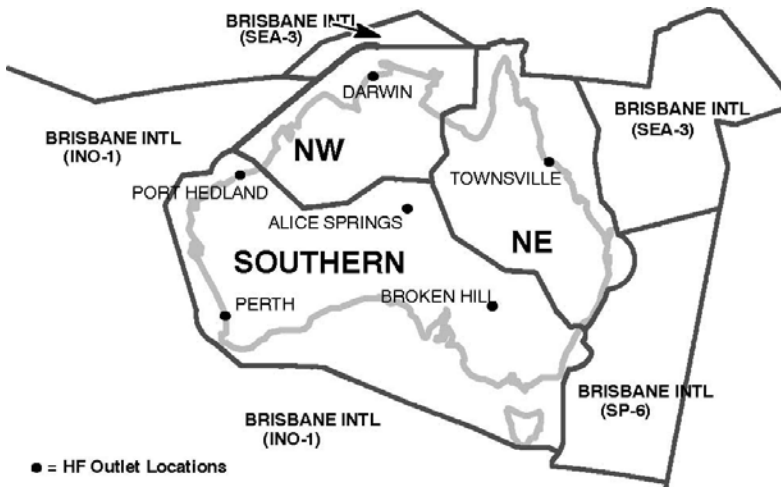


9. FLIGHTWATCH HF ORGANISATION



FREQUENCIES

NORTH WESTERN	3452	6541	8843	SP-6	BRISBANE INTL	3467	5643	8867	13261	17904	(KHZ)
NORTH EASTERN	3452	6610	8831	SEA-3	BRISBANE INTL	3470	6556	11396	13318	17907	(KHZ)
SOUTHERN	3461	6565	8822	INO-1	BRISBANE INTL	3476	5634	8679	13306	17961	(KHZ)

- 9.1 Australia is divided into six HF Network Areas known as Regional Domestic Air Route Areas (RDARA). Details of the HF FREQ organisation is shown on PCA. All FREQ quoted are suppressed carrier FREQ, and the upper sideband mode is used. These HF FREQ are operated from Brisbane.
- 9.2 Depending on HF propagation conditions, the best useable RDARA/MWARA frequencies for reception will vary. Pilots can access up to date primary and secondary frequencies for all Domestic and International HF through the Aircservices website. Access is made through Pilot Briefing Services, Location Briefing. Each HF area has been allocated a unique code and once entered into Location Briefing will provide an up to date primary and secondary HF frequency for that selected area. Enter the code that represents the area required in the following table.

RDARA	LOCATION CODE
Southern	165
North Western	170
North Eastern	175
MWARA	
SP-6 Brisbane INTL	150
INO-1 Brisbane INTL	155
SEA-3 Brisbane INTL	160

- 10. **ATS AREA FREQUENCIES AT UNCONTROLLED AERODROMES**
- 10.1 These are shown on en route and terminal charts.
- 10.2 HF facilities are remotely operated; proximity to these may affect frequency selection. The location of HF outlets and the frequencies operated from each outlets are shown above.

11. LOW JET ROUTES

- 11.1 Routes at or below 5,000FT AGL used by military aircraft for low level, high speed operations are designated as Low Jet Routes (LJR). Routes are planned to avoid:
- controlled airspace administered by Airservices Australia;
 - restricted and danger areas not administered by the ADF;
 - civil aerodromes listed in ERSA by at least 5NM laterally or 4,000FT vertically;
 - aerodromes where carriage and use of radio is required unless equipped with the appropriate radio frequency; and
 - sensitive areas and oil/gas platforms as detailed in ERSA.
- 11.2 Notification of routes and duration of LJR operations will be by NOTAM. Information on LJR activity in your area is available from the pre-flight briefing service and FLIGHTWATCH.
- 11.3 Aircraft using LJR may be camouflaged and emit little or no smoke trail, although they will normally show anti-collision beacons. They may operate singly or in close or loose formation. Significant wake turbulence and a large turn radius may be expected.
- 11.4 All LJR aircraft are equipped with UHF and some also have VHF and HF. However, they may often be out of communications (NOCOM) for part of their flight. Although most LJR aircraft are radar equipped, these radars do not enable avoidance of conflicting aircraft.
- 11.5 WHERE POSSIBLE, PILOTS SHOULD PLAN THEIR FLIGHTS TO AVOID ACTIVE LJR.
- 11.6 The following LJR are activated HJ and are flown by F18 aircraft operating at or BLW 5,000FT AGL:
- R638 - 10NM SSW Baryulgil below 3,000FT AGL - Gatton (Climb Point) - Amberley.
 - R638 - Coastal below 3,000FT AGL - Gold Coast - Point Lookout (Stradbroke Island) - Brisbane.
 - Point Lookout - Gold Coast- Coastal below 5,000FT AGL - R638.
 - R638 - Casino 231025 - Amberley 191043 - Amberley.
 - Sandy Cape - Coastal below 3,000FT AGL - Double Island Point - Bribie Island - Cape Moreton - Point Lookout.
 - Point Lookout - Cape Moreton - Bribie Island - Coastal below 3,000FT AGL - Double Island Point - Sandy Cape.

Note: A number of other LJR and Defence activities are in operation at various times in addition to those shown above and will be advised by NOTAM when necessary.

12. NIGHT VISION DEVICES AND EQUIPMENT

- 12.1 Night vision devices and equipment are used in defence, security and law enforcement operations. Current equipment is:
- Night Vision Goggles (NVG) - helmet mounted light amplifying binoculars which sense minute amounts of visible and near infra red light under conditions of near darkness and enhance them through an image intensifier tube assembly.
 - Low Light Television (LLTV) - aircraft equipment which uses TV cameras with powerful zoom lenses, with or without image intensifiers for low light conditions.
 - Forward Looking Infra Red (FLIR) - aircraft mounted sensor which detects temperature differences and displays on a screen, thermal images. May also be capable of looking along other axes. Used in SAR, law enforcement and defence applications.
- 12.2 Various limitations are placed on the aircraft and crews using these devices. In particular, NVG require modifications to aircraft lighting. Masking or extinguishing external lights may create difficulties for other traffic and ATC in providing visual separation, particularly since most of the defence aircraft involved are camouflaged. Much of this activity is carried out at low level and may involve abrupt manoeuvring.
- ## 13. LOW LEVEL FLIGHTS - NOTIFICATION
- 13.1 Flights at very low level will advise their operating band of levels in the flight notification. Aircraft unlit, or with masked external lights will advise their operating area. In controlled airspace, other traffic will be advised of the activity and separation will be achieved using local procedures agreed between ATS and the night vision device user. In Class G airspace, notification of low level flights will be provided by NOTAM.

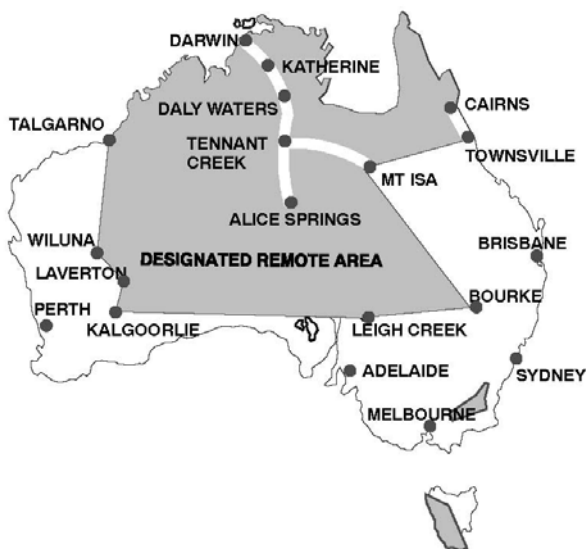
14. PRECAUTIONS

- 14.1 Because of the likely activities of these device users, e.g. surveillance, law enforcement, SAR and military operations, significant variations to normal aircraft operating procedures may be encountered. Pilots should acquaint themselves of the activity by making use of pre-flight briefing facilities and when in flight take account of possible non-standard procedures.
- 14.2 Aircraft operating in close proximity to such traffic may request that external lighting be displayed. Night agricultural operators in areas known to be used for night vision device training (e.g. Oakey and Townsville) should advise defence authorities of their intentions.

15. HIGH ALTITUDE BALLOON FLIGHTS

- 15.1 Large helium-filled plastic balloons are launched periodically from various locations. They carry scientific equipment to record data from the upper atmosphere and normally ascend to altitudes in excess of 70,000 FT with flight duration of 80 hours or more. The main balloon launching station is at Alice Springs but other launching sites, e.g. Charleville, may also be used. Where possible, flight paths will be selected so that the recovery area is outside the more densely populated Eastern/South Eastern/South Western areas. Notification will be by NOTAM.

16. DESIGNATED REMOTE AREAS



Notes:

1. ACFT planned to operate within or through the designated remote area shown in this section are required to carry survival equipment suitable for sustaining life in the area over which the flight is planned as per the civil aviation legislation relevant to their operation.
2. Flight through corridors must be made within sight of and not more than five miles from the highway concerned.
3. Australian administered islands adjacent to the Remote Area between Anna Plains and Cairns are part of the Designated Remote Area.
4. Mainland within 50NM of Darwin excluded from Designated Remote Area.