Welcome and Overview

• Welcoming Remarks

• Overview
  • Naval Base Ventura County (NBVC) Point Mugu
  • Air Installations Compatible Use Zones (AICUZ) Program
  • NBVC Point Mugu AICUZ Program
  • AICUZ Implementation
  • Summary and Contact Information
Naval Base Ventura County

• Comprised of three main operating areas: Point Mugu, Port Hueneme, and San Nicolas Island

• NAS Point Mugu originally established on August 1, 1949, to support the U.S. Naval Air Missile Test Center

• NBVC officially established in 2000, when NAS Point Mugu and Construction Battalion Center (CBC) Port Hueneme were consolidated
  - San Nicolas Island transferred to NBVC in 2004

• Primary mission is to provide the highest quality support for aircraft and test range operations at NBVC.
Naval Air Station Ventura County: Point Mugu

- Located along the coast of Ventura County, California, about 55 miles west of the city of Los Angeles
- Serves as the installation’s airfield and covers 4,490 acres of land
- Bordered by Laguna Peak to the east, the Pacific Ocean to the south, and agricultural farmland to the north and west

NBVC is the largest employer in Ventura County, employing 20,000 military, civilian, and contract personnel. NBVC contributed an estimated $2 billion annual economic impact throughout the Ventura County Region. (Source: FY 2010 Economic Impact Assessment. FY 2015 Update Forthcoming Early 2017)
Regional Location
Naval Base Ventura County Point Mugu

Tenant Commands:

**E-2 Hawkeye**: VAW-112 “Golden Hawks;” VAW-113 “Black Eagles;”
VAW-116 “Sun Kings;” VAW-117 “Wallbangers”

**Test and Evaluation**: VX-30 Naval Test Wing Pacific “Bloodhounds”

**Reserve Squadron**: VR-55 Fleet Logistic Support Squadron “Minutemen”

**Naval Air Warfare Center Weapons Division**

California Air National Guard:

Air Force’s 146th Airlift Wing, Channel Islands Air National Guard

United States Coast Guard:

Search and Rescue HM-65C

Commercial and General Aviation:

Airborne Tactical Advantage Company (ATAC)
Navy AICUZ Program
The goals of the AICUZ Program, according to the Office of the Chief of Naval Operations Instruction (OPNAVINST 11010.36C), are to:

- Protect the health, safety, and welfare of civilians and military personnel by encouraging land use that is compatible with aircraft operations;
- Reduce noise impacts caused by aircraft operations, while meeting operational, training, and flight safety requirements on and in the vicinity of air installations;
- Inform the public and seek cooperative efforts to minimize noise and aircraft accident potential impacts by promoting compatible development; and
- Protect Navy and United States Marine Corps installation investments by safeguarding the installation’s operational capabilities.
Noise Exposure Contours

• The United States Department of Defense (DOD) identifies noise exposure zones surrounding a military airfield as a planning tool for local planning agencies.

• NBVC Point Mugu, and all air installations in California, measures noise exposure from aircraft using a variant of the day-night average sound level (DNL).
  • DNL is an average of cumulative noise exposure produced by individual events that occur over 24 hours.
  • The California variant is the Community Noise Equivalent Level (CNEL), which is slightly more stringent.

• CNEL noise contours of 65, 70, 75, 80, and 85 decibels (dB) are plotted on maps as part of the AICUZ Study.
Accident Potential Zones (APZs)

- The DOD identifies APZs as areas where an aircraft accident is most likely to occur, if an accident were to take place. APZs do not reflect the probability of an accident.

- The AICUZ map defines three APZs: the Clear Zone, APZ I, and APZ II. The Clear Zone extends beyond the runway and has the highest potential for accidents. APZ I extends beyond the Clear Zone, and APZ II extends beyond APZ I.

- If an accident were to occur, it is most likely to occur in the Clear Zone and more likely to occur in APZ I than in APZ II.
Land Use Compatibility

- To protect public health, safety, and welfare, land use should be compatible with airfield noise zones, APZs, and flight safety criteria.

- Although land use activities outside the airfield can impact Navy operations, the use and development of the surrounding properties are under the jurisdiction of the local governments.

- The AICUZ Study provides tools for local governments to protect public health, safety, and welfare by encouraging compatible development around the airfield while still supporting the Navy’s mission.
AICUZ Study

- The AICUZ Program’s purpose is to achieve compatibility between air installations and neighboring communities.

- To satisfy this purpose, the Navy works with the local communities to foster compatible development.

- An AICUZ Study presents analysis of community development trends, land use tools, and mission requirements to recommend strategies for communities to prevent incompatible development.
2015 NBVC Point Mugu AICUZ Study
NBVC Point Mugu AICUZ Study

• Developed in accordance with OPNAVINST 11010.36C

• Formal update to the 1992 AICUZ Study

• Evaluates historic noise contours and APZs, baseline noise contours, and the prospective noise contours and APZs

• Addresses past and expected changes in mission and aircraft and prospective operational levels for 2015 through calendar year (CY) 2020
NBVC Point Mugu Aircraft Operations

• Typical Flight Operations include:
  • Departures;
  • Arrivals - Straight-In/Full-Stop and Overhead Break; and
  • Pattern - Touch-and-Go, Field Carrier Landing Practice (FCLP), Ground Control Approach (GCA).

• NBVC Point Mugu has two runways, 03/21 (Primary Runway) and 09/27.
# NBVC Point Mugu Aircraft Operations

## Overview of Annual Operations for Three Operations Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Total Annual Operations</th>
<th>Change in Ops from Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daytime</td>
<td>Evening</td>
</tr>
<tr>
<td>Historic (CY1990)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>56,390</td>
<td>11,769</td>
</tr>
<tr>
<td>Baseline (5-Year Average CY2009-2013)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>23,955</td>
<td>4,720</td>
</tr>
<tr>
<td>Prospective (CY2020)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>31,327</td>
<td>6,923</td>
</tr>
</tbody>
</table>

### Sources:
(a) Navy 1992 and HMMH 1990  
(b) Wyle 2014

### Key:
- % = percent of operations conducted during that time of day  
- Ops = operations

### Notes:
- Daytime hours are from 7:00 a.m. to 7:00 p.m.  
- Evening hours are from 7:00 p.m. to 10:00 p.m.  
- Nighttime hours are from 10:00 p.m. to 7:00 a.m.
Prospective Scenario (CY2020)

Relative to the baseline scenario, the changes for the prospective scenario include:

• Minimal increase in evening (7:00 p.m. to 10:00 p.m.) operations from 16% to 18% of total flight operations, with nighttime (10:00 p.m. to 7:00 a.m.) operations remaining at 3%.

• Increase in E-2 flight operations by 65%.

• Introduction of based Unmanned Aircraft System (UAS).

• Increase in transient flight operations.
Noise Contours

- Utilized NOISEMAP, the DOD standard model for assessing noise exposure from military aircraft operations at air installations.

- Noise Modeling Data Inputs
  - Type of flight operation;
  - Number of operations;
  - Flight track;
  - Aircraft power settings;
  - Terrain; and
  - Weather.
APZs

- A Clear Zone is required for all active runways.

- APZs extend from the end of the runway, but apply to the main arrival and/or departure flight tracks used by the aircraft.

- The prospective scenario (2020) resulted in a reduction in APZs relative to the historic scenario.
AICUZ Implementation
AICUZ Implementation

- The Navy recommends that AICUZ noise contours and APZs be adopted into individual planning studies, regulations, and processes to best guide compatible development around the installations.

- Ultimate control over land use and development near NBVC Point Mugu are the responsibility of the local governments; however, the Navy has the ability and responsibility to conduct actions and implement programs in support of the local effort.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Compatibility with AICUZ Noise Zone (DNL/CNEL)</th>
<th>Compatibility with AICUZ APZs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noise Zone 1</td>
<td>Noise Zone 2</td>
</tr>
<tr>
<td>Single-Family Residential</td>
<td>&lt;55</td>
<td>55-65</td>
</tr>
<tr>
<td>Multi-Family Residential and Hotels</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Public Assembly Areas and Auditoriums</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Schools and Hospitals</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Manufacturing/Industrial</td>
<td></td>
<td></td>
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<tr>
<td>Outdoor Parks and Recreation Areas</td>
<td></td>
<td></td>
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<tr>
<td>Business Services</td>
<td></td>
<td></td>
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<tr>
<td>Agriculture, Forestry, and Mining</td>
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<td></td>
</tr>
</tbody>
</table>

**KEY:**
- **Compatible**
- **Incompatible**

**NOTES:**
1. Maximum density of 1 to 2 dwellings per acre.
2. Land use and related structures generally compatible; however, measures to achieve recommended noise level reduction should be incorporated into design and construction of the structures.
3. Maximum floor area ratio that limits people density may apply.
4. Facilities must be low intensity.
Land Use Compatibility Concerns

- Overall, land use compatibility concerns for NBVC Point Mugu are minimal to moderate due to the strong local land use controls and zoning boundaries that contain urban development, protect farmland, and prevent incompatible development.

- The majority of the AICUZ footprint extends northwest and west of the installation.

- The 2020 noise contours that extend off the installation range from 65 to 75 dB CNEL, posing a compatibility concern with specific types of land use.

- Some incompatible land uses exist within APZs.
Land Use Compatibility: AICUZ Footprint
Land Use Compatibility Concerns

• North: Residential uses/single family residential dwellings lie within APZ I and the 60-65 dB CNEL noise zone.

• South: Much of the high noise contours and APZ I and APZ II are located over the Pacific Ocean and pose little to no compatibility concerns.

• East: Residential dwellings within APZ I with potential for development in areas within APZ II.

• West: Portions of the private gun and hunting clubs west of NBVC lie within the 65 and 75 dB CNEL noise contour, including residential structures.
Navy and Community Leadership Roles

• Local governments have the responsibility to protect public health, safety, and welfare. The Navy has similar responsibilities, while also preserving the mission of the installation.

• Cooperation by all parties is key in promoting compatible land use and deterring potential hazards.

The Navy’s Role Includes:
• Advise local government agencies on land use near the installation by providing information on aircraft noise and accident potential.
• Maintain routine communication with local, state, and regional governments to be aware of any land use changes.

Local Government and Community Roles Include:
• Preserve land use compatibility through the adoption and implementation of appropriate control measures recommended in this AICUZ Study.
• Private citizens are encouraged to identify AICUZ considerations in all property transactions.
Relationship to NBVC Joint Land Use Study

- NBVC Joint Land Use Study (JLUS) completed September 2015
- Local Sponsor: Ventura County Transportation Commission, in partnership with NBVC, County of Ventura, Cities of Camarillo, Port Hueneme and Oxnard, and other stakeholders
- JLUS includes strategies related to the AICUZ Study, such as LU-2A (Update Airport Comprehensive Land Use Plan upon completion of AICUZ Study update)
- AICUZ Study recommends coordination with implementation of JLUS strategies
Contact Information

Naval Base Ventura County Point Mugu:
Community Planning & Liaison Officer
(805) 989-9752

Written inquiries and correspondence should be sent to:
Community Planning & Liaison Officer
NBVC Point Mugu
311 Main Road, Bldg. 66
Point Mugu, California 93042

Website:
Questions/Comments
Back-Up Slides ......
Aircraft Operating at NBVC Point Mugu

**Based Aircraft**
- Fixed-wing Aircraft: E-2C Hawkeye 2000; S-3B Viking; P-3 Orion; C-130 Hercules
- Unmanned Aircraft System: MQ-8B/C Fire Scout

**Transient Aircraft**
- F/A-18C/D Hornet and F/A-18 E/F Super Hornet; MV-22B Osprey; MH-60 R/S Seahawk
- Commercial Aviation: F-21 Kr; MK-58 Hunter

**Projected Missions**
- F-35 Lightning II (Transient); C-20 Gulfstream III; C-37 Gulfstream V; EA-18G Growler (Transient); MQ-4C Triton UAS; MH-65D Dolphin Helicopter;