



Military Noise Sources

A wide variety of sounds from multiple sources such as jet and propeller aircraft, helicopters, small arms, explosives and large caliber weapons are generated at DoD installations and ranges. Each sound source has unique physical and acoustical characteristics that determine intensity, distance, and location that the sound travels. During military test and training operations, sounds from aircraft flight, detonation of ordnance, tank gun firings, artillery use, missile firings, combat engineering demolitions, and air-to-surface bomb drops all have the possibility of being disruptive to daily activity. DoD recognizes these potential disruptions and actively manages noise from military activities.

As members of the community, the Military Services (Army, Navy, Marine Corps, and Air Force) want to be good neighbors. The military continues to work with civilian partners and to listen to residents' concerns regarding the sounds associated with military training that may be disruptive to their community. Military Service staff are available to meet and discuss noise associated with military training. Contact the local Public Affairs Office or the Community Plans and Liaison Officer with any questions or concerns.

For information or questions about the DoD Noise Program, please contact us at osd.noiseprogram@mail.mil.



**Department of Defense
Noise Program**

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Noise Management and the
Department of Defense

The Military and You: Communities in Harmony



United States
Department of Defense
Noise Program



Military Noise and Its Effects

To some people, the sound of military training and testing activities evoke thoughts of safety and national security, but to other people, these sounds are unwanted and deprive them of peace and quiet. Noise, or unwanted sound, can disturb routine activities and may be an annoyance. Annoyance is largely subjective, but can be quantified, qualified, and used by the Department of Defense (DoD) and Federal agencies to address long-term noise exposure, noise impacts, and land use compatibility. An individual's response to military sound sources and perception of noise will vary depending on many factors including:

- intensity, or loudness of the sound;
- duration, or length of time they can detect the sound;
- frequency, or pitch of the sound;
- repetition of the sound source;
- time of day the sound occurs;
- abruptness of onset or cessation of the sound;
- fear of personal danger from the sound sources; and
- the extent to which people believe that DoD can control the noise.

DoD Noise Management

DoD strives to be a good neighbor by understanding concerns about noise and disclosing information about noise exposure to surrounding communities. DoD minimizes noise impacts where possible. While noise impacts can be minimized through noise reduction or abatement methods, DoD also uses land use planning solutions for noise management. Different management tools and strategies DoD uses to manage noise include:

Operational Strategies. National security depends on realistic military training and testing capability. Warfighters need the ability to train as they fight, which necessitates round the clock activities with real weapon systems. To mitigate the effects of DoD noise on surrounding communities whenever possible, DoD maximizes the use of "quiet" training and testing techniques (e.g., computer simulations, blank rounds, raised flight altitudes), develops plans that avoid noise-sensitive areas, and places limits on the occurrence of noise-producing operations. In addition, DoD limits night activities to those that are essential for effective training and testing.

Land Use Strategies. DoD supports compatible land uses near military installations, ranges, and training areas. DoD and each of the Military Services have created policies enabling DoD to work directly with local governments on comprehensive planning efforts to ensure surrounding development is compatible with operational requirements. Local governments and communities are working with DoD to protect the public and the military mission by creating buffers between installations and ranges,

and noise-sensitive communities. These buffers create areas between DoD controlled lands and noise-sensitive communities that are zoned for compatible use, such as agriculture, forestry, or for certain recreational activities. DoD also limits future incompatible land uses by securing easements that benefit land and wildlife conservation efforts through partnerships with other federal agencies, states, communities, and conservation organizations. These buffers and conservation projects have been very effective at mitigating community annoyance levels.

Community Partnership and Outreach

DoD and its Military Departments have established compatible land use programs designed to identify noise impacts and partner with local communities to find cooperative solutions. Installation personnel proactively conduct community outreach to understand how their activities may affect neighbors, articulate the importance of the military mission, and support ongoing comprehensive planning efforts. Community activities, meetings, and military-sponsored exchanges are excellent opportunities to update interested parties on installation activities and to forge relationships between installation personnel and community leaders. Many installations also provide hotlines for neighbors to report nuisance noise, providing additional opportunities for communication. These community outreach tools provide installations with a better understanding of how noise is affecting their neighbors and can foster mutually beneficial solutions for both communities and the military.

