AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

FEDERAL REGISTER

Vol. 76 Wednesday,
No. 86 May 4, 2011

Part IV

Department of Commerce

National Oceanic and Atmospheric Administration

50 CFR Part 218
Taking and Importing Marine Mammals; Military Training Activities Conducted Within the Gulf of Alaska Temporary Maritime Activities Area; Final Rule

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 218

[Docket No. 100817363–1137–02]

RIN 0648–BA14

Taking and Importing Marine Mammals; Military Training Activities Conducted Within the Gulf of Alaska Temporary Maritime Activities Area

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: NMFS, upon application from the U.S. Navy (Navy), issues regulations to govern the unintentional taking of marine mammals incidental to training activities conducted in the Gulf of Alaska (GoA) Temporary Maritime Activities Area (TMAA) for the period April 2011 through April 2016. The Navy's activities are considered military readiness activities pursuant to the Marine Mammal Protection Act (MMPA), as amended by the National Defense Authorization Act for Fiscal Year 2004 (NDAA). These regulations, which allow for the issuance of "Letters of Authorization" (LOAs) for the incidental take of marine mammals during the described activities and specified timeframes, prescribe the permissible methods of taking and other means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat, as well as requirements pertaining to the monitoring and reporting of such taking.

DATES: Effective May 4, 2011 through May 4, 2016.

ADDRESSES: A copy of the Navy's application (which contains a list of references used in this document), NMFS' Record of Decision (ROD), and other documents cited herein may be obtained by writing to Michael Payne, Chief, Permits, Conservation and Education Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910–3225 or by telephone via the contact listed here (see **FOR FURTHER INFORMATION CONTACT**).

FOR FURTHER INFORMATION CONTACT: Jolie Harrison, Brian D. Hopper, or Michelle Magliocca, Office of Protected Resources, NMFS, (301) 713–2289.

SUPPLEMENTARY INFORMATION:

Availability of Supporting Information

Extensive **SUPPLEMENTARY INFORMATION** was provided in the proposed rule for this activity, which was published in the **Federal Register** on Tuesday, October 19, 2010 (75 FR 64508). This information will not be reprinted here in its entirety; rather, all sections from the proposed rule will be represented herein and will contain either a summary of the material presented in the proposed rule or a note referencing the page(s) in the proposed rule where the information may be found.

Background

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (Secretary) to allow, upon request, the incidental, but not intentional taking of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) during periods of not more than five consecutive years each if certain findings are made and regulations are issued or, if the taking is limited to harassment, notice of a proposed authorization is provided to the public for review.

Authorization shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses, and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such taking are set forth.

NMFS has defined "negligible impact" in 50 CFR 216.103 as: "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival."

The National Defense Authorization Act of 2004 (NDAA) (Public Law 108–136) modified the MMPA by removing the "small numbers" and "specified geographical region" limitations and amended the definition of "harassment" as it applies to a "military readiness activity" to read as follows (Section 3(18)(B) of the MMPA): "any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild [Level A Harassment]; or any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered [Level B Harassment].

Summary of Request

In March 2009, NMFS received an application from the Navy requesting authorization to take individuals of 20 species of marine mammals (15 cetaceans and 5 pinnipeds) incidental to upcoming training activities to be conducted from April 2011 through April 2016 in the GoA TMAA, which is a 42,146 square nautical mile (nm^2) (145,482 km^2) polygon roughly the shape of a 300 nm (555.6 km) by 150 nm (277.8 km) rectangle oriented northwest to southeast in the long direction. NMFS subsequently requested additional information, which was provided in November 2009 in the form of a revised application. These training activities are classified as military readiness activities under the provisions of the NDAA of 2004. These military readiness activities may incidentally take marine mammals within the TMAA by exposing them to sound from mid-frequency or high-frequency active sonar (MFAS/HFAS) or underwater detonations. The Navy requested authorization to take individuals of 20 species of cetaceans and pinnipeds by Level B Harassment. Further, although it is neither anticipated to occur, nor does the Navy's model factor in any potential benefits from the implementation of mitigation measures, the Navy still requested authorization to take, by injury or mortality, up to 15 individual beaked whales (of any of the following species as a conservative (*i.e.,* overestimation) measure: Baird's beaked whale, Cuvier's beaked whale, Stejneger's beaked whale) over the course of the 5-year regulations.

Background of Request

The proposed rule contains a description of the Navy's mission, their responsibilities pursuant to Title 10 of the United States Code, and the specific purpose and need for the activities for which they requested incidental take authorization. The description contained in the proposed rule has not changed (75 FR 64508). The Navy plans to conduct up to two, 21-day training exercises (composed of smaller exercise components) per year between the months of April and October in the Gulf of Alaska.

Overview of the GoA TMAA

The proposed rule contains a description of the GoA TMAA. The description contained in the proposed rule has not changed (75 FR 64508). The GoA TMAA is a roughly rectangular area approximately 300 nm (555.6 km)

long by 150 nm (277.8 km) wide (42,146 nm^2 (145,482 km^2)), situated south of Prince William Sound and east of Kodiak Island.

Specified Activities

The proposed rule contains a complete description of the Navy's specified activities that are covered by these final regulations, and for which the associated incidental take of marine mammals will be authorized in the related LOAs. The proposed rule describes the nature and number of anti-submarine warfare (ASW) exercises and anti-surface warfare (ASUW) exercises involving both mid- and high-frequency active sonar (MFAS and HFAS), as well as explosive detonations. It also describes the sound sources and explosive types used (75 FR 64508, pages 64509–64518). The narrative description of the action contained in the proposed rule has not changed. Tables 1, 2, and 3 list the types of sonar sources and the estimated yearly use, summarize the characteristics of the exercise types, and list the explosive types used. One acoustic source mentioned in the text of the proposed rule, the MK–39 EMATT target, was not included in Table 1 in the proposed rule due to an oversight. It has been added to Table 1 in this final rule. Also, Table 1 in the proposed rule contained an error in the number of AN/SSQ–110A (IEER) sonobuoys. The Navy proposes to use 80 of these sonobuoys annually, which has been corrected in Table 1 in this final rule.

The Navy has carefully characterized the training activities planned for the GoA TMAA over the 5 years covered by these regulations; however, evolving real-world needs necessitate flexibility in both the types and amounts of sound sources used in annual activities. In the proposed rule, NMFS included regulatory text (see § 218.122(c)) allowing for inter-annual flexibility in the amount of use of specific sound and explosive sources, provided it does not affect the take estimates and anticipated impacts in a manner that changes our analysis. However, additional minor changes to the text are needed to address flexibility in the types of sources.

In some cases, the proposed rule identified the most representative or highest power source to represent a group of known similar sources. Additionally, the Navy regularly modifies or develops new technology, often in the way of sound sources that are similar to, but not exactly the same as, other sources. In this refinement to the final rule's regulatory text (§ 218.120 (c)(1) & (2)), we increase flexibility by inserting language that will allow for authorization of take incidental to the previously identified specified sources or to "similar sources," provided that the implementation of these changes in annual or biennial LOAs does not result in exceeding the incidental take analyzed and identified in the final rule.

BILLING CODE 3510–22–P

Sonar Sources	Frequency (kHz)	Source Level (dB) re 1 μPa @ 1 m	Emission Spacing (m)*	Vertical Directivity	Horizontal Directivity	Associated Platform	System Description	Annual Amount	Unit
AN/SQS-53	3.5	235	154	Omni	240° forward-looking	Cruiser (CG) and Destroyer (DDG) hull mounted sonar	ASW search, detection, & localization (approximately 120 pings per hour)	578	Hours
AN/SQS-56	7.5	225	129	13°	30°	Frigate (FFG) hullmounted sonar	ASW search, detection, & localization (approximately 120 pings per hour)	52	Hours
AN/AQS-13/22	Classifed (MF)	Classified	15	Omni	Omni	Helicopter Dipping sonar	ASW search, detection, & localization (10 pings/dip, 30 seconds between pings), also used to represent AN/AQS-13	192	Hours
AN/BQQ-10	Classifed (MF)	Classified	Classified	Classified	Classified	Submarine hull-mounted sonar	ASW search and attack (approximately one ping per two hours when in use)	48	Hours
BQS-15 or BQQ-24	Classified (HF)	Classified	Classified	Classified	Classified	Submarine hull-mounted sonar	20 pings per hours for 4 hours	24	Hours
AN/SSQ-62 DICASS (sonobuoy, tonal)	8	201	450	Omni	Omni	Helicopter and maritime patrol aircraft (P3 and P8 MPA) dropped sonobuoy	Remotely commanded expendable sonar-equipped buoy (approximately 12 pings per use, 30 secs between pings, 8 buoys per hour)	266	Buoys
MK-48 torpedo sonar	Classified (>10)	Classified	144	Omni	Omni	Submarine (SSN) launched torpedo (used during SINKEX)	Recoverable and non-explosive exercise torpedo; sonar is active approximately 15 min per torpedo run	2	Torpedoes
AN/SSQ-110A (IEER)	Classified (impulsive, broadband)	Classified	n/a	Omni	Omni	MPA deployed	ASW system consists of explosive acoustic source buoy (contains two 5 lb charges) and expendable passive receiver sonobuoy	80	Buoys
AN/SSQ-125 (MAC)	1	Classified	15	Omni	Omni	MPA deployed	AN/SSQ-110A replacement. ASW system consists of active sonobuoy and expendable passive receiver sonobuoy. Phased introduction beginning in 2011.	Included in IEER above	Buoys
MK-84 Range Pingers	12.9 or 37 (rare)	194	Ping dur. 15 msec / ping every 2 sec	90°	Omni	Ships, submarines, weapons, targets, and UUV (8-10 knot platform)	4 pingers maxused during a PUTR TRACKEX exercise. Surface ship pingers are at 7 m depth / target or sub pingers at 100 m depth. 8 hours total event duration each during PUTR operational days.	80	Hours
SUS MK-84	Selectable at 3.3 or 3.5	160	Continuous	Omni	Omni	Sonobuoy	Expendable buoy deployed from aircraft and ships used as a signaling device to communicate with submarines. Operating life of 70 seconds.	24	Buoys
PUTR Transponder	8.8 or 40	186 or 190	n/a		180 upward looking	Portable Undersea Tracking Range, deployed on ocean floor	2 pingers used 8 hrs per event. One ping every 2 seconds.	80	Hours

Table 1. Active sonar sources in the GOA and parameters used for modeling them. Many of the actual parameters and capabilities of these sonars are classified. Parameters used for modeling were derived to be as representative as possible. When, however, there were a wide range of potential modeling values, a nominal parameter likely to result in the most impact was used so that the model would err towards overestimation.

*Spacing means distance between pings at the nominal speed

CG – Guided Missile Cruiser; DDG – Guided Missile Destroyer; DICASS – Directional Command-Activated Sonobuoy System; FFG – Fast Frigate; HF – High-Frequency; MF – Mid-Frequency; MPA - Maritime Patrol Aircraft; UUV - Unmanned Underwater Vehicle.

EXERCISE TYPE	SINKEX	EER/IEER/MAC	RANGE OPERATIONS (PUTR)	BOMBEX [A-S]	GUNEX [A-S, S–S, S-A]	MISSILEX [A-A, S-A]	ASW Helicopter or MPA	ASW Surface	ASW Submarine
Sources / Weapons / Rounds	MK-48 MK-82 (Inert/HE) MK-83 (HE) AGM-88 HARM AGM-84 Harpoon AGM-65 Maverick AGM-114 Hellfire AGM-119 Penguin Standard Missile 1 Standard Missile 2 5"/54 BLP (Inert)	SSQ-110A (5 lb NEW) SSQ-125	MK-84 pingers	MK 82/83/84 BDU-45	5" (Inert/HE) 76mm (Inert/HE 57mm (Inert) 25mm (Inert) 20mm (Inert) 7.62mm (inert) .50 cal (inert)	Standard missle Sea Sparrow RAM AIM-7/9/120	AN/SSQ-62 DICASS AN/ASQ-22	AN/SQS-53 MFA Sonar AN/SQS-56 MFA Sonar MK-39 EMATT	BQQ-10 Submarine Sonar BQS-15 Submarine sonar SUS MK-84 Sonobuoy
Explosion in or on water	Yes	Yes - SSQ-110A No - SSQ-125	No	Yes	Yes	No	No	No	No
Length of Exercise	4-8 hrs over 2 days	6 hrs	4 hrs	1 hr	2-3 hrs	1 hr	2-4hrs	5-7 days	2-3 days
Detonations / hours/ rounds / sonobuoy or torpedo deployments, or helicopter sonar dips per exercise or year	MK-82 (Inert) = 3 MK-82 (HE) = 7 MK-83 (HE) = 4 AGM-88 HARM = 2 AGM-84 Harpoon = 5 AGM-65 Maverick = 3 AGM-114 Hellfire = 1 AGM-119 Penguin = 1 Standard Missile 1 = 1 Standard Missile 2 = 1 5"/54 BLP = 500 rounds	80 deploy/yr	MK-84 pingers = 80hrs	MK-82 (HE) = 128 MK-83 (HE) = 12 MK-84 = 4 (1 HE) BDU-45 (inert) = 216	5" (Inert) = 48 5" (HE) = 84 76mm (Inert) = 16 76mm (HE) = 28 57mm (Inert) = 200 25mm (Inert) = 6,000 20mm (Inert) = 20,000 7.62mm (inert) = 9,000 .50 cal (inert) = 2,400	**S-A** Standard missle, Sea Sparrow, RAM = 6 **A-A** AIM-7 = 18 AIM-9 = 24 AIM-120 = 18	AN/SSQ-62 DICASS AN/ASQ-22 = 192	AN/SQS-53 = 578hrs AN/SQS-56 = 52 MK-39 EMATT = 12hrs	BQQ-10 = 48hrs BQS-15 =24hrs SUS MK-84 = 24
Number Exercises per Year	2	4	20	36	32	6	44	3	3
Area Used	TMAA	TMAA	TMAA	TMAA	TMAA	TMAA	TMAA	TMAA	TMAA
Months of Yr	April - October	April - October	April - October	April - October	April - October	April - October	April - October	April - October	April - October

Table 2. Summary of Navy training activities in GoA TMAA and associated componets.

BILLING CODE 3510–22–C

Description of Marine Mammals in the Area of the Specified Activities

Twenty-six marine mammal species or populations/stocks have confirmed or possible occurrence within or adjacent to the GoA, including seven species of baleen whales (mysticetes), 13 species of toothed whales (odontocetes), five species of seals (pinnipeds), and the sea otter (mustelid). Nine of these species are ESA-listed and considered depleted under the MMPA: blue whale, fin whale, humpback whale, sei whale, sperm whale, North Pacific right whale, Cook Inlet beluga whale, Steller sea lion, and sea otter. Table 4 summarizes their abundance, Endangered Species Act (ESA) status, occurrence, density, and likely occurrence in the TMAA during the April to October timeframe. The sea otter is managed by the U.S. Fish and Wildlife Service and will not be addressed further here. The proposed rule contains a discussion of five species (Cook Inlet beluga whale, false killer whale, northern right whale dolphin, Risso's dolphin, and short-finned pilot whale) that are not considered further in the analysis because of their rarity in the GoA TMAA and therefore are unlikely to be impacted by the training. The proposed rule contains a discussion of important areas, including North Pacific right whale and Steller sea lion critical habitat, and feeding habitats for marine mammals in the GoA. The proposed rule also includes a discussion of marine mammal vocalizations. Finally, the proposed rule includes a discussion of the methods used to estimate marine mammal density in the GoA TMAA. The Description of Marine Mammals in the Area of Specified Activities section has not changed from what was in the proposed rule (75 FR 64508, pages 64518–64524).

BILLING CODE 3510–22–P

Ordnance/Explosive	Net Explosive Weight	Sub-TTS	TTS	Injury	Mortality	Exclusion Zone Used (m)
		177dB	182 SEL / 23psi	50% TM rupture, 205db or 23 psi-ms	Onset massive lung injury or 31 psi-ms	
5" Naval gunfire	**9.54 lbs**	413	227/269	43	23	549
76 mm Rounds	**1.6 lbs**	168	95/150	19	13	549
MK-82	**238 lbs**	2720	1584/809	302	153	914
MK-83	**574 lbs**	4056	2374/1102	468	195	914
MK-84	**945 lbs**	5196	3050/1327	611	226	914
SSQ-110 IEER	**5 lbs**	NA	325/271	155	76	914
MK-48	**851 lbs**	NA	2588/1198	762	442	1852

Table 3. Sources of at-sea explosives used in GoA TMAA for which take of marine mammals is anticipated. Table also indicates range to indicated threshold and size of Navy exclusion zone used in mitigation. **Units are meters.**

Common Name	Species Name	ESA/ MMPA Status	Occurrence Apr-Dec	Abundance	Density* /km^2
Mysticetes					
Blue whale	*Balaenoptera musculus*	E, D, S	Rare	1,368	NA
Fin whale	*Balaenoptera physalus*	E, D, S	Common	2,636	0.01
Sei whale	*Balaenoptera borealis*	E, D, S	Rare	43	NA
Minke whale	*Balaenoptera acutorostrata*		Rare	Unknown	0.0006
Humpback whale	*Megaptera novaeangliae*	E, D, S	Common	4,005	0.0019
Gray whale	*Eschrichtius robustus*		Common	18,813	0.0125
North Pacific right whale	*Eubalaena japonica*	E, D, S	Rare	Unknown (<100)	NA
Odontocetes					
Sperm whale	*Physeter macrocephalus*	E, D, S	Rare	Unknown	0.0003
Baird's beaked whale	*Berardius bairdii*		Rare	Unknown	0.0005
Cook Inlet beluga whale	*Delphinaptera leucas*	E, D, S	Extra-limital	375	NA
Cuvier's beaked whale	*Ziphius cavirostris*		Common	Unknown	0.0022
Dall's porpoise	*Phocoenoides dalii*		Common	83,400	0.1892
False killer whale	*Pseudorca crassidens*		Extra-limital	Unknown	NA
Killer whale (multiple stocks)	*Orcinus orca*		Common	249-1,123	0.01
Pacific white-sided dolphin	*Lagenorhynchus obliguidens*		Common	26,880	0.0208
Risso's dolphin	*Grampus griseus*		Extra-limital	11,621	NA
Short-finned pilot whale	*Globicephala macrorhynchus*		Extra-limital	245	NA
Harbor porpoise	*Phocoena phocoena*		Rare	41,854	NA
Northern right whale dolphin	*Lissodelphis borealis*		Extra-limital	12,876	NA
Stejneger's beaked whale	*Mesoplodon stejnegeri*		Common	Unknown	.0022**
Pinniped					
Stellar sea lion (eastern stock)	*Eumetopias jubatus*	T, D, S	Common	45,095-55,832	0.0098
Stellar sea lion (western stock)	*Eumetopias jubatus*	E, D, S	Common	38,988	0.0098
California sea lion	*Zalophus californianus*		Rare	238,000	NA
Harbor seal	*Phoca vitulina richardii*		Rare	45,975	NA
Northern elephant seal	*Mirounga angustirostris*		Common	124,000	0.0022
Northern fur seal	*Callorhinus ursinus*	D, S	Common	665,500	0.118
Mustelid					
Sea otter	*Enhydra lutris*	T, S	Extra-limital	Unknown	NA

Table 4. Marine Mammals of known or possible occurrence in GOA. Table includes status, ocurrence, and density.

* Density derived for summer (appendix B)

** Cuvier's beaked whale density used as surrogate

BILLING CODE 3510–22–C

Brief Background on Sound

The proposed rule contains a section that provides a brief background on the principles of sound that are frequently referred to in this rulemaking (75 FR 64508, pages 64524–64526). This section also includes a discussion of the functional hearing ranges of the different groups of marine mammals (by frequency) as well as a discussion of the two main sound metrics used in NMFS' analysis (sound pressure level (SPL) and sound energy level (SEL)). The information contained in the proposed rule has not changed.

Potential Effects of Specified Activities on Marine Mammals

With respect to the MMPA, NMFS' effects assessment serves four primary purposes: (1) To prescribe the permissible methods of taking (*i.e.,* Level B Harassment (behavioral harassment), Level A Harassment (injury), or mortality, including an identification of the number and types of take that could occur by Level A or Level B Harassment or mortality) and to prescribe other means of effecting the least practicable adverse impact on such species or stock and its habitat (*i.e.,* mitigation); (2) to determine whether the specified activity will have a negligible impact on the affected species or stocks of marine mammals (based on the likelihood that the activity will adversely affect the species or stock through effects on annual rates of recruitment or survival); (3) to determine whether the specified activity will have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses; and (4) to prescribe requirements pertaining to monitoring and reporting.

In the Potential Effects of Specified Activities on Marine Mammals section of the proposed rule, NMFS included a

qualitative discussion of the different ways that MFAS/HFAS and underwater explosive detonations may potentially affect marine mammals (some of which NMFS would not classify as harassment), as well as a discussion of the potential effects of vessel movement and collision (75 FR 64508, pages 64526–64542). Marine mammals may experience direct physiological effects (such as threshold shift), acoustic masking, impaired communications, stress responses, and behavioral disturbance. This section also included a discussion of some of the suggested explanations for the association between the use of MFAS and marine mammal strandings (such as behaviorally-mediated bubble growth) that have been observed a limited number of times in certain circumstances (the specific events are also described) (75 FR 64508, pages 64535–64542). The information contained in the Potential Effects of Specified Activities on Marine Mammals section from the proposed rule has not changed.

Later, in the Estimated Take of Marine Mammals section, NMFS relates and quantifies the potential effects to marine mammals from MFAS/HFAS and underwater detonations of explosives discussed here to the MMPA definitions of Level A and Level B Harassment.

Mitigation

In order to issue an incidental take authorization (ITA) under section 101(a)(5)(A) of the MMPA, NMFS must set forth the "permissible methods of taking pursuant to such activity, and other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance." The NDAA of 2004 amended the MMPA as it relates to military-readiness activities and the ITA process such that "least practicable adverse impact" shall include consideration of personnel safety, practicality of implementation, and impact on the effectiveness of the "military readiness activity." The training activities described in the GoA TMAA application are considered military readiness activities.

NMFS reviewed the proposed GoA TMAA activities and the proposed GoA TMAA mitigation measures as described in the Navy's LOA application to determine if they would result in the least practicable adverse effect on marine mammals. This included a careful balancing of the likely benefit of any particular measure to the marine mammals against the likely effect of that measure on personnel safety, practicality of implementation, and impact on the effectiveness of the "military-readiness activity." NMFS identified the need to further amplify the Navy's plan for how to respond in the event of a stranding in the GoA, and the Navy and NMFS subsequently coordinated and produced the draft Stranding Response Plan for the GoA, which was made available to the public at the NMFS' Web site: *http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications*.

NMFS' proposed rule includes a list of the Navy's proposed mitigation measures (75 FR 64508, pages 64542–64548), which have been included in the regulatory text of this document.

Based on our evaluation of the proposed measures and other measures considered by NMFS or recommended by the public, NMFS has determined that the required mitigation measures (including the Adaptive Management component, see below) provide adequate means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, while also considering personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity. The proposed rule contains further support for this finding in the Mitigation Conclusion section (75 FR 64508, pages 64546–64548). During the public comment period, a few mitigation measures not previously considered were recommended, and NMFS' analysis of these measures is included in the Response to Public Comments section.

Research

The Navy provides a significant amount of funding and support to marine research. In the past five years, the agency funded over $100 million ($26 million in Fiscal Year 08 alone) to universities, research institutions, Federal laboratories, private companies, and independent researchers around the world to study marine mammals. The U.S. Navy sponsors 70 percent of all U.S. research concerning the effects of human-generated sound on marine mammals and 50 percent of such research conducted worldwide. Major topics of Navy-supported research include the following:

- Better understanding of marine species distribution and important habitat areas;
- Developing methods to detect and monitor marine species before and during training;
- Understanding the effects of sound on marine mammals, sea turtles, fish, and birds; and
- Developing tools to model and estimate potential effects of sound.

This research is directly applicable to fleet training activities, particularly with respect to the investigations of the potential effects of underwater noise sources on marine mammals and other protected species. Proposed training activities employ active sonar and underwater explosives, which introduce sound into the marine environment.

The Marine Life Sciences Division of the Office of Naval Research currently coordinates six programs that examine the marine environment and are devoted solely to studying the effects of noise and/or the implementation of technology tools that will assist the Navy in studying and tracking marine mammals. The six programs are as follows:

- Environmental Consequences of Underwater Sound
- Non-Auditory Biological Effects of Sound on Marine Mammals
- Effects of Sound on the Marine Environment
- Sensors and Models for Marine Environmental Monitoring
- Effects of Sound on Hearing of Marine Animals
- Passive Acoustic Detection, Classification, and Tracking of Marine Mammals

The Navy has also developed the technical reports referenced within this document, which include the Marine Resource Assessment. Furthermore, research cruises by NMFS and by academic institutions have received funding from the U.S. Navy. For example, in April 2009, the U.S. Pacific Fleet contributed approximately $250,000 to support a NMFS marine mammal density survey of the GoA's offshore waters. The goal of this study was to increase the state of awareness on marine mammal occurrence, density, and distribution within the GoA. The Navy-funded vessel-based line-transect survey conducted from onboard the NOAA ship *Oscar Dyson* determined marine mammal species distribution and abundance in the GoA TMAA. The survey cruise employed multiple observation techniques, including visual and passive acoustic observations, as well as photographic identifications (Rone *et al.,* 2009). In addition to the U.S. Pacific Fleet-funded monitoring initiative, the Chief of Naval Operations Environmental Readiness Division and the Office of Naval Research have developed a coordinated Science & Technology and Research & Development program focused on

marine mammals and sound. Total Investment in this program between 2004 and 2008 was $100 million. Fiscal Year 09 funding was $22 million and continued funding at levels greater than $14 million is foreseen in subsequent years (beyond 2010).

The Navy has sponsored several workshops to evaluate the current state of knowledge and potential for future acoustic monitoring of marine mammals. The workshops brought together acoustic experts and marine biologists from the Navy and other research organizations to present data and information on current acoustic monitoring research efforts, and to evaluate the potential for incorporating similar technology and methods on instrumented ranges. However, acoustic detection, identification, localization, and tracking of individual animals still requires a significant amount of research effort to be considered a reliable method for marine mammal monitoring. The Navy supports research efforts on acoustic monitoring and will continue to investigate the feasibility of passive acoustics as a potential mitigation and monitoring tool.

Overall, the Navy will continue to fund marine mammal research, and is planning to coordinate long-term monitoring/studies of marine mammals on various established ranges and operating areas. The Navy will continue to research and contribute to university/external research to improve the state of the science regarding marine species biology and acoustic effects. These efforts include mitigation and monitoring programs; data sharing with NMFS and via the literature for research and development efforts; and future research as described previously.

Monitoring

Section 101(a)(5)(A) of the MMPA states that, in order to issue an ITA for an activity, NMFS must set forth "requirements pertaining to the monitoring and reporting of such taking." The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for LOAs must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present.

Proposed Monitoring Plan for the GoA TMAA

The Navy submitted a draft Monitoring Plan for the GoA TMAA which may be viewed at NMFS' Web site: *http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications.*

Navy Monitoring Plans are typically designed as a collection of focused "studies" to gather data that will allow the Navy to address one or more of the following questions:

(a) Are marine mammals exposed to MFAS/HFAS (1–10 kHz), especially at levels associated with adverse effects (*i.e.,* based on NMFS' criteria for behavioral harassment, TTS, or PTS)? If so, at what levels are they exposed?

(b) If marine mammals are exposed to MFAS/HFAS, do they redistribute geographically as a result of continued exposure? If so, how long does the redistribution last?

(c) If marine mammals are exposed to MFAS/HFAS, what are their behavioral responses to various levels?

(d) What are the behavioral responses of marine mammals that are exposed to explosives at specific levels?

(e) Is the Navy's suite of mitigation measures for MFAS/HFAS and explosives (*e.g.,* Protective Measures Assessment Protocol, major exercise measures agreed to by the Navy through permitting) effective at avoiding TTS, injury, and mortality of marine mammals?

Given the larger scope of training events within other Navy range complexes as compared to the GoA, not all of these original five study questions would necessarily be addressed in the final GoA TMAA Monitoring Plan. Rather, data collected from the GoA monitoring efforts would be used to supplement a consolidated range complex marine mammal monitoring report incorporating data from the Hawaii Range Complex, Marianas Island Range Complex, Northwest Training Range Complex, and Southern California Range Complex.

Data gathered in these studies will be collected by qualified, professional marine mammal biologists who are experts in their field.

Monitoring methods proposed for the GoA include use of passive acoustic monitoring (PAM) to primarily focus on providing additional data for study questions (b) and (c).

This monitoring plan has been designed to gather data on all species of marine mammals that are observed in the GoA TMAA study area; however, the Navy will prioritize monitoring efforts for ESA-listed species and beaked whale species. The Plan recognizes that deep-diving and cryptic species of marine mammals, such as beaked whales and sperm whales, may have low probability of visual detection (Barlow and Gisiner, 2006). Therefore, methods will be utilized to address this issue (*e.g.,* PAM).

During the comment period on the Notice of Receipt (75 FR 5575, February 3, 2010) for the GoA TMAA action, NMFS received multiple public comments suggesting that there are inadequate density, distribution, and abundance data for marine mammals in the GoA TMAA. As mentioned previously, the Navy funded a $250,000 density survey in the offshore waters of the GoA TMAA in April, 2009. The Navy developed its draft monitoring plan for the GoA TMAA was developed to contribute scientific information to the overall NMFS–Navy monitoring goals. It selected year-round PAM recorders as the most appropriate long-term tool for obtaining more precise marine mammal occurrence data (presence/absence) in the GoA TMAA, especially in the offshore waters where weather and sea conditions would likely limit the usefulness of visual surveys. At other Navy range complexes, results from similar PAM recordings have begun to provide better information on species-specific occurrence and behavior.

NMFS believes that we should vigorously target this baseline information need with the monitoring plan and, in consideration of the public comments that we received on the proposed rule (75 FR 64508, October 19, 2010), we worked with the Navy on revising the plan. The revised monitoring plan now includes a commitment by the Navy to deploy PAM devices in 2011 and 2012 in the GoA TMAA to detect, locate, and potentially track vocalizing marine mammals, as well as provide seasonal estimates of presence/absence. These devices will be deployed year-round, including during Navy training events. Given the potential seas states and ocean conditions during both winter and summer, and the relatively infrequent Navy presence in the GoA TMAA, PAM represents the best long-term monitoring technique to employ within the GoA TMAA. In addition to collecting marine mammal vocalization and echolocation data before, during, and after any Navy training event, information can be inferred as to whether the training event has an effect or no effect on observed vocalizations. In 2013 and 2014, the Navy plans to conduct further monitoring using either PAM or another survey method. An alternate survey technique would ideally be part of a larger focused effort during the same time period in coordination with other agencies or research organizations working in the area. While the exact extent and

technique to be employed is still undetermined (*e.g.,* including but not limited to visual survey), monitoring in 2013 and 2014 is expected to receive the same level of fiscal and logistical support as the 2011–2012 efforts.

In addition to the Monitoring Plan for the GoA, the Navy has established an Integrated Comprehensive Monitoring Program (ICMP). The ICMP is a Navy-wide monitoring framework that will provide an overarching structure and coordination that will, over time, compile data from all Navy range-specific monitoring plans; the GoA TMAA plan is just one component of the ICMP. The overall objective of the ICMP is to assimilate relevant data collected across Navy range complexes in order to answer questions pertaining to the impact of MFAS and underwater explosive detonations on marine animals. Top priorities of the ICMP include: monitoring Navy training events, particularly those involving MFAS and underwater detonations; collecting data to estimate the number of individuals exposed to sound levels above current regulatory thresholds; assessing the efficacy and practicability of monitoring and mitigation tools and techniques and the Navy's current mitigation methods; and adding to the overall knowledge base on potential behavioral and physiological effects to marine species from MFAS and underwater detonations. More information about the ICMP may be found in the Monitoring Plan for the GoA.

Monitoring Workshop

The Navy, with guidance and support from NMFS, will convene a Monitoring Workshop, including marine mammal and acoustic experts as well as other interested parties, in 2011. The Monitoring Workshop participants will review the monitoring results from other Navy rules and LOAs (*e.g.,* the Southern California Range Complex (SOCAL), Hawaii Range Complex (HRC), *etc.*). The Monitoring Workshop participants will provide their individual recommendations to the Navy and NMFS on the monitoring plan(s) after also considering the current science (including Navy research and development) and working within the framework of available resources and feasibility of implementation. NMFS and the Navy will then analyze the input from the Monitoring Workshop participants and determine the best way forward from a national perspective. Subsequent to the Monitoring Workshop, NMFS and the Navy will apply modifications to monitoring plans as appropriate.

Adaptive Management

Our understanding of the effects of MFAS and explosives on marine mammals is still in its relative infancy, and yet the science in this field is evolving fairly quickly. These circumstances make the inclusion of an adaptive management component both valuable and necessary within the context of 5-year regulations for activities that have been associated with marine mammal mortality in certain circumstances and locations (though not in the Pacific Ocean or within the GoA TMAA). NMFS has included an adaptive management component in these regulations, which will allow NMFS to consider new information from different sources to determine (in coordination with the Navy and with input regarding practicability) on an annual or biennial basis if mitigation or monitoring measures should be modified (including additions or deletions) if new data suggest that such modifications are appropriate for subsequent annual or biennial LOAs.

The following are some of the possible sources of applicable data: (1) Findings of the Workshop that the Navy will convene in 2011 to analyze monitoring results to date, review current science, and recommend modifications, as appropriate, to the monitoring protocols to increase monitoring effectiveness; (2) compiled results of Navy funded research and development (R&D) studies (presented pursuant to the ICMP, which is discussed elsewhere in this document); (3) results from specific stranding investigations (involving coincident MFAS or explosives training or not involving coincident use); (4) results from general marine mammal and sound research; and (5) any information which reveals that marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent Letters of Authorization.

Separately, in July, 2010, NMFS and the Navy convened the "Marine Mammals and Sound" workshop, which brought together science and policy experts from the government, the academic community, and non-governmental organizations with the goals of prioritizing marine mammal research needs and opening up a broad discussion of (and potentially making recommendations regarding) some of the current management issues related to marine mammals and sound. After the information and ideas gathered during this workshop are sorted, compiled, and assessed, NMFS will use them, as appropriate, to inform our management decisions on issues such as appropriate mitigation and monitoring. In addition to considering these workshop products in the broader context of all MMPA authorizations from the Office of Protected Resources, they will also be considered as NMFS and the Navy work through the Adaptive Management process outlined for the GOA below.

Mitigation measures or monitoring requirements could be modified, added, or deleted if new information suggests that such modifications would have a reasonable likelihood of accomplishing the goals of mitigation or monitoring laid out in this final rule and if the measures are practicable.

Reporting

In order to issue an ITA for an activity, section 101(a)(5)(A) of the MMPA states that NMFS must set forth "requirements pertaining to the monitoring and reporting of such taking." Effective reporting is critical both to compliance as well as ensuring that the most value is obtained from the required monitoring. The proposed rule contains the reporting requirements for the Navy (75 FR 64508, pages 64550–64552), and these requirements remain unchanged.

Comments and Responses

On October 19, 2010 (75 FR 64508), NMFS published a proposed rule in response to the Navy's request to take marine mammals incidental to military readiness training in the GoA TMAA and solicited comments, information, and suggestions concerning the proposed rule. NMFS received twelve comment letters from environmental non-governmental organizations, the Marine Mammal Commission (MMC), and interested members of the public. The comments are summarized, sorted into general topic areas, and addressed below. Full copies of the comment letters may be accessed at *http://www.regulations.gov.*

NMFS worked with the Navy to develop MMPA rules and LOAs for the GoA TMAA, Atlantic Fleet Active Sonar Training (AFAST) activities, Southern California Range Complex (SOCAL), Hawaii Range Complex (HRC), Mariana Islands Range Complex (MIRC), and Northwest Training Range Complex (NWTRC). Many of the issues raised in the public comments for this rule were also raised for these previous rules, and NMFS considered many of the broader issues in the context of all of these Navy actions when determining how to address the comments on the GoA TMAA. Responses to public comments on AFAST, SOCAL, and HRC were

published in January 2009, and responses to public comments on MIRC and NWTRC were published in August and November 2010, respectively. These final rules and their responses to public comments may provide the public with additional detail, if needed.

Additional Mitigation Recommendations

Comment 1: One commenter suggests that aerial surveys before SINKEXs (75 FR 64508, p. 64546) should be mandatory, especially when the Beaufort Sea State is above 3.

Response: As stated in the proposed rule, in the event of a Beaufort Sea State 4 or above, survey efforts shall be increased within the 2 nm (3.7 km) zone around the target. This shall be accomplished through the use of an additional aircraft, if available, and conducting tight search patterns. The exercise shall not be conducted unless the 2 nm (3.7 km) zone around the target could be adequately monitored visually.

Comment 2: One commenter suggests that over-flights should be required for spotting marine mammals before detonation exercises (75 FR 64508, p. 64552) because the typical sea state in GoA is usually greater than 1.

Response: As stated in the proposed rule, a series of surveillance over-flights shall be conducted within the exclusion and the safety zones, prior to and during exercises, when feasible.

Comment 3: One commenter asked whether the training could be done during times of the year that would result in the minimal impact to all species. Another commenter asked whether there is another location that could be used for at least part of the training, where fewer animals would be impacted.

Response: While several species of baleen whales have periods of increased prevalence within the TMAA, these times do not always overlap; hence, it is not possible for the Navy to avoid every species of marine mammal. Furthermore, most species are more prevalent during summer months, which is when the Navy needs to do their exercises. Training during the winter months is not an option due to human safety concerns. Certain specific types of seasonal and geographic restrictions or limitations are impracticable for the Navy's activities in the TMAA.

In response to the second part of the comment, the TMAA was chosen very carefully in order to meet the Navy's training requirements and allow for the safe operation of ships, aircraft, and submarines. Moving the training activities to alternative locations would impact the effectiveness of the training and has no known benefit. Moreover, satisfying this request is beyond NMFS' authority under current laws. Furthermore, the existing marine mammal density and distribution information does not suggest that there are specific areas within the GoA where training would result in fewer impacts to marine mammals.

Comment 4: One commenter asked if the military could develop and substitute computer-simulated training for at least part or most of the training.

Response: As explained in the Navy's EIS, the Navy often employs simulators and synthetic training, but live training in a realistic environment is vital to success. The Navy relies on realistic combat-like training to prepare men and women for deployment. Moreover, a simulator cannot match the dynamic nature of the environment, either in bathymetry, sound propagation properties, or oceanography. In addition, coordinated unit level and Strike Group Training activities require multiple crews to interact in a variety of acoustic environments that cannot be simulated. Finally, it is a training imperative that crews actually use the equipment they will be called upon to operate. For more information on the simulated training option please refer to the Alternatives Eliminated from Further Consideration section of the Navy's EIS.

Comment 5: One commenter refers to the Navy's claims that it does not anticipate beaked whale mortality, yet requests Level A take, and states that this is not acceptable; beaked whales require additional mitigation and protection from Navy sonar.

Response: As stated in the proposed rule, evidence from five beaked whale strandings (all of which have taken place outside the GoA TMAA, and have occurred over approximately a decade) suggests that the exposure of beaked whales to MFAS in the presence of certain conditions (*e.g.,* multiple units using active sonar, steep bathymetry, constricted channels, strong surface ducts, *etc.*) may result in strandings, potentially leading to mortality. Although not all five of these physical factors believed to have contributed to the likelihood of beaked whale strandings are present, in their aggregate, in the GoA TMAA, scientific uncertainty exists regarding what other factors, or combination of factors, may contribute to beaked whale strandings. Accordingly, to allow for scientific uncertainty regarding contributing causes of beaked whale strandings and the exact behavioral or physiological mechanisms that can lead to the stranding and/or death, the Navy has requested authorization for (and NMFS is authorizing) take by injury or mortality. Although NMFS is authorizing take by injury or mortality of up to 15 beaked whales over the course of the 5-year regulations, the Navy's model did not predict injurious takes of beaked whales and neither NMFS nor the Navy anticipates that marine mammal strandings or mortality will result from the operation of MFAS during Navy exercises within the GoA TMAA. NMFS determined that the impact to beaked whales from the Navy's activities cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival and, therefore, concluded that the activity would have a negligible impact for these species.

Comment 6: One commenter refers to NMFS' mention of the ENP Alaskan resident stock and ENP Alaskan transient stock (75 FR 64508, p. 64571) of killer whales and asks if this is the depleted Prince William Sound stock. If so, according to the commenter, they require special consideration.

Response: The ENP Alaska resident stock includes the Prince William Sound pod; however, this stock of killer whales is not listed as "depleted" under the MMPA. In the Gulf of Alaska, Malkin *et al.* (1999) described two genetically distinct communities of transient killer whales that do not interact, the so-called Gulf of Alaska transients and the AT1 transients. In 2004, the AT1 transient killer whale group was determined by NMFS to be depleted under the MMPA. Individuals from this stock may be present in the TMAA; however, the Navy's activities are not expected to occur in an area/time of specific importance for reproduction, feeding, or other known critical behaviors. Furthermore, these large-grouped gregarious animals are very likely to be detected by Marine Mammal Observers (MMOs) and Navy Lookouts. As stated in the proposed rule, NMFS has determined that the Navy's specified activities will have a negligible impact on this species.

Comment 7: The MMC recommends that the rule require the suspension of the Navy's activities if a marine mammal is seriously injured or killed and the injury or death could be associated with those activities. The injury or death should be investigated to determine the cause, assess the full impact of the activity or activities and determine how activities should be modified to avoid future injuries or deaths.

Response: NMFS and the Navy have developed a detailed Stranding Response Plan for the GoA TMAA that outlines protocols for, and describes the underlying rationale for shutdown (in very specific circumstances) and investigation in the event that dead or stranded animals are found in the vicinity of an exercise. In addition, NMFS' regulations include a provision for "General notification of injured or dead marine mammals," that requires Navy personnel to notify NMFS immediately (or as soon as clearance procedures allow) if an injured, stranded, or dead marine mammal is found during or shortly after, and in the vicinity of, any Navy training exercise utilizing MFAS, HFAS, or underwater explosive detonations. The provision further requires the Navy to provide NMFS with species identifications or descriptions of the animal(s), the conditions of the animal(s) (including carcass condition if the animal is dead), location, time of first discovery, observed behaviors (if alive), and photo or video of the animal(s) (if available).

It can take months to years to complete the necessary tests and analysis required to determine, with a reasonable amount of certainty, the cause of a marine mammal death—and sometimes it is not possible to determine it. All but one of the small number of strandings that have occurred around the world associated with MFAS exercises have occurred concurrent with MFAS exercises that would have been considered "major," which typically involve multiple surface vessels and last for a much longer duration than non-major exercises. Therefore, NMFS (with input from the Navy) determined that it was beneficial and practicable to preemptively outline an explicit plan (that includes a shutdown requirement in certain circumstances) for how to deal with a stranding that occurs during a major exercise, and Stranding Response Plans were developed for all of the areas in which major exercises are conducted. Alternatively, for non-major exercises, the general notification provisions apply, under which the Navy would contact NMFS as soon as clearance procedures allow and we would determine how best to proceed at that time.

Because: (1) So few strandings have been definitively associated with MFAS training in the 60+ years that the U.S. and other countries that share information have been conducting MFAS training; (2) the exercises conducted in the GoA TMAA are of short duration and seasonally limited (*i.e.,* no more than two 21-day exercises, which may only be conducted between the months of April and October); and (3) investigations take a long time and are not always conclusive, it is not reasonable or practicable to require the Navy to shut down every time an injured or dead animal is found in the vicinity pending the results of an investigation that could take years to conduct.

However, NMFS and the Navy will implement the Stranding Response Plan as written and, as in the past, will work together on a case-by-case basis within the constraints of our available resources to investigate the causes of any stranding or death occurring during a non-major exercise. Once investigations are completed and determinations made (as feasible), NMFS would use the available information to help reduce the likelihood that a similar event would recur and would work with the Navy on the necessary steps to ensure compliance by the Navy with the MMPA. NMFS and the Navy will develop and finalize a Memorandum of Agreement that will streamline and improve the way that the Navy assists NMFS during a stranding investigation. Finally, the Stranding Response Plan includes a provision for stranding debriefs/lessons learned meetings between NMFS and the Navy following a stranding response, and the GoA TMAA rule includes an adaptive management provision that allows for the modification of mitigation or monitoring measures based on new information (like that which might be gathered during a stranding response/investigation), as appropriate.

Comment 8: One commenter states that NMFS' assertion regarding blue whales most likely feeding during the summer months should lead to NMFS prohibiting Navy activities during this time.

Response: NMFS stated that, "like most baleen whales, blue whales would most likely feed in the north during summer months (potentially the GoA) and head southward in the cooler months." However, the GoA TMAA activities are not expected to occur in an area/time of specific importance for breeding, calving, or other known critical behaviors of blue whales. Currently, there are no known specific feeding grounds for blue whales within the TMAA. Furthermore, the blue whales' large size and detectability makes it unlikely that these animals would be exposed to the higher levels of sound expected to result in more severe effects. Moreover, training during other times of the year is not an option due to human safety concerns.

Comment 9: One commenter requests that NMFS protect feeding grounds for humpback whales and migratory routes for gray whales. In addition, this commenter and another commenter request that NMFS protect (*e.g.,* prohibit MFAS within) high bathymetric relief areas for beaked whales.

Response: In the proposed rule, NMFS stated that most baleen whales, including humpback and gray whales, would most likely feed in the north during summer months, potentially the GoA, and head southward in the cooler months. However, the GoA TMAA activities are not expected to occur in an area/time of specific importance for breeding, calving, or other known critical behaviors. Currently, there are no known specific feeding grounds for humpback or gray whales within the TMAA. Furthermore, their large size and detectability makes it unlikely that these animals would be exposed to the higher levels of sound expected to result in more severe effects.

As indicated in the Navy's EIS and referenced in the proposed rule, gray whales have a well-defined north-south migratory path that takes them through the GoA twice a year. During migration through the GoA, gray whales' primary occurrence extends seaward 15 nm (28 km) from the shoreline within a narrow margin of the TMAA's northern boundary. The April 2009 survey encountered one group of two gray whales within the western edge of the TMAA and two groups well outside the TMAA nearshore at Kodiak Island (Rone *et al.,* 2009). The potential impacts to gray whales from Navy training activities are specifically discussed in the Potential Effects of Specified Activities on Marine Mammals section of the proposed rule. Given the transient nature of gray whales during migration through the GoA, and in light of the Navy's mitigation measures, although some gray whales may be behaviorally disturbed, more severe responses are not anticipated and NMFS determined that the take will have a negligible impact on the stock.

With respect to high bathymetric relief areas and beaked whales, the Navy's training exercises are spread throughout the GoA TMAA (as opposed to being focused in an area of known particular importance). Furthermore, the Navy's activities in the GoA are only occurring for a 21-day period once or twice a year.

Comment 10: One commenter states that NMFS must ensure that SINKEXs do not occur in or near critical habitat or breeding/feeding grounds.

Response: NMFS agrees that protecting important habitat (*e.g.,*

critical habitat or areas known for displays of important behaviors such as breeding and feeding) can be an effective way to minimize impacts to marine mammals; however, SINKEXs will not occur in or near critical habitat because designated critical habitats for Steller sea lions and North Pacific right whales are outside of the GoA TMAA. Furthermore, the commenter has neither suggested particular areas used by marine mammals for breeding/feeding nor presented any additional evidence that NMFS could consider in identifying such areas within the GoA TMAA. Pursuant to the MMPA, NMFS makes mitigation decisions based on the biological information pertaining to the potential impacts of an activity on marine mammals and their habitat (and the practicability of the measure). SINKEXs, in general, require the most comprehensive suite of mitigation measures relative to other Navy training exercises and the permit issued to the Navy under the Marine Protection, Research and Sanctuaries Act requires vessels to be sunk in waters that are at least 6,000 ft (1,829 m) deep and at least 50 nm (92.6 km) from land. In addition, the Navy has agreed not to conduct SINKEXs within Habitat Areas of Particular Concern (HAPCs) established in the GoA. NMFS believes that the permit conditions and avoidance of HAPCs, in conjunction with the Navy's SINKEX mitigation plan, set forth a means for effecting the least practicable adverse impact. The rationale behind this finding was discussed in the Mitigation Conclusion section of the proposed rule (75 FR 64508, pages 64546–64548).

Comment 11: One commenter states that, with respect to North Pacific right whales, the Navy must take all possible precautions, including a larger buffer zone around the critical habitat area that extends inside the TMAA, and ceasing all activity when whales are present. Another similar comment states that NMFS should require sufficient buffers between critical habitat and the TMAA. Another commenter claims NMFS' proposal to allow Level B takes of North Pacific right whales (75 FR 64508, p. 64568), is unacceptable due to their critically endangered status.

Response: NMFS believes that the location of the TMAA relative to designated critical habitats is sufficient to avoid diminishing their conservation value to species. For example, the nearest boundary of the Pacific right whale critical habitat is approximately 16 nm (30 km) west of the southwest corner of the TMAA. NMFS believes that this distance, coupled with the fact that most exercises will take place away from the boundaries of the TMAA, provide an adequate buffer around North Pacific right whale critical habitat. In addition, current regulations (50 CFR 224.103(c)) require ships to maneuver to maintain at least 500 yards (460 m) of separation from any observed right whale (consistent with safety of ship). The Navy's model predicted that approximately 10 takes of North Pacific right whales would occur within the GoA TMAA over the course of five years (and no takes by injury or mortality). NMFS believes that by implementing specific mitigation measures the Navy has minimized, to the extent practicable, the impacts to North Pacific right whales and their critical habitat.

In addition, the TMAA is located offshore of the main habitat and foraging grounds for Steller sea lions. While the Steller sea lions' range runs adjacent to the TMAA, their foraging habitat consists primarily of shallow, nearshore areas, and continental shelf waters 8 to 24 km (4.3 to 13 nm) offshore, which are inshore of the TMAA boundaries. There is no critical habitat for Steller sea lions within the TMAA boundaries. The area designated as critical habitat was based on land use patterns, the extent of foraging trips, and the availability of prey items, with particular importance given to the haul out areas where Stellers rest, pup, nurse, mate, and molt.

With respect to the additional comment regarding takes of North Pacific right whales, as noted in the proposed rule, only Level B takes in the form of behavioral disturbances are anticipated. No TTS takes are estimated because the North Pacific right whales' large size and detectability makes it unlikely that these animals would be exposed to the higher levels of sound expected to result in more severe effects.

Mitigation Effectiveness

Comment 12: According to one commenter, NMFS states that bow riding dolphins will not be affected because they are outside the main beam of the sonar (75 FR 64508, p. 64547). The commenter then asks about the assumption that marine mammals will not approach ships, and whether the Navy is supposed to cease MFAS when marine mammals are within 1,000 yds.

Response: Dolphins are known to deliberately close in on a ship to ride the vessel's bow wave. While in the shallow-wave area of the vessel bow, dolphins are out of the main transmission axis of the active sonar. As stated in the proposed rule, if after conducting an initial maneuver to avoid close quarters with dolphins or porpoises, the Officer of the Deck (OOD) concludes that dolphins or porpoises are deliberately closing to ride the vessel's bow wave, no further mitigation actions are necessary while the dolphins or porpoises continue to exhibit bow wave riding behavior.

Comment 13: One commenter claims that NMFS fails to describe Navy's "suite of mitigation measures" (75 FR 64508, p. 64549).

Response: NMFS discussed the proposed mitigation measures in detail within the proposed rule (75 FR 64542, October 19, 2010). To briefly reiterate, they include personnel training, specific operating procedures and collision avoidance, shutdowns, buffer zones, and Lookouts. This information is also explicitly described in the regulatory text of the final rule.

Comment 14: One commenter asserts that safety zones (1,000 yard power-down and 200 yard shut down) around sonar domes are an inadequate and ineffective mitigation measure. Similarly, another commenter recommended that the 1,000 yard safety zone should be increased to 2,000 yards.

Response: The commenter provides no justification for increasing the buffer zone to 2,000 yards. The Navy's powerdown and shutdown strategy (*i.e.,* the specific distances) is intended to avoid exposure of marine mammals to injurious levels of sound (which is thought to occur at about 10 m from the source), and to reduce exposing marine mammals (to varying degrees, depending on the species and environmental conditions) to higher levels of sound that might be associated with more severe behavioral responses. As the proposed rule discussed, while visual detection of marine mammals is not anticipated to be 100% effective, the 1,000 yard safety zone coincides with a Lookout's ability to realistically maintain situational awareness over a large area of the ocean; including the ability to detect marine mammals during less than ideal sea state conditions. The Mitigation Conclusion section of the proposed rule describes NMFS' least practicable adverse impact analysis (75 FR 64508, pages 64546–64548).

Comment 15: One commenter expressed concern over the unknown impacts of the way sound travels with respect to the large underwater canyons in the GoA and states that the Navy does not set forth adequate measures to mitigate harmful effects of sonar primarily with sensitivity to fin, right, minke, or killer whales.

Response: In general, environmental parameters—such as bathymetry—play an important role in the Navy's analysis of marine mammal impacts, and due to the importance that propagation loss

plays in ASW exercises, the Navy has, over the last four to five decades, invested heavily in measuring and modeling environmental parameters. Within the GoA TMAA, the Navy has identified six bathymetric provinces ranging from 100 m to typical deep-water depths (slightly more than 5,000 m). To model how sound from a particular source travels through the water column, bathymetric features are combined with other environmental parameters, such as sound speed profiles and High-Frequency Bottom Loss classes to determine propagation loss, and, ultimately, the zone of influence of a particular sound source.

The model used by the Navy to estimate marine mammal exposures to sonar, which also considers the density of each species in the area, did not predict any Level A exposures (PTS) on fin, North Pacific right, minke, or killer whales. With respect to mitigation measures, NMFS indicates that Level A Harassment (injury) and Temporary Threshold Shift (TTS) (one type of Level B Harassment) are unlikely to occur because of: The distance from the source within which an animal would need to approach to be exposed to levels associated with injury (~ 10 m) or TTS (~178–335 m); the fact that Lookouts would detect animals at that close distance; the fact that the Navy model (which does not take mitigation or avoidance into consideration) predicted that 1 Dall's porpoise would be exposed to injurious levels of sound and 931 animals would be exposed to levels associated with TTS; and the fact that many (not all) animals will avoid sonar at some distance. Although modeling predicted that one animal would be exposed to levels of sound that would cause injury, Level A takes were not requested by the Navy (and NMFS is not authorizing Level A takes) because the implementation of mitigation and monitoring procedures will further minimize the potential for marine mammal exposures to sonar sources. Additionally, the Navy is capable of effectively monitoring a 1,000 m safety zone using a variety of techniques, including binoculars, night vision goggles, infrared cameras, and passive acoustic monitoring.

Comment 16: One commenter claims that NMFS assumes marine mammals can easily move away during SINKEXs, but asserts that little to nothing is known about how marine mammals in the GoA will react to noise.

Response: The commenter misrepresents this piece of text from the proposed rule. Up to two SINKEXs are planned annually for the GoA TMAA. These exercises are stationary and conducted in deep, open water where few marine mammals would typically be expected to be randomly encountered. NMFS does not solely rely on the animal's ability to detect the activity and avoid it as a mitigation measure during SINKEXs. In fact, SINKEXs have the most rigorous monitoring and shutdown protocol of any planned explosive exercise. For a complete list of these protocols, please refer to § 218.124(a)(4).

Impact Assessment

Comment 17: One commenter claims that NMFS refers to models, but does not provide a source (75 FR 64508, p. 64548).

Response: NMFS refers to the model used by the Navy to estimate marine mammal takes in the GoA, which is described in detail in Appendix B of the LOA application and Appendix D of the EIS.

Comment 18: One commenter claims that NMFS does not address the issue of greenhouse gases from overflights.

Response: NMFS is not authorizing the Navy's activities; rather, we are analyzing and authorizing the take of marine mammals incidental to those activities. NMFS does not anticipate that greenhouse gas emissions from overflights will result in marine mammal take, and therefore, we do not address the issue any further. Please refer to section 3.1 of the EIS for a detailed discussion of potential impacts to air quality, including emissions from aircraft activities.

Comment 19: One commenter claims NMFS states that the probability of marine mammals approaching the sonar dome is low (75 FR 64508, p. 64547), but does not cite where that information is from and does not take into account deep-diving whales that may be present.

Response: NMFS actually stated that the probability that a marine mammal would approach within the above distances of the sonar dome without being seen by the watchstanders is very low. The watchstanders' job is to look for marine mammals and activate a shutdown, should they approach within 200 yd (183 m).

Comment 20: One commenter asserts that NMFS claims that animals exposed to MFAS would not receive enough exposure to drive bubble growth to substantial size (75 FR 64508, p. 64553), and asks what studies substantiate this assertion.

Response: The proposed rule contained a detailed discussion of the many hypotheses involving both acoustically-mediated and behaviorally-mediated bubble growth. NMFS concluded that there is not sufficient evidence to definitively say that any of these hypotheses accurately describe the exact mechanism that leads from sonar exposure to a stranding. Despite the many theories involving bubble formation (both as a direct cause of injury and an indirect cause of stranding), Southall *et al.* (2007) summarizes that scientific disagreement or complete lack of information exists regarding the following important points: (1) Received acoustical exposure conditions for animals involved in stranding events; (2) pathological interpretation of observed lesions in stranded marine mammals; (3) acoustic exposure conditions required to induce such physical trauma directly; (4) whether noise exposure may cause behavioral reactions (such as atypical diving behavior) that secondarily cause bubble formation and tissue damage; and (5) the extent to which the post mortem artifacts introduced by decomposition before sampling, handling, freezing, or necropsy procedures affect interpretation of observed lesions. Based on the best available science, NMFS stated that a short duration of active sonar pings (such as that which an animal exposed to MFAS would be most likely to encounter) would not likely be long enough to drive bubble growth to any substantial size (75 FR 64553, October 19, 2010). The Navy's mitigation and monitoring measures are in place to prevent prolonged exposure of marine mammals to MFAS.

Comment 21: One commenter refers to NMFS' use of a risk function based on studies on four species and limited science (75 FR 64508, p. 64558) and asks if this is a risk model that will be used in the GoA. If so, the commenter asserts, it needs to integrate cumulative, long-term, synergistic stressors. The commenter claims that if there is no data to allow for this integration, then NMFS should not be using this risk function to estimate and authorize takes.

Response: NMFS has explained in the proposed rule why we chose the three datasets we used to define the risk function. These three datasets represent the only known data that specifically relate altered behavior responses (that NMFS would consider Level B Harassment) to exposure—at specific received levels—to MFAS and sources within or having components within the range of MFAS (1–10 kHz). As commenters have pointed out in previous rules, there are datasets that report marine mammal responses to lower levels of received sound; however, because of the structure of the curve NMFS uses and what it predicts (Level B Harassment), we need datasets

that show a response that we have determined qualifies as harassment (in addition to needing a source that is adequately representative of MFAS and includes reliable specific received level information), which many of the lower level examples do not.

Comment 22: One commenter claims that the hours of MFAS over a 5-year period are not readily apparent in Table 8.

Response: Table 8 (Table 5 in this final rule) is not intended to depict the hours of MFAS over a 5-year period. Rather, the table shows the Navy's estimated amount of take and NMFS' proposed annual take authorization. The hours of sonar sources authorized over a 5-year period are included in Subpart N of Part 218—Regulations Governing the Taking and Importing of Marine Mammals.

Comment 23: One commenter asks if sonar has been shown to affect the successful reproduction of any marine mammal species or their prey.

Response: In the Species Specific Analysis section of the proposed rule, NMFS discusses potential effects on marine mammals in the GoA TMAA, including population level effects. The GoA TMAA activities are not expected to occur in an area/time of specific importance for breeding, calving or other known critical behaviors. In addition, the size of many large whale species and group size of smaller ododocetes improves detectability and makes it unlikely that these animals would be exposed to higher levels of sound that would be expected to result in more severe effects. Therefore, the activities are not expected to adversely impact rates of recruitment and survival of these marine mammals species or stocks and NMFS has determined that the Navy's activities will have a negligible impact on the affected species or stocks. With respect to marine mammal prey, in the Effects on Marine Mammal Habitat section, NMFS discusses the effects on marine mammal food resources, including fish and invertebrates. Potential impacts to marine mammal food resources within the GoA TMAA are negligible given both the lack of hearing sensitivity to mid-frequency sonar, the very limited spatial and temporal scope of most Navy activities at sea including underwater detonations, and the high biological productivity of these resources. NMFS concludes that no short- or long-term effects to marine mammal food resources from Navy activities are anticipated within the GoA TMAA.

Comment 24: One commenter asserts that plastic, heavy metals, and nylon materials from sonobuoys will undoubtedly wash up along the GoA, degrading the marine environment and posing a potential risk to marine mammals, and believes that NMFS does not appropriately address the issue of flotsam from expended materials.

Response: The effects from expended materials are considered insignificant and discountable, as addressed in the Navy's EIS. The probability of a marine mammal ingesting any material is extremely low based on the size of the TMAA, the limited duration of the training exercises, and the low concentration of certain materials being used. Other materials are expected to sink beyond the known depth of marine mammals or are considered large enough to prohibit ingestion.

Comment 25: The MMC recommended that NMFS advise the Navy to consult with the U.S. Fish and Wildlife Service to determine if the Navy also needs authorization to take sea otters.

Response: The Navy has consulted on the GoA TMAA action under section 7 of the ESA with the USFWS, which has jurisdiction over sea otters. The Navy and the USFWS coordinated regarding the list of species, and sea otters were not included. Sea otters are considered to be extralimital to the GoA TMAA and none were encountered within the TMAA during the April 2009 GOALS survey (Rone *et al.,* 2009). The MMC concurred that sea otters were unlikely to enter the Navy training range area due to the distance from shore in their comment letter on the DEIS dated January 27, 2010.

Comment 26: The MMC recommended that NMFS require the Navy to conduct an external peer review of its marine mammal density estimates for the GoA, the data upon which those estimates are based, and the manner in which those data are being used.

Response: Both NMFS and the Navy use peer-reviewed science whenever it is available and applicable, and NMFS has encouraged the Navy to get the models they use and data they gather peer-reviewed. In 2008, the impacts analysis model used for the GoA TMAA (and the previous Navy EISs and final rules) underwent the NMFS peer review process using the Center for Independent Experts (CIE) and was deemed adequate and sufficient for the purpose for which it was being used. Recommendations made by the CIE for improvements were incorporated into the next generation model upgrades.

In the context of the Navy's GoA TMAA EIS/OEIS and LOA application, the marine mammal densities used in the Navy's impact analysis were derived from several sources, which are summarized in Table B–16 of the Navy's LOA application. The sources the Navy relied upon to derive density estimates for marine mammal species in the GoA are all from peer-reviewed journals. In addition, due to the lack of new survey data for marine mammals in the GoA, the Navy funded the Gulf of Alaska Line-Transect Survey (GOALS), which was conducted in April 2009. During this survey, line-transect visual data and acoustic data were collected over a 10-day period, from which densities were derived for fin and humpback whales for inshore and offshore strata.

Also, while it is not the same as peer review, both the NEPA and MMPA processes include a comment period during which the public can specifically recommend better ways to use the data to estimate density, which the Navy and NMFS take into account. For example, the proposed rule for the GoA TMAA (75 FR 64508, October 19, 2010) encouraged the public to recommend effective, regionally specific methods for augmenting existing marine mammal density, distribution, and abundance information in the GoA TMAA and to prioritize the specific density and distribution data needs in the area.

Further, a new systematic framework (that includes a hierarchy of preferred methodologies based on the data available in an area) is being developed by the Navy to estimate density in the analyses for the rule renewals that will follow the expiration of the MMPA rules for Navy training in 2009, 2010, and 2011 (*i.e.,* rules that would, if appropriate, be issued in 2014 and later). The Navy has indicated that they may pursue a peer review of this framework and NMFS has encouraged them to do so.

Comment 27: The MMC recommended that NMFS require the Navy to estimate marine mammal takes using season- and location-specific environmental parameters (including sound speed profiles and wind speed) and marine mammal densities before issuing the final rule; if the Navy plans to conduct training exercises in April or May, but does not provide more realistic take estimates for these months, NMFS should limit the final rule to exercises that occur during the period from June to October.

Response: The Navy did consider densities during April–May, but elected to use the higher summer densities as a conservative measure (*i.e.,* over prediction of potential exposures). The multi-day Northern Edge (NE) exercise is the main modeling driver for exposures, and these event-based exposures are what are summed in the "annual" exposures. Highest densities

from the summer were used to model two NE events; the sum of all current exposures likely overestimates exposure to all species (mitigation is not factored into these exposure values either), and re-modeling/re-assessing for April–May for two species of pinnipeds would not significantly change species specific or total exposures. The modeling was not done for an entire period of time (June–October) of continuous activity. This is different from other range complexes like SOCAL where there is year round unit level training. The only Navy ships in the GOA will likely be there in association with NE exercises.

Comment 28: Ocean Conservation Research (OCR) included a copy of their comments on the Navy's EIS and suggested that some of those comments also pertained to the MMPA authorization. Other commenters mirrored several of the recommendations that OCR made in these comments.

Response: OCR and others assert that the chemical, toxic, and "inert" pollution models used in the GoA DEIS are over simplistic and do not take into account the current state of knowledge about accumulation and concentrations of chemical, toxic, and "inert" pollutant behavior throughout the entire ocean, and up and down the entire food chain—including humans. The Navy did not expect GoA TMAA exercises to result in the production of any toxic chemicals that would affect marine mammals. The EIS did analyze the potential impacts from PUTR material, ordnance and target-related materials, chaff, sunken hulks (*i.e.,* SINKEXs), and expended sonobuoys, and found that no significant impacts to marine mammals were likely to result from those expended materials. Therefore, the Navy determined that marine mammals would not be taken via ingestion of toxins or interaction with the aforementioned expended materials and they did not request (nor did NMFS grant) authorization for take of marine mammals via these methods.

Comment 29: One commenter claims that, due to insufficient data provided on the sonar characteristics and source levels, assessments of potential impacts are incomplete.

Response: NMFS does not agree with the commenter's claim that insufficient data were provided on the sonar characteristics and source levels used in the GoA TMAA. To the extent permissible (*i.e.,* not classified), the Navy provided detailed source descriptions in Table B–4 of the Navy's LOA application. The same information was provided in Table D–4 of the Navy's EIS. If unclassified, these tables include source depth, center frequency, source level, emission spacing, vertical directivity, and horizontal directivity for the active sonar sources used in the TMAA. The Navy then used the characteristics of these sources to model the potential impacts on marine mammals.

Comment 30: One commenter claims that the bio-acoustic impact models used in the DEIS are overly simplistic and do not represent wild animal impacts or behaviors and do not account for agonistic qualities and characteristics of the various signals that would be introduced into the environment.

Response: NMFS does not agree with the commenter's claim that the impact models used in the DEIS are overly simplistic and unrepresentative. NMFS has responded to similar comments regarding the Navy's risk function analysis provided by Dr. David Bain in the Atlantic Fleet Active Sonar Training final rule (74 FR 4865) and refers readers to those comments and responses.

Comment 31: One commenter asserts that mid- and high-frequency sonar acoustic impact data on fish is lacking and does not justify the conclusion that impacts are "negligible or non-existent."

Response: Limited data exists on the effects of sound on fish, both in terms of number of well controlled studies and species tested. However, the vast majority of fish species studied to date are hearing generalists and cannot hear sounds above 500 to 1,500 Hz (0.5 to 1.5 kHz), depending on the species. Therefore, most fish are not likely to experience behavioral effects as a result of exposure to sonar because they cannot hear in that frequency range. Even for species that are capable of hearing above 1,500 Hz (1.5 kHz), their hearing in this range is poor compared to their sensitivity at lower frequencies. Moreover, even if a fish detects a mid- or high-frequency sound, masking of biologically relevant sounds is unlikely to occur since the vast majority of biologically relevant sounds for fish are below 1,000 Hz (1 kHz).

Comment 32: One commenter claims that the mortality "risk continuum" for fish due to explosives is inadequate and suspiciously biased to appear much more benign than it actually is. The conclusion in the DEIS section on fish admits that very little is known about impact of sonar, yet contradicts the summary table statement that "sonar used in Navy exercises would result in minimal harm to fish or EFH."

Response: The commenter refers to the Navy's analysis of potential impacts to fish and Essential Fish Habitat contained in the EIS. It is important to note that the analysis referred to was conducted in the context of the Magnuson-Stevens Fishery Conservation and Management Act, the ESA, and Executive Order 12114. The factors used to assess the significance of effects vary under these Acts, and are also different from those applied to the MMPA's effects analysis. The purpose of this comment period was for the public to provide comments on the proposed rule, which is being promulgated under the authority of the MMPA. In the Effects on Marine Mammal Habitat section of the proposed rule, NMFS discusses the effects on marine mammal food resources, including fish and invertebrates. Potential impacts to marine mammal food resources within the GoA TMAA are negligible given both the lack of hearing sensitivity to mid-frequency sonar, the very limited spatial and temporal scope of most Navy activities at sea including underwater detonations, and the high biological productivity of these resources. NMFS concludes that no short- or long-term effects to marine mammal food resources from Navy activities are anticipated within the GoA TMAA.

Comment 33: One commenter claims that the exposure risk models of marine mammals appear to contain many examples of "statistical manipulations of convenience" which erodes both the credibility of the models and the integrity of the entire DEIS.

Response: NMFS disagrees with the commenter's assertions. For example, the commenter takes issue with the density of species being presented in animals per km^2, which results in 0.0019 humpback whales per km^2, because there is no such thing as 0.0019 of a humpback whale. While the commenter is correct that there is no such thing as 0.0019 of a humpback whale, density is typically measured in terms of the number of animals per unit of area, which is usually per square kilometer or mile. In addition, the commenter asks whether setting the cutoff extent of the integral to 120 dB is based on either excluding the harbor porpoise from the marine mammal response data set or modifying the harbor porpoise risk function to a "heaviside step function." Harbor porpoise are found in coastal regions of northern temperate and subarctic waters (Reeves *et al.,* 2002). Generally, harbor porpoise are not found in water deeper than 100 m, and decline linearly as depth increases (Carretta *et al.,* 2001, Barlow 1988, Angliss and Allen 2009). A survey conducted in the GoA in June 2003 yielded a single sighting of two

individual harbor porpoises (Waite, 2003). The vessel survey conducted in April 2009 yielded 30 sightings of 89 harbor porpoise (Rone *et al.,* 2009). Based on their coastal distribution and limitation to shallower depths, it is unlikely that harbor porpoises would occur within the TMAA; therefore, there is no empirical density information for this species. The Navy used stock assessment information indicating an area for the GoA harbor porpoise stock of approximately 69,829 nm^2 (239,597 km^2) with an abundance of 41,854 animals. Assuming an even distribution of harbor porpoises in the GoA stock, there would be 2,719 harbor porpoises within the TMAA. While this figure is likely an overestimate, the Navy assumes for analysis purposes that 2,719 harbor porpoises will be exposed to Level B behavioral harassment.

Comment 34: One commenter claims that the model of bio-acoustic impact of explosives on marine mammals is overly simplistic because it models the animals as "linear input devices" and does not account for synergistic effects of stress on the animal or destruction of habitat and food sources.

Response: Although the Navy's model does not quantitatively consider the points raised by the commenter (because the quantitative data necessary to include those concepts in a mathematical model do not currently exist), NMFS and the Navy have qualitatively addressed these concerns in the effects analysis contained in the rule and EIS.

Comment 35: One commenter claims that NMFS dismisses effects of MFAS on fish because the Navy will be operating beyond the frequency that fish can hear, but does not take into account the effects of pressure from sound waves. The commenter further claims that NMFS cites one study on one species and references the lack of data on fish and exposure to sound, but goes on to make a broad assumption that no long-term negative effects will occur (75 FR 64508, p. 64562).

Response: In the Effects on Marine Mammal Habitat section, after some discussion, NMFS concludes that there "will be few, and more likely no, impacts on the behavior of fish from active sonar." NMFS also discusses the potential for both threshold shift and mortality to fish from MFAS, though we conclude that these impacts would be short-term (threshold shift) and insignificant to the population as a whole in light of natural daily mortality rates. As stated in the proposed rule, there are currently no well-established thresholds for estimating effects to fish from explosives other than mortality models. Fish that are located in the water column, in proximity to the source of detonation could be injured, killed, or disturbed by the impulsive sound and possibly leave the area. The huge variations in the fish population, including numbers, species, sizes, and orientation and range from the detonation point, make it very difficult to accurately predict mortalities at any specific site of detonation. Most fish species experience a large number of natural mortalities, especially during early life stages, and any small level of mortality caused by training exercises in the GoA TMAA involving explosives will likely be insignificant to the population as a whole.

Comment 36: One commenter claims NMFS cites an incident of damage to squid following airgun activity, but supports the position that the activity was "totally circumstantial" (75 FR 64508, p. 64563), thus participating in a Type II error. The commenter asserts that bias for the Navy on the part of NMFS is apparent.

Response: As stated in the proposed rule, the data presented showing damage to squid tissue is highly questionable since there was no way to differentiate between damage due to some external cause (*e.g.,* the seismic airgun) and normal tissue degradation that takes place after death, or due to poor fixation and preparation of tissue. To date, this work has not been published in peer reviewed literature, and detailed images of the reportedly damaged tissue are also not available.

Comment 37: One commenter expressed concern that NMFS did not account for non-Navy ships that may strike whales as they surface due to MFAS. This commenter further asserts that non-Navy ship traffic should not be excluded from consideration because they too pose a risk to marine mammals.

Response: NMFS appreciates the commenter's concern regarding the potential impacts of non-Navy vessel activity in the GoA; however, the non-Navy shipping traffic in the area falls outside of the scope of the proposed action that NMFS and the Navy analyzed as part of the proposed and final rulemaking process. For more information on non-Navy vessel activity, please refer to section 3.3 and section 4 of the Navy's EIS.

Under section 101(a)(5)(A) of the MMPA, NMFS prescribes regulations setting forth the permissible methods of taking pursuant to an activity *upon request* (emphasis added) by citizens of the United States. In this case, the Navy requested authorization from NMFS to permit the taking of marine mammals incidental to training activities in the GoA and NMFS, after determining that the total take during the 5-year period will have a negligible impact on marine mammals, has responded by prescribing regulations setting forth the permissible methods of taking pursuant to Navy training activities, and other means of effecting the least practicable adverse impact on marine mammals and their habitat.

Separately, non-Navy vessels are prohibited from taking marine mammals under section 101(a) of the MMPA. In addition, NMFS has regulations in effect that prohibit approaching within 100 yards (91.4 m) of a humpback whale in waters within 200 nm (370.4 km) of Alaska (50 CFR 224.103(b)). These regulations also require vessels to operate at a "slow safe speed" within proximity to a humpback whale. For other species or marine mammals in Alaskan waters, NMFS has guidelines that advise vessels to remain at least 100 yards (91.4 m) from marine mammals. The guidelines are available on the following Web site: *http://www.fakr.noaa.gov/protectedresources/mmv/guide.htm*. Guidelines and regulations are designed to prevent vessels from violating Federal law and to reduce the potential for inadvertently harming whales, dolphins, porpoises, seals and sea lions.

Comment 38: One commenter expressed concern that the speeds at which Navy ships travel (10–14 knots) increase the likelihood of ship strikes because NMFS has previously stated that speeds in excess of 10 knots cause fatalities in ship strike events.

Response: NMFS has analyzed the potential impacts from ship strikes in the proposed rule (75 FR 64508, pages 64540–64542) and includes mitigation measures to minimize the likelihood of ship strikes in the final rule (see § 218.124(a)(2)). Because of the relatively low density of Navy traffic in the GoA TMAA, the limited number of days that the Navy plans to conduct training activities in the GoA TMAA, the fact that there are no reports of Navy vessels striking a whale in the GoA, and the mitigation measures required under this final rule, NMFS does not believe that a vessel strike of a marine mammal is likely in the GoA TMAA.

Comment 39: One commenter claims that NMFS' authorization of lethal take of up to 15 beaked whales over the course of 5 years is unacceptable in the absence of scientific data about these animals in the GoA.

Response: NMFS appreciates the commenter's concern, but the MMPA directs NMFS to issue an incidental take authorization if certain findings can be made. Under the MMPA, NMFS must

make the decision of whether or not to issue an authorization based on the proposed action that the applicant submits. Any U.S. citizen (including the Navy) can request and receive an MMPA authorization as long as all of the necessary findings can be made. Both NMFS and the Navy have a responsibility to use the best available science to support our analyses and decisions under both the MMPA and NEPA. For example, in 2009, the Navy funded a baseline survey of the GoA to gather data on the distribution and density of marine mammals. The results from this survey, as well as other relevant literature presented in the LOA application and EIS, represent the best available science generated by the Navy and used by NMFS. As more surveys are conducted, data will be collected across additional months and areas (such as seamounts that are associated with the presence of beaked whales), which will allow for the calculation of more spatially and temporally explicit density estimates. In the meantime, the density estimates from the 2009 survey and other sources allow NMFS to make reasonable predictions regarding the number of marine mammals that might be exposed to particular levels of sound. In this case, NMFS has determined that the Navy's GoA TMAA exercises will have a negligible impact on the affected species or stock (including beaked whales) and, therefore, we plan to issue the requested MMPA authorization.

Comment 40: One commenter asks how NMFS can justify estimating takes using criteria that were developed based on assumptions about received levels of MFAS.

Response: The commenter misrepresents this discussion in the proposed rule. As discussed in the Acoustic Take Criteria section of the proposed rule, NMFS developed acoustic criteria that estimate at what received level (when exposed to MFAS/HFAS or explosive detonations) Level B Harassment, Level A Harassment, and mortality (for explosives) would occur. NMFS utilizes three acoustic criteria to assess impacts from MFAS/HFAS: PTS (injury—Level A Harassment), TTS (Level B Harassment), and behavioral harassment (Level B Harassment). A number of investigators have measured TTS in marine mammals. These studies measured hearing thresholds in trained marine mammals before and after exposure to intense sounds. Because PTS data do not currently exist for marine mammals (and are unlikely to be obtained due to ethical concerns), these levels are estimated using TTS data from marine mammals and relationships between TTS and PTS have been discovered through the study of terrestrial mammals. For behavioral harassment, NMFS uses acoustic risk continuum functions, which allow for probability of a response that NMFS would classify as harassment to occur over a range of possible received levels and assume that the probability of a response depends first on the "dose" (in this case, the received level of sound) and that the probability of a response increases as the "dose" increases. The Navy and NMFS have previously used acoustic risk functions to estimate the probable response of marine mammals to acoustic exposures for other training and research programs.

Comment 41: One commenter refers to NMFS' statement in the proposed rule that marine mammals that incur PTS due to approaching sonar sources may compensate, "although this may include energetic costs" and asserts that energetic costs can contribute to the decline of an animal's state of health, and that it is reasonable to assume that such costs could potentially lead to an animal's death.

Response: The commenter takes the statement quoted from the proposed rule out of context. First, in order to incur PTS a marine mammal would have to be within 10m of the sonar dome and NMFS believes that many animals would deliberately avoid exposing themselves to the received levels of active sonar necessary to induce injury by either moving away from the source or at least modifying their course to avoid a close approach. Second, in the unlikely event that an animal approaches the sonar vessel at close distance, NMFS believes that the mitigation measures (*i.e.,* shutdown/powerdown zones for MFAS/HFAS) would typically ensure that animals would not be exposed to injurious levels of sound. Third, if a marine mammal is able to approach a surface vessel within the distance necessary to incur PTS, the likely speed of the vessel (typically 10–12 knots) would make it very difficult for the animal to remain in range long enough to accumulate enough energy to result in more than a mild case of PTS. Fourth, although the Navy's modeling predicted that one Dall's porpoise would incur PTS from exposure to MFAS/HFAS, the Navy and NMFS believe this result is very unlikely to occur; therefore, the Navy has not requested authorization for takes by Level A Harassment and NMFS is not authorizing takes by Level A Harassment. Finally, although NMFS states that marine mammals may compensate for PTS, which may incur energetic costs, this would represent a worst case scenario that is unlikely to occur in the GoA TMAA because of the mitigation measures implemented to prevent animals from being exposed to injurious levels of sound. Therefore, NMFS determined that the impact to marine mammals from the Navy's activities cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival and concluded that the activity would have a negligible impact.

Comment 42: One commenter claims that NMFS' assertion that marine mammals will deliberately avoid exposing themselves to received levels of active sonar necessary to induce injury is not supported by available data and asks whether NMFS really believes this.

Response: See response to Comment 41 above.

Comment 43: One commenter claims NMFS assumes that marine mammals will not be exposed to sounds long enough to induce TTS, yet nothing is known about how marine mammals will respond to sound in the GoA. The commenter further claims that NMFS makes assumptions based on experiments, but the public does not know whether these experiments involved control, the number of test subjects, and other important information.

Response: The impacts of the Navy's training activities in the GoA have been analyzed in the Navy's DEIS and LOA application. A detailed description of the Navy's approach to analyzing the impacts on marine mammals is provided in Appendix D of the EIS and Appendix B of the LOA application. In the proposed rule, NMFS discusses the potential effects of Navy training activities, including active sonar, on marine mammals and refers to a number of studies that have measured TTS in marine mammals. These studies measured hearing thresholds in trained marine mammals before and after exposure to intense sounds. A detailed description of how the TTS criterion was derived from the results of these studies may be found in Chapter 3 of Southall *et al.* (2007), as well as the Navy's GoA TMAA LOA application.

Comment 44: One commenter expressed concern regarding NMFS' conclusion that the Navy activities would not be expected to occur in areas of reproduction, feeding, or other critical behaviors of beaked whales in light of lack of available information regarding these species in the GoA. This commenter expressed additional concern that NMFS mentions oceanic seamounts and submarine escarpments,

but fails to mention the effect of reverberating sound on beaked whales.

Response: The rule does not discount the potential impacts on beaked whales. NMFS specifically addresses the potential impacts to beaked whales in the following sections of the proposed rule: "Acoustically Mediated Bubble Growth;" "Behaviorally Mediated Responses to MFAS That May Lead to Stranding;" "Stranding and Mortality;" and "Association Between Mass Stranding Events and Exposure to MFAS." Specifically, in recognition of potential impacts to beaked whales and the scientific uncertainty surrounding their presence in the GoA and the exact mechanisms that lead to strandings, NMFS has authorized the mortality of 15 beaked whales over the course of 5 years in the unlikely event that a stranding occurs as a result of Navy training exercises. In addition, the commenter is misrepresenting a piece of the text from the proposed rule—although NMFS points out that the five factors that contributed to the stranding in the Bahamas are not all present in the GoA TMAA, we do not say that fact alone means strandings are unlikely to occur.

Comment 45: One commenter asks how NMFS can issue permits based on the best available data if NMFS admits that data does not exist on marine mammal behavioral response as a result of factors other than received levels of MFAS?

Response: NMFS relies on the best available date for analyzing the effects on marine mammals. However, because the best available data is constantly changing and our current knowledge of marine mammal behavioral response is limited, NMFS utilizes an adaptive management approach. In so doing, we are able to continuously assess behavioral effects and incorporate new mitigation or monitoring measures when necessary. NMFS never stated that data on factors other than received level is non-existent; but rather, that quantitative data on marine mammal behavioral response to factors other than received level does not exist. The proposed rule included a qualitative discussion of how factors other than received level (*e.g.,* speed, angle of approach) may impact a marine mammal's response to a sound source.

Comment 46: One commenter states that the proposed rule assumes that because stranding events have been low during 60 years of conducting MFAS/HFAS training exercises, they are not likely to occur, but unreported strandings and mortalities cannot be minimized since there was little to no oversight, mitigation, or reporting requirements during this period. Another commenter claims that, with respect to marine mammal injury/mortality stats, NMFS fails to account for whales that may sink to the bottom.

Response: The Navy has been conducting MFAS/HFAS training exercises throughout the world's oceans for over 60 years. Although the Navy has not conducted monitoring specifically in conjunction with training exercises in the past, people have been collecting data from stranded animals for approximately 30 years. In addition, although not all dead or injured animals are expected to end up on the shore (some may be eaten or float out to sea), one would expect that if marine mammals were being harmed by Navy training exercises with some regularity, more evidence would have been detected over the 30-year period.

Comment 47: One commenter states that NMFS' assumption that marine mammals will habituate to noise by comparing GoA to a different region is not a valid.

Response: In the proposed rule, NMFS stated that, "although the radiated sound from Navy vessels will be audible to marine mammals over a large distance, it is unlikely that animals will respond behaviorally (in a manner that NMFS would consider MMPA harassment) to low-level distant shipping noise as the animals in the area are likely to be habituated to such noises (Nowacek *et al.,* 2004)." Although Nowacek's study does not take place in the GoA, that does not change the fact that shipping currently occurs in the TMAA and the noise from Navy vessels should not cause a different reaction.

Comment 48: One commenter states that the studies NMFS cites on marine mammals in captivity to justify the assumption that marine mammals will avoid sound sources lack an adequate sample size, and asks if NMFS believes that these studies translate into the field with so many unknown variables, including lack of information about marine mammal behaviors in the GoA.

Response: The SSC Dataset (Controlled Laboratory Experiments with Odotocetes) is not the primary source of data for the behavioral harassment threshold; rather, it is one of three datasets (two of which are from wild species exposed to noise in the field) treated equally in the determination of the K value (equates to midpoint) of the behavioral risk function. NMFS recognizes that certain limitations may exist when one develops and applies a risk function to animals in the field based on captive animal behavioral data. However, we note that for the SSC Dataset: (1) Researchers had superior control over and ability to quantify noise exposure conditions; (2) behavioral patterns of exposed marine mammals were readily observable and definable; and (3) fatiguing noise consisted of tonal noise exposures with frequencies contained in the tactical MFAS bandwidth. NMFS does not ignore the deficiencies of these data, rather we weighed them against the value of the data and compared the dataset to the other available, applicable, and validated datasets and decided that the SSC dataset was one of the three appropriate datasets to use in the development of the risk function.

Monitoring and Reporting

Comment 49: One commenter claims that NMFS fails to define "Marine Species Awareness Training," and assumes that Navy personnel will be able to spot whales from the bridge, but does not include the sea state in their assertion. In addition, a similar comment claims that NMFS does not mention sea state when discussing the probability that watchstanders will likely observe whales.

Response: MSAT is a training course, intended for Navy Lookouts, designed to introduce marine mammal cues that may assist in avoiding potential collisions with whales during Navy activities. While NMFS does expect observers to see whales, we do not assume that observers will see every whale. NMFS recognizes that sea state affects visibility, which is why the Navy will increase survey efforts in the event of a Beaufort Sea State of 4 or above.

In response to the second part, the Navy's activities within the TMAA will occur during summer months, when Beaufort Sea State conditions are lower and visibility is better for monitoring. In addition to watchstanders, aerial surveys and passive acoustic monitoring (PAM) will also be used to observe for marine mammals. During sinking exercises (SINKEX), every attempt shall be made to conduct the exercise in sea states that are ideal for marine mammal sighting, Beaufort Sea State 3 or less. In the event of a 4 or above, survey efforts shall be increased within the 2 nm (3.7 km) zone around the target. This shall be accomplished through the use of an additional aircraft, if available, and by conducting tight search patterns.

Comment 50: One commenter states that NMFS fails to define "highly qualified and experienced observers of the marine environment" (75 FR 64508, p. 64543) and who will train them.

Response: NMFS explained in the proposed rule that Navy Lookouts, also referred to as "watchstanders," are highly qualified and experienced

observers of the marine environment. All Lookouts take part in Marine Species Awareness Training so that they are better prepared to spot marine mammals. Their duties also require that they report all objects sighted in the water, not just marine mammals, that may be indicative of a threat to the vessel and its crew. Lookouts are stationed day and night whenever a ship or surfaced submarine is moving through the water.

Comment 51: One commenter states that NMFS fails to define "most effective means to ensure quick and effective communication within the command structure in order to facilitate implementation of protective measures if marine species are spotted" (75 FR 64508, p. 64543).

Response: As previously stated, all Navy Lookouts undergo Marine Species Awareness Training. The Navy is responsible for deciding the most effective means of communicating information within the command structure. This is the same "quick communication" that Lookouts rely on to notify the captain that there is something in the vessel's path. NMFS does not define this means of rapid communication, because it is different for each vessel and best determined by Navy operators.

Comment 52: One commenter claims that NMFS fails to fully describe how they and the Navy plan to integrate results from monitoring data for the public and other interested entities.

Response: The Navy's annual monitoring reports will be available for public viewing on NFMS' Web site (*http://www.nmfs.noaa.gov/pr/permits/incidental.htm*). The Navy is in the process of making some of their data available through an on-line database.

Comment 53: One commenter asks if marine mammal observers will be aboard to watch for adverse effects. The commenter further asks whether sonar training is halted if observers note negative impacts from the training?

Response: As stated in the proposed rule, marine mammal observers and Navy Lookouts will be used to monitor for marine mammals before, during, and after training events. Should a marine mammal enter an exclusion zone, mitigation measures will be implemented. For example, the Navy will powerdown and shutdown sonar emitting devices when marine mammals are detected within ranges where the received sound level is likely to result in temporary threshold shift (TTS) or injury. In addition, the Navy and NMFS have a stranding response plan for the GoA that will be implemented in the event of a marine mammals stranding, which includes a shutdown requirement in the event of a live stranding. Furthermore, the rule includes an adaptive management component that allows for timely modification of mitigation or monitoring measures based on new information, when appropriate.

Comment 54: One commenter states that NMFS asserts that little is known about how marine mammals will react to sonar in the GoA, but mentions the Navy's claim that no marine mammals have been harassed in other training ranges, which the commenter believes should be a red flag that the Navy's monitoring system is not effective and asks what is the probability that zero marine mammals will be harassed during training exercises that occur year round?

Response: The Navy's LOA application and EIS clearly discuss the potential adverse effects (harassment) that marine mammals may experience when exposed to MFAS/HFAS and explosive detonations. The Navy has and will continue to work as an active partner to investigate the extent and severity of the impacts and how to reduce them (see Research section of this final rule). Regarding the issue of monitoring being effective, nowhere does either the Navy or NMFS indicate that the current monitoring (and associated mitigation) will eliminate impacts. The MMPA requires that NMFS put forth the means of effecting the least practicable adverse impacts, and NMFS has determined that the required mitigation and associated monitoring (meaning specifically the mitigation monitoring) measures accomplish this. If it were possible to eliminate impacts to marine mammals, an MMPA authorization would not be necessary.

Comment 55: The MMC and other commenters recommend that NMFS require the Navy to conduct seasonal, systematic vessel or aerial line-transect surveys supplemented with passive acoustic monitoring and satellite tracking to provide the data needed to describe marine mammal density, distribution, and habitat use during the seasons and in the regions when and where the Navy plans to conduct its exercises.

Response: NMFS agrees and has recommended that the Navy refocus their Monitoring Plan for the GoA TMAA. In 2011 and 2012, the Navy plans to deploy two PAM devices in the GoA TMAA to detect, locate, and potentially track vocalizing marine mammals, as well as provide seasonal estimates of presence/absence. These devices will be deployed year-round, including during Navy training events. Given the potential sea states and ocean conditions during both winter and summer, and the relatively infrequent Navy presence in the GoA TMAA, PAM represents the best long-term monitoring technique to employ within the GoA TMAA. In addition to collecting marine mammal vocalization and echolocation data before, during, and after any Navy training event, information from which NMFS can infer to whether the training event has an effect or no effect on observed vocalizations.

In response to public comment, the Navy has modified their monitoring plan such that in either 2013 or 2014, instead of deploying the PAM devices as originally planned, the Navy will conduct a survey using a visual method (most likely vessel survey), which will augment the data gathered by the PAM devices. The PAM devices will be deployed in whichever year (2013 or 2014) the visual survey is not conducted. An alternate survey technique would ideally be part of a larger focused effort during the same time period, in coordination with other agencies or research organizations working in the area. While the exact extent and technique to be employed is still to be determined (*e.g.,* including but not limited to visual surveys), monitoring in 2013 and 2014 is expected to receive the same level of fiscal and logistical support as the 2011–2012 efforts.

Comment 56: The MMC recommended that NMFS extend the required monitoring period to at least one hour before the resumption of training exercises when an animal has been sighted within the safety zone and after power-down and shut-down of active sonar sources.

Response: NMFS does not concur with the MMC that we should expand the delay (until sonar can be restarted after a shutdown due to a marine mammal sighting) to one hour for the following reasons:

- The ability of an animal to dive for extended periods (*i.e.,* greater than 30 minutes) does not mean that it will always do so. Therefore, the one hour delay would only potentially add value in instances when animals have remained under water for more than 30 minutes.
- Navy vessels typically move at speeds of 10–12 knots (5–6 m/sec) when operating active sonar and potentially much faster when not. Fish *et al.* (2006) measured speeds of 7 species of odontocetes and found that they ranged from 1.4–7.30 m/sec. Even if a vessel moves at the slower of the typical speeds associated with active sonar use,

an animal would need to be swimming near sustained maximum speed for an hour in the direction of the vessel's course to stay within the safety zone of the vessel. Increasing the typical speed associated with active sonar use would further narrow the circumstances in which the one hour delay would add value.

• Additionally, the times when animals are underwater for longer periods of time (*i.e.,* deep-diving) are the same times that a large portion of their motion is in the vertical direction, which means that they are far less likely to keep pace with a vessel moving horizontally across the surface.

• Given that the animal would need to have stayed in the immediate vicinity of the sound source for an hour and, considering the maximum area that both the vessel and the animal could cover in an hour, it is improbable that this would randomly occur. Moreover, considering that many animals have been shown to avoid both acoustic sources and ships without acoustic sources, it is improbable that a deep-diving cetacean (as opposed to a dolphin that might bow-ride) would choose to remain in the immediate vicinity of the source. NMFS believes that it is unlikely that a single cetacean would remain in the safety zone of a Navy sound source for up to one hour.

Comment 57: The MMC recommended that NMFS require all members of the Navy's mitigation teams to complete the marine mammal training program (*i.e.,* the NMFS-approved Marine Species Awareness Training) before they participate in any training activities.

Response: The Navy has Lookouts stationed onboard ships whose primary duty is to detect objects in the water, estimate their distance from the ship, and identify them as any of a number of inanimate or animate objects that are significant to a Navy exercise or as a marine mammal so that the mitigation measure can be implemented. Navy Lookouts undergo extensive training to learn these skills and the Marine Species Awareness Training is used to augment it with some information specific to marine mammals that will make them aware of some of the cues that they may not otherwise have learned and may contribute to their collection of slightly more accurate and descriptive information in their reports. However, Lookouts are not expected to identify marine mammals to species and they are not expected to provide in-depth behavioral or status information on marine mammals.

Comment 58: The MMC recommended that NMFS require the Navy to use a sufficient level of monitoring during all training activities to ensure that marine mammals are not being taken in unanticipated ways or numbers.

Response: There are two different types of monitoring required pursuant to the GoA TMAA. One type is outlined in the Monitoring Plan, which consists of different monitoring methods designed to address a series of focused study questions and is conducted by Marine Mammal Observers (MMOs).

The second type of monitoring is routinely conducted by Navy Lookouts on surface vessels (and opportunistically by personnel on other platforms). This monitoring is used to detect animals so the necessary mitigation measure can be implemented. Behavioral data that allow for a general assessment of the impacts are collected with other information (such as the status of sonar sources), which help verify the Navy's implementation of the appropriate mitigation measure. This data-gathering requirement is described in more detail in § 218.125 of the regulatory text entitled "Requirements for monitoring and reporting."

Comment 59: One commenter asked if there are plans for any long-term monitoring (1–2 years) of marine mammals after the training activities take place.

Response: In 2011 and 2012, the Navy plans to deploy two passive acoustic monitoring (PAM) devices in the GoA TMAA to detect, locate, and potentially track vocalizing marine mammals, as well as provide seasonal estimates of presence/absence. These devices will be deployed year-round, including during Navy training events. Given the potential sea states and ocean conditions during both winter and summer, and the relatively infrequent Navy presence in the GoA TMAA, PAM represents the best long-term monitoring technique to employ within the GoA TMAA. In addition to collecting marine mammal vocalization and echolocation data before, during, and after any Navy training event, information can be inferred as to whether the training event has an effect or no effect on observed vocalizations.

In response to public comment, the Navy has modified their mitigation plan such that in either 2013 or 2014, instead of deploying the PAM devices as originally planned, the Navy will conduct a survey using a visual method (most likely, vessel survey), which will augment the data gathered by the PAM devices. The PAM devices will be deployed in whichever year (2013 or 2014) the visual survey is not conducted. An alternate survey technique would ideally be part of a larger focused effort during the same time period in coordination with other agencies or research organizations working in the area. While the exact extent and technique to be employed is still to be determined (*e.g.,* including but not limited to visual surveys), monitoring in 2013 and 2014 is expected to receive the same level of fiscal and logistic support as the 2011–2012 efforts.

Comment 60: One commenter expressed concern over marine mammals potentially leaving Alaskan waters to avoid the exposure to sound and asks if marine mammals will be tagged/tracked to see how the Navy's activities will affect them.

Response: Currently, there are no plans to conduct tagging/tracking studies in the GoA TMAA. At this point, NMFS feels it is more important to improve our understanding of the presence, density, and abundance of marine mammal species in the area. Therefore, the focus will be on deploying PAM devices—two long-term deployments in 2011 and 2012—and either additional visual surveys or long-term deployments of PAMs in 2013 and 2014. A monitoring study for 2015 will be determined after adaptive management review, which NMFS has incorporated into the GoA TMAA rule and that allows for yearly review of Navy monitoring and current science that could influence (allow for the potential modification of) monitoring and mitigation measures in subsequent LOAs, if appropriate. Separately, the Navy has voluntarily developed and funded a number of research plans that are designed to address technologies to reduce the impacts of active acoustic sources on marine mammals (see Research section).

Subsistence Harvest of Marine Mammals

Comment 61: One commenter claims that even if Alutiiq, Eyak, and Tlingnit Tribes do not use the GoA TMAA for subsistence use, the animals used by these Tribes for traditional subsistence do. This commenter further requested that NMFS make public the letters that the consulted Tribes provided on the Navy's GoA TMAA DEIS.

Response: NMFS agrees that marine mammals that occur within the GoA TMAA are those that may be taken for subsistence use; however, the activities in the TMAA do not overlap in space or time with any subsistence hunts and should not directly impact any subsistence hunts through: Causing abandonment of locations where

subsistence use takes place; displacing subsistence users; or placing physical barriers between marine mammals and hunters. Any effects on marine mammals within the TMAA are likely to be behavioral in nature and temporary in duration and NMFS' negligible impact determination further supports the finding that the Navy training activities will not have an unmitigable adverse impact on the availability of marine mammal species or stocks for taking for subsistence uses.

With respect to the second point, pursuant to the Navy's American Indian/Alaskan Native policy, letters were sent to 12 local Tribes. These letters provided the Navy's preliminary determination that potential protected Tribal resources may be affected, but not adversely affected by Navy training activities in the GoA TMAA. The Navy asked whether the training activities would significantly affect any Tribal rights or protected Tribal resources, requested a reply, and invited consultation on a Government-to-Government basis. These letters and the written responses, if any, will be provided in Navy's Final EIS.

Comment 62: One commenter took issue with NMFS' claim that no Tribes around the GoA had concerns with the Navy's DEIS and assert that their Tribe (Tlingit) protested the Navy's plans to conduct training exercises in an area where their subsistence animals are known to migrate, feed, reproduce, *etc.*

Response: NMFS was unaware that the Tlingit protested the Navy's plans to conduct training in the GoA TMAA. Under the MMPA, in order to issue regulations authorizing the taking of marine mammals incidental to the Navy's training activities, NMFS must find that the total taking during the 5-year period will have a negligible impact on the affected marine mammal species or stocks and will not have an unmitigable adverse impact on the availability of such species or stock for taking for subsistence use. NMFS has made this determination and prescribed regulations setting forth the permissible method of taking, and other means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat, and on the availability of such species or stocks for subsistence use.

With respect to the EIS process, on April 18, 2008, the Navy sent a letter to the Yakutat Tlingit Tribe, asking if the proposed EIS would have a significant impact on any of the Tribal rights or resources, and therefore require formal Government-to-Government consultation. On June 4, 2008, via phone call, the Alaska Command (ALCOM) Native Liaison confirmed that the Yakutat Tlingit Tribe did not want to initiate formal Government-to-Government consultation with the Navy on the Gulf of Alaska Navy Training Activities EIS and the proposal would not have any significant impact on a Tribal right or resource. The Tribe was also sent a letter by Commander, U.S. Pacific Fleet on December 7, 2009 with a full hard copy of the Draft EIS, asking for their input and comments. No comments from the Tribe were received by the Navy on the Draft EIS.

Other

Comment 63: One commenter states that the Navy has recently expanded ASW training areas in multiple range complexes, and claims that adding the GoA is not justified by any scarcity of other training areas.

Response: As stated in the Navy's EIS, the location, oceanographic conditions, and area of training space make the TMAA (and Alaska Training Area components) a unique and strategically important training venue for the Navy. Furthermore, the GoA is not a recent expansion; the Navy has been training in this area for over 30 years.

Comment 64: Several commenters claim that there was a lack of alternatives analysis and establishment of protection areas in Navy's DEIS.

Response: Several comments were received that relate to the Navy's DEIS. The purpose of this comment period was for the public to provide comments on NMFS' proposed rule. Responses were not provided to comments on the EIS if their bearing on the MMPA authorization was not clear.

Comment 65: One commenter states that NMFS mentions a Memorandum of Understanding between NMFS and the Navy, but the document is apparently not ready, and asks how NMFS can make a determination on this request to take marine mammals when all of the documents are not in place for public review.

Response: NMFS and the Navy are still working on this document, but it is not intended for public review because it is an internal, interagency letter that pertains to coordination and cooperation between the two agencies.

Comment 66: Multiple commenters expressed general opposition to Navy activities and NMFS' issuance of an MMPA authorization, citing general concerns about the health and welfare of marine mammals.

Response: NMFS appreciates the commenters' concern for the marine mammals that live in the area of the Navy's training activities. The MMPA directs NMFS to issue an incidental take authorization if certain findings can be made. NMFS has determined that the Navy's GoA TMAA exercises will have a negligible impact on the affected species or stocks. Additionally, NMFS has worked with the Navy to develop mitigation measures that help minimize the impacts to marine mammals and a monitoring plan that will increase our understanding of the marine mammals in the area and guide their responses in the presence of marine mammals. Therefore, NMFS issues the necessary governing regulations and plans to issue the requested MMPA authorization.

Estimated Take of Marine Mammals

As mentioned previously, one of the main purposes of NMFS' effects assessments is to identify the permissible methods of taking, meaning: The nature of the take (*e.g.,* resulting from anthropogenic noise vs. from ship strike, *etc.*); the regulatory level of take (*i.e.,* mortality vs. Level A or Level B harassment); and the amount of take. The Potential Effects section identified the lethal responses, physical trauma, sensory impairment (permanent and temporary threshold shifts and acoustic masking), physiological responses (particular stress responses), and behavioral responses that could potentially result from exposure to MFAS/HFAS or underwater explosive detonations. This section will relate the potential effects to marine mammals from MFAS/HFAS and underwater detonation of explosives to the MMPA statutory definitions of Level A and Level B Harassment and attempt to quantify the effects that might occur from the specific training activities that the Navy is proposing in the GoA TMAA.

In the Estimated Take of Marine Mammals section of the proposed rule, NMFS related the potential effects to marine mammals from MFAS/HFAS and underwater detonations (discussed in the Potential Effects of Specified Activities on Marine Mammals section) to the MMPA statutory definitions of Level A and Level B Harassment and quantified (estimated) the effects on marine mammals that could result from the specific activities that the Navy intends to conduct. The subsections of that analysis are discussed individually below.

Definition of Harassment

The Definition of Harassment section of the proposed rule contains the definitions of Level A and Level B Harassment, and a discussion of which of the previously discussed potential effects of MFAS/HFAS or explosive detonations fall into the categories of

Level A Harassment (permanent threshold shift (PTS), acoustically mediated bubble growth, behaviorally mediated bubble growth, and physical disruption of tissues resulting from explosive shock waves) or Level B Harassment (temporary threshold shift (TTS), acoustic masking and communication impairment, and behavioral disturbance rising to the level of harassment). See 75 FR 64508, pages 64552–64554. No changes have been made to the discussion contained in this section of the proposed rule.

Acoustic Take Criteria

In the Acoustic Take Criteria section of the proposed rule, NMFS described the development and application of the acoustic criteria for both MFAS/HFAS and explosive detonations (75 FR 64508, pages 64554–64562). No changes have been made to the discussion contained in this section of the proposed rule.

Estimates of Potential Marine Mammal Exposure

The proposed rule describes in detail how the Navy estimated the take that will result from their proposed activities (75 FR 64508, pages 64559–64560), which entails the following three general steps: (1) A propagation model estimates animals exposed to sources at different levels; (2) further modeling determines the number of exposures to levels indicated in criteria above (*i.e.,* number of takes); and (3) post-modeling corrections refine estimates to make them more accurate. More information regarding the models used, the assumptions used in the models, and the process of estimating take is available in Appendix B of the Navy's application or Appendix D of the Navy's DEIS for the GoA TMAA.

Table 5, which is identical to Table 8 in the proposed rule with a few minor corrections, indicates the number of takes that were modeled and that are being authorized annually or biennially incidental to the Navy's activities, with the following allowances. The Navy has carefully characterized the training activities planned for the GoA TMAA over the 5 years covered by these regulations; however, evolving real-world needs necessitate flexibility in annual activities, which in turn is reflected in the annual variation in the potential take of marine mammals. NMFS has included language bounding this flexibility in the regulatory text (see § 218.122(c)). These potential annual variations were considered in the negligible impact analysis and the analysis in the proposed rule remains applicable. This language indicates that after-action modeled annual takes (*i.e.,* based on the activities that were actually conducted and which must be provided with the LOA application) of any individual species may vary, but will not ultimately exceed the indicated 5 year total for that species by more than 10 percent and will not exceed the indicated annual total by more than 25 percent in any given year; and that modeled total yearly take of all species combined may vary, but may not exceed the combined amount indicated below in any given year by more than 10 percent.

BILLING CODE 3510–22–P

Species	Modeled Sonar Exposures to Indicated Thresholds			Modeled Explosive Exposures to Indicated Thresholds				NMFS Annual Take Authorization		
	Level B Exposures		Level A Exposures (PTS)	Level B Exposures		Level A Exposures	Mortality			
	Risk Function (Behavioral)	TTS		Sub-TTS	TTS			Level B Harassment	Level A Harassment	Mortality
ESA Species										
Blue whale	1	0	0	1	0	0	0	2		
Fin whale	10,998	21	0	13	5	0	0	11,037		
Humpback whale	1,388	6	0	1	0	0	0	1,395		
North Pacific right whale	1	0		1	0	0	0	2		
Sei whale	4	0	0	4	0	0	0	8		
Sperm whale	327	1	0	1	0	0	0	329		
Stellar sea lion	11,104	1	0	2	1	0	0	11,108		
Mysticetes										
Gray whale	384	1	0	3	0	0	0	388		
Minke whale	677	2	0	2	0	0	0	681		
Odontocetes										
Baird's beaked whale	485	1	0	1	0	0	0	487	15 over the couse of 5-yr rule	
Stejneger's beaked whale	2,302	6	0	3	1	0	0	2,312		
Cuvier's beaked whale	2,302	6	0	3	1	0	0	2,312		
Dall's porpoise	205,485	768	0	84	37	2	1	206,374		
Harbor porpoise	5,438	0	0	2	0	0	0	5,440		
Killer whale	10,602	41	0	4	2	0	0	10,649		
Pacific white-sided dolphin	16,912	61	0	12	6	1	0	16,991		
Pinnipeds										
California sea lion	1	0	0	1	0	0	0	2		
Harbor seal	1	0	0	1	0	0	0	2		
Northern elephant seal	2,064	0	0	4	1	0	0	2,069		
Northern fur seal	154,144	16	0	26	16	1	0	154,202		
Total	**424,620**	**931**	**0**	**169**	**70**	**4**	**1**	**425,790**	**15**	**2,128,965**

Table 5. Navy's estimated marine mammal exposures to the thresholds and NMFS take authorization.

BILLING CODE 3510–22–C

Mortality

Evidence from five beaked whale strandings, all of which have taken place outside the GoA TMAA, and have occurred over approximately a decade, suggests that the exposure of beaked whales to MFAS in the presence of certain conditions (*e.g.,* multiple units using active sonar, steep bathymetry, constricted channels, strong surface ducts, *etc.*) may result in strandings, potentially leading to mortality. Although not all five of these physical factors believed to have contributed to the likelihood of beaked whale strandings are present, in their aggregate, in the GoA TMAA, scientific uncertainty exists regarding what other factors, or combination of factors, may contribute to beaked whale strandings. Accordingly, to allow for scientific uncertainty regarding contributing causes of beaked whale strandings and the exact behavioral or physiological mechanisms that can lead to the ultimate physical effects (stranding and/or death), the Navy has requested authorization for (and NMFS authorizes) take of beaked whales, by injury or mortality. Although NMFS authorizes take by injury or mortality of up to 15 beaked whales over the course of the 5-year regulations, the Navy's model did not predict any injurious takes of beaked whales would occur and neither NMFS nor the Navy anticipates that marine mammal strandings or mortality will result from the operation of MFAS during Navy exercises within the GoA TMAA.

Effects on Marine Mammal Habitat

NMFS' proposed rule includes a section that addresses the effects of the Navy's activities on Marine Mammal Habitat (75 FR 64508, pages 64562–64564). The analysis preliminarily concluded that the Navy's activities would have minimal effects on marine mammal habitat. No changes have been made to the discussion contained in this section of the proposed rule and NMFS has concluded there would be minimal effects on marine mammal habitat.

Analysis and Negligible Impact Determination

Pursuant to NMFS' regulations implementing the MMPA, an applicant for an LOA is required to estimate the number of animals that will be "taken" by the specified activities (*i.e.,* takes by harassment only, or takes by harassment, injury, and/or death). This estimate informs the analysis that NMFS must perform to determine whether the activity will have a "negligible impact" on the affected species or stock. Level B (behavioral) harassment occurs at the level of the individual(s) and does not assume any resulting population-level consequences, though there are known avenues through which behavioral disturbance of individuals can result in population-level effects (*e.g.,* pink-footed geese (*Anser brachyrhynchus*) in undisturbed habitat gained body mass and had about a 46-percent reproductive success compared with geese in disturbed habitat (being consistently scared off the fields on which they were foraging) which did not gain mass and has a 17-percent reproductive success). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.,* population-level effects). An estimate of the number of Level B harassment takes, alone, is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be "taken" through behavioral harassment, NMFS must consider other factors, such as the likely nature of any responses (their intensity, duration, *etc.*), the context of any responses (critical reproductive time or location, migration, *etc.*), as well as the number and nature of estimated Level A Harassment takes, the number of estimated mortalities, and effects on habitat. Generally speaking, and especially with other factors being equal, the Navy and NMFS anticipate more severe effects from takes resulting from exposure to higher received levels (though this is in no way a strictly linear relationship throughout species, individuals, or circumstances) and less severe effects from takes resulting from exposure to lower received levels.

In the Analysis and Negligible Impact Determination section of the proposed rule, NMFS addressed the issues identified in the preceding paragraph in combination with additional detailed analysis regarding the severity of the anticipated effects, and including species (or group)-specific discussions, to preliminarily determine that Navy training will have a negligible impact on the marine mammal species and stocks present in the GoA TMAA. No changes have been made to the discussion contained in the proposed rule (75 FR 64508, pages 64564–64574).

Determinations

Negligible Impact

Based on the analysis contained here and in the proposed rule (and other related documents) of the likely effects of the specified activity on marine mammals and their habitat and dependent upon the implementation of the mitigation and monitoring measures, NMFS finds that the total taking from Navy training exercises utilizing MFAS/HFAS and underwater explosives in the GoA TMAA will have a negligible impact on the affected species or stocks. NMFS issues regulations for these exercises that prescribe the means of effecting the least practicable adverse impact on marine mammals and their habitat and set forth requirements pertaining to the monitoring and reporting of that taking.

Subsistence Harvest of Marine Mammals

NMFS has determined that the issuance of 5-year regulations and subsequent LOAs for Navy training exercises in the GoA TMAA would not have an unmitigable adverse impact on the availability of the affected species or stocks for subsistence use. The Tribes nearest the GoA TMAA include the Alutiiq, Eyak, and Tlingit groups; however, these Tribes do not use the TMAA for subsistence. In March 2008, the Navy sent letters to 12 Tribes, including those listed above, with the assistance of the Alaskan Command's Tribal liaison, requesting Government-to-Government consultation pursuant to Executive Order 13175. None of the 12 Tribes indicated that they desired consultation on the proposed action. All 12 Tribes were also provided a copy of the GoA TMAA DEIS for review and comment. Comments on the DEIS were received from the Eyak, Afognak, and Shoonaq' Tribes. The Navy will continue to keep the Tribes informed of the timeframes of future joint training exercises.

ESA

There are eight marine mammal species under NMFS' jurisdiction that are listed as endangered or threatened under the ESA with confirmed or possible occurrence in the TMAA: Cook Inlet beluga whale, North Pacific right whale, humpback whale, sei whale, fin whale, blue whale, sperm whale, and Steller sea lion. Typically, the Cook Inlet beluga whale does not leave Cook Inlet, which is approximately 70 nm (129.6 km) from the nearest edge of the TMAA. Based on this information, Cook Inlet beluga whales are considered extralimital to the TMAA, were not considered further for analysis under the MMPA and the Navy concluded that their activities will have no effect on Cook Inlet beluga whales. Pursuant to section 7 of the ESA, the Navy has consulted with NMFS on this action. NMFS has also consulted internally on the issuance of regulations under

section 101(a)(5)(A) of the MMPA for this activity. The Biological Opinion concludes that the Navy's activities in the GoA TMAA and NMFS' issuance of these regulations are not likely to jeopardize the continued existence of threatened or endangered species under NMFS jurisdiction or destroy or adversely modify any designated critical habitat.

NEPA

NMFS participated as a cooperating agency on the Navy's Final Environmental Impact Statement (FEIS) for the GoA TMAA. NMFS subsequently adopted the Navy's FEIS for the purpose of complying with the MMPA.

Classification

This action does not contain any collection of information requirements for purposes of the Paperwork Reduction Act.

The Office of Management and Budget has determined that this rule is not significant for purposes of Executive Order 12866.

Pursuant to the Regulatory Flexibility Act (RFA), the Chief Counsel for Regulation of the Department of Commerce certified at the proposed rule stage to the Chief Counsel for Advocacy of the Small Business Administration that this rule will not have a significant economic impact on a substantial number of small entities. The RFA requires Federal agencies to prepare an analysis of a rule's impact on small entities whenever the agency is required to publish a notice of proposed rulemaking. However, a Federal agency may certify, pursuant to 5 U.S.C. 605 (b), that the action will not have a significant economic impact on a substantial number of small entities. During the public comment period, NMFS did not receive any comments related to this certification. The Navy is the sole entity that will be affected by this rulemaking, not a small governmental jurisdiction, small organization, or small business, as defined by the RFA. Any requirements imposed by a Letter of Authorization issued pursuant to these regulations, and any monitoring or reporting requirements imposed by these regulations, will be applicable only to the Navy. NMFS does not expect the issuance of these regulations or the associated LOAs to result in any impacts to small entities pursuant to the RFA. Because this action will directly affect the Navy and not a small entity, NMFS concludes the action will not result in a significant economic impact on a substantial number of small entities.

The Assistant Administrator for Fisheries has determined that there is good cause under the Administrative Procedure Act (5 U.S.C. 553(d)(3)) to waive the 30-day delay in effective date of the measures contained in the final rule. The Navy is the entity subject to the regulations and has informed NMFS that, due to unforeseen delays in publishing the Final EIS and in the interest of national security and homeland defense, it is imperative that these measures go into effect upon publication so that the LOA can be issued on or before June 1, 2011. The Navy has a compelling reason to conduct military readiness activities in the GoA TMAA without suspension or interruption. As discussed below, suspension/interruption of the Navy's ability to conduct training activities disrupts adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and suitability for combat essential to our national security.

In order to meet its national security objectives, the Navy must continually maintain its ability to operate in a challenging at-sea environment, conduct military operations, control strategic maritime transit routes and international straits, and protect sea lines of communications that support international commerce. To meet these objectives, the Navy must develop and maintain proficiency with current and emerging defense systems by establishing and executing training programs, including at-sea training and exercises, and ensuring naval forces have access to the ranges, operating areas, and airspace needed to develop and maintain the skills for conducting naval activities. Such training is critical to achieving the level of certification, proficiency, and readiness needed to ensure that naval forces are combat-ready.

The training requirements are designed to provide the experience and familiarity needed to properly prepare U.S. Sailors and Marines for operational success. The Navy has identified and scheduled training in the Gulf of Alaska for the purpose of acquiring combat-ready certification for the fleet forces assigned to the GoA TMAA. Delays in training and evaluation affects the Navy's ability to meet its statutory mission to deploy worldwide naval forces equipped to meet existing and emergent threats. Although a 30-day delay may not affect specific training events, it will delay the effective date of the final rule, and thus could affect planning for future needs and emergent training which cannot be anticipated.

Waiver of the 30-day delay of the effective date of the final rule is in the public interest because it will allow the Navy to conduct training activities essential to homeland defense and national security, and to put capability into the hands of U.S. Sailors and Marines quickly.

List of Subjects in 50 CFR Part 218

Exports, Fish, Imports, Incidental take, Indians, Labeling, Marine mammals, Navy, Penalties, Reporting and recordkeeping requirements, Seafood, Sonar, Transportation.

Dated: April 25, 2011.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For reasons set forth in the preamble, 50 CFR part 218 is amended as follows:

PART 218—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

■ 1. The authority citation for part 218 continues to read as follows:

Authority: 16 U.S.C. 1361 *et seq.*

■ 2. Subpart N is added to part 218 to read as follows:

Subpart N—Taking and Importing Marine Mammals; Gulf of Alaska Temporary Maritime Activities Area (GoA TMAA)

Sec.
218.120 Specified activity and geographical area.
218.121 Effective dates.
218.122 Permissible methods of taking.
218.123 Prohibitions.
218.124 Mitigation.
218.125 Requirements for monitoring and reporting.
218.126 Applications for Letters of Authorization.
218.127 Letters of Authorization.
218.128 Renewal of Letters of Authorization and adaptive management.
218.129 Modifications to Letters of Authorization.

Subpart N—Taking and Importing Marine Mammals; Gulf of Alaska Temporary Maritime Activities Area (GoA TMAA)

§ 218.120 Specified activity and geographical area.

(a) Regulations in this subpart apply only to the U.S. Navy for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occur incidental to the activities described in paragraph (c) of this section.

(b) The taking of marine mammals by the Navy is only authorized if it occurs within the Gulf of Alaska Temporary

Maritime Activities Area (GoA TMAA) (as depicted in Figure 1–1 in the Navy's application for GoA TMAA), which is bounded by a hexagon with the following six corners: 57°30′ N. lat., 141°30′ W. long.; 59°36′ N. lat., 148°10′ W. long.; 58°57′ N. lat., 150°04′ W. long.; 58°20′ N. lat., 151°00′ W. long.; 57°16′ N. lat., 151°00′ W. long.; and 55°30′ N. lat., 142°00′ W. long.

(c) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the following activities:

(1) The use of the following mid-frequency active sonar (MFAS) sources, high-frequency active sonar (HFAS) sources, or similar sources for Navy training activities (estimated amounts below):

(i) AN/SQS–53 (hull-mounted active sonar)—up to 2,890 hours over the course of 5 years (an average of 578 hours per year);

(ii) AN/SQS–56 (hull-mounted active sonar)—up to 260 hours over the course of 5 years (an average of 52 hours per year);

(iii) AN/SSQ–62 (Directional Command Activated Sonobuoy System (DICASS) sonobuoys)—up to 1,330 sonobuoys over the course of 5 years (an average of 266 sonobuoys per year);

(iv) AN/AQS–22 (helicopter dipping sonar)—up to 960 "dips" over the course of 5 years (an average of 192 "dips" per year);

(v) AN/BQQ–10 (submarine hull-mounted sonar)—up to 240 hours over the course of 5 years (an average of 48 hours per year);

(vi) MK–48 (torpedo)—up to 10 torpedoes over the course of 5 years (a maximum of 2 torpedoes per year);

(vii) AN/SSQ–110A (IEER)—up to 400 buoys deployed over the course of 5 years (an average of 80 per year maximum combined use of AN/SSQ–110A or AN/SSQ–125);

(viii) AN/SSQ–125 (MAC)—up to 400 buoys deployed over the course of 5 years (an average of 80 per year maximum combined use of AN/SSQ–110A or AN/SSQ–125);

(ix) Range Pingers—up to 400 hours over the course of 5 years (an average of 80 hours per year);

(x) SUS MK–84—up to 120 devices over the course of 5 years (an average of 24 per year);

(xi) PUTR Transponder—up to 400 hours over the course of 5 years (an average of 80 hours per year); and

(xii) MK–39 EMATT Targets—up to 60 devices over the course of 5 years (an average of 12 per year).

(2) The detonation of the underwater explosives indicated in paragraph (c)(2)(i) of this section, or similar explosives, conducted as part of the training exercises indicated in paragraph (c)(2)(ii) of this section:

(i) Underwater Explosives (Net Explosive Weight (NEW)):

(A) 5″ Naval Gunfire (9.5 lbs NEW);

(B) 76 mm rounds (1.6 lbs NEW);

(C) Maverick (78.5 lbs NEW);

(D) MK–82 (238 lbs NEW);

(E) MK–83 (238 lbs NEW);

(F) MK–83 (574 lbs NEW);

(G) MK–84 (945 lbs NEW);

(H) MK–48 (851 lbs NEW);

(I) AN/SSQ–110A (IEER explosive sonobuoy—5 lbs NEW);

(ii) Training Events:

(A) Gunnery Exercises (S–S GUNEX)—up to 60 exercises over the course of 5 years (an average of 12 per year);

(B) Bombing Exercises (BOMBEX)—up to 180 exercises over the course of 5 years (an average of 36 per year);

(C) Sinking Exercises (SINKEX)—up to 10 exercises over the course of 5 years (a maximum of 2 per year);

(D) Extended Echo Ranging and Improved Extended Echo Ranging (EER/IEER) Systems—up to 400 deployments over the course of 5 years (an average of 80 per year);

(E) Missile exercises (A–S MISSILEX)—up to 20 exercises over the course of 5 years (an average of 4 per year).

(d) The taking of marine mammals may be authorized in an LOA for the activities and sources listed in § 218.120(c) should the amounts (*i.e.,* hours, dips, number of exercises) vary from those estimated in § 218.120(c), provided that the variation does not result in exceeding the amount of take indicated in § 218.122(c).

§ 218.121 Effective dates.

Regulations in this subpart are effective from May 4, 2011, through May 4, 2016.

§ 218.122 Permissible methods of taking.

(a) Under Letters of Authorization issued pursuant to §§ 216.106 and 218.127 of this chapter, the Holder of the Letter of Authorization (hereinafter "Navy") may incidentally, but not intentionally, take marine mammals within the area described in § 218.120(b), provided the activity is in compliance with all terms, conditions, and requirements of these regulations and the appropriate Letter of Authorization.

(b) The activities identified in § 218.120(c) must be conducted in a manner that minimizes, to the greatest extent practicable, any adverse impacts on marine mammals and their habitat.

(c) The incidental take of marine mammals under the activities identified in § 218.120(c) is limited to the species listed below in paragraphs (c)(4) and (5) of this section by the indicated method of take and the indicated number of times (estimated based on the authorized amounts of sound source operation), but with the following allowances for annual variation in activities:

(1) In any given year, annual take, by harassment, of any species of marine mammal may not exceed the amount identified in paragraphs (c)(4) and (5) of this section, for that species by more than 25 percent (a post-calculation/estimation of which must be provided in the annual LOA application);

(2) In any given year, annual take by harassment of all marine mammal species combined may not exceed the estimated total of all species combined, indicated in paragraphs (c)(4) and (5) of this section, by more than 10 percent; and

(3) Over the course of the effective period of this subpart, total take, by harassment, of any species may not exceed the 5-year amounts indicated in paragraphs (c)(4) and (5) of this section by more than 10 percent. A running calculation/estimation of takes of each species over the course of the years covered by the rule must be maintained.

(4) Level B Harassment:

(i) Mysticetes:

(A) Humpback whale (*Megaptera novaeangliae*)—6,975 (an average of 1,395 annually);

(B) Fin whale (*Balaenoptera physalus*)—55185 (an average of 11,037 annually);

(C) Blue whale (*Balaenoptera musculus*)—10 (an average of 2 annually);

(D) Sei whale (*Balaenoptera borealis)*—40 (an average of 8 annually);

(E) Minke whale (*Balaenoptera acutorostrata*)—3,405 (an average of 681 annually);

(F) Gray whale (*Eschrichtius robustus*)—1,940 (an average of 388 annually); and

(G) North Pacific right whale (*Eubalaena japonica*)—10 (an average of 2 annually).

(ii) Odontocetes:

(A) Sperm whales (*Physeter macrocephalus*)—1,645 (an average of 329 annually);

(B) Killer whale (*Orcinus orca*)—53,245 (an average of 10,649 annually);

(C) Harbor porpoise (*Phocoena phocoena*)—27,200 (an average of 5,440 annually);

(D) Baird's beaked whales (*Berardius bairdii*)—2,435 (an average of 487 annually);

(E) Cuvier's beaked whales (*Ziphius cavirostris*)—11,560 (an average of 2,312 annually);

(F) Stejneger's beaked whales (*Mesoplodon stejnegeri*)—11,565 (an average of 2,313 annually);

(G) Pacific white-sided dolphin (*Lagenorhynchus obliquidens*)—84,955 (an average of 16,991 annually); and

(H) Dall's porpoise (*Phocoenoides dalli*)—1,031,870 (an average of 206,374 annually).

(iii) Pinnipeds:

(A) Steller sea lion (*Eumetopias jubatus*)—55,540 (an average of 11,108 annually)

(B) California sea lion (*Zalophus californianus*)—10 (an average of 2 annually);

(C) Harbor seal (*Phoca vitulina richardsi*)—10 (an average of 2 annually);

(D) Northern elephant seal (*Mirounga angustirostris*)—10,345 (an average of 2,069 annually); and

(E) Northern fur seal (*Callorhinus ursinus*)—771,010 (an average of 154,202 annually).

(5) Level A Harassment and/or mortality of no more than 15 beaked whales (total), of any of the species listed in § 218.122(c)(1)(ii)(D) through (F) over the course of the 5-year regulations.

§ 218.123 Prohibitions.

No person in connection with the activities described in § 218.120 may:

(a) Take any marine mammal not specified in § 218.122(c);

(b) Take any marine mammal specified in § 218.122(c) other than by incidental take as specified in §§ 218.122(c)(1), (c)(2), and (c)(3);

(c) Take a marine mammal specified in § 218.122(c) if such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(d) Violate, or fail to comply with, the terms, conditions, and requirements of these regulations or a Letter of Authorization issued under §§ 216.106 and 218.127 of this chapter.

§ 218.124 Mitigation.

(a) When conducting training and utilizing the sound sources or explosives identified in § 218.120(c), the mitigation measures contained in a Letter of Authorization issued under §§ 216.106 and 218.127 of this chapter must be implemented. These mitigation measures include, but are not limited to:

(1) Personnel Training (for all Training Types):

(i) All commanding officers (COs), executive officers (XOs), Lookouts, Officers of the Deck (OODs), junior OODs (JOODs), maritime patrol aircraft aircrews, and Anti-Submarine Warfare (ASW) helicopter crews shall complete the NMFS-approved Marine Species Awareness Training (MSAT) by viewing the U.S. Navy MSAT digital versatile disk (DVD). All bridge Lookouts shall complete both parts one and two of the MSAT; part two is optional for other personnel.

(ii) Navy Lookouts shall undertake extensive training in order to qualify as a watchstander in accordance with the Lookout Training Handbook (Naval Education and Training Command [NAVEDTRA] 12968–D).

(iii) Lookout training shall include on-the-job instruction under the supervision of a qualified, experienced Lookout. Following successful completion of this supervised training period, Lookouts shall complete the Personal Qualification Standard Program, certifying that they have demonstrated the necessary skills (such as detection and reporting of partially submerged objects). Personnel being trained as Lookouts can be counted among required Lookouts as long as supervisors monitor their progress and performance.

(iv) Lookouts shall be trained in the most effective means to ensure quick and effective communication within the command structure in order to facilitate implementation of protective measures if marine species are spotted.

(v) All Lookouts onboard platforms involved in ASW training events shall review the NMFS-approved Marine Species Awareness Training material prior to use of mid-frequency active sonar.

(vi) All COs, XOs, and officers standing watch on the bridge shall have reviewed the Marine Species Awareness Training material prior to a training event employing the use of MFAS/HFAS.

(2) General Operating Procedures (for all Training Types):

(i) Prior to major exercises, a Letter of Instruction, Mitigation Measures Message or Environmental Annex to the Operational Order shall be issued to further disseminate the personnel training requirement and general marine species protective measures.

(ii) COs shall make use of marine species detection cues and information to limit interaction with marine mammals to the maximum extent possible consistent with safety of the ship.

(iii) While underway, surface vessels shall have at least two Lookouts with binoculars; surfaced submarines shall have at least one Lookout with binoculars. Lookouts already posted for safety of navigation and man-overboard precautions may be used to fill this requirement. As part of their regular duties, Lookouts shall watch for and report to the OOD the presence of marine mammals.

(iv) On surface vessels equipped with mid-frequency active sonar, pedestal mounted "Big Eye" (20x110) binoculars shall be properly installed and in good working order to assist in the detection of marine mammals in the vicinity of the vessel.

(v) Personnel on Lookout shall employ visual search procedures employing a scanning methodology in accordance with the Lookout Training Handbook (NAVEDTRA 12968–D).

(vi) After sunset and prior to sunrise, Lookouts shall employ Night Lookouts Techniques in accordance with the Lookout Training Handbook (NAVEDTRA 12968–D).

(vii) While in transit, naval vessels shall be alert at all times, use extreme caution, and proceed at a "safe speed," which means the speed at which the CO can maintain crew safety and effectiveness of current operational directives, so that the vessel can take action to avoid a collision with any marine mammal.

(viii) When marine mammals have been sighted in the area, Navy vessels shall increase vigilance and take all reasonable and practicable actions to avoid collisions and activities that might result in close interaction of naval assets and marine mammals. Such action may include changing speed and/or direction and are dictated by environmental and other conditions (*e.g.,* safety, weather).

(ix) Navy aircraft participating in exercises at sea shall conduct and maintain surveillance for marine mammals as long as it does not violate safety constraints or interfere with the accomplishment of primary operational duties.

(x) All marine mammal detections shall be immediately reported to assigned Aircraft Control Unit for further dissemination to ships in the vicinity of the marine species as appropriate when it is reasonable to conclude that the course of the ship will likely result in a closing of the distance to the detected marine mammal.

(xi) Naval vessels shall maneuver to keep at least 1,500 ft (500 yd or 457 m) away from any observed whale in the vessel's path and avoid approaching whales head-on. These requirements do not apply if a vessel's safety is threatened, such as when change of course will create an imminent and serious threat to a person, vessel, or aircraft, and to the extent vessels are restricted in their ability to maneuver. Restricted maneuverability includes, but is not limited to, situations when

vessels are engaged in dredging, submerged activities, launching and recovering aircraft or landing craft, minesweeping activities, replenishment while underway and towing activities that severely restrict a vessel's ability to deviate course. Vessels shall take reasonable steps to alert other vessels in the vicinity of the whale. Given rapid swimming speeds and maneuverability of many dolphin species, naval vessels would maintain normal course and speed on sighting dolphins unless some condition indicated a need for the vessel to maneuver.

(3) Operating Procedures (for Anti-submarine Warfare (ASW) Operations):

(i) On the bridge of surface ships, there shall always be at least three people on watch whose duties include observing the water surface around the vessel.

(ii) All surface ships participating in ASW training events shall have, in addition to the three personnel on watch noted in paragraph (i), at least two additional personnel on watch as Lookouts at all times during the exercise.

(iii) Personnel on Lookout and officers on watch on the bridge shall have at least one set of binoculars available for each person to aid in the detection of marine mammals.

(iv) Personnel on Lookout shall be responsible for reporting all objects or anomalies sighted in the water (regardless of the distance from the vessel) to the Officer of the Deck, since any object or disturbance (*e.g.,* trash, periscope, surface disturbance, discoloration) in the water may be indicative of a threat to the vessel and its crew or indicative of a marine mammal that may need to be avoided as warranted.

(v) All personnel engaged in passive acoustic sonar operation (including aircraft, surface ships, or submarines) shall monitor for marine mammal vocalizations and report the detection of any marine mammal to the appropriate watch station for dissemination and appropriate action.

(vi) During mid-frequency active sonar operations, personnel shall utilize all available sensor and optical systems (such as night vision goggles) to aid in the detection of marine mammals.

(vii) Aircraft with deployed sonobuoys shall use only the passive capability of sonobuoys when marine mammals are detected within 200 yd (183 m) of the sonobuoy.

(viii) Helicopters shall observe/survey the vicinity of an ASW exercise for 10 minutes before the first deployment of active (dipping) sonar in the water.

(ix) Helicopters shall not dip their sonar within 200 yd (183 m) of a marine mammal and shall cease pinging if a marine mammal closes within 200 yd (183 m) of the sound source after pinging has begun.

(x) Safety Zones—When marine mammals are detected by any means (aircraft, shipboard Lookout, or acoustically) within 1,000 yd (914 m) of the sonar dome (the bow), the ship or submarine shall limit active transmission levels to at least 6 decibels (dB) below normal operating levels for that source (*i.e.,* limit to at most 229 dB for AN/SQS–53 and 219 for AN/SQS–56, *etc.*).

(A) Ships and submarines shall continue to limit maximum transmission levels by this 6–dB factor until the animal has been seen to leave the 1,000-yd (914 m) exclusion zone, has not been detected for 30 minutes, or the vessel has transited more than 2,000 yds (1,829 m) beyond the location of the last detection.

(B) Should a marine mammal be detected within 500 yd (457 m) of the sonar dome, active sonar transmissions shall be limited to at least 10 dB below the equipment's normal operating level (*i.e.,* limit to at most 225 dB for AN/SQS–53 and 215 for AN/SQS–56, *etc.*). Ships and submarines shall continue to limit maximum ping levels by this 10–dB factor until the animal has been seen to leave the 500-yd (457 m) safety zone (at which point the 6–dB powerdown applies until the animal leaves the 1,000-yd (914 m) safety zone), has not been detected for 30 minutes, or the vessel has transited more than 2,000 yd (1,829 m) beyond the location of the last detection.

(C) Should the marine mammal be detected within 200 yd (183 m) of the sonar dome, active sonar transmissions shall cease. Sonar shall not resume until the animal has been seen to leave the 200-yd (183 m) safety zone (at which point the 10–dB or 6–dB powerdowns apply until the animal leaves the 500-yd (457 m) or 1,000-yd (914 m) safety zone, respectively), has not been detected for 30 minutes, or the vessel has transited more than 2,000 yd (1,829 m) beyond the location of the last detection.

(D) Special conditions applicable for dolphins and porpoises only: If, after conducting an initial maneuver to avoid close quarters with dolphins or porpoises, the OOD concludes that dolphins or porpoises are deliberately closing to ride the vessel's bow wave, no further mitigation actions are necessary while the dolphins or porpoises continue to exhibit bow wave riding behavior.

(xi) Prior to start up or restart of active sonar, operators shall check that the Safety Zone radius around the sound source is clear of marine mammals.

(xii) Active sonar levels (generally)—Navy shall operate active sonar at the lowest practicable level, not to exceed 235 dB, except as required to meet tactical training objectives.

(xiii) Submarine sonar operators shall review detection indicators of close-aboard marine mammals prior to the commencement of ASW training events involving MFAS.

Note to paragraph (a)(3): If the need for power-down should arise (as detailed in 218.114(a)(3)(x)) when the Navy is operating a hull-mounted or sub-mounted source above 235 db (infrequent), the Navy shall follow the requirements as though they were operating at 235 dB—the normal operating level (*i.e.,* the first power-down will be to 229 dB, regardless of at what level above 235 dB active sonar was being operated).

(4) Sinking Exercise:

(i) All weapons firing shall be conducted during the period 1 hour after official sunrise to 30 minutes before official sunset.

(ii) An exclusion zone with a radius of 1.0 nm (1.9 km) shall be established around each target. An additional buffer of 0.5 nm (0.9 km) will be added to account for errors, target drift, and animal movements. Additionally, a safety zone, which will extend beyond the buffer zone by an additional 0.5 nm (0.9 km), shall be surveyed. Together, the zones extend out 2 nm (3.7 km) from the target.

(iii) A series of surveillance over-flights shall be conducted within the exclusion and the safety zones, prior to and during the exercise, when feasible. Survey protocol shall be as follows:

(A) Overflights within the exclusion zone shall be conducted in a manner that optimizes the surface area of the water observed. This may be accomplished through the use of the Navy's Search and Rescue Tactical Aid, which provides the best search altitude, ground speed, and track spacing for the discovery of small, possibly dark objects in the water based on the environmental conditions of the day. These environmental conditions include the angle of sun inclination, amount of daylight, cloud cover, visibility, and sea state.

(B) All visual surveillance activities shall be conducted by Navy personnel trained in visual surveillance. At least one member of the mitigation team shall have completed the Navy's marine mammal training program for Lookouts.

(C) In addition to the overflights, the exclusion zone shall be monitored by passive acoustic means, when assets are

available. This passive acoustic monitoring shall be maintained throughout the exercise. Potential assets include sonobuoys, which can be utilized to detect any vocalizing marine mammals (particularly sperm whales) in the vicinity of the exercise. The sonobuoys shall be re-seeded as necessary throughout the exercise. Additionally, if submarines are present, passive sonar onboard submarines may be utilized to detect any vocalizing marine mammals in the area. The OCE shall be informed of any aural detection of marine mammals and shall include this information in the determination of when it is safe to commence the exercise.

(D) On each day of the exercise, aerial surveillance of the exclusion and safety zones shall commence 2 hours prior to the first firing.

(E) The results of all visual, aerial, and acoustic searches shall be reported immediately to the OCE. No weapons launches or firing may commence until the OCE declares the safety and exclusion zones free of marine mammals.

(F) If a marine mammal is observed within the exclusion zone, firing shall be delayed until the animal is re-sighted outside the exclusion zone, or 30 minutes have elapsed. After 30 minutes, if the animal has not been re-sighted it can be assumed to have left the exclusion zone. The OCE shall determine if the marine mammal is in danger of being adversely affected by commencement of the exercise.

(G) During breaks in the exercise of 30 minutes or more, the exclusion zone shall again be surveyed for any marine mammal. If marine mammals are sighted within the exclusion zone or buffer zone, the OCE shall be notified, and the procedure described above shall be followed.

(H) Upon sinking of the vessel, a final surveillance of the exclusion zone shall be monitored for 2 hours, or until sunset, to verify that no marine mammals were harmed.

(iv) Aerial surveillance shall be conducted using helicopters or other aircraft based on necessity and availability.

(v) Where practicable, the Navy shall conduct the exercise in sea states that are ideal for marine mammal sighting, Beaufort Sea State 3 or less. In the event of a Beaufort Sea State 4 or above, survey efforts shall be increased within the zones. This shall be accomplished through the use of an additional aircraft, if available, and conducting tight search patterns.

(vi) The exercise shall not be conducted unless the exclusion zone can be adequately monitored visually.

(vii) In the event that any marine mammals are observed to be harmed in the area, NMFS shall be notified as soon as feasible following the stranding communication protocol. A detailed description of the animal shall be taken, the location noted, and if possible, photos taken of the marine mammal. This information shall be provided to NMFS via the Navy's regional environmental coordinator for purposes of identification (see the draft Stranding Plan for detail).

(viii) An after action report detailing the exercise's time line, the time the surveys commenced and terminated, amount, and types of all ordnance expended, and the results of survey efforts for each event shall be submitted to NMFS.

(5) Surface-to-Surface Gunnery (up to 5-inch Explosive Rounds):

(i) For exercises using targets towed by a vessel, target-towing vessels shall maintain a trained Lookout for marine mammals when feasible. If a marine mammal is sighted in the vicinity, the tow vessel shall immediately notify the firing vessel, which shall suspend the exercise until the area is clear.

(ii) A 600-yd (585 m) radius buffer zone shall be established around the intended target.

(iii) From the intended firing position, trained Lookouts shall survey the buffer zone for marine mammals prior to commencement and during the exercise as long as practicable. Due to the distance between the firing position and the buffer zone, Lookouts are only expected to visually detect breaching whales, whale blows, and large pods of dolphins and porpoises.

(iv) The exercise shall be conducted only when the buffer zone is visible and marine mammals are not detected within it.

(6) Surface-to-Surface Gunnery (non-explosive rounds):

(i) A 200-yd (183 m) radius buffer zone shall be established around the intended target.

(ii) From the intended firing position, trained Lookouts shall survey the buffer zone for marine mammals prior to commencement and during the exercise as long as practicable.

(iii) If available, target-towing vessels shall maintain a Lookout (unmanned towing vessels will not have a Lookout available). If a marine mammal is sighted in the vicinity of the exercise, the tow vessel shall immediately notify the firing vessel in order to secure gunnery firing until the area is clear.

(iv) The exercise shall be conducted only when the buffer zone is visible and marine mammals are not detected within the target area and the buffer zone.

(7) Surface-to-Air Gunnery (Explosive and Non-explosive Rounds):

(i) Vessels shall orient the geometry of gunnery exercises in order to prevent debris from falling in the area of sighted marine mammals.

(ii) Vessels shall expedite the attempt to recover any parachute deploying aerial targets to reduce the potential for entanglement of marine mammals.

(iii) Target-towing aircraft shall maintain a Lookout if feasible. If a marine mammal is sighted in the vicinity of the exercise, the tow aircraft shall immediately notify the firing vessel in order to secure gunnery firing until the area is clear.

(8) Air-to-Surface Gunnery (Explosive and Non-explosive Rounds):

(i) A 200-yd (183 m) radius buffer zone shall be established around the intended target.

(ii) If surface vessels are involved, Lookout(s) shall visually survey the buffer zone for marine mammals prior to commencement and during the exercise.

(iii) Aerial surveillance of the buffer zone for marine mammals shall be conducted prior to commencement of the exercise. Aerial surveillance altitude of 500 ft to 1,500 ft (152–456 m) is optimum. Aircraft crew/pilot shall maintain visual watch during exercises. Release of ordnance through cloud cover is prohibited; aircraft must be able to actually see ordnance impact areas.

(iv) The exercise shall be conducted only if marine mammals are not visible within the buffer zone.

(9) Small Arms Training (Grenades, Explosive and Non-explosive Rounds)—Lookouts shall visually survey for marine mammals. Weapons shall not be fired in the direction of known or observed marine mammals.

(10) Air-to-Surface At-sea Bombing Exercises (explosive bombs and rockets):

(i) If surface vessels are involved, trained Lookouts shall survey for marine mammals. Ordnance shall not be targeted to impact within 1,000 yd (914 m) of known or observed marine mammals.

(ii) A 1,000-yd (914 m) radius buffer zone shall be established around the intended target.

(iii) Aircraft shall visually survey the target and buffer zone for marine mammals prior to and during the exercise. The survey of the impact area shall be made by flying at 1,500 ft (457 m) or lower, if safe to do so, and at the slowest safe speed. Release of ordinance

through cloud cover is prohibited: Aircraft must be able to see ordnance impact areas. Survey aircraft shall employ most effective search tactics and capabilities.

(iv) The exercise shall be conducted only if marine mammals are not visible within the buffer zone.

(11) Air-to-Surface At-Sea Bombing Exercises (Non-explosive Bombs and Rockets):

(i) If surface vessels are involved, trained Lookouts shall survey for marine mammals. Ordnance shall not be targeted to impact within 1,000 yd (914 m) of known or observed marine mammals.

(ii) A 1,000-yd (914 m) radius buffer zone shall be established around the intended target.

(iii) Aircraft shall visually survey the target and buffer zone for marine mammals prior to and during the exercise. The survey of the impact area shall be made by flying at 1,500 ft (457 m) or lower, if safe to do so, and at the slowest safe speed. Release of ordnance through cloud cover is prohibited: Aircraft must be able to actually see ordnance impact areas. Survey aircraft shall employ most effective search tactics and capabilities.

(iv) The exercise shall be conducted only if marine mammals and are not visible within the buffer zone.

(12) Air-to-Surface Missile Exercises (explosive and non-explosive):

(i) Aircraft shall visually survey the target area for marine mammals. Visual inspection of the target area shall be made by flying at 1,500 ft (457 m) or lower, if safe to do so, and at the slowest safe speed. Firing or range clearance aircraft must be able to actually see ordnance impact areas.

(ii) Explosive ordnance shall not be targeted to impact within 1,800 yd (1646 m) of sighted marine mammals.

(13) Aircraft Training Activities Involving Non-Explosive Devices:

(i) Non-explosive devices such as some sonobuoys and inert bombs involve aerial drops of devices that have the potential to hit marine mammals if they are in the immediate vicinity of a floating target. The exclusion zone (200 yd), therefore, shall be clear of marine mammals and around the target location.

(ii) [Reserved]

(14) Extended Echo Ranging/ Improved Extended Echo Ranging (EER/ IEER):

(i) Crews shall conduct visual reconnaissance of the drop area prior to laying their intended sonobuoy pattern. This search shall be conducted at an altitude below 500 yd (457 m) at a slow speed, if operationally feasible and weather conditions permit. In dual aircraft operations, crews are allowed to conduct coordinated area clearances.

(ii) Crews shall conduct a minimum of 30 minutes of visual and aural monitoring of the search area prior to commanding the first post detonation. This 30-minute observation period may include pattern deployment time.

(iii) For any part of the intended sonobuoy pattern where a post (source/ receiver sonobuoy pair) shall be deployed within 1,000 yd (914 m) of observed marine mammal activity, the Navy shall deploy the receiver ONLY and monitor while conducting a visual search. When marine mammals are no longer detected within 1,000 yd (914 m) of the intended post position, the Navy shall co-locate the explosive source sonobuoy (AN/SSQ–110A) (source) with the receiver.

(iv) When operationally feasible, Navy crews shall conduct continuous visual and aural monitoring of marine mammal activity. This is to include monitoring of own-aircraft sensors from first sensor placement to checking off station and out of RF range of these sensors.

(v) Aural Detection—If the presence of marine mammals is detected aurally, then that shall cue the Navy aircrew to increase the diligence of their visual surveillance. Subsequently, if no marine mammals are visually detected, then the crew may continue multi-static active search.

(vi) Visual Detection—If marine mammals are visually detected within 1,000 yd (914 m) of the explosive source sonobuoy (AN/SSQ–110A) intended for use, then that payload shall not be detonated. Aircrews may utilize this post once the marine mammals have not been re-sighted for 30 minutes, or are observed to have moved outside the 1,000-yd (914 m) safety buffer. Aircrews may shift their multi-static active search to another post, where marine mammals are outside the 1,000-yd (914 m) safety buffer.

(vii) Aircrews shall make every attempt to manually detonate the unexploded charges at each post in the pattern prior to departing the operations area by using the "Payload 1 Release" command followed by the "Payload 2 Release" command. Aircrews shall refrain from using the "Scuttle" command when two payloads remain at a given post. Aircrews shall ensure that a 1,000-yd (914 m) safety buffer, visually clear of marine mammals, is maintained around each post as is done during active search operations.

(viii) Aircrews shall only leave posts with unexploded charges in the event of a sonobuoy malfunction, an aircraft system malfunction, or when an aircraft must immediately depart the area due to issues such as fuel constraints, inclement weather, and in-flight emergencies. In these cases, the sonobuoy shall self-scuttle using the secondary or tertiary method.

(ix) The Navy shall ensure all payloads are accounted for. Explosive source sonobuoys (AN/SSQ–110A) that cannot be scuttled shall be reported as unexploded ordnance via voice communications while airborne, then upon landing via naval message.

(x) Marine mammal monitoring shall continue until out of own-aircraft sensor range.

(15) The Navy shall abide by the letter of the "Stranding Response Plan for Major Navy Training Exercises in the GoA TMAA" (available at: *http://www.nmfs.noaa.gov/pr/permits/incidental.htm*), which is incorporated herein by reference, to include the following measures:

(i) Shutdown Procedures—When an Uncommon Stranding Event (USE—defined in § 216.271) occurs during a Major Training Exercise (MTE) (as defined in the Stranding Plan, meaning including Multi-strike group exercises, Joint Expeditionary exercises, and Marine Air Ground Task Force exercises in the GoA TMAA), the Navy shall implement the procedures described below.

(A) The Navy shall implement a Shutdown (as defined in the Stranding Response Plan for GoA TMAA) when advised by a NMFS Office of Protected Resources Headquarters Senior Official designated in the GoA TMAA Stranding Communication Protocol that a USE (as defined in the Stranding Response Plan for the GoA TMAA) involving live animals has been identified and that at least one live animal is located in the water. NMFS and Navy shall communicate, as needed, regarding the identification of the USE and the potential need to implement shutdown procedures.

(B) Any shutdown in a given area shall remain in effect in that area until NMFS advises the Navy that the subject(s) of the USE at that area die or are euthanized, or that all live animals involved in the USE at that area have left the area (either of their own volition or herded).

(C) If the Navy finds an injured or dead marine mammal floating at sea during an MTE, the Navy shall notify NMFS immediately or as soon as operational security considerations allow. The Navy shall provide NMFS with the species or description of the animal(s), the condition of the animal(s) including carcass condition if the animal(s) is/are dead), location, time of

first discovery, observed behavior(s) (if alive), and photo or video of the animal(s) (if available). Based on the information provided, NMFS shall determine if, and advise the Navy whether a modified shutdown is appropriate on a case-by-case basis.

(D) In the event, following a USE, that: Qualified individuals are attempting to herd animals back out to the open ocean and animals are not willing to leave, or animals are seen repeatedly heading for the open ocean but turning back to shore, NMFS and the Navy shall coordinate (including an investigation of other potential anthropogenic stressors in the area) to determine if the proximity of MFAS/HFAS activities or explosive detonations, though farther than 14 nm from the distressed animal(s), is likely decreasing the likelihood that the animals return to the open water. If so, NMFS and the Navy shall further coordinate to determine what measures are necessary to further minimize that likelihood and implement those measures as appropriate.

(ii) Within 72 hrs of NMFS notifying the Navy of the presence of a USE, the Navy shall provide available information to NMFS (per the GoA TMAA Communication Protocol) regarding the location, number and types of acoustic/explosive sources, direction and speed of units using MFAS/HFAS, and marine mammal sightings information associated with training activities occurring within 80 nm (148 km) and 72 hrs prior to the USE event. Information not initially available regarding the 80 nm (148 km) and 72 hrs prior to the event shall be provided as soon as it becomes available. The Navy shall provide NMFS investigative teams with additional relevant unclassified information as requested, if available.

(iii) Memorandum of Agreement (MOA)—The Navy and NMFS shall develop a MOA, or other mechanism, that will establish a framework whereby the Navy can (and provide the Navy examples of how they can best) assist NMFS with stranding investigations in certain circumstances.

(b) [Reserved]

§ 218.125 Requirements for monitoring and reporting.

(a) General Notification of Injured or Dead Marine Mammals—Navy personnel shall ensure that NMFS is notified immediately ((see Communication Plan) or as soon as clearance procedures allow) if an injured, stranded, or dead marine mammal is found during or shortly after, and in the vicinity of, any Navy training exercise utilizing MFAS, HFAS, or underwater explosive detonations. The Navy shall provide NMFS with the species or description of the animal(s), the condition of the animal(s) (including carcass condition if the animal is dead), location, time of first discovery, observed behavior(s) (if alive), and photo or video of the animal(s) (if available). In the event that an injured, stranded, or dead marine mammal is found by the Navy that is not in the vicinity of, or during or shortly after, MFAS, HFAS, or underwater explosive detonations, the Navy shall report the same information as listed above as soon as operationally feasible and clearance procedures allow.

(b) General Notification of Ship Strike—In the event of a ship strike by any Navy vessel, at any time or place, the Navy shall do the following:

(1) Immediately report to NMFS the species identification (if known), location (lat/long) of the animal (or the strike if the animal has disappeared), and whether the animal is alive or dead, or whether its status is unknown.

(2) Report to NMFS as soon as operationally feasible the size and length of animal, an estimate of the injury status (*e.g.*, dead, injured but alive, injured and moving, unknown, *etc*)., vessel class/type and operational status.

(3) Report to NMFS the vessel length, speed, and heading as soon as feasible.

(4) Provide NMFS a photo or video of the animal(s), if equipment is available.

(c) The Navy must conduct all monitoring and/or research required under the Letter of Authorization including abiding by the GoA TMAA Monitoring Plan. (*http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications*)

(d) Report on Monitoring required in paragraph (c) of this section—The Navy shall submit a report annually on December 15 describing the implementation and results (through October of the same year) of the monitoring required in paragraph (c) of this section. The Navy shall standardize data collection methods across ranges to allow for comparison in different geographic locations.

(e) *Sonar Exercise Notification*—The Navy shall submit to the NMFS Office of Protected Resources (specific contact information to be provided in LOA) either an electronic (preferably) or verbal report within 15 calendar days after the completion of any MTER indicating:

(1) Location of the exercise;

(2) Beginning and end dates of the exercise; and

(3) Type of exercise.

(f) Annual GoA TMAA Report—The Navy shall submit an Annual Exercise GoA TMAA Report on December 15 of every year (covering data gathered through October). This report shall contain the subsections and information indicated below.

(1) MFAS/HFAS Training Exercises—This section shall contain the following information for the following Coordinated and Strike Group exercises: Joint Multi-strike Group Exercises; Joint Expeditionary Exercises; and Marine Air Ground Task Force GoA TMAA:

(i) Exercise Information (for each exercise):

(A) Exercise designator;

(B) Date that exercise began and ended;

(C) Location;

(D) Number and types of active sources used in the exercise;

(E) Number and types of passive acoustic sources used in exercise;

(F) Number and types of vessels, aircraft, *etc.,* participating in exercise;

(G) Total hours of observation by watchstanders;

(H) Total hours of all active sonar source operation;

(I) Total hours of each active sonar source (along with explanation of how hours are calculated for sources typically quantified in alternate way (buoys, torpedoes, *etc.*)); and

(J) Wave height (high, low, and average during exercise).

(ii) Individual marine mammal sighting info (for each sighting in each exercise):

(A) Location of sighting;

(B) Species (if not possible—indication of whale/dolphin/pinniped);

(C) Number of individuals;

(D) Calves observed (y/n);

(E) Initial Detection Sensor;

(F) Indication of specific type of platform observation made from (including, for example, what type of surface vessel; *i.e.,* FFG, DDG, or CG);

(G) Length of time observers maintained visual contact with marine mammal(s);

(H) Wave height (ft);

(I) Visibility;

(J) Sonar source in use (y/n);

(K) Indication of whether animal is < 200 yd, 200–500 yd, 500–1,000 yd, 1,000–2,000 yd, or > 2,000 yd from sonar source in (x) above;

(L) Mitigation Implementation—Whether operation of sonar sensor was delayed, or sonar was powered or shut down, and how long the delay was;

(M) If source in use (x) is hull-mounted, true bearing of animal from ship, true direction of ship's travel, and estimation of animal's motion relative to ship (opening, closing, parallel); and

(N) Observed behavior—Watchstanders shall report, in plain language and without trying to categorize in any way, the observed behavior of the animals (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming, *etc.*).

(iii) An evaluation (based on data gathered during all of the exercises) of the effectiveness of mitigation measures designed to avoid exposing marine mammals to MFAS. This evaluation shall identify the specific observations that support any conclusions the Navy reaches about the effectiveness of the mitigation.

(2) ASW Summary—This section shall include the following information as summarized from non-major training exercises (unit-level exercises, such as TRACKEXs):

(i) Total Hours—Total annual hours of each type of sonar source (along with explanation of how hours are calculated for sources typically quantified in alternate way (buoys, torpedoes, *etc.*)).

(ii) Cumulative Impacts—To the extent practicable, the Navy, in coordination with NMFS, shall develop and implement a method of annually reporting other training (*i.e.,* Unit Level Training (ULT)) utilizing hull-mounted sonar. The report shall present an annual (and seasonal, where practicable) depiction of non-major training exercises geographically across the GoA TMAA. The Navy shall include (in the GoA TMAA annual report) a brief annual progress update on the status of the development of an effective and unclassified method to report this information until an agreed-upon (with NMFS) method has been developed and implemented.

(3) Sinking Exercises (SINKEXs)—This section shall include the following information for each SINKEX completed that year:

(i) Exercise info:

(A) Location;

(B) Date and time exercise began and ended;

(C) Total hours of observation by watchstanders before, during, and after exercise;

(D) Total number and types of rounds expended/explosives detonated;

(E) Number and types of passive acoustic sources used in exercise;

(F) Total hours of passive acoustic search time;

(G) Number and types of vessels, aircraft, *etc.,* participating in exercise;

(H) Wave height in feet (high, low, and average during exercise); and

(I) Narrative description of sensors and platforms utilized for marine mammal detection and timeline illustrating how marine mammal detection was conducted.

(ii) Individual marine mammal observation during SINKEX (by Navy Lookouts) information:

(A) Location of sighting;

(B) Species (if not possible—indication of whale/dolphin/pinniped);

(C) Number of individuals;

(D) Calves observed (y/n);

(E) Initial detection sensor;

(F) Length of time observers maintained visual contact with marine mammal;

(G) Wave height (ft);

(H) Visibility;

(I) Whether sighting was before, during, or after detonations/exercise, and how many minutes before or after;

(J) Distance of marine mammal from actual detonations (or target spot if not yet detonated)—use four categories to define distance:

(*1*) The modeled injury threshold radius for the largest explosive used in that exercise type in that OPAREA (762 m for SINKEX in the GoA TMAA);

(*2*) The required exclusion zone (1 nm for SINKEX in the GoA TMAA);

(*3*) The required observation distance (if different than the exclusion zone (2 nm for SINKEX in the GoA TMAA); and

(*4*) Greater than the required observed distance. For example, in this case, the observer shall indicate if < 762 m, from 762 m–1 nm, from 1 nm–2 nm, and > 2 nm.

(K) Observed behavior—Watchstanders shall report, in plain language and without trying to categorize in any way, the observed behavior of the animals (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming *etc.*), including speed and direction.

(L) Resulting mitigation implementation—Indicate whether explosive detonations were delayed, ceased, modified, or not modified due to marine mammal presence and for how long.

(M) If observation occurs while explosives are detonating in the water, indicate munitions type in use at time of marine mammal detection.

(4) Improved Extended Echo-Ranging System (IEER) Summary:

(i) Total number of IEER events conducted in the GoA TMAA;

(ii) Total expended/detonated rounds (buoys); and

(iii) Total number of self-scuttled IEER rounds.

(5) Explosives Summary—The Navy is in the process of improving the methods used to track explosive use to provide increased granularity. To the extent practicable, the Navy shall provide the information described below for all of their explosive exercises. Until the Navy is able to report in full the information below, they shall provide an annual update on the Navy's explosive tracking methods, including improvements from the previous year.

(i) Total annual number of each type of explosive exercise (of those identified as part of the "specified activity" in this final rule) conducted in the GoA TMAA; and

(ii) Total annual expended/detonated rounds (missiles, bombs, *etc.*) for each explosive type.

(g) GoA TMAA 5–Yr Comprehensive Report—The Navy shall submit to NMFS a draft report that analyzes and summarizes all of the multi-year marine mammal information gathered during ASW and explosive exercises for which annual reports are required (Annual GoA TMAA Exercise Reports and GoA TMAA Monitoring Plan Reports). This report shall be submitted at the end of the fourth year of the rule (December 2014), covering activities that have occurred through October 2014.

(h) Comprehensive National ASW Report—By June, 2014, the Navy shall submit a draft National Report that analyzes, compares, and summarizes the active sonar data gathered (through January 1, 2014) from the watchstanders and pursuant to the implementation of the Monitoring Plans for the Northwest Training Range Complex, the Southern California Range Complex, the Atlantic Fleet Active Sonar Training, the Hawaii Range Complex, the Mariana Islands Range Complex, and the Gulf of Alaska.

(i) The Navy shall comply with the Integrated Comprehensive Monitoring Program (ICMP) Plan and continue to improve the program in consultation with NMFS.

§ 218.126 Applications for Letters of Authorization.

To incidentally take marine mammals pursuant to these regulations, the U.S. Citizen (as defined by § 216.103 of this chapter) conducting the activity identified in § 218.120(c) (*i.e.,* the Navy) must apply for and obtain either an initial Letter of Authorization in accordance with § 218.127 or a renewal under § 218.128.

§ 218.127 Letters of Authorization.

(a) A Letter of Authorization, unless suspended or revoked, will be valid for a period of time not to exceed the period of validity of this subpart, but must be renewed annually or biennially subject to renewal conditions in § 218.128.

(b) Each Letter of Authorization shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact on the species, its habitat, and on the availability of the species for subsistence uses (*i.e.,* mitigation); and

(3) Requirements for mitigation, monitoring and reporting.

(c) Issuance and renewal of the Letter of Authorization shall be based on a determination that the total number of marine mammals taken by the activity as a whole will have no more than a negligible impact on the affected species or stock of marine mammal(s).

§ 218.128 Renewal of Letters of Authorization and adaptive management.

(a) A Letter of Authorization issued under §§ 216.106 and 218.127 of this chapter or the activity identified in § 218.120(c) shall be renewed annually or biennially upon:

(1) Notification to NMFS that the activity described in the application submitted under § 218.126 shall be undertaken and that there will not be a substantial modification to the described work, mitigation or monitoring undertaken during the upcoming 12–24 months;

(2) Receipt of the monitoring reports and notifications within the indicated timeframes required under § 218.125(b through j); and

(3) A determination by NMFS that the mitigation, monitoring, and reporting measures required under § 218.124 and the Letter of Authorization issued under §§ 216.126 and 218.127 of this chapter were undertaken and will be undertaken during the upcoming period of validity of a renewed Letter of Authorization.

(b) If a request for a renewal of a Letter of Authorization issued under §§ 216.126 and 216.128 indicates that a substantial modification, as determined by NMFS, to the described work, mitigation or monitoring undertaken during the upcoming season will occur, NMFS will provide the public a period of 30 days for review and comment on the request. Review and comment on renewals of Letters of Authorization are restricted to:

(1) New cited information and data indicating that the determinations made in this document are in need of reconsideration, and

(2) Proposed changes to the mitigation and monitoring requirements contained in these regulations or in the current Letter of Authorization.

(c) A notice of issuance or denial of a renewal of a Letter of Authorization will be published in the **Federal Register**.

(d) Adaptive Management—NMFS may modify or augment the existing mitigation or monitoring measures (after consulting with the Navy regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of mitigation and monitoring set forth in the preamble of these regulations. Below are some of the possible sources of new data that could contribute to the decision to modify the mitigation or monitoring measures:

(1) Results from the Navy's monitoring from the previous year (either from the GoA TMAA or other locations).

(2) Findings of the Monitoring Workshop that the Navy will convene in 2011.

(3) Compiled results of Navy-funded research and development (R&D) studies (presented pursuant to the Integrated Comprehensive Monitoring Plan).

(4) Results from specific stranding investigations (either from the GoA TMAA or other locations, and involving coincident MFAS/HFAS or explosives training or not involving coincident use).

(5) Results from the Long Term Prospective Study described in the preamble to these regulations.

(6) Results from general marine mammal and sound research (funded by the Navy (described below) or otherwise).

§ 218.129 Modifications to Letters of Authorization.

(a) Except as provided in paragraph (b) of this section, no substantive modification (including withdrawal or suspension) to the Letter of Authorization by NMFS, issued pursuant to §§ 216.126 and 218.127 of this chapter and subject to the provisions of this subpart, shall be made until after notification and an opportunity for public comment has been provided. For purposes of this paragraph, a renewal of a Letter of Authorization under § 218.128, without modification (except for the period of validity), is not considered a substantive modification.

(b) If the Assistant Administrator determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 218.120(b), a Letter of Authorization issued pursuant to §§ 216.126 and 218.127 of this chapter may be substantively modified without prior notification and an opportunity for public comment. Notification will be published in the **Federal Register** within 30 days subsequent to the action.

[FR Doc. 2011–10440 Filed 5–3–11; 8:45 am]

BILLING CODE 3510–22–P