

FREQUENTLY ASKED QUESTIONS

Kempsey Airport Noise Management Plan and Fly Neighbourly Advice

Q: The report contains a number of abbreviations. Where can I find what these abbreviations mean?

A: The abbreviations are listed on page iv of the report, following the table of contents, figures and tables.

Q: What does KPS stand for?

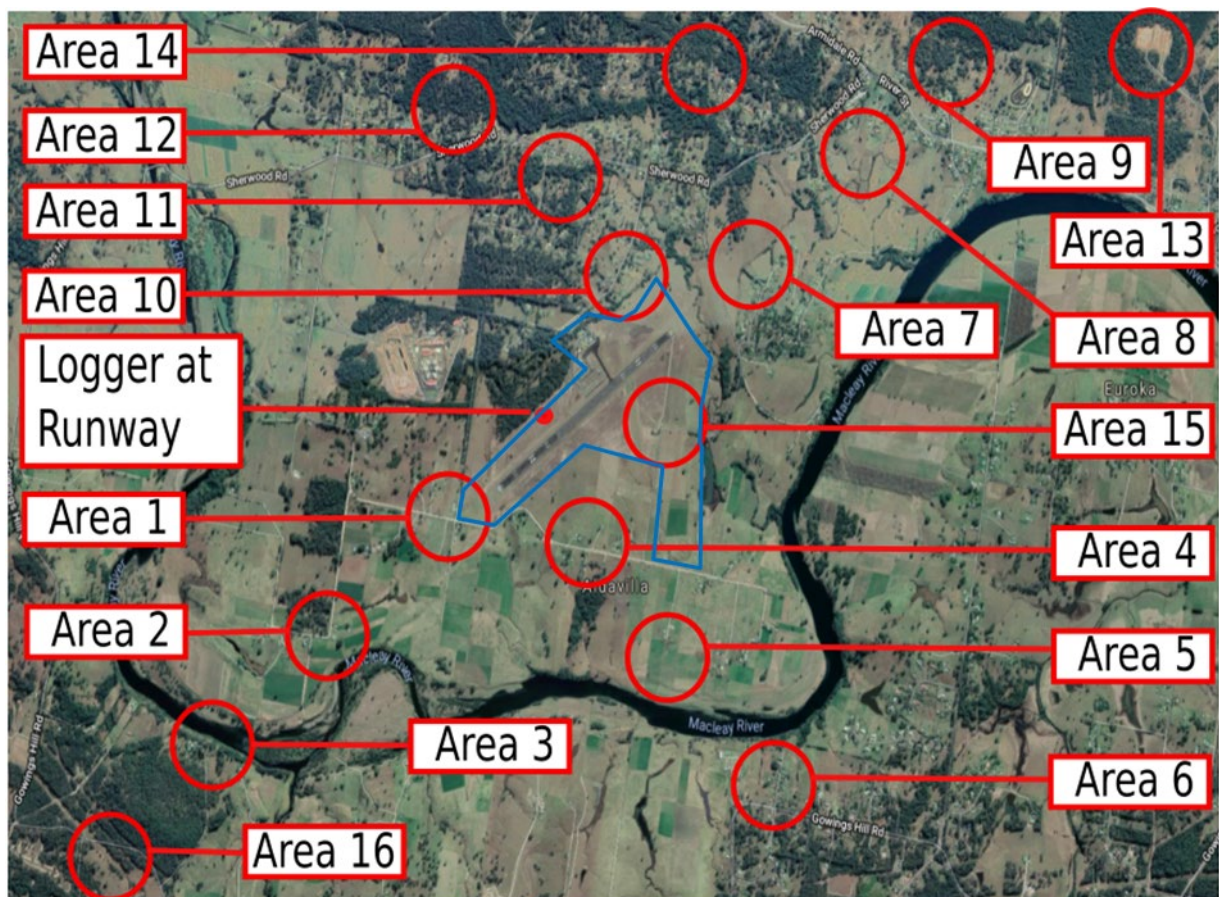
A: KPS is the International Air Transport Association (IATA) code for Kempsey Airport. A three-letter code designating almost all airports around the world as defined by IATA.

Q: What is Avdata?

A: The Avdata Airport Charges Billing Service manages airport billing and reporting for over 130 airports across Australia. Avdata is used by Kempsey Airport to bill aircraft operators using the airport. As part of this service, Kempsey Shire Council receives a report from Avdata which details all aircraft movements at the airport and this information has been used in the development of the Noise Management Plan.

Q: Where were the noise loggers located?

A: The location of the noise loggers is outlined in the graphic below. This information is also detailed within the Noise Management Plan report.



Q: Why hasn't there been any consideration of background or road traffic noise?

A: There has been some consideration to differentiate the noise events that were recorded to ensure that the data is aircraft movements (and not for example road traffic noise).

Background noise levels are best described by the LA90 descriptor. This descriptor represents the noise level that is exceeded for 90% of the time over a relevant period of measurements using the 'A' frequency weighting. Road traffic noise is best described by LA10 level and LAeq level. The LA10 noise level is the level of noise exceeded for 10% of any period. The LAeq is the equivalent energy level. It is the constant level that, over a period of time, contains the same amount of sound energy as the varying levels of the road traffic noise. The LMax level is the maximum level generated from a single noise event. The Australian Standard AS2021:2015 specifies noise limits for an aircraft movement are based on an LMax event. As such, LMax is the measure which has been adopted in the assessment of the NMP and FNA. Therefore, LA90 (background noise) and LA10 (road traffic) noise descriptors are not considered relevant to assess an aircraft movement noise impact in this NMP and FNA and have not been included in this report as they would not alter the outcomes of the assessment.

The intent of the NMP report is to assess the aircraft noise impact on the surrounding residential receivers. As per the Australian Standard AS2021.2015, aircraft noise impacts are best described by LMax noise level and are assessed against fixed LMax noise limits. Background noise levels are best described by the LA90 noise descriptor. As the project specific noise limits are based on the noise limits specified in Australian standard AS2021 and are independent of the existing background noise levels, including the background noise levels with the issued aircraft noise monitoring report will not be beneficial.

As specified in AS2021, internationally aircraft noise is measured using slow (S) time-weighting and the extensive database and programming algorithms used in determining aircraft noise exposure levels use data based on 'S' time-weighted measurements. Consistent with these practices, aircraft noise measurements and assessment in Australia use S time-weighting and an average of maximum noise levels. As specified in Australian Standard AS1055.2018, background A-weighted sound pressure level (LA90,T) is obtained by using time-weighting 'F', which is equal to or exceed for 90% of the time interval considered in the absence of the noise under investigation. F refers to fast-time response. As the focus of the initial measurement was to measure the aircraft movement noise, all noise loggers installed were set to measure using slow (S) time-weighting.

Q: How has the worst day been determined in the noise monitoring period?

A: In order to identify the worst noise affected day for each monitoring area, the 15-minute interval noise data for the 8-weeks monitoring period and the Avdata provided aircraft movement for each day was reviewed. For the purpose of this task, days when all noise loggers were working simultaneously were

considered. Based on this review, the worst affected day for each noise monitoring area was identified. In order to identify that these noise levels occurred from an aircraft movement, the 1-minute interval noise data measured at each noise logger location for the worst-affected day was analysed. The LAmax noise levels from 1-minute interval data were then correlated with the aircraft movement time provided by the Avdata recordings. Thus, it is unlikely that a noise event other than one caused by an aircraft movement (e.g. Road or machinery noise) will trigger the LAmax noise levels at all four monitoring locations at the same time. Particularly, at a time when an aircraft movement recorded by Avdata also occurred.

Q: What is the difference between the 'number above' (N60 and N70 contours) and the Australian Noise Exposure Forecast (ANEF)?

A: The Number Above contours are the most commonly used metric of noise in Australia which is determined by the number of events that occur above particular decibels (i.e. 70dB(A) is N70, and 60dB(A) is N60). Whilst the ANEF is based on forecast future aircraft movements for a planning period (typically 20 years) and the types of aircraft that are likely to be operated at that point in time and on an average day. The allocations of the forecast movements to runways and flight paths are on an average basis and take into account the existing and forecast air traffic control procedures at the Airport which nominate preferred runways and preferred flight paths for noise abatement purposes.

Q: Why isn't there an ANEF for Kempsey Airport?

A: The ANEF is not compulsory for Kempsey Airport. For the purposes of this study, it was not included as it is based on future forecast aircraft movements whilst this study considered the current aircraft movements and noise that occurred. The production of an ANEF for Kempsey Airport is a recommendation of the Noise Management Plan.

Q: Where can I find extra information relating to aircraft noise?

A: Throughout the report there are a number of links to helpful sources of information and references which are used throughout the report. These links are located in the footers of the respective pages within the report (i.e. at the bottom of the page). Clicking on these links will allow you to access further information that is relevant to that section of the NMP / FNA.