procedures; and b) Full voice coordination including SSR code.
Total TN voice switch failure	 a) No intercoms with TN ATC; b) Holding of aircraft inbound to Tindal; and c) High workload possible. 	 a) No intercoms; b) Air-ground emergency radios only; and c) Coordination by independent telephones only (not ADATS). 	 a) Apply traffic management procedures; and b) Use listed phone numbers for coordination.

4.7 Civil ATS contingency

When Airservices administered airspace is subject to an ATS contingency, a checklist will be used to manage the response by adjacent Defence administered airspace control units. The checklist will be amended, as appropriate to the contingency, by the Airservices OM or Contingency Response Manager and forwarded to the relevant Defence unit(s) by fax or email.

For information purposes, the checklist template is at

ATS Contingency Plan (En route) Template.

The information will include but is not limited to:

- a) brief synopsis of the contingency;
- b) the relevant NOTAM number(s);
- c) a diagram of the airspace affected by the contingency;
- d) estimated recovery time;
- e) contact details for the Contingency Response Manager;
- f) aircraft procedures;
- g) relevant TIBA frequencies; and
- h) suggested phraseology to be used by adjacent Defence ATC units.

4.8 Darwin ATS contingency – Emergency Evacuation

When ATS are not available at Darwin due to emergency evacuation of the ATC facility, or other emergency, apply the following procedures:

- a) TIBA communication procedures apply in the DN CTR/CTA within 40 NM A085 and below - frequency 126.35 MHz. Mandatory Broadcast Procedures also apply frequency 133.1 MHz;
- b) Darwin shall conduct an airspace handover of airspace above A085 to BN ATC, if time does not permit prior to evacuation this handover shall occur via phone as soon as possible through the Brisbane SM Aisle 1 contact number listed in <u>5 Contacts</u>;

Note: Brisbane shall only accept airspace once all aircraft have established minimum 5 nm lateral or vertical separation.

- c) If time permits, DN ATC must advise aircraft inbound to DN of the change of service level and request intentions;
- d) If evacuation is immediate and no time is available to advise aircraft of the evacuation, DN ATC must cancel any clearance issued to aircraft that are not yet airborne;

Note:

- 1) DN ATC will have access to a handheld radio during the evacuation for communication purposes.
- 2) Aircraft in DN CTR/CTA at the time of the evacuation may continue, or divert to an alternate, subject to TIBA and Mandatory Broadcast requirements.
- e) BN ATC must notify TN ATC, or the TN DATCO when TN ATC is not available, of any potential diversions of Darwin bound aircraft to TN;
- f) Airservices will issue the following NOTAMs:
 - YPDN template 67; and
 - YBBB template 791
- g) BN ATC must advise aircraft outside of DN CTA/CTR TIBA airspace of the change of service level and request intentions as soon as possible after the evacuation is known to have occurred;
- h) BN ATC may clear aircraft to leave controlled airspace descending into DN TIBA airspace and where able, BN ATC shall provide FIS and SAR services within DN TIBA airspace at pilot request on frequency 118.15; and
- Use the mobile phone numbers (primarily tower or approach) listed in Section 5.1 ADATS contingency plan contact numbers to determine an estimate for the resumption of ATS.

4.9 Darwin ATS contingency – Operational Restrictions

When ATS are not available at Darwin due to operational restrictions, apply the following procedures.

- a) AFIS procedures apply within the DN Temporary Restricted Airspace (TRA) within 40
 NM A085 and below. Darwin Information will be provided frequency 133. 1MHz;
- b) Darwin shall conduct an airspace handover of airspace above A085 to BN ATC; aircraft above A085 will be transferred to BN ATC frequency 129.85 MHz;

Note: Brisbane shall only accept airspace once all aircraft have established minimum 5 nm lateral or vertical separation.

- c) If time permits, DN ATC must advise aircraft inbound to DN of the change of service level and request intentions;
- d) CASA will issue NOTAM promulgating the DAR CTR/CTA at A085 and below as Darwin TRA:
- e) Prior to operating on the manoeuvring area or in the TRA pilots/operators must contact Darwin Information by telephone or on frequency 133.1 MHz for access authority. IFR aircraft departing Darwin are to contact BN ATC frequency 118.15 MHz with Taxi Call:
- f) Aircraft will advise BN ATC when an authorisation has been received to enter the DN TRA;
- g) BN ATC must advise aircraft outside of DN TRA airspace of the change of service level;
- h) BN ATC may clear authorised aircraft to leave controlled airspace descending into DN TRA. Darwin Information shall provide FIS and SAR services within DN TRA on frequency 133.1 MHz.

5 Contact numbers

Contact	Phone number
Army	
R203AB Kangaroo Flats RCO (when active)	PRI: 08 8978 2599 SEC: 08 8978 2545 Mob: 0418 425 916
R224 Mt Bundey RCO	PRI: 08 8970 4601 SEC: 0427 166 790 Fax: 08 8925 1889
Bradshaw Field Training Area (BFTA)	PRI: 0427 185 058 SEC: 0419 848 996 EMG: 08 8971 9088
Navy	
FXP Enquires (SO3 DOMREG - JCC Watchkeeper)	02 6128 4339
RAAF	
Joint Airspace Control Cell	PRI: 02 6128 4858 SEC: 02 6128 4856 A/H: 0417 895227
452SQN DAR FLT FLTCDR	08 7929 4671 0408 892 476
452SQN DAR FLT OPSCDR	08 7929 4673 0408 809 864
DN APP	08 7929 4817 0476 829 470
DN TWR	08 7929 4816 0459 825 684
DN ATC in event of Communications Outage	DN APP: 08 8942 4509 DN TWR: 08 8942 4507 08 8942 4508
452SQN DAR Airspace Management Cell	PRI: 08 7929 4817 SEC: 08 7929 4673
452SQN TDL Airspace Management Cell	PRI: 08 8973 7463 SEC: 08 8973 6705 Fax: 08 8973 7485 A/H: 0408 221 783

Contact	Phone number
452SQN TDL FLT FLTCDR	08 8974 4477 0428 293 629
452SQN TDL FLT OPSCDR	03 5169 89200409 178 611
452SQN TDL FLT STO	08 8973 7447
TN APP	08 8973 6705
TN TWR	08 8973 6740 DATCO 0408 221 783
DWF RSO	PRI: 08 8977 0540 SEC: 08 8977 0541 TERT: 0417 814 450
Airservices	
ATM Director	1300 879 535
BN SS	07 3866 3420
BN SM Aisle 1	07 3866 3314
ML SM3	03 9235 7492
NCC	Phone: 02 6268 5063 Fax: 02 6268 5044
If R215 is infringed, contact one of the following	
Australian Chief of Security	08 8951 2010 08 8951 2019 (Fax) 08 8951 2000 (Switchboard H24)
Deputy Chief of Facility	08 8951 2025
Australian Federal Police Protective Service	08 8951 2470

5.1 ADATS contingency plan contact numbers

Location	452SQN DAR FLT	452SQN TDL FLT
FLTCDR	08 7929 4671	08 8973 7460
OPSCDR	08 7929 4673	08 8973 7461
Tower	08 7929 4816	08 8973 6740
Tower emergency mobile	(Only be used if landlines not available) 0459 825 684	DATCO 0408 221 783
Approach/ATC admin	08 7929 4817 0476 829 470	08 8973 6705