Flight Information Handbook Australia

AD2 Supplement Richmond (YSRI)

Version 5.0

Effective 09 Jul 26

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Change summary

Version	Date	Change description
5.0	09 Jul 26	2.2.1.2 – OLAs, slight change to include description of OLA 8 (within OLA 7).
		3.1.1 – Restricted Areas changing to R479, R480 and R481. R479 and R480 minor changes to dimensions (minimal impact). R481 is the 'new R494' - significant change of airspace volume.
		3.1.2 – ATC responsibility administrative changes associated with airspace names. Change to notification requirements for R481.
		3.1.4 – Amaroo Step – removed due to airspace change.
		3.2.1.1 – Training Areas – Change of Area Yarra to Area Diver.
		3.2.4 – Northern Training Area – upper limit confirmed A060, subject to AIP priorities.
		3.2.5 – Southern Training Area – Change to eastern edge. Upper limit confirmed A040, subject to AIP priorities.
		3.2.6 – Area Yarra – Replaced with details on replacement airspace, 'Area Diver'. Removal of being contingent on TACAN being serviceable (as GNSS-based).
		4.3.1 – Departures – Incorporating new MATS SUPP order of priority of departure type: Procedural SID, then Visual Departure or Radar SID.
		4.6.1 – Area Yarra Planning – amended to cover Area Diver Flight Planning requirements
		4.6.2 – Area Yarra Planning – Transponder Usage – New Area Diver does not facilitate nil transponder operations.
		5.2.3 – Removal of 'RIC DZ' Free Fall parameters, re-write to cover new R481, requirements for parachutes to remain inside R481 (unless otherwise specifically requested and approved), drop aircraft does not need to remain in R481 (subject to ATC clearance – including example of ATC clearance from Sydney Approach.
		Other amendments: All editorial changes regarding airspace numbers and ATC agencies.

AD2 supplement production

The *YSRI AD2 Supplement* is subject to review at least every 12 months, however, is not subject to a regular release cycle. All AD2 Supplements will be published IAW AIRAC cycles.

AD2 supplement amendments

To make a change to the *YSRI AD2 Supplement* outside of a new issue date an '*AD2 SUPP Amendment*' will be issued through AIS-AF. Amendments shall be distributed for review 2 weeks prior to their WEF date.

Change request submission

Change request submissions for the *YSRI AD2 Supplement* shall be submitted via respective stakeholders to 453SQN RIC FLTCDR.

Changes will be reviewed at the Flying Operations Safety Committee (FOSC), to be held every 12 months. FLTCDR 453SQN RIC FLT is to chair this meeting with representatives from the base flying community.

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1 AD2 Supplement Information

1.1 Introduction

1.1.1 Purpose

1.1.1.1 Operational procedures

YSRI AD2 Supplement provides operational airspace, planning, flying, abnormal operations and ground procedures that are directly related to aircraft operations at RAAF Base Richmond and within its associated airspace.

1.1.1.2 Supporting documents

YSRI AD2 Supplement provides specific local airspace information particularly pertinent to military flying. Additional procedures and general flying information can be found in the *ERSA FAC*, *Designated Airspace Handbook* and other relevant aeronautical information charts.

1.1.1.3 Electronic flight bag suitability

YSRI AD2 Supplement is deemed Electronic Aeronautical Information and is made available for Electronic Flight Bag use via the *Defence Aeronautical Information Service Provider AIS-AF*. AD2 SUPP documents are available via the AIS-AF FIHA AD2 Supplements.

1.1.1.4 Defence aviation safety regulations compliance

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

1.1.2 Publishing

1.1.2.1 Authority

YSRI AD2 Supplement approval authority is CO 453 SQN.

The sponsor is 453 SQN Richmond Flight Commander, Significant changes require endorsement from primary stakeholders. Endorsement authorities are:

a) CO 37 SQN;

b) CO 22 SQN and

c) CO 6 AVN REGT.

1.1.2.2 Applicable documents

YSRI AD2 Supplement is prepared in accordance with the following documents:

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

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

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

1.1.3 Hierarchy of Documents

The hierarchy of RAAF RIC aviation documents is:

a) RAAF AIS-AF Publications; then

b) RAAF RIC Aerodrome Manual; then

c) RAAF RIC Instructions; then

d) Local Operator Squadron Local Instructions.

Where differences exist between documents, the higher document takes precedence.

1.1.4 Use

1.1.4.1 Rule compliance

Aircraft locally based at YSRI are to adhere to the rules and procedures contained within.

1.1.4.2 Local operators

The following units are considered local military operators at YSRI:

a) 37 SQN;

b) 6 AVN REGT; and

c) A visiting SQN or aircraft that has received a local procedures briefing from their host SQN or 453 SQN RIC FLT, or who advises compliance with *YSRI AD2 Supplement*.

1.1.4.3 Non local operators

For aircraft not locally based at the aerodrome, advice of compliance with *YSRI AD2 Supplement* by the aircrew is required prior to ATC considering it to be a ‘local aircraft’ in the application of local procedures. Where doubt exists, ATC is to treat the aircraft as non-local. If necessary, transient aircraft may request a local briefing (arranged by the AD2 SUPP sponsor) prior to accepting local procedures.

1.1.5 Definitions

1.1.5.1 Glossary precedence

The terms used in *YSRI AD2 Supplement* are defined in the DASR Glossary and Australian Defence Glossary. Where a conflict may occur between the DASR Glossary and ADG, the DASR takes precedence.

1.1.5.2 AD2 specific definitions

Where terms are specific to the *YSRI AD2 Supplement* only, they are identified within this document. Within this document, the following definitions apply:

Term	Definition
ASP	Aircraft Safety Point
BKA	Bankstown Approach
DZSO	Drop Zone Safety Officer
FFW	Forward Firing Weapons
FPL	Flight Plan
LDD TA	Londonderry Training Area
NTA	Northern Training Area
RAPSL	Ram Air Parachute Static Line
RKBY	Rickabys
SRA	Sydney Richmond Approach
SYC	Sydney Centre
SFC	Surface
STA	Southern Training Area

1.1.5.3 Levels

All levels referred to in the *YSRI AD2 Supplement* are in feet AMSL, unless otherwise specified.

1.1.6 ERSA information

YSRI AD2 Supplement applies to the conduct of flying operations and ATC services at YSRI aerodrome and the surrounding airspace. Information contained in the *YSRI AD2 Supplement* that may have civil application or may enhance overall usability is also provided in the YSRI section of *ERSA*.

2 Aerodrome information

2.1 Manoeuvring Areas

2.1.1 Taxiways

2.1.1.1 Restrictions

Refer to the *ERSA FAC YSRI Aprons and Taxiways*.

2.1.1.2 Aircraft wash bay

The status of the aircraft wash bay is indicated by the yellow bag covering the control switch. When:

a) The cover is ON, the wash bay is switched OFF; or

b) The cover is OFF, the wash bay is switched ON.

2.1.2 Runway End Safety Area (RESA)

The minimum RESA length as stated in Table 6.26(4) of the Part 139 MOS has been met for RWY 10/28.

2.1.3 Grassed Areas

2.1.3.1 Western Grass

The Western Grass is the grassed area north of TWY Z, to within 10 m of the Richmond Flying Club TWY, the Richmond Flying Club apron and the Northern Perimeter Rd. An airfield fence line segregates the northeast portion of the western grass.

2.1.3.2 Southern Grass

The Southern Perimeter Road, the gable markers south of RWY 10/28 and the two unnamed bitumen Roads bind the southern grass east and west.

2.1.3.2.1 Southern Grass operations during Air Traffic Services

The following procedures apply when ATC is active:

a) Aircraft shall operate on the southern grass in the same direction as the RWY nominated on the ATIS; and

b) Landing and take-off clearances are required.

2.1.3.2.2 Grass manoeuvring areas – Figure 1

The Western Grass and Southern Grass manoeuvring areas are depicted in Figure 1.

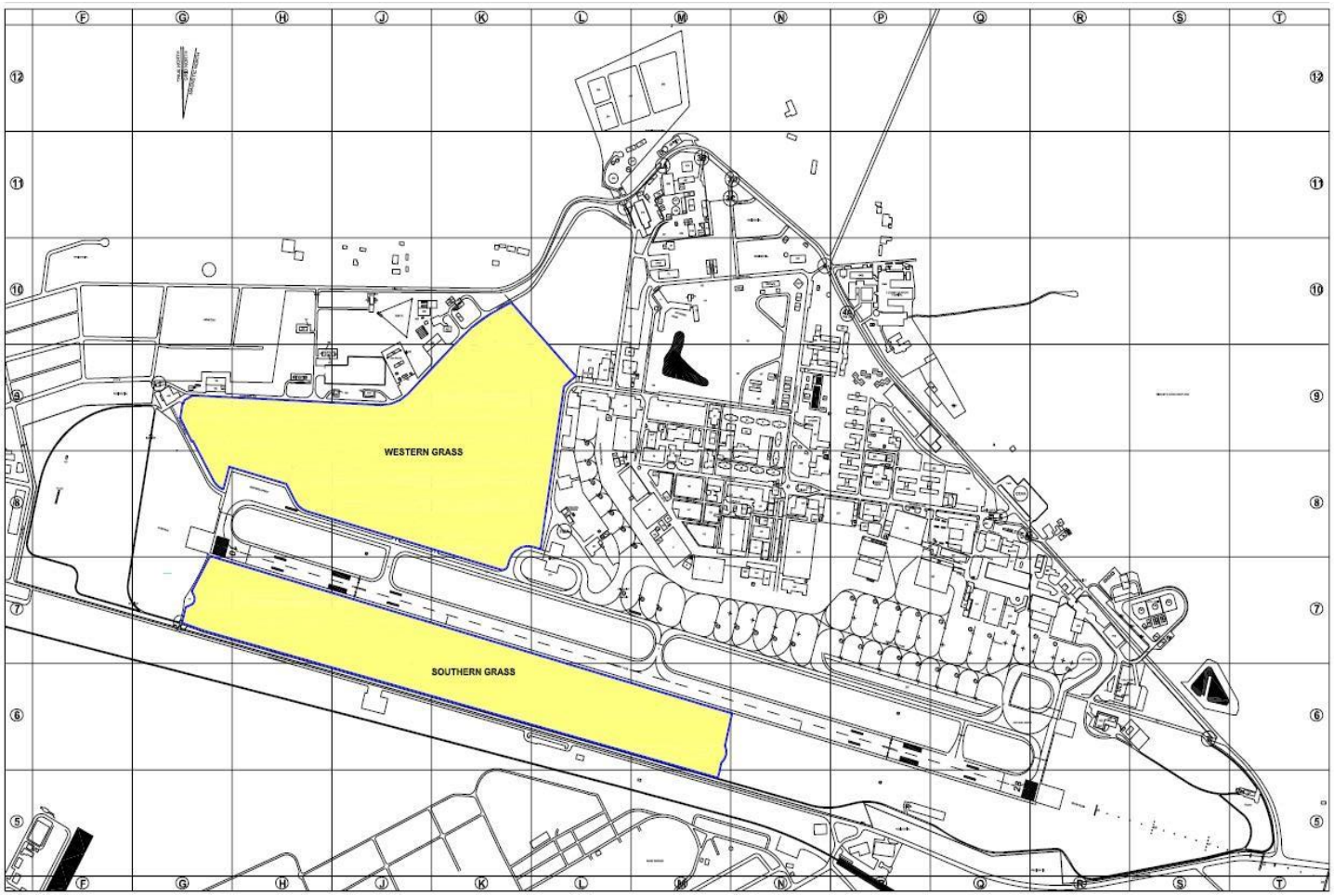

Figure 1 – Western Grass and Southern Grass

2.2 Ordnance Loading Areas (OLA)

2.2.1 Locations

2.2.1.1 OLA 1

OLA 1 is located on TWY X.

2.2.1.2 OLA 5

OLA 5 is located on the Western Apron.

2.2.1.3 OLA 7

OLA 7 is located on TWY Z4 and extends partially onto TWY Z3.

2.2.1.4 OLA 8

OLA 8 is contained within OLA 7 and extends west from the intersection of TWY Z4 and TWY D.

2.2.2 Safety distances

2.2.2.1 Base armament manager defined distance

OLA 1, OLA 5, OLA 7 and OLA 8 safety distances vary due to the nature of the EO used. The 22 SQN BAM will define the safety distance whenever EO is present on OLA 1, OLA 5, OLA 7 or OLA 8.

2.2.2.2 No defined distance provided

Whenever a safety distance has not been defined, a minimum of 400 m is to be enforced by ATC when active, to ensure the safety of personnel not involved in the EO operation (High Explosives – HD 1.1). When OLA 1, OLA 5, OLA 7 and OLA 8 are in use, ATC will restrict personnel and vehicles from accessing:

a) TWY Z3 west of TWY W (Birdbath);

b) TWY Z4;

c) TWY D;

d) TWY E;

e) The Western Grass; and

f) RWY 10/28 west of TWY W.

2.2.2.3 NOTAM requirements

Outside of ATC hours, a NOTAM shall be raised stating that the aerodrome is not available to civil aircraft. Coordination of this NOTAM is the responsibility of the BAM.

2.3 Forward Firing Weapons (FFW)

2.3.1 FFW EO

2.3.1.1 Facilities

Richmond does not have an appropriate EO facility for use of FFW. Refer to *Explosive Safety Advisory Circular 2023/002* for risk assessments involving EO if FFW are to be used at Richmond.

2.3.1.2 Arming/de-arming and loading/unloading procedures

The following points are to be considered when arming/de-arming or loading/unloading an aircraft with forward firing ordnance:

a) There is no OLA suitable for the loading or unloading of FFW at RAAF Base Richmond;

b) If aircraft already fitted with FFW are required to land at RAAF Richmond, approval shall be sought from the relevant FEG or HQAC via the BAM;

c) ASP 1 (midpoint of TWY E) and ASP 2 (midpoint of TWY A) are the only areas to be used to change the state of readiness of armed aircraft, or removal or installation of an ordnance delivery system safety device;

d) Aircraft taxiing, taking off or landing on the active runway may cross the line of fire of an aircraft that is armed with rockets or small arms ammunition;

e) Notices and barriers are to be placed surrounding the aircraft defining a safety distance. Personnel or vehicles are not permitted within the declared safety distance while arming/de-arming is in progress; and

f) Whenever armed aircraft are parked on the Western Apron in an EO loading area, or whenever EO is being loaded. The following equipment is not to be operated in the vicinity (BAM will determine safe distances):

   i) Radars in aircraft which are proceeding along TWY Z to the holding point for RWY 10;

   ii) Ground radio or ground radar equipment;

   iii) Any handheld or vehicle mounted radio transceivers; or

   iv) Any mobile phone.

3 Airspace information

3.1 Richmond

3.1.1 Restricted and danger areas

3.1.1.1 Composition

RAAF Richmond airspace comprises of the following areas defined in the DAH, Section 13:

a) R479;

b) R480;

c) R481; and

d) D459.

3.1.2 Air traffic control responsibility

3.1.2.1 R479 not above 1500 FT

453 SQN RIC FLT is responsible for the provision of ATC within restricted area R479 not above 1500 FT. Additional vertical airspace can be negotiated when required.

3.1.2.2 R479 above 1500 FT, R480 and R481

Sydney Terminal Control Unit, 'Richmond Approach', under Airservices Australia, is responsible for the provision of ATC on behalf of 453 SQN RIC FLT within R479 above 1500 FT, R480 and R481.

3.1.2.3 R481 activation

R481 requires prior notice to 453SQN RIC FLT for activation by NOTAM; preferably, 24 hours. For short notice changes and activation, NOTAM must be published at least 60 minutes prior to activation. Max height for activation in FL280.

3.1.2.4 Control hours

453SQN RIC FLT provides ATC services during hours published in *ERSA*, and as varied via NOTAM. Non-controlled aerodrome procedures apply during out of hours on VHF frequency 135.5 MHz.

See Planning - Air traffic services

3.1.2.5 Priorities within Richmond Airspace

Military aircraft have priority for use of:

a) R479 at or below A015; and

b) R481 below the upper level described by NOTAM. This includes operations in R479 and R480 within the lateral limits of R481.

AIP priorities (ENR 1.4) apply to operations above A015 in R479 and in R480. This includes operations above A015 in Richmond training areas.

3.1.3 D459

3.1.3.1 Lateral limits

For plotting purposes, the following coordinates are provided:

a) 332731S 1503436E;

b) Then along the clockwise arc of a circle of 42 NM radius centred on 335638S 1511057E (SY/DME) to 331835S 1504927E;

c) Then 332613S 1505252E;

d) Then along the counter clockwise arc of a circle of 11 NM radius centred on 333627S 1504756E (RIC/TAC) to 332940S 1503734E; and

e) 332732S 1503436E.

3.1.3.2 Vertical limits

Vertical limits are SFC to 2500 FT.

3.1.3.2.1 D459 – Figure 2

D459 is depicted in Figure 2.

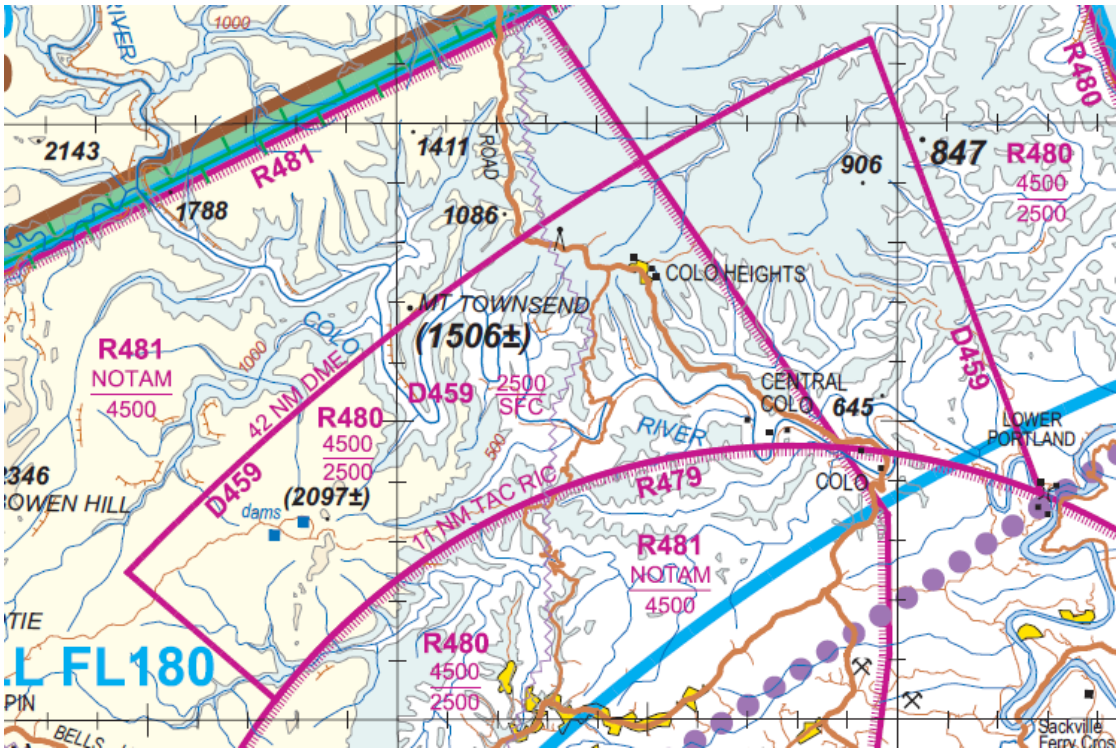

Figure 2 – D459

3.2 Training Areas

3.2.1.1 Normal training areas

The following are normal training areas associated with Richmond airspace:

a) Circuit area;

b) Londonderry training area (LDD TA);

c) Northern training area (NTA);

d) Southern training area (STA); and

e) Area Diver.

Note: For notification of intended operation/booking training area airspace, see 4.1.2.1

3.2.2 Circuit area

3.2.2.1 Circuit area definition

YSRI Circuit area is defined as within 6 NM of the YSRI ARP. An aircraft operating in the circuit area will be issued a clearance to the circuit area not above 1500 FT.

3.2.2.2 Circuit direction

Standard circuit direction is left.

3.2.2.3 Low level circuits

Low-level circuits must be conducted to the north for noise abatement.

3.2.2.4 Military Stream Landing Procedures

3.2.2.4.1 Initial and Pitch

In accordance with FIHA, the Initial Points are 5NM of active runway, displaced deadside, left pitch/circuit direction.

3.2.2.4.2 Low Level Initial and Pitch

Low-level (i.e. Not Above 1000ft AMSL) initial run shall be to the northern side (due noise sensitive area to south), pitch/circuit to the north. This will be cleared via specific instruction – *'Cleared low level initial, run-in and pitch north'.*

3.2.2.5 Weekend training

For noise and surrounding community considerations, weekend circuit training should not occur prior to 0800 local and should be completed by 2200 local.

3.2.3 Londonderry Training Area (LDD TA)

3.2.3.1 Planning

See *YSRI AD2 Supplement Chapter 4* for LDD TA planning information.

3.2.3.2 Visual boundaries

LDD TA is bound by the following visual features:

a) Yarramundi Bridge;

b) Then east via Springwood Road;

c) Bonner Road and the Driftway to the intersection of Londonderry Road;

d) Then south via Londonderry and Northern Roads to the intersection of Vincent Road;

e) Then west along Vincent Road projecting a straight line aligned with Vincent Road to the intersection of the Nepean River (contains aircraft north of the northernmost point of the Penrith Lakes); and

f) Then north via the eastern bank of the Nepean River to Yarramundi Bridge.

3.2.3.3 Lateral limits

For plotting purposes, the following coordinates are provided:

a) 333647S 1504200E;

b) 333645S 1504204E;

c) 333649S 1504231E;

d) 333726S 1504420E;

e) then south via Londonderry and Northern Roads to 334221S 1504325E;

f) 334151S 1503934E;

g) then north via the eastern bank of the Nepean river to 333607S 1504200E.

3.2.3.4 Vertical limits

Vertical limits are SFC to 1500 FT.

3.2.3.5 LDD TA – Figure 3

LDD TA is depicted in Figure 3.

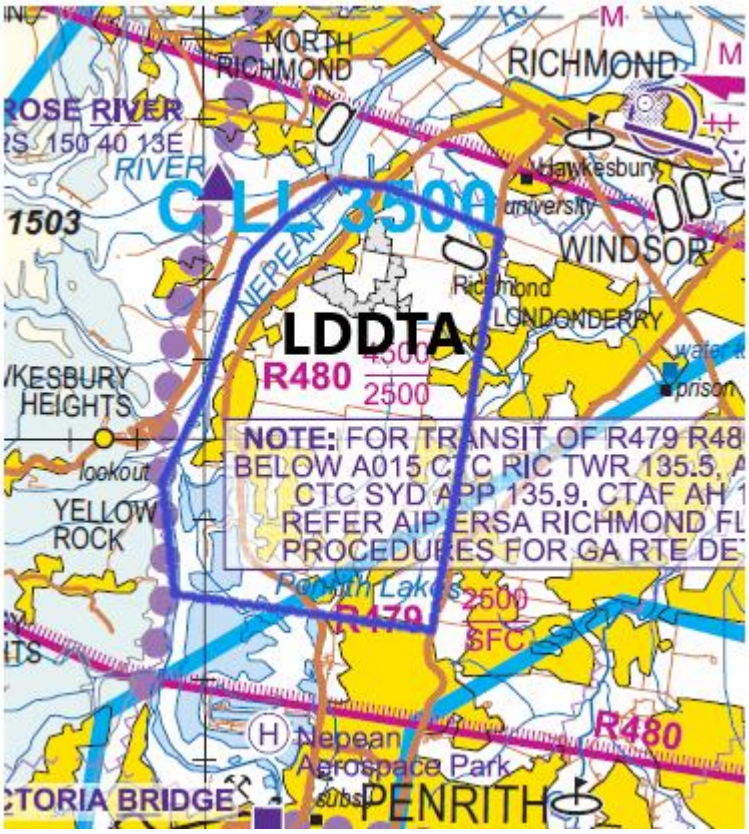

Figure 3 – LDD TA

3.2.4 Northern Training Area (NTA)

3.2.4.1 Location

The NTA is contained within R479.

3.2.4.2 Usage

The NTA is primarily used by the RAAF Richmond Flying Club.

3.2.4.3 Lateral limits

The NTA is bound by:

a) The intersection of the North-South (# 31/32) power line and Bells Line of Road;

b) North along the power transmission line to the R479 boundary at 332615S 1504259E;

c) East along the R479 boundary to the Hawkesbury River at 332710S 1505340E;

d) 333020S 1505530E;

e) 333400S 1505320E;

f) 333420S 1505005E;

g) 333320S 1505010E;

h) Then West via Kurmond Road to Kurmond

i) Via Bells Line of Road to the intersection of the North-South power line (# 31/32).

3.2.4.4 Vertical limits

NTA operations are normally up to 6000 FT. Pilots may request operations to higher altitudes.

3.2.4.5 NTA – Figure 4

NTA is depicted in Figure 4.

3.2.5 Southern Training Area (STA)

3.2.5.1 Location

The STA is contained within R479.

3.2.5.2 Usage

The STA is primarily used by the RAAF Richmond Flying Club.

3.2.5.3 Lateral limits

The STA is bound by:

a) Richmond Train Station;

b) West to the water tank at 333513S 1504243E;

c) Via a straight line to the R479 airspace boundary at 333346S 1503510E;

d) Following the R479 airspace boundary south through to the Northern Road;

e) Northern Road to the intersection with Richmond/Blacktown Road;

f) Richmond Road to George and Macquarie Street (333730S 1504757E);

g) To Windsor Golf Course (333646S 1504823E), then via the railway line west to Richmond Train Station.

3.2.5.4 Vertical limits

STA operations are normally up to 4000 FT. Pilots may request operations to higher altitudes.

3.2.5.5 STA – Figure 4

STA is depicted in Figure 4.

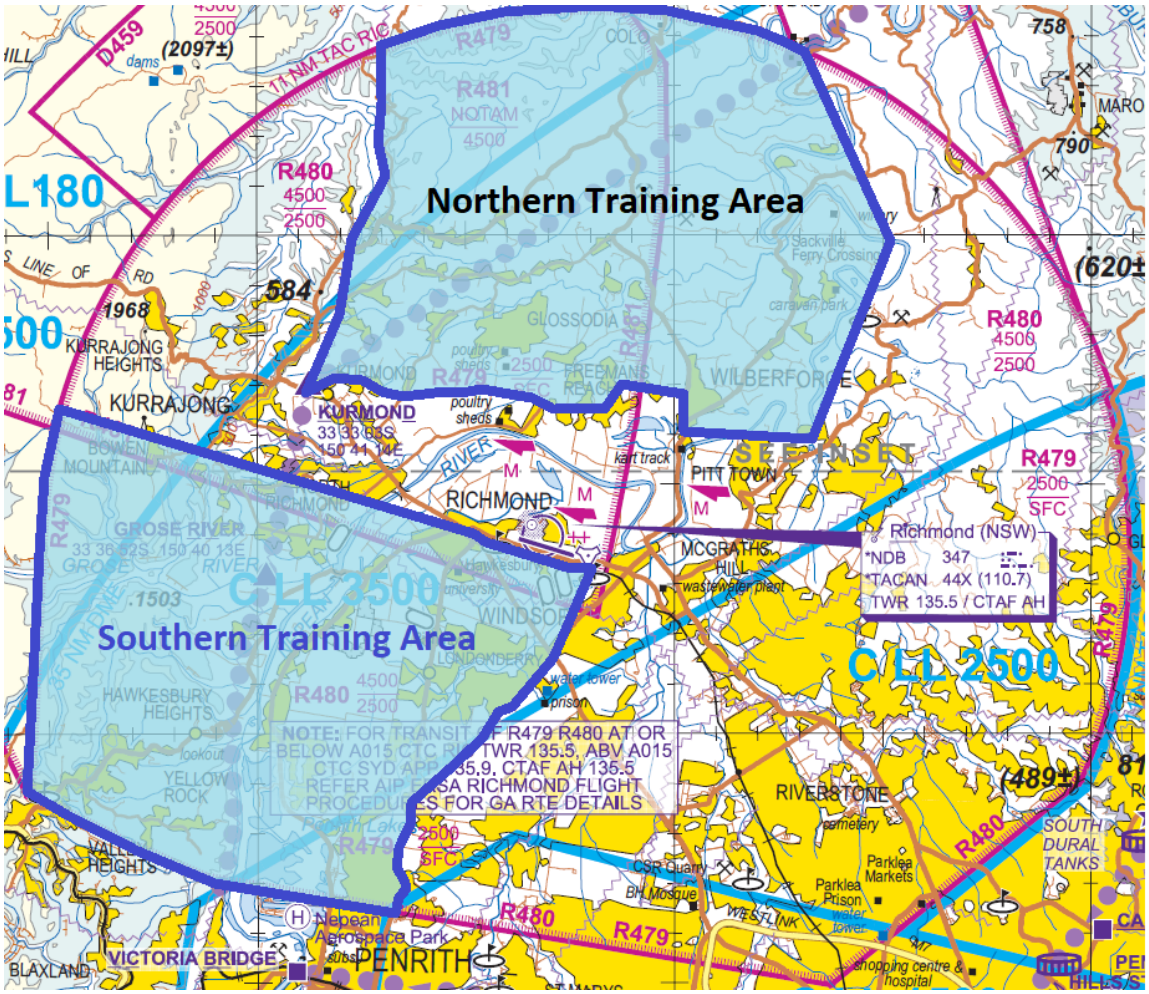

Figure 4 – NTA and STA

3.2.6 Area Diver (A/B)

3.2.6.1 Location and purpose

Area Diver is an airspace release located west of R481. It is used as an AMG and SRG training area whenever operations in R481 (or Sydney CTA within the lateral confines of R481) are impractical. It is also used for the flight testing of military aircraft.

3.2.6.2 Lateral and vertical limits

Area Diver is in Class C and E airspace and is defined as follows (TACAN or GNSS may be used for airspace containment):

DIVER A				
Vertical limits: 9000 FT MSL and above				
Vertexes		Arcs		
Latitude	Longitude	Latitude	Longitude	Radius
S 33 35 38.59	E 149 37 34.44	S 33 54 14.14	E 150 31 57.66	49.00nm
S 33 18 16.26	E 149 52 01.80			
S 33 32 09.63	E 150 07 21.43			
S 33 40 09.41	E 149 50 21.06			

DIVER B				
Vertical limits: FL130 and above				
Vertexes		Arcs		
Latitude	Longitude	Latitude	Longitude	Radius
S 33 29 45.84	E 149 21 03.43	S 33 54 14.14	E 150 31 57.66	64.00nm
S 33 07 13.09	E 149 39 54.95			
S 33 18 16.26	E 149 52 01.80	S 33 54 14.14	E 150 31 57.66	49.00nm
S 33 35 38.59	E 149 37 34.44			

3.2.6.3 Area expansion

To facilitate an aircraft's operations, the dimensions of Area Diver can be expanded on pilot request, controller workload permitting. Likewise, the controller can restrict the availability of Area Diver if necessary.

3.2.6.4 Planning

See Planning - Area Diver

3.2.6.5 Area Diver – Figure 5

Area Diver is depicted in Figure 5.

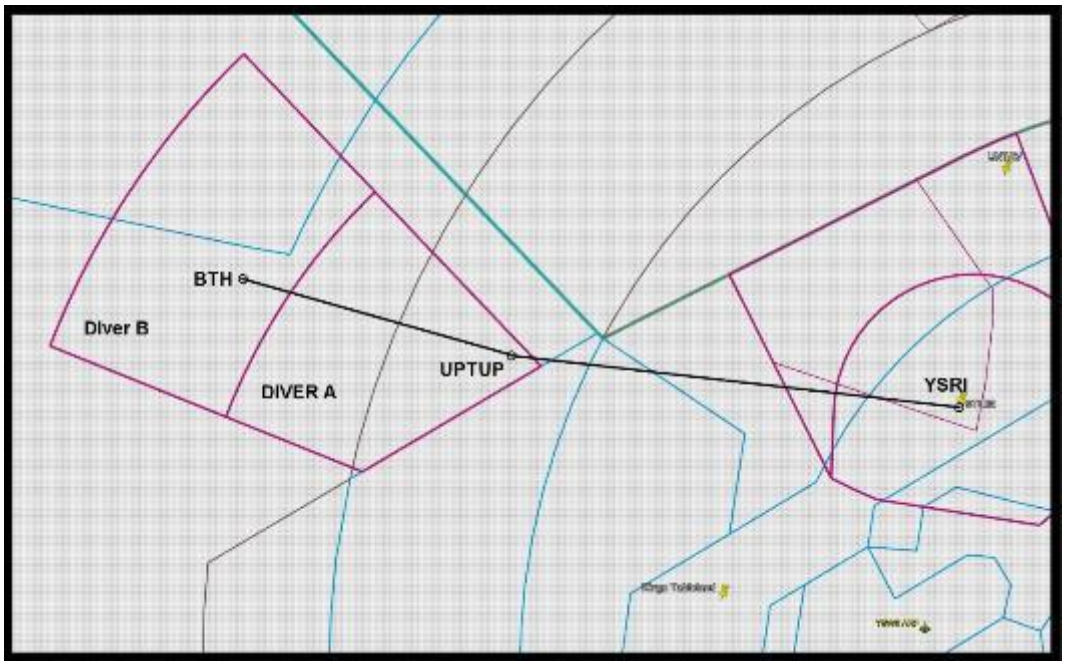

Figure 5 – Area Diver

4 Planning

4.1 Air Traffic Services

4.1.1 Richmond Tower

4.1.1.1 Services

Richmond Tower (453 SQN RIC FLT) provides a Class C service to all airspace users.

4.1.1.2 Out of hours services

Seventy-two hours prior notice is required for aircraft movements requiring ATS outside of ATC hours. 453 SQN RIC FLT will provide ATS for all foreign military and heavy wake turbulence category aircraft movements when provided with such notice. All other requests for OOH ATS will be considered subject to ATC capability. RIC ABOC will inform 453 SQN RIC FLT when they become aware of planned OOH movements.

4.1.1.3 Short Notice Deactivation

Where no further military flights or activities are expected for a specific day, and this is confirmed by AMCC, Richmond ABOC, Flight Plan data, AMTACS, FPARS and Airspace Booking System indications, ATC may cease services early (generally not before 1830 Mon-Thu, and 1600 Fri). Early deactivation enables 453 SQN RIC FLT to efficiently manage equipment maintenance, staffing levels, and other priorities (e.g. National Defence Strategy activities). ATS provided on Sat, Sun and Public Holidays may regularly activate/deactivate for known military movements only.

4.1.2 Local military flying

4.1.2.1 Notification of Airwork within Richmond Airspace

All circuit, instrument approach training, training area, and DZ operations require notification to ATC via ‘Book Airwork’ airspace booking system – https://raaf.bookawk.com. The intent of this system is to enable ATC to identify and forecast complex activities and/or activities with competing priorities. If unable to use the booking system for any reason (including OPSEC), or conflicting operations are already booked, contact Richmond Tower.

4.1.2.2 Night sorties flight planning

When planning night sorties, the aircraft captain shall notify ATC by FPL, bookawk.com, or contact 453 SQN RIC FLT prior to 1600 Local where practicable.

4.1.2.3 Operations within R480, R481 or R479 above 1500 FT

Operations within R479 above 1500 FT, or within R480 or R481 (including the lateral confines of R479 and R480 when R481 it is not active) require the submission of a FPL. The FPL shall be from YSRI to YSRI. Field 18 shall contain the following information: 'RMK/AWK R479 R480 R481'.

4.1.2.4 VFR operations within R479 at or below 1500 FT

Circuit, airdrop and static line parachute operations are normally conducted within R479 not above 1500 FT. Aircraft operating under VFR and remaining within R479 and not above 1500 FT, are not required to submit a FPL.

4.1.2.5 Ground activities LDD TA

All ground activities planned for LDD TA, including helicopter pilot training, helicopter landing site HLS training and confined area training are to be de-conflicted and booked using TASMIS at least 72 hours in advance.

4.2 Drop Zone Bookings

4.2.1 Drop Zone Use and Bookings

4.2.1.1 Primary DZ for personnel drops

RKBY DZ is the primary DZ for all personnel parachuting activities. RIC DZ and LDD DZ may be used when the primary DZ is not available.

4.2.1.2 Seventy-two hour prior notice

DZ bookings are to be lodged by the user unit using the TASMIS at least 72 hours in advance. Notification shall include:

a) unit name, location and telephone contact number;

b) date(s) requested;

c) time period of use;

d) number and nature of drop loads; and

e) DZ party provision or requirement.

4.2.1.3 Less than seventy-two hours prior notice

Requests for bookings within 72 hours require telephone contact with 22SQN OPSO to confirm availability.

4.2.1.4 22SQN responsibilities

The 22SQN OPSO shall ensure that:

a) the bookings register is maintained for each DZ;

b) conflicting requests for DZ usage are resolved using the following basic priority;

   i. Agreement between requesting units for mutual de-confliction; and

   ii. Referral to parent FEG; and

c) Activity details are recorded appropriately;

d) 22SQN to provide confirmation receipt with instruction to book Airspace for DZ activity on https://raaf.bookawk.com (see para 5.2.1.5)

4.2.1.5 Drop Zone Airspace Booking

Once accurate timings of Drop Zone activity are known, operators are to book airspace/advise ATC via https://raaf.bookawk.com. If activity conflicts with other DZ bookings, see para 5.1.1.4 (Richmond ABOC to coordinate application of priorities).

4.2.1.6 Flight plans not arriving/departing Richmond

For flights without a departure or arrival portion at YSRI (e.g. YAMB-YAMB), operators are to either:

a) call Richmond Tower to confirm receipt of Flight Plan (due to limitations with AFTN Addressing systems associated with some flight planning systems resulting in ATC not receiving information of intended operation); or

b) submit Flight Plan including a portion arriving or departing YSRI, with note in 'RMK/' field advising intentions;

Failure to ensure ATC is notified via 'bookawk.com' and receipt of FPL (especially during night sorties) may see activity be inadvertently unsupported.

4.2.1.7 Drop Zone Activity Priorities

See Planning - Active DZ - Impact of DZ operations and priorities

4.2.2 Active Drop Zones

4.2.2.1 Impact of DZ operations and priorities

DZ operations may affect concurrent activities such as circuits, instrument approach training and other flying operations. The lowest priority event can expect holding delays. During DZ operations, priorities are:

a) Planned DZ operations;

b) Arrivals and departures;

c) Circuits and instrument approach training;

Note: *Concurrent DZ operations (e.g. more than one DZ in use at any one time) may incur significant delays to one and/or all DZ aircraft, and other airspace users.*

Note: *Company/SQN traffic can adjust priorities through negotiation with ATC. E.g. DZ operations giving priority to ARR or DEP.*

4.2.2.2 Start approvals and 'propellers/engines stopped' reports

A start approval is required whenever parachute drops are conducted onto the Richmond DZ. Additionally, 'propellers/engines stopped' reports are required. ATC shall notify these requirements by both NOTAM and ATIS broadcast.

4.2.2.3 Approval of engine starts

When start approvals are required, ATC may approve engine start while parachutes are still airborne, provided that the parachutes have been sighted by ATC and are assured of a landing on or near the designated DZ.

4.2.2.4 DZ procedures, clearances and other requirements

See Drop Zone Operations

4.3 Departures

4.3.1 Richmond

4.3.1.1 Type of departure

Type of departure will be assigned in following order of preference:

a) Procedural SID;

b) SID (Radar) (see Outside Tower Hours below);

c) Visual Departure (VSD);

For details on standard instrument departures, see *TERMA* or *DAP East YSRI.*

4.3.1.1.1 Outside Tower Hours

The NESSY (n) SID will be issued by Sydney Centre in lieu of a SID (Radar) outside of Richmond Tower Hours.

4.3.1.2 Departure levels

Departing aircraft will be assigned A050 or Flight Planned level if lower.

4.3.1.3 R560 active

When R560 is activated (via WWX Airspace NOTAMS), pilots shall plan via amended routing as per *ERSA* and as promulgated by the release of a WWX NOTAM.

4.4 Noise Abatement Procedures

4.4.1 Richmond

See *ERSA FAC YSRI Noise Abatement Procedures*.

4.5 Local Routes

4.5.1 General aviation route

See *ERSA FAC YSRI Flight Procedures*.

4.5.2 Cadet air experience (CAE) route

See Australian Air Force Cadets (AAFC) Elementary Flying Training School (EFTS) Supplementary Aerodrome Guide.

4.6 Area Diver

4.6.1 Planning

4.6.1.1 Flight planning requirements

Flights are to be planned:

a) Route DCT UPTUP BTH [return W460 STUIE DCT or elsewhere as desired];

b) Airwork delay and requested block level at UPTUP and/or BTH;

c) RMK/AWK DIVER A (or B or AB); and

d) MARSA when multiple DIVER operations conflict.

4.6.1.2 MARSA

Where multiple aircraft plan to operate within Area Diver and undertake operations where they cannot be provided a separation service, pilots should consider requesting MARSA procedures.

4.6.1.3 Airspace Jurisdiction and Airways Clearance

Melbourne Centre (Bathurst Sector) is responsible for controlling Area Diver. Once able, the controller will provide airways clearance for operations within Area Diver, example: 'TROJ67 CLEARED TO OPERATE WITHIN AREA DIVER A, BLOCK 9000 TO FLIGHT LEVEL 140'.

4.6.1.4 Area Diver Priorities

AIP priorities apply for Area Diver operations, and Melbourne Centre (Bathurst Sector) will provide normal airspace services.

4.6.1.5 Transponder Usage

Nil transponder operations are not available in Area Diver.

4.7 Meteorology

4.7.1 Products

4.7.1.1 AWIS and ATIS

AWIS is available on 02 9353 6448. ATIS is available on 02 4587 2589.

4.7.1.2 Forecasting products

TAF CAT A, METAR/SPECI, and AD WRNG are available forecasting products.

5 Drop Zone (DZ) Operations

5.1 General Procedures

5.1.1 All DZ

5.1.1.1 VFR operations

Drop aircraft within restricted areas R479/R480/R481 shall normally operate VFR. IFR operations require the submission of a FPL.

5.1.1.2 Drop zone safety officer responsibility

The Drop Zone Safety Officer (DZSO) must ensure that the DZ survey provided to the operating unit accurately reflects the position of any visual markers in use. Points of Impact coordinates are to be provided in WGS 84 datum.

5.1.1.3 Drop zones within R479

R479 contains the three drop zones and is depicted in Figure 6.

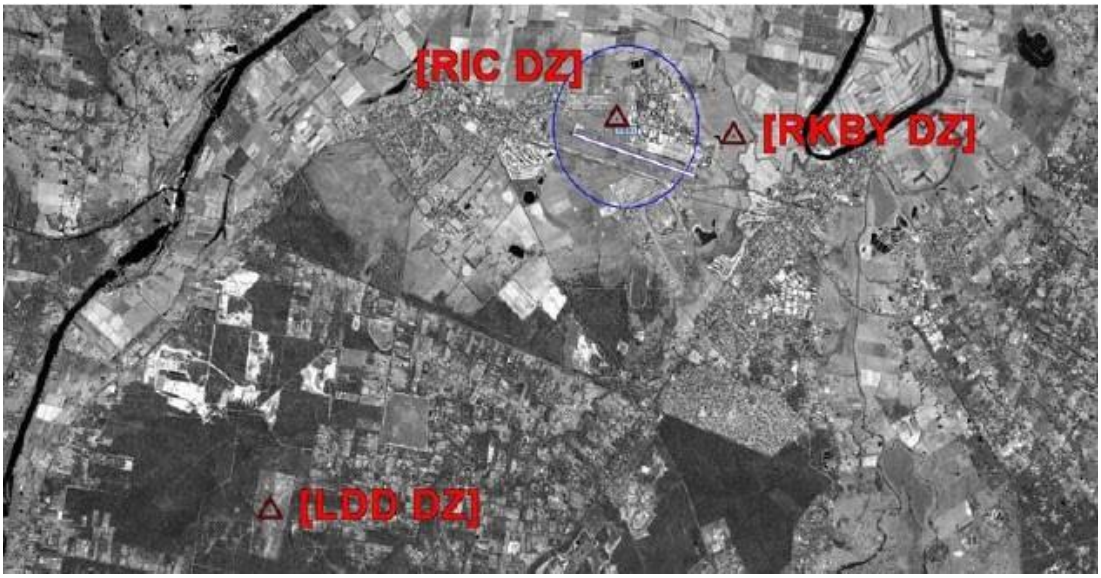

Figure 6 – LDD, RKBY and RIC DZ

5.1.1.4 Drop zone purposes

The purpose of each DZ is as follows:

a) LDD DZ. Cargo (light equipment - helibox/compacts and CDS) and personnel (free fall and RAPSL only);

b) RKBY DZ. Personnel only (free fall, RAPSL or static line); and

c) RIC DZ. Cargo (helibox), personnel (free fall and RAPSL), helicopter winch training and slung loads.

5.1.1.5 Approval for use

Approval authority for the use of any DZ is the ABXO.

5.1.1.6 Out of hours drops

Airdrops shall not be conducted whilst R479/R480 is deactivated. Operations planned outside of normal ATC hours must be coordinated through 22SQN ABOC to facilitate adjusted ATC hours.

5.1.1.7 DZSO clearances

A drop clearance is required from the DZSO for each DZ.

5.1.1.8 Cancel drop clearance

ATC will use the phrase ‘STOP DROP’ to cancel a drop clearance. A read back is required.

5.1.1.9 Monitoring frequencies

Drop aircraft must monitor both the ATC and DZSO frequencies.

5.1.1.10 Personnel on board

The drop aircraft shall advise ATC of the number of jumpers planned in a stick. The aircraft will update the remaining personnel on board on recovery.

5.1.1.11 Priorities

See Planning - Active Drop Zones - Impact of DZ operations and priorities

5.2 DZ Details

5.2.1 Londonderry drop zone (LDD DZ)

5.2.1.1 Location

LDD DZ is situated 4 NM southwest of Richmond within the LDD TA. See Figure 7.

5.2.1.2 Drop zone dimensions

The cleared DZ area within the LDD TA is approximately 1150 m x 550 m. Refer to user unit DZ surveys for accurate dimensions.

5.2.1.3 Low level static line personnel drops

LDD DZ is not available for low level (1000FT AGL) static line personnel drops due to the surface condition.

5.2.1.4 Airways clearance

Locally based airdrop aircraft shall be issued with the ATC clearance `CLEARED TO LDD DZ NOT ABOVE *(ALTITUDE)'*. This shall clear the aircraft to track to and then operate within R479, remaining on or west of the run-in track 181 DEG magnetic, to LDD DZ, in a right circuit pattern, at the cleared altitude.

Each circuit pattern is expected to overfly the Drop Zone. Deviations from the 'standard' drop zone pattern (e.g. direction, orbits, amended inbound leg turn point etc) require ATC clearance.

Note: *Run-in track establishes the aircraft west of the Richmond CBD. Other activities (e.g. VFR Rotary Wing and Light Fixed Wing Aircraft) may be segregated from LDD DZ activities by being instructed to remain east of Richmond CBD.*

Note: *Exception, during LDD DZ formation activities, formation lead aircraft will be established on or west of the run-in track, other formation aircraft are approved to operate east of that track due operational requirements.*

5.2.1.4.1 Drop clearance

A drop clearance is only required from ATC when operating above 1500 feet AMSL.

5.2.1.5 Run-in course/track

The preferred run-in direction for extracted loads is north to south due to the proximity of built up areas south of the LDD DZ.

5.2.1.6 Segregation of Operations

Londonderry Drop Zone operations, where VFR, will be segregated from other VFR operations in a manner in which Drop Zone aircraft will not require to manoeuvre unless specifically instructed. Where IFR, full separation from other airspace users will be provided. Springwood Nepean Model Aircraft Club operations will be precluded from occurring during Londonderry Drop Zone activities.

Note: *Some DZ aircraft may have TCAS Resolution Advisories (RA) inhibited during DZ operations due to operational requirements.*

5.2.1.7 RPAS and MAC Operations

RPAS and MAC activities in close proximity to the DZ will be prohibited, unless DZ aircraft captain gives approval.

5.2.1.8 Londonderry Drop Zone image

Figure 7 – LDD DZ

5.2.2 Rickabys drop zone (RKBY DZ)

5.2.2.1 Location

RKBY DZ is established near Rickabys Creek, adjacent to the fuel farm on the eastern perimeter of Richmond aerodrome. RKBY DZ is depicted in Figure 8.

5.2.2.2 Drop zone dimensions

The dimensions of the DZ are approximately 1050 m x 550 m. Operating units are to refer to an approved DZ surveys for accurate DZ dimensions.

5.2.2.3 No cargo drops

RKBY DZ is not available for any form of cargo airdrop due to its proximity to built up areas.

5.2.2.4 Airways clearance

Locally based drop aircraft shall be issued with the ATC clearance 'CLEARED TO RKBY DZ, NOT ABOVE *(ALTITUDE)*'. This shall clear the aircraft to track to and then operate within R479, to RKBY DZ, in a right circuit pattern, at the cleared altitude.

5.2.2.4.1 Drop clearance

A drop clearance is required from ATC.

5.2.2.5 Run-in course/track (static line)

Drop aircraft shall fly a right circuit pattern unless otherwise coordinated with ATC. The run-in track and drop pattern is typically:

a) 309 DEG magnetic, right pattern (default); or
b) 129 DEG magnetic, left pattern.

Each circuit pattern is expected to overfly the Drop Zone. Deviations from the 'standard' drop zone pattern (e.g. direction, orbits, amended inbound leg turn point etc) require ATC clearance.

Note: *During RKBY DZ formation activities, formation lead aircraft will be established on the run-in track, other formation aircraft are approved to operate laterally offset of that track due operational requirements.*

5.2.2.6 Segregation of Operations

Rickaby's Drop Zone operations, where VFR, will be segregated from other VFR operations in a manner in which Drop Zone aircraft will not require to manoeuvre unless specifically instructed. Where IFR, full separation from other airspace users will be provided.

Note: *Some DZ aircraft may have TCAS Resolution Advisories (RA) inhibited during DZ operations due to operational requirements.*

5.2.2.7 RPAS and MAC Operations

RPAS and MAC activities in close proximity to the DZ will be prohibited, unless DZ aircraft captain gives approval.

5.2.2.8 Rickabys Drop Zone image

Figure 8 – RKBY DZ

5.2.3 Richmond drop zone (RIC DZ)

5.2.3.1 Location

RIC DZ is established on the Western Grass on Richmond aerodrome. See Figure 9.

5.2.3.2 Drop clearance

A drop clearance is required from ATC.

5.2.3.2.1 Explosive ordnance on OLA 1

RIC DZ is not available when Class 1.1 explosives are on OLA 1.

5.2.3.3 Entry to RIC DZ/western grass

Entry to the Drop Zone requires an ATC clearance. Request for entry can be made to callsign 'RICHMOND GROUND' on VHF frequency 121.65 MHz or by telephoning Richmond Tower on 02 4587 1201. Approval for entry to the DZ does not constitute an ATC clearance to enter other airfield area.

5.2.3.4 Free Fall Parameters

Military aircraft and PJE operations cleared to operate within R481 must apply necessary buffers to contain their operations laterally inside R481. If unable, pilots may request lateral extensions subject to normal AIP priorities. Provide Run-in Track and Drop Point reference the Drop Zone.

5.2.3.5 RPAS and MAC Operations

RPAS and MAC activities in close proximity to the DZ will be prohibited, unless DZ aircraft captain gives approval.

5.2.3.6 Image of RIC DZ

Figure 9 – RIC DZ

6 Other Military Operations and Procedures

6.1 Tactical Exercise Operations

6.1.1 Richmond

6.1.1.1 Inbound

Inbound tactical exercise aircraft not in receipt of a clearance shall request a clearance no less than 10 NM prior to the restricted area boundary.

6.1.2 Night flying operations

6.1.2.1 Local night flying training

Local night flying training shall normally be conducted Monday to Thursday, excluding public holidays. Circuit and instrument approach training should be completed by 2300 local. High priority training may occur on the authority of SQN Commanding Officers.

6.1.2.2 NVG training – aerodrome lighting

Aircraft requiring aerodrome lighting will be given priority over aircraft conducting NVG training. ATC will advise NVG aircraft of the estimated timings of non-NVG movements as soon as practicable to aid sortie planning.

6.1.3 Formation Operations

6.1.3.1 Formation (N) Procedure

For formation aircraft requiring an in-trail Radar SID:

a) The aircraft will be issued a Richmond (N) Radar SID departure;

b) If departing RWY 10, the aircraft requires heading 095 til 4 TAC;

c) If departing RWY 28, the aircraft requires heading 285 til 4 TAC;

d) All subsequent heading changes must be less than 90 degrees;

Formation aircraft must specifically request this procedure from ATC. Aircraft will be cleared: ‘RICHMOND (N) DEPARTURE, FORMATION (N) PROCEDURE’.

6.1.4 NOCOM Operations

6.1.4.1 Notification

For NOCOM operations in Richmond Airspace, contact Richmond Tower for coordination prior to activity.

6.2 Military Helicopter Procedures

6.2.1 Richmond

6.2.1.1 Runway 10/28 HLS – Short and Long

Two HLS have been established on RWY 10/28:

a) **RWY 10/28 Short.** From approach end THR to TWY C;

b) **RWY 10/28 Long.** From TWY C to the departure end THR.

6.2.1.2 Simultaneous helicopter operations

Two helicopters may operate to RWY Short and Long simultaneously under the following conditions:

a) HLS is specified using the phrase ‘RWY SHORT/LONG’;

b) A landing clearance to RWY Long when Short is occupied shall be via offset procedure, using the phrase ‘CALLSIGN, SHORT OCCUPIED, RWY LONG CLEARED TO LAND.’

c) A take-off clearance from RWY Short when Long is occupied shall be via offset procedure, using the phrase ‘CALLSIGN, RWY LONG OCCUPIED, RWY SHORT, CLEARED FOR TAKE-OFF’;

d) Aircraft conducting an offset procedure are to maintain own separation from aircraft in the other HLS by offsetting to south while remaining within the RWY strip;

e) Practice engine failure after take-off procedures are not available unless agreed to by the aircraft in RWY Long; and

f) Offset departures are not available at night unless both aircraft are NVG/NVD or military terrain clearance (MTC).

6.2.1.3 Autorotation practice

Aircraft intending to conduct a practice autorotation are to advise this intention and landing area with the base call.

6.2.1.3.1 180/360 degree autorotations

180/360 degree autorotation's may be approved subject to ATC discretion, the request is to be made no later than downwind and with intended landing area.

6.2.1.4 Slow approaches

Any intention to make a slow approach is to be requested no later than established on the downwind leg.

6.3 Chaff/Flare Operations

6.3.1 Richmond

6.3.1.1 Hung flare

On detection of a Hung flare aircraft are proceed in accordance with aircraft publication. ASP which are located on TWY A and E are available for taxi. OLA1 is also usable by certain aircraft types.

7 Emergencies

7.1 Procedures

7.1.1 Alternate landing runways

7.1.1.1 RWY 10/28 not available

If RWY 10/28 is not available, possible alternates include:

a) TWY Z;

c) Southern Grass; or

d) Western Grass.

7.1.2 Aircraft arrestor systems

7.1.2.1 RWY 10/28

Hook cable arrestor systems are located at both ends of RWY 10/28.

7.1.2.2 Emergency hook cable arrests - priority

Emergency hook cable arrests have priority over all other traffic, unless there is an aircraft with a higher-level emergency. ATC shall consider recovering as many other aircraft as possible prior to the arrest.

7.1.3 Airborne fuel jettison

7.1.3.1 Designated area

Unless limited by emergency conditions, fuel jettison should be carried out beyond 10 NM northwest of Richmond at 10, 000 FT (satisfies the statutory 6000 FT AGL minimum).

7.1.4 Controlled aircraft abandonment

7.1.4.1 Designated area

The controlled abandonment area is RIC006011 with the aircraft tracking 006 DEG magnetic. The recommended abandonment altitude is 10 000 FT, with a minimum of 2000 FT.

8 References

Title	Section
En Route Supplement Australia (ERSA) http://www.airservicesaustralia.com/aip/	FAC YSRI
Designated Airspace Handbook (DAH) http://www.airservicesaustralia.com/aip/	Section 13
Departure and Approach Procedures (DAP) http://www.airservicesaustralia.com/aip/	YSRI
Terminal Australia (TERMA) https://ais-af.airforce.gov.au/	YSRI
YSRI Aerodrome Manual – Version 6 Richmond Aerodrome Manual (OBJ: J4149604)	All
RAAF RIC Instruction 12-2025 - RAAF Richmond Parachute and Airdrop Procedures	All
AAFC EFTS Supplementary Aerodrome Guide (Link to be sourced)	TBD