

Patuxent River Complex (PRC) Testing and Training Environmental Impact Statement (EIS)

Quantifying Noise

Aircraft flying in the PRC generate noise, and the Navy is preparing a noise assessment as part of this EIS. Noise metrics to be used in the EIS include, but are not limited to:

Day-Night Average Sound Level (DNL)

- Used to determine the community's response to long-term exposure to aircraft noise and land use compatibility
- A 24-hour cumulative noise metric
- 10 dB is added to noise events occurring between 10 p.m. and 7 a.m. to reflect the added intrusiveness of nighttime events

Sound Exposure Level (SEL)

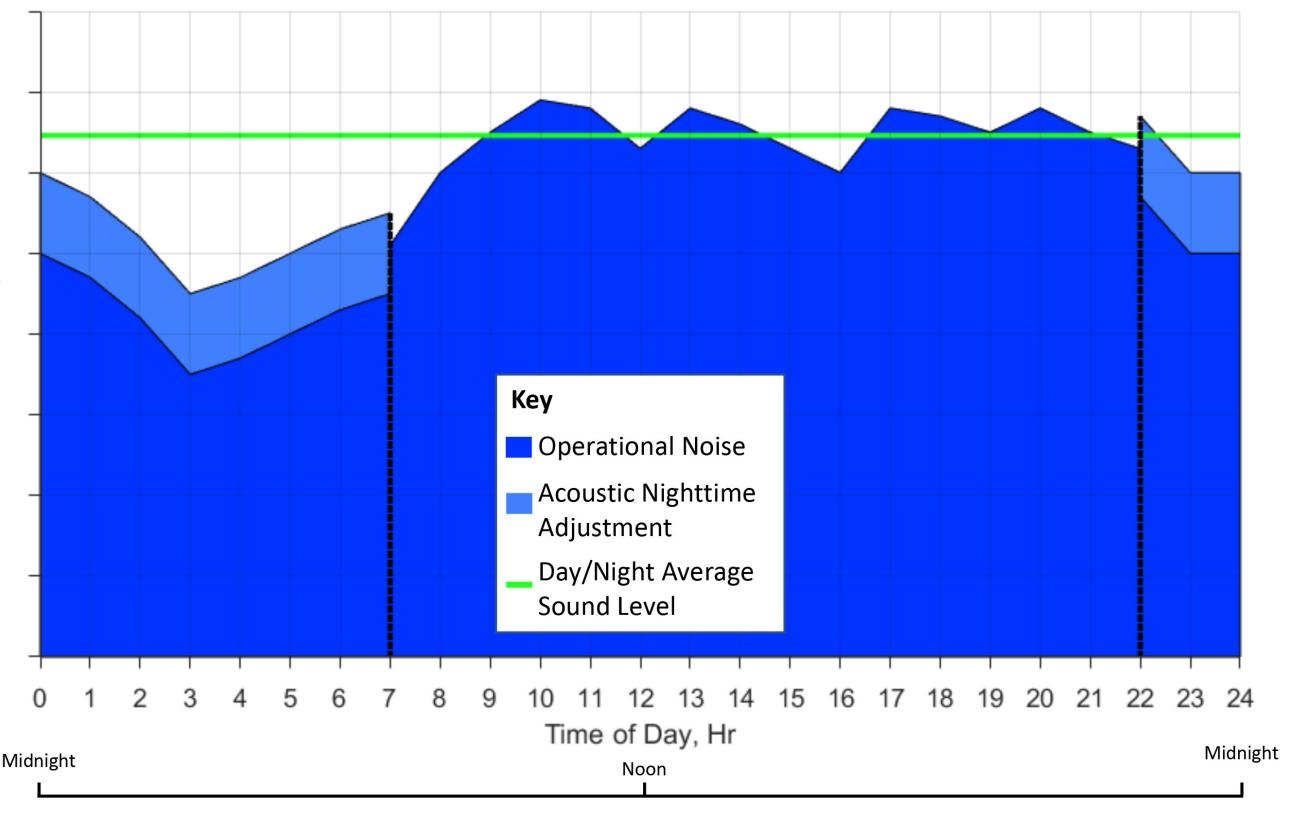
- Noise exposure of a single event, such as a flyover, as if it occurred in 1 second
- Accounts for noise level and duration

Maximum A-Weighted Sound Level (Lmax)

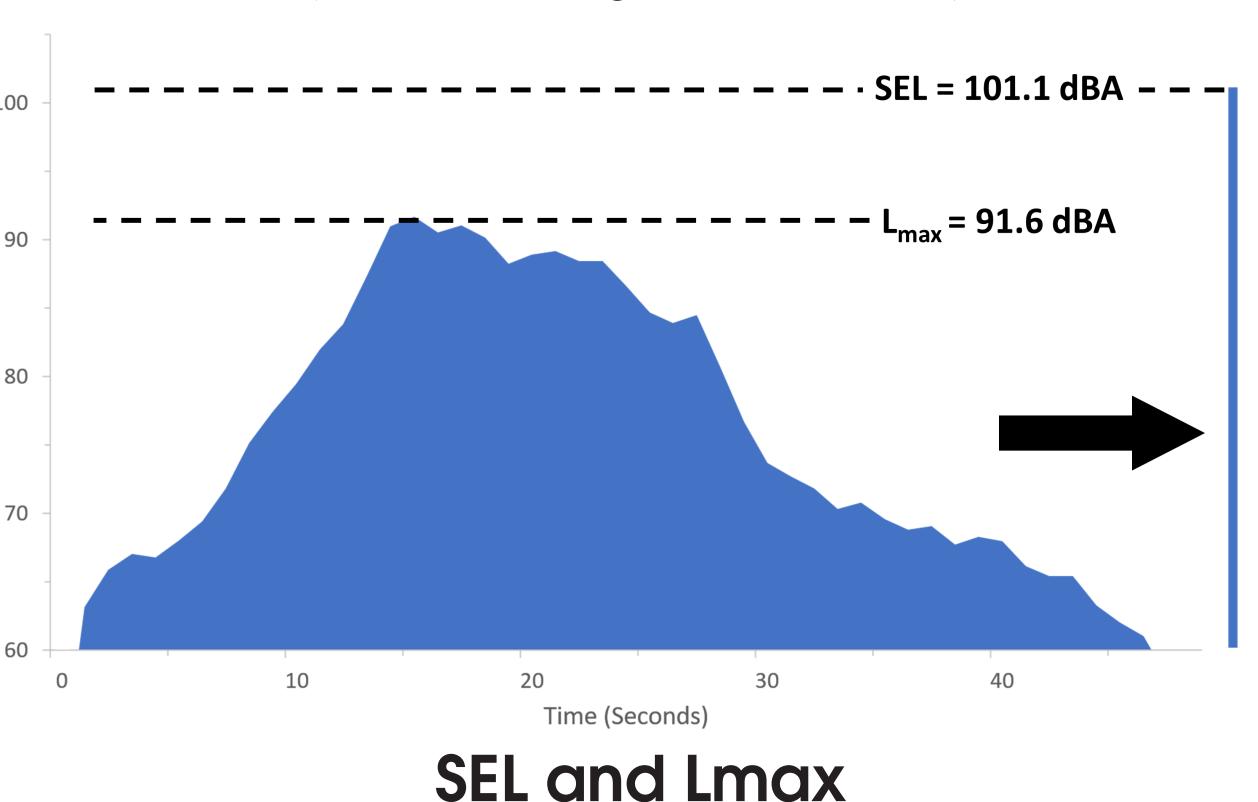
 Maximum sound level that humans can hear during an overflight event Sound Levels, dBA

Weighted sound Lev (dBA re 20 μPa)

AIRCRAFT NOISE



DNL



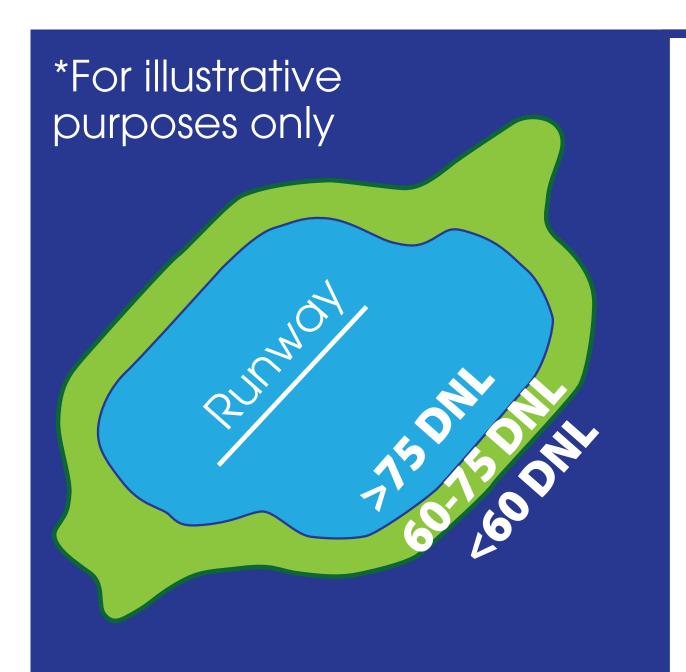
(dBA = A-weighted decibels)

FOR MORE INFORMATION, PLEASE VISIT THE PROJECT WEBSITE AT: WWW.PRCEIS.COM

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Noise Modeling

Computer noise models will be used to calculate noise generated from all current and projected future aircraft activities at the airfields, in airspace, during supersonic flights, and during non-explosive weapons use.



Less than 60 dB DNL is generally considered an area of low exposure.

60 to 75 dB DNL is an area where some land use controls are needed due to noise levels.

Greater than 75 dB DNL needs the greatest degree of land use controls due to noise levels.

Noise Assessment

- Analyze for cumulative noise impacts around the airfield and in the airspace
- Supplemental analysis at representative locations (e.g., schools, residential areas, parks) to assess impacts on:
 - » Sleep disturbance
 - » Indoor and outdoor speech interference
 - » Classroom/learning interference
- Assess risk of hearing loss

Current Noise Management

- Noise response hotline
- Sonic boom monitors
- Noise awareness briefings to pilots
- Community noise advisories
- Monitor and track activities



Noise Hotline 866-819-9028