City Council Work Session  
October 11, 2017 @ 5:00 pm  
Cordova Center Community Rooms  
Agenda

A. Call to order

B. Roll call

Mayor Clay Koplin, Council members  
James Burton, Kenneth Jones, Jeff Guard,  
Robert Beedle, Josh Hallquist, David  
Allison and James Wiese

C. Work Session topics:

1. City of Cordova 2018 budget discussion
2. US Navy and Alaska Command representatives............... (page 1) 

presentation, Q&A for Council and public regarding Naval exercises in the Gulf of Alaska in summer 2017

D. Adjournment

If you have a disability that makes it difficult to attend city-sponsored functions, you may contact 424-6200 for assistance.

Full City Council agendas and packets available online at www.cityofcordova.net
NORTHERN EDGE 2017

Alaskan Command and U.S. Pacific Fleet

October, 2017
NORTHERN EDGE 17

- U.S. Pacific Command (USPACOM) - sponsored exercise planned and run by Alaskan Command (ALCOM)
- Objectives developed in conjunction with and support of USPACOM and Service Components (Air Force, Army, Navy, Marine Corps), and with USCG support
- Replicates most challenging scenarios in USPACOM theater
  - Navy, Marine Corps, and Air Force practiced and refined challenging joint interoperability tactics, techniques, and procedures
  - Alaskan-sized spaces and range infrastructure facilitated realistic, robust scenarios including vast distances modern military forces face
  - Over 1,700 sorties (Take Offs) & 4,000+ flight hours during NE17
NE17 Timeline and Economic Impact

**NE17 AK-Wide Economic Impact**
- Visiting personnel spending ~ $12,400,000
- Contracts – $7,900,000
- Base Support Wages – $7,700,000

**Total - over $28,000,000**

**Dates & Participants**
- Dates: 1-12 May 2017
- DoD:
  - 6,000+ personnel
  - > 160 aircraft
  - 2 Navy destroyers + 1 supply ship
- Non DoD:
  - USCG vessel, 5 civilian fishing boats
- Virtual participants from multiple US locations
- 26 test & experimentation initiatives
- Navy ship port visits to Homer & Juneau
NE17 Navy Maritime Goals and Activities Conducted

Navy activities occurred in the TMAA from 1-12 May 2017

**Ships**
- 2 Navy surface combatant ships (Destroyers)
- 1 support/replenishment ship (fuel/food)
- 1 Coast Guard vessel
- 5 Contracted Alaskan fishing vessels (to simulate opposition forces)

**Training objectives and activities**
- Coordination and integration with joint forces
- Practice anti-submarine exercises with ships (i.e., tracking simulated submarine)
- Practice in Visit, Board, Search, and Seizure (VBSS) techniques
- Aircraft combat maneuvering between land and maritime areas
- Small arms gunnery

Small arms qualification aboard Navy ship

USS Hopper (DDG 70)

USS O’Kane (DDG 77)

USNS Guadalupe (T-AE 200)

VBSS team approaching “opposition vessel”
Environmental Planning

Supplemental EIS analyzes maximum levels of activity
Actual activity for NE17 considerably less (e.g. 12 days, no explosives used)

- **July 2016**: Released Final SEIS/SOEIS (Supplement to 2011 EIS)
- **April 2017**: Navy issued Record of Decision (ROD) & NMFS issued final MMPA Permit and ESA Biological Opinion for TMAA activities from 2017-2022
  - Process included extensive public participation and formal Government-to-Government Consultation with Alaska Native Tribes

Best Available Science showed impacts **not significant** under both alternatives considered

After carefully weighing of future strategic and operational requirements, and environmental consequences of the Proposed Action as well as comments received from government agencies, Alaska Native Tribes, and the public, the Navy elected to proceed with Alternative 1 of the SEIS

* **Alternative 1**
  - 1 annual large-scale 21-day Carrier Strike Group (CSG) exercise between Apr–Oct
  - No sinking exercise

(Alternative 2 not selected and included 2 annual CSG exercises, each occurring over a maximum time of 21 consecutive days each Apr–Oct; 1 sinking exercise per CSG exercise for total of 2 per year)
NE17 Navy Environmental Summary

• Navy fully complied with all mitigation measures/required procedures; events within scope of SEIS and NMFS permits
  - **Only 12 days** (vice maximum of 21 days in SEIS)
  - Minimum active SONAR use compared to SEIS level
  - **No explosive ordnance used** (i.e., no live bombs, missiles, or explosive 5-inch gun rounds)

• No events (SONAR or ordnance) triggered procedural measures
  - **No marine mammals sighted** within required mitigation zones, so no power down or shutdown of SONAR needed
  - 2,880 hours of shipboard lookout effort during 12 days

• No indications or evidence of any environmental impacts

• Navy not aware of any interactions or conflicts with other users of maritime environment (e.g. fishing, shipping, aircraft)

• Reporting – to be posted on Navy Marine Mammal Monitoring website
  - **Exercise Reporting**: Report required by NMFS submitted 31 August 2017
  - **Monitoring Reporting**: 3 passive acoustic monitoring devices deployed from Apr-Sep 2017; Analysis and report to NMFS publically available July 2018
    https://www.navymarinespeciesmonitoring.us/
Protective Mitigation Measures

Extensive mitigation measures developed in coordination with NMFS

- Implement mitigation zones for sonar and explosive activities
- Post qualified Lookouts
- Monitor mitigation zones before and during training
- Report monitoring results and training activities
- Coordinate with regulatory agencies stranding program
- Conduct offshore population surveys and other marine mammal monitoring research

***New Mitigations for NE17***

North Pacific Right Whale Cautionary Area during feeding time (*Jun-Sep*)

- No surface ship hull mounted sonar
- No explosives

Portlock Bank

- No explosives use
# NE17 Usage

SONAR – actual usage not publicly releasable but minimal amount of SONAR in NE17

<table>
<thead>
<tr>
<th>Training Ordnance or Expended Materials</th>
<th>EIS Analysis (Alt 1 of Final SEIS)</th>
<th>NE15</th>
<th>NE17 (planned/actual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombs</td>
<td>180</td>
<td>0</td>
<td>0/0</td>
</tr>
<tr>
<td>Missiles</td>
<td>33</td>
<td>0</td>
<td>0/0</td>
</tr>
<tr>
<td>Naval Gunshells (Various Types)</td>
<td>13,188</td>
<td>15 (inert)</td>
<td>100/28 (all inert / non-explosive)</td>
</tr>
<tr>
<td>Small Arms Rounds</td>
<td>5,700</td>
<td>2,100</td>
<td>3,500/2,500</td>
</tr>
<tr>
<td>Pyrotechnics</td>
<td>78</td>
<td>5 (flares)</td>
<td>5/5 (signal flares)</td>
</tr>
<tr>
<td>Targets</td>
<td>47</td>
<td>6 (floating targets)</td>
<td>6/6 (floating targets)</td>
</tr>
<tr>
<td>Sonobuoys</td>
<td>794 (40 explosive)</td>
<td>250 (no explosive)</td>
<td>0/0</td>
</tr>
<tr>
<td>Portable Undersea Training Range (PUTR)</td>
<td>7 (Anchors on Sea Floor)</td>
<td>0</td>
<td>0/0; not installed</td>
</tr>
</tbody>
</table>
Analysis of Impacts To Marine Species

**FISH:**
- TMAA has minimal overlap with fisheries management areas
- Mid-frequency active sonar not heard by most fish species including key commercial species (e.g. salmon, groundfish)
- Only a few fish species able to hear sonar (e.g. herring) but not likely to be affected from sonar due to fish’s inability to swim at ship speed and remain close to bow of ship for hours of exposure (no bow-riding fish schools)
- No fish mortality from sonar
- No explosives used in NE17 therefore no fish mortality from explosives

**MARINE MAMMALS:**
- Minimum exposure of marine mammals to limited sonar use which would not have significant impacts and below SEIS predictions*
- No mass strandings associated with Navy; no Navy ship strikes to marine mammals
- 9 years of Navy funded monitoring (2009-2017) shows higher likelihood of more marine mammal species offshore in summer-fall (Jul-Oct) compared to spring-early summer (May-Jun)

**BIRDS:** No impacts to birds from in-water activities; only 3 Navy surface ships in large TMAA ocean area with minimum to no in-air impacts (seabirds not usually associated with Navy ships)

**OTHER:** No fuel spills during 4 Navy ship refuelings at sea; Navy ships retain all plastics onboard; low amount of military expendable material in ocean

*SEIS marine mammal analysis addressed impacts between entire range from Apr to Oct with quantitative analysis (modeling) for large multi-ship exercise (≥3-5 sonar ships) over a 21 day period*
Minimum exposure or impacts to marine species in the GOA TMAA due to short at-sea exercise window (12 days); lower amounts of activity than analyzed in SEIS including only 2 sonar-equipped ships with little active sonar use; no explosive ordnance use; no fuel spills; no reports of mass strandings, no Navy ship strikes, and no indication of public access impacts

- Overall, analysis based on best available science shows minimal impacts to individuals and no long term population level effects associated with NE17
Planning for Northern Edge 2019 will begin with Initial Planning Conference (IPC) in Winter 2018

Level of activity may fluctuate for each NE exercise but will remain within EIS levels and 2017-2022 MMPA permit limits

Timing of NE19 and scope of activities being considered by USPACOM, ALCOM, and Navy

Planning consideration include force availability, resource constraints and costs, weather considerations, and larger USPACOM Pacific-wide exercise calendar

Planned economic impact expected to be similar to NE17 (~$28 Million)

Community and Tribal Outreach for NE19

Leading up to NE19 ALCOM and Navy are committed to provide additional information and engage communities and Tribes as the planning process moves forward
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

- 80 nm to Anchorage
- 24 nm to Homer
- 45 nm to Seward
- 12 nm to Prince William Sound
- 130 nm to Valdez
- 170 nm to Cordova
- 190 nm to Kodiak
- 240 nm to Yakutat
Fish Hearing and Sonar

- **Salmonids**: 10-580 Hz
- **Halibut**: 20-200 Hz
- **Rockfishes**: 10-1000 Hz
- **Cod**: 2-500 Hz
- **Herring**: 0 - 5000 Hz
- **AN/SQS-53**: 3500 Hz

**Sources:** Astrup 1999; Astrup and Mohl 1993; Hawkins and Johnstone 1978; Jorgensen et al. 2000; Lovell et al. 2003; Menn et al. 2003; Popper 2003; and Popper and Carlson 1998.
Apr 2017 through Sep 2017

Figure 1. GOA TMAA HARP Deployment Locations (26-30 Apr 2017)