

U.S. Navy & Exercise Northern Edge



North Pacific Fishery Management Council Meeting

April 4, 2018

John Mosher & Andrea Balla-Holden
U.S. Pacific Fleet
Environmental Readiness Directorate





Exercise NORTHERN EDGE (NE)

- U.S. Pacific Command sponsored joint forces training exercise involving Air Force, Army, Navy, Marine Corps, and Coast Guard
- NE exercise is biennial, occurring every other odd number year (2017, 2019, 2021...)
- Replicates most challenging scenarios in Pacific theater, practicing and refining joint interoperability tactics, techniques, and procedures
- Navy participation is highly variable due to training needs in other parts of the Pacific, real-world events & deployments, and fiscal or maintenance constraints





TMAA & JOINT PACIFIC ALASKA RANGE COMPLEX (JPARC)

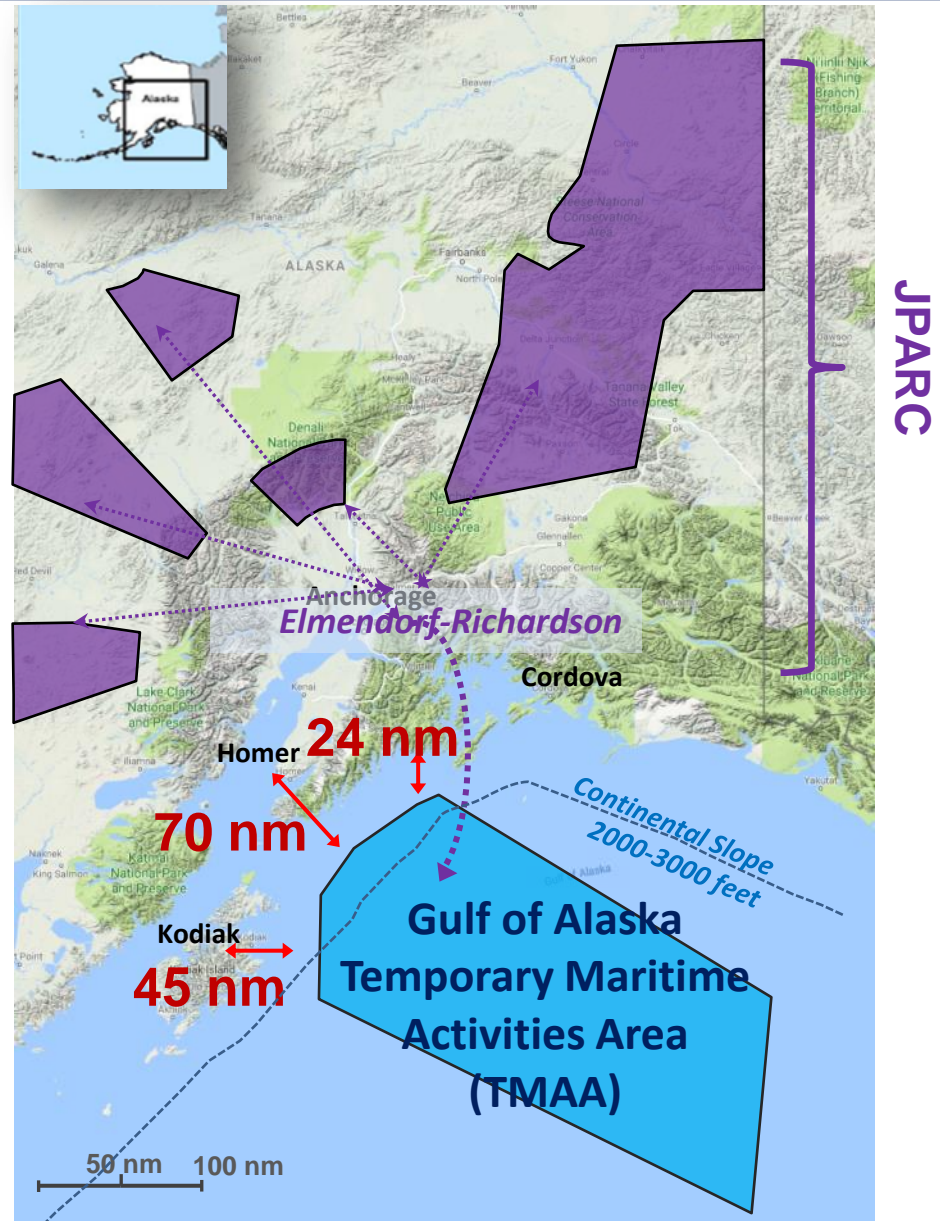
B. Northern Edge of Range
APRIL 2018

Gulf of Alaska Temporary Maritime Activities Area (TMAA):

- Allows air access to Joint Base Elmendorf-Richardson and inland ranges of JPARC
- Only used and established for duration of Navy participation in the exercise
- No restrictions on civilian navigation (fishing vessels, commercial shipping, aircraft...)
- Most Navy activities occur far offshore toward center of TMAA

Center of TMAA:

140 nm offshore
170 nm to Cordova
190 nm to Kodiak
240 nm to Yakutat





Navy & NE17 Recap

- 12- day exercise: 1-12 May 2017
- At-sea portion conducted offshore within TMAA
- All exercise levels of activity were less than what was presented to the Council in Feb 2017

Navy Participants:

- 2 Navy destroyers (NE 2015- 2 ships; NE 2013- 0 ships)
- 1 Navy supply ship (fuel/food) & 1 Coast Guard vessel
- 5 contracted Alaskan fishing boats (as “opposition” vessels)
- Various Navy aircraft temporarily based on land

Training Conducted:

- Coordination with joint forces (USAF, USMC, USA, USCG...)
- Ship anti-submarine training (tracking simulated submarine)
- Visit, Board, Search, and Seizure (VBSS) training
- Aircraft combat maneuvering between land & sea
- Ship & personnel gunnery training

Destroyer:



USS Hopper (DDG 70)

Destroyer:



USS O'Kane (DDG 77)

Supply Ship:



USNS Guadalupe (T-AE 200)

NE17 Reported Usage

Training Ordnance or Expended Materials	Maximum Amount Analyzed in the Final Supplemental EIS/OEIS Alternative 1	Actual NE17 Level of Activity Conducted
Bombs	180	0
Missiles	33	0
Naval Gunshells (various types)	13,188	28 (all non- explosive)
Small Arms Rounds	5,700	2,500
Sonobuoys	794	0

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



NE17 Navy Environmental Summary

- **Less Navy activity than amounts authorized:**
 - Only 12 days within far offshore area (vice max. of 21 days)
 - Minimum active SONAR use compared to levels covered in EIS analysis
 - No explosive ordnance used (no bombs, missiles, or explosive 5-inch gun rounds)
- **Protective measures and mitigation successfully used:**
 - New protective measures for Portlock Bank and North Pacific Right whales
 - No marine mammals sighted within required mitigation zones
- **No indications of any significant environmental impacts** (marine mammals, fish or commercial fisheries, birds, no fuel spills...)
- **No reports of any interactions or conflicts with other users of marine environment** (fishing activities, shipping, aircraft...)
- **Reports posted on Navy monitoring website:**
 - Exercise Report: NE17 report required by NMFS submitted Aug 2017 and publically available on Navy's website: <https://www.navymarinespeciesmonitoring.us/>
 - Monitoring Report: 3 passive acoustic monitoring devices deployed Apr-Sep 2017 will be posted to website Jul 2018



Navy Protective Measures

Extensive mitigation measures developed in coordination with National Marine Fisheries Service:

- 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 for adaptive management
- Conduct offshore population surveys and other marine mammal monitoring





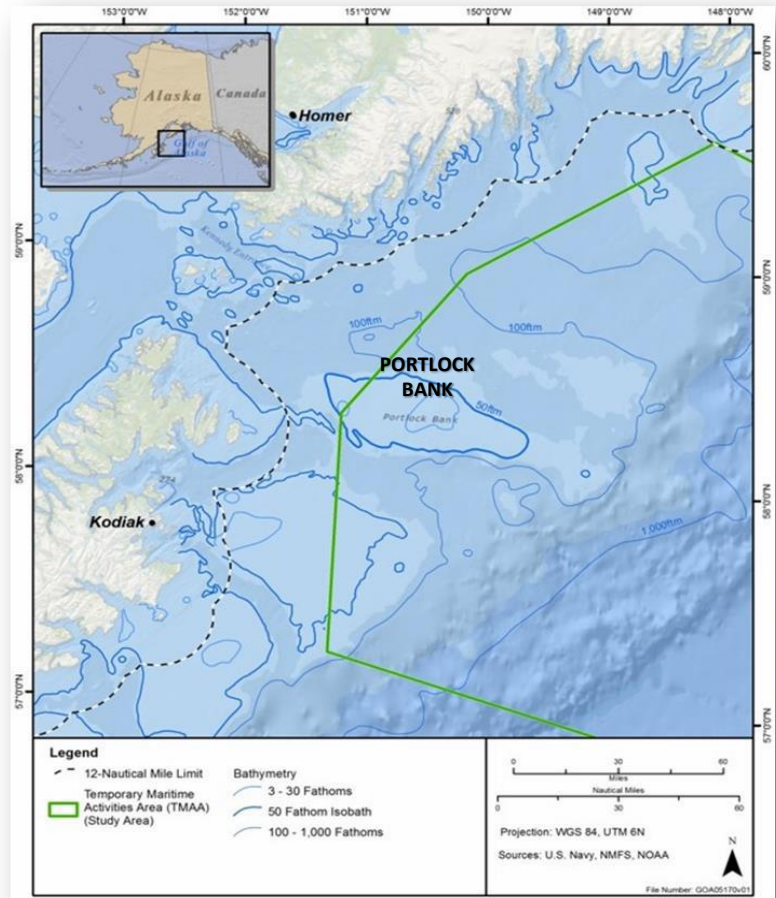
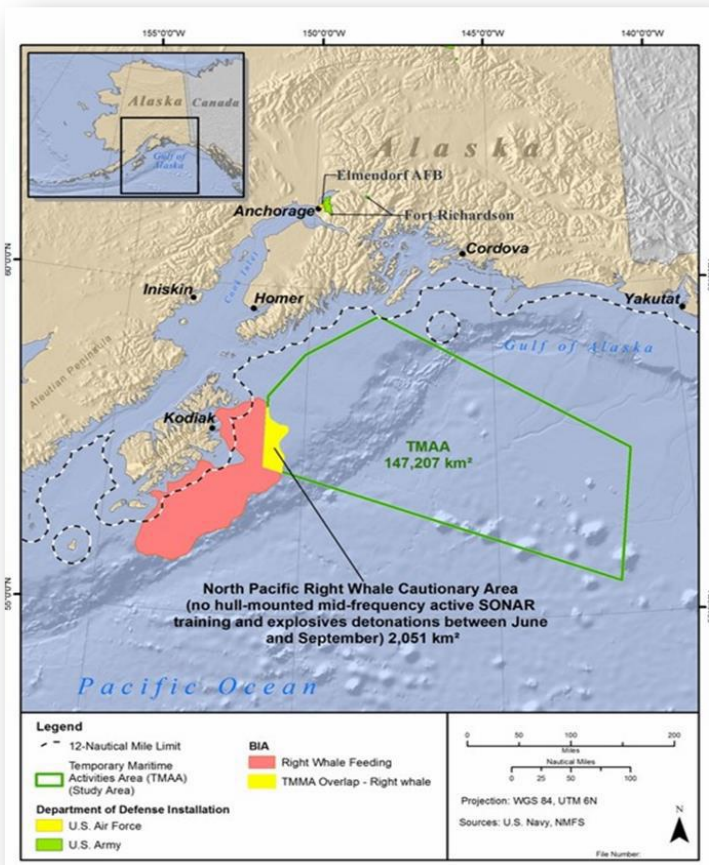
New Mitigations Implemented for NE17

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

- No surface ship hull mounted sonar
- No explosives use

Portlock Bank:

- No explosives use





Minimal Impacts to Marine Species

Fish:

- TMAA minimal overlap with fisheries management areas
- Mid-frequency active sonar not heard by most fish species including key commercial species (*e.g. salmon, groundfish*)
- Very few fish species able to hear sonar; 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 fish mortality occurs from sonar
- No explosives in NE17, therefore no fish mortality



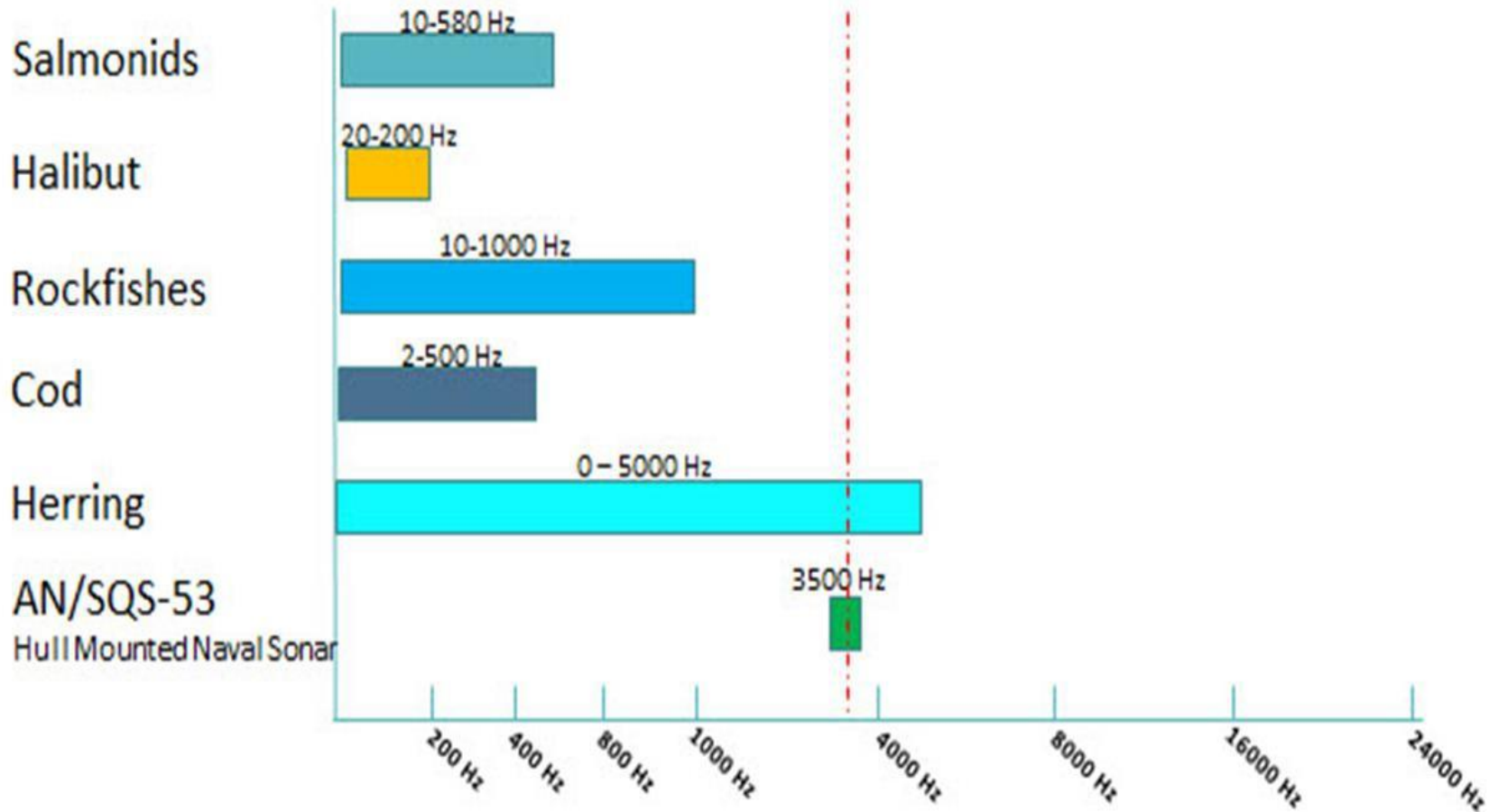
Marine Mammals:

- Minimal exposure of marine mammals with limited sonar use; would not have significant long term or species level effects
- No strandings associated with Navy; no Navy ship strikes of marine mammals
- 9 years Navy funded monitoring (2009-2017) shows higher likelihood of more marine mammal species offshore in summer-fall (Jul-Oct) compared to spring-early summer (Apr-Jun)

Marine Birds: Minimal impacts to birds from in-water and in-air activities; only 3 Navy ships in NE17 over large TMAA ocean area; most marine birds near shore



Fish Hearing & Sonar



Sources: Astrup 1999; Astrup and Mohl 1993; Hawkins and Johnstone 1978; Jorgensen et al. 2003; Lovell et al. 2003; Mann et al. 2003; Popper 2008; and Popper and Carlson 1998.



Environmental Planning

- **Navy completed Supplemental Environmental Impact Statement (EIS) process and issued Record of Decision for Gulf of Alaska Training Activities in April 2017:**
 - **Best Available Science** showed minimal impacts to the marine environment
 - **National Marine Fisheries Service (NMFS)** issued final MMPA Permit and ESA Biological Opinion for 2017-2022 time frame
- **Navy and NMFS Documents available on project website:**
goaeis.com
- **Next Supplement to the EIS and permit renewal process to address Navy training beyond 2022 to be initiated in spring 2019:**
 - **Supplemental EIS process** to include extensive public participation and formal Government-to-Government consultation with Alaska Native Tribes
 - **Ongoing public outreach** planned in addition to EIS project engagement



Questions?

