



MGA 84 RUNWAY COORDINATES

Location	Eastings (m)	Northings (m)
ADP	475,234.64	7,817,295.76
Threshold RWY 01	475,230.00	7,802,514.62
Threshold RWY 07	474,310.29	7,810,440.61
Threshold RWY 19	476,283.97	7,827,880.46
Threshold RWY 25	475,341.34	7,821,153.86
Eastern End TWR Bravo	475,041.36	7,810,701.60
Western End TWR Bravo	474,624.90	7,810,702.84



LOCALITY DIAGRAM



Building Type	ANEF zone of influence		
	Acceptable	Unacceptable	Unacceptable
Houses, Towns, etc. flat terrain path	Less than 25 ANEF (Dots)	25 to 25 ANEF (Dots)	Greater than 25 ANEF
Hills, ridges, etc.	Less than 25 ANEF (Dots)	25 to 25 ANEF (Dots)	Greater than 25 ANEF
Single occupancy	Less than 25 ANEF (Dots)	25 to 25 ANEF (Dots)	Greater than 25 ANEF
Public buildings	Less than 25 ANEF (Dots)	25 to 25 ANEF (Dots)	Greater than 25 ANEF
Health facilities	Less than 25 ANEF (Dots)	25 to 25 ANEF (Dots)	Greater than 25 ANEF
Commercial buildings	Less than 25 ANEF (Dots)	25 to 25 ANEF (Dots)	Greater than 25 ANEF
Light industrial	Less than 25 ANEF (Dots)	25 to 25 ANEF (Dots)	Greater than 25 ANEF
Other uses	Less than 25 ANEF (Dots)	25 to 25 ANEF (Dots)	Greater than 25 ANEF

- Notes:**
- The actual location of the 25 ANEF contour is difficult to define accurately, only because of variations in aircraft flight paths.
 - Within the 25 ANEF, some areas may be included in the 25 ANEF zone of influence as a result of obstructions. Land use authorities may consider the incorporation of these areas into the construction of residential or schools as appropriate.
 - There are no cases where a building of a particular type will contain spaces used for activities which would generally be found in a different type of building (e.g. an office in an industrial building) or vice versa. Table A1 should be used to determine site acceptability, but any spaces which are not listed within the specific spaces should be determined by reference to the Australian Standard.
 - The Australian Standard does not recommend development in unacceptable areas. However, where the relevant planning authority determines that development in unacceptable areas is appropriate, the applicant should refer to the Australian Standard for more information on the required Airport Noise Reduction (ANR) developed in accordance with the Standard. For residential areas, the level of aircraft noise is calculated using the method described in the Australian Standard.
 - In no case should new development take place in a different class deemed unacceptable because such development may impact on airport operations.
- Source: AS1021-2015

**ENDORSEMENT FOR TECHNICAL ACCURACY
MILITARY INPUT ONLY**

Original signed by: *[Signature]*
 A/First Assistant Secretary Infrastructure - Estate and Infrastructure Group
 Department of Defence

Date: 29 / 11 / 2016
 The aircraft noise contours on this 2036 ANEF map are based upon a forecast made in November 2015 of aircraft movements and aircraft types for the year 2036. This forecast is used as an input to the INM model to create the 2036 ANEF forecast. The model applies weighting to aircraft movements for different times of the day. The forecast has been prepared for use with AS1021-2015 and in accordance with acceptance industry practice.

The forecast annual military aircraft movements of 8,850 reflect the normal military aircraft operations both based at and transiting through RAAF Base Townsville in a year of an 80% 2400 Friday night. Additional military aircraft movements related to military operations and training exercises can occur in excess of the forecast annual military aircraft movements on a periodic basis. The number and type of military aircraft involved in the short duration exercises varies for each individual exercise, and in accordance with forecast accuracy and, therefore, is not included in the Military Aircraft Movements.

**Military Aircraft Monthly Movements by Runway and Aircraft Type
Townsville Military 2036 ANEC**

Runway	Arrivals			Departure			Concur			Total
	Count	Day	Night	Count	Day	Night	Count	Day	Night	
07	1750	1,625	1,250	1,125	1,050	1,050	2,060	1,820	1,320	5,350
19	1,000	9,205	8,440	2,854	1,537	1,537	1,538	2,077	1,820	11,327
25	1,000	2,400	2,250	1,000	1,000	1,000	1,000	1,000	1,000	4,250
30	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
33	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
35	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
38	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
40	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
42	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
44	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
46	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
48	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
50	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
52	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
54	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
56	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
58	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
60	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
62	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
64	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
66	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
68	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
70	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
72	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
74	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
76	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
78	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
80	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
82	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
84	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
86	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
88	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
90	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
92	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
94	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
96	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
98	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
100	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
102	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
104	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
106	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
108	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
110	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
112	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
116	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
118	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
120	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
122	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
124	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
126	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
128	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
130	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
132	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
134	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
136	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
138	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
140	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
142	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
144	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
146	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
148	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
150	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
152	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
154	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
156	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
158	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
160	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
162	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
164	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
166	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
168	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
170	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
172	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
174	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
176	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
178	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
180	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	5,570
182	1,114	1,114	1,114	1,114</						