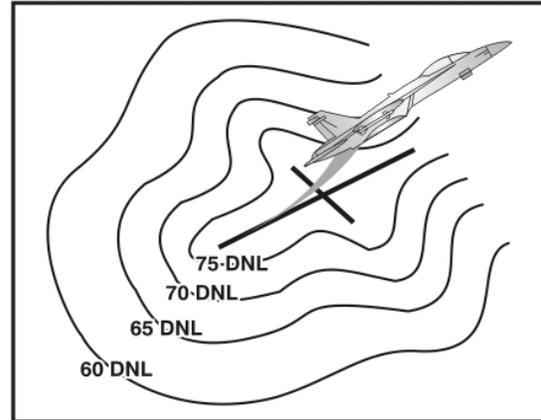




What is DNL?

Day-night average sound level or DNL is a measure of noise commonly used surrounding a military installation.

The main sources of noise at airfields are flight operations, which include take-offs, landings, touch-and-go operations, and engine maintenance run-ups. The Navy considers how its operations impact the local community by calculating the day-night average sound level (DNL). The DNL averages the noise levels of all aircraft operations that occur within a 24-hour period. The DNL has been determined to be a reliable measure of community sensitivity to aircraft noise and has become the standard metric used in the United States for aircraft noise.



The DNL is depicted as a contour around a noise source connecting points of equal value, usually in 5-dB increments. Noise contours are not exact measurements. Noise levels inside a contour may be similar to those outside a contour line. The change in noise level occurs gradually. The area between two noise contours is known as a noise zone. For planning purposes, the noise zones are grouped as follows:

- **Noise Zone 1** (less than 65 DNL) - is generally considered an area of low or no noise impact.
- **Noise Zone 2** (65 to 75 DNL) - is an area of moderate impact where some land use controls are required.
- **Noise Zone 3** (greater than 75 DNL) - is the most severely impacted area and requires the greatest degree of land use control.

These AICUZ requirements are derived from OPNAVINST 11010.36B – *Air Installations Compatible Use Zones Program*.

How Does Aircraft Noise Compare?	
Noise Source	Sound Levels
Carrier Flight Deck	130 dB
Rock Music Concert	110 dB
Fighter Jet Departure	110 dB
Ambulance Siren	100 dB
Automobile (100 feet away)	65 dB

For further information, contact

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