Australian Noise Exposure Forecast (ANEF) Maps

Aircraft Noise and ANEF Maps

Defence has an honest approach about aircraft noise. Although aircraft noise will never by eliminated, Air Force is doing everything it can to reduce noise impacts, whilst balancing operational and training requirements.

The publication of Australian Noise Exposure Forecast (ANEF) maps are one way that Defence advises of future plans. ANEF maps provide a forecast of aircraft noise for a future year – at RAAF Base Williamtown the current ANEF provides a forecast for the year 2025. The ANEF maps use an index for predicting cumulative community exposure to aircraft noise.

ANEF maps should be used by local councils when considering development applications. Councils should apply *Australian Standard 2021-2000 Building Site Acceptability based on ANEF zones* to determine whether a location will be affected by aircraft noise.

RAAF Base Williamtown

RAAF Base Williamtown is a strategic national asset, providing vital training for the next generation of air combat aircraft. In the future, RAAF Base Williamtown will be home to the first squadron of F-35A (Joint Strike Fighter) aircraft.

Development around RAAF Base Williamtown exposes new people to aircraft noise and limits Air Force's ability to reduce aircraft noise for existing properties.

Noise Reduction

Air Force has implemented a 'fly neighbourly' policy at RAAF Base Williamtown to reduce aircraft noise for existing properties. Developing properties within the ANEF zones, will further constrain the already limited opportunities for Air Force to mitigate aircraft noise impacts – both now with F/A-18A/B Hornets and in the future with the F-35A.

It is unreasonable to expect Air Force to reduce the noise impact for homeowners that knowingly purchase properties within ANEF zones.





TABLE 2.1 BUILDING SITE ACCEPTABILITY BASED ON ANEF ZONES

(To be used in conjunction with Table 3.3)

Building type	ANEF zone of site		
	Acceptable	Conditionally acceptable	Unacceptable
House, home unit, flat, caravan park	Less than 20 ANEF (Note 1)	20 to 25 ANEF (Note 2)	Greater than 25 ANEF
Hotel, motel, hostel	Less than 25 ANEF	25 to 35 ANEF	Greater than 30 ANEF
School, university	Less than 20 ANEF (Note 1)	20 to 25 ANEF (Note 2)	Greater than 25 ANEF
Hospital, nursing home	Less than 20 ANEF (Note 1)	20 to 25 ANEF	Greater than 25 ANEF
Public building	Less than 20 ANEF (Note 1)	20 to 30 ANEF	Greater than 30 ANEF
Commercial building	Less than 25 ANEF	25 to 35 ANEF	Greater than 35 ANEF
Light industrial	Less than 30 ANEF		Greater than 40 ANEF
Other industrial	Acceptable in all ANEF zones		

NOTES:

- The actual location of the 20 ANEF contour is difficult to define accurately, mainly because of variation in aircraft flight paths. Because of this, the procedure of Clause 2.3.2 may be followed for building sites outside but near to the 20 ANEF contour.
- Within 20 ANEF to 25 ANEF, some people may find that the land is not compatible with residential or educational uses. Land use authorities may consider that the incorporation of noise control features in the construction of residences or schools is appropriate (see also Figure Al of Appendix A).
- 3. There will be 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). In these cases Table 2.1 should be used to determine site acceptability, but internal design noise levels within the specific spaces should be determined by Table 3.3.
- 4. This Standard does not recommend development in unacceptable areas. However, where the relevant planning authority determines that any development may be necessary within existing built-up areas designated as unacceptable, it is recommended that such development should achieve the required ANR determined according to Clause 3.2. For residences, schools, etc., the effect of aircraft noise on outdoor areas associated with the buildings should be considered.
- In no case should new development take place in greenfield sites deemed unacceptable because such development may impact airport operations.

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