The Overall Classification of this Briefing is: UNCLASSIFIED
Background

• NORTHERN EDGE (NE) is a U.S. Pacific Command (PACOM) exercise preparing for crisis in the Indo-Asia-Pacific region
  – ALCOM plans and conducts NE on behalf of PACOM

• Biennial exercise (odd years) dating back to 1975
  – Late spring/early summer since 2002

• Participation from all military services and interagency partners
Overview

• PACOM contingency exercise
  – Replicate most challenging Pacific theater scenarios
  – Joint interoperability tactics, techniques & procedures
  – Requires Alaskan-sized spaces to simulate vast distances that modern military forces face

• Comprehensive, realistic training
  – Air-to-Air
  – Air-to-Surface
  – Tactical Command and Control
  – Live-Virtual-Constructive Integration
Stony Military Operations Area (MOA)

Inland Ranges

Gulf of Alaska Temporary Maritime Activities Area (TMAA)
Proximity of Temporary Maritime Activities Area (TMAA) to Shore

Center of TMAA:
- 140 nm offshore
- 170 nm to Cordova
- 190 nm to Kodiak
- 240 nm to Yakutat
NE15 Economic Impact

• Total estimated economic impact of over $13 million
  – Lodging, rental cars, support contracts
  – Port fees for ship visit
  – Contracted fishing vessels
  – Participant spending in communities

• Spread across Southcentral and Interior Alaska

• Expect similar economic contributions for NE17

USS Shoup (DDG 86) mooring at the Port of Anchorage during NE15
NE17 Exercise Planning

• Scheduled exercise window: 1-12 May 2017
  – Driven by force availability, resource constraints, weather considerations
  – Tied to / restrained by larger PACOM exercise calendar

• Exercise planning on-going
  – Maritime activities include air defense and anti-surface warfare
  – Final planning conference (Feb)
NE17 Participants

• Participating organizations:
  – United States Army Alaska
  – Marine Corps Forces Pacific
  – U.S. Pacific Fleet
  – Pacific Air Forces
  – U.S. Coast Guard District 17

• Including:
  – Approximately 6,000 personnel
  – 175 fixed-wing aircraft at JBER and Eielson AFB
  – 2 Navy ships with embarked helicopters
Navy/Maritime Goals and Planned Activities

• One Navy surface combatant ship
• One support ship (fuel/food)
• One Coast Guard vessel
• Contracted Alaskan fishing vessels (~5) to play opposition force

• Training objectives/activities required by Combatant Commander (PACOM)
  – Coordination and integration with joint forces
  – Practice in anti-submarine exercises by aircraft and ships (i.e., tracking “simulated” submarine)
  – Practice in Visit, Board, Search, and Seizure techniques
  – Aircraft combat maneuvering between land and maritime areas
  – Small arms gunnery

• Port Visit – logistics planning underway
<table>
<thead>
<tr>
<th>Training Ordnance or Expended Materials</th>
<th>Maximum Amount Analyzed in 2011 Final EIS/OEIS (for 2 events at 3 weeks each)</th>
<th>NE15 Level of Activity (12 Days long)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombs</td>
<td>360</td>
<td>0</td>
</tr>
<tr>
<td>Missiles</td>
<td>66</td>
<td>0</td>
</tr>
<tr>
<td>Naval Gunshells (Various Types)</td>
<td>26,376</td>
<td>15 actual (all inert/non-explosive)</td>
</tr>
<tr>
<td>Small Arms Rounds</td>
<td>11,400</td>
<td>2,100 (approximate)</td>
</tr>
<tr>
<td>Pyrotechnics</td>
<td>156</td>
<td>5 (signal flares)</td>
</tr>
<tr>
<td>Targets</td>
<td>94</td>
<td>6 (floating targets)</td>
</tr>
<tr>
<td>Sonobuoys</td>
<td>1,587 (80 explosive)</td>
<td>1200 (250 Active / 950 passive; all non-explosive)</td>
</tr>
<tr>
<td>Portable Undersea Training Range (PUTR)</td>
<td>7 (Anchors on Sea Floor)</td>
<td>0; Not Installed</td>
</tr>
<tr>
<td>Ordnance used during SINKEX (Various Types)</td>
<td>858</td>
<td>0</td>
</tr>
</tbody>
</table>

**NE17 levels would be similar to or less than NE15**
NE Exercise Summary

- One of PACOM & DoD’s premier exercises
- Alaska’s military infrastructure allows top-quality training unmatched anywhere else
- Interagency cooperation & community support are keys to exercise success
- Level of activity varies by exercise
Navy Environmental Planning

• 2011: Gulf of Alaska Environmental Impact Statement (EIS) for training from 2011-2016

• 2013: Initiated Supplemental EIS (SEIS/SOEIS) for beyond 2016

• July 2016: Released Final SEIS/SOEIS

• Marine Mammal Protection Act Permit (MMPA), Endangered Species Act (ESA), and Record of Decision forthcoming

• National Marine Fisheries Service (NMFS): Cooperating Agency in the environmental planning process

• Government-to-Government consultation with tribes in Kodiak area and Native Village of Eyak Tribe in Cordova
EIS Alternatives

• Alternative 1 includes:
  – Conducting one annual large-scale Carrier Strike Group (CSG) exercise, occurring over a maximum time period of up to 21 consecutive days during the April–October timeframe
  – No sinking exercise

• Alternative 2 includes:
  – Conducting up to two annual large-scale CSG exercises, each occurring over a maximum time period of up to 21 consecutive days during the April–October timeframe
  – Conducting one sinking exercise per CSG exercise for a total of two per year

EIS analyzes maximum levels of activity – Actual activity is generally considerably less
EIS Analysis – Marine Mammals

- Marine Mammal EIS analysis addresses impacts between April and October.
- Quantitative analysis (modeling) done for entire date range.
- Navy’s monitoring program has supported species occurrence information in GOA.
  - Over 8 years (2009-2017), monitoring found higher likelihood for more marine mammal species in summer-fall (July-Oct) as compared to spring-early summer (May-June).
- Overall, analysis using best available science shows the potential for minimal impacts to individuals of various species, but no population level effects.
Alaska commercial fishing seasons occur throughout the year. However, not all fisheries management areas overlap the TMAA:

- Partial overlap with groundfish management areas
- Minimal overlap with shellfish management areas
- No overlap with salmon management areas
- No overlap with herring management areas

Training will not interfere with commercial, subsistence or recreational fishing

- De-confliction of training activities and other users
- Similar training levels as previous years planned for near term future
Fish Hearing and Sonar

FISH HEARING AND NAVAL SONAR

- **Salmonids**: 10-580 Hz
- **Halibut**: 20-200 Hz
- **Rockfishes**: 10-1000 Hz
- **Cod**: 2-500 Hz
- **Herring**: 0 - 5000 Hz
- **AN/SQS-53**: Hull Mounted Naval Sonar

Potential Impacts to Fish

• Mid-frequency active sonar is not heard by most fish species

• The few fish species that are able to hear sonar are not likely to be affected
  – Not impulsive source, vessel movement and fish behavior

• Use of explosives during training may injure individual fish if present and only those close to the surface and within the immediate vicinity of where explosives may be used
  – No effects to bottom fish species or fish swimming at depth below surface

• Military expended materials will not have significant effects on fish or fish habitat
Protective Mitigation Measures

- Extensive mitigation measures developed in coordination with NMFS
  - Implement mitigation zones for sonar and explosive activities
  - Monitor zones before and during training
  - Post qualified Lookouts
  - Report monitoring results and training activities
  - Coordinate with regulatory agencies stranding program
  - Conduct population density surveys and other research
  - No aircraft fuel release in air unless required for safety

- New Mitigations for NE17
  - North Pacific Right Whale Cautionary Area during feeding time (June-Sept)
    - No hull mounted Mid-Frequency Sonar
    - No explosives
  - No explosives over Portlock Bank
North Pacific Right Whale Cautionary Area

- Measure developed with NMFS as part of MMPA process and based on public comments
- Implementation of Cautionary Area in months of feeding importance (June – September) in southwest corner of Temporary Maritime Activity Area (TMAA)
  - No hull-mounted mid-frequency active SONAR
  - No explosives
  - Not a factor for NE17
Portlock Bank

- Westernmost portion of TMAA
- Area identified during consultation with fishermen and tribes
- Agreed not to conduct training with explosives
Summary

• Environmental protection is an integral part of the exercise.
  – The Navy’s at-sea training activities are conducted with an extensive set of mitigation measures designed to minimize the potential risk to marine life

• NE planned activity in Gulf of Alaska well below max allowable under the SEIS/SOEIS

• Training in Gulf of Alaska de-conflicted from areas of concern highlighted by fishing communities

• We are grateful to the citizens of the state of Alaska for their support as we use the unique training environment in Alaska
Questions?