

**2011 REQUEST FOR LETTER OF AUTHORIZATION RENEWAL  
UNDER SECTION 101(a) (5) (A) OF THE MARINE MAMMAL  
PROTECTION ACT INCIDENTAL TO ATLANTIC FLEET ACTIVE  
SONAR TRAINING ACTIVITIES**

**Submitted To:  
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**(U) 1. DESCRIPTION OF ACTIVITES**

(U) Pursuant to the Marine Mammal Protection Act of 1972 (MMPA) and implementing regulations<sup>1</sup>, this document is the annual renewal Application to the National Marine Fisheries Service (NMFS) for a Letter of Authorization (LOA) for incidental harassment of marine mammals from U.S. Navy (Navy) Atlantic Fleet Active Sonar (AFAST) training and research activities.

(U) This 2011 LOA renewal is being sought to cover the annual period from January 2011 to January 2012 to cover the taking of marine mammals, as described by the MMPA, incidental to training and research within AFAST study area. The LOA will not address activities designated for armed conflict or direct combat support operations, nor during periods of heightened national threat conditions, as determined by the President and Secretary of Defense or their duly designated alternatives or successors, as assisted by the Chairman of the Joint Chiefs of Staff.

(U) The table below shows the MMPA permit documentation applicable to AFAST and NMFS' authorization (**Table 1**). Information contained in these references provide a complete description of the background for the Navy's request, overview of AFAST, description of the specified activities, description of marine mammals in the area, discussion of potential effects or lack of effects of specified activities on marine mammals, mitigation, marine mammal monitoring, and reporting. The descriptions contained in these references have not changed, except as where noted in this application renewal.

**(U) Table 1. Timeline of key AFAST MMPA documents**

Timeline Date	From	Event	Reference
1 FEB 08	Navy	Letter Of Authorization Application (request for Incidental Harassment For AFAST activities) submitted to NMFS Office of Protected Resources	DoN 2008a
14 OCT 08	NMFS	Taking and Importing Marine Mammals U.S Navy's Atlantic Fleet Active Sonar Training (AFAST); Proposed Rule published in Federal Register (73 Fed. Reg. 60754)	NMFS 2008
12 DEC 08	Navy	Atlantic Fleet Active Sonar Training Environmental Impact Statement\Overseas Environmental Impact Statement- Final December 2008	DoN 2008b
22 JAN 09-21 JAN 10	NMFS	Letter of Authorization take marine mammals incidental to U.S Navy's Atlantic Fleet Active Sonar Training (AFAST) issued 22 Jan 09.	NMFS 2009a
27 JAN 09	NMFS	Taking and Importing Marine Mammals; U.S Navy's Atlantic Fleet Active Sonar Training (AFAST); Final Rule published in Federal Register (74 Fed. Reg. 4843)	NMFS 2009b
2 NOV 09	Navy	Letter Of Authorization 2010 Renewal Application (request for Incidental Harassment For AFAST activities) submitted via registered mail to NMFS Office of Protected Resources	DoN 2009
22 JAN 10-21 JAN 11	NMFS	Letter of Authorization take marine mammals incidental to U.S Navy's Atlantic Fleet Active Sonar Training (AFAST) issued 21 Jan 10.	NMFS 2010

<sup>1</sup> MMPA Section 101 (a)(5)(A) and 50 Code of Federal Regulations (CFR) Part 216, Subpart V

(U) There are no changes to Chapter 1 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).

**(U) 2. DATES, DURATION AND LOCATION OF ACTIVE SONAR ACTIVITIES**

(U) There are no changes to Chapter 2 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).

**(U) 3. MARINE MAMMAL SPECIES AND NUMBERS**

(U) There are no changes to Chapter 3 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).

**(U) 4. AFFECTED SPECIES STATUS AND DISTRIBUTION**

(U) There are no changes to Chapter 4 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).



**(U) 5. TYPE OF INCIDENTAL TAKE REQUESTED**

(U) There are no changes to Chapter 5 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).

**(U) 6. NUMBERS AND SPECIES EXPOSED**

(U) There are no changes to Chapter 6 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010). Navy is requesting renewal of the current authorization and **Table 2** summarizes the 2011 and 2010 requested take numbers for reference.

(U) Table 2. Total marine mammal takes requested for 2011 Letter of Authorization renewal showing no change from 2010 NMFS Letter of Authorization.

Species	2011 REQUESTED AUTHORIZATION		2010 NMFS AUTHORIZATION	
	MMPA Level B	MMPA Level A and/or Mortality	MMPA Level B	MMPA Level A and/or Mortality
North Atlantic right whale*	733	0	733	0
Humpback whale*	4622	0	4622	0
Minke whale	457	0	457	0
Bryde's whale	40	0	40	0
Sei whale*	1163	0	1163	0
Fin whale*	970	0	970	0
Blue whale*	881	0	881	0
Sperm whale*	10734	0	10734	0
Kogia spp.	4822	0	4822	0
Beaked whale	5398	10 over 5 years	5398	10 over 5 years
Rough-toothed dolphin	2979	0	2979	0
Bottlenose dolphin	667482	0	667482	0
Pantropical spotted dolphin	153237	0	153237	0
Atlantic spotted dolphin	413917	0	413917	0
Spinner dolphin	23271	0	23271	0
Clymene dolphin	51082	0	51082	0
Striped dolphin	192196	0	192196	0
Common dolphin	106106	0	106106	0
Fraser's dolphin	381	0	381	0
Risso's dolphin	103483	0	103483	0
Atlantic white-sided dolphin	22716	0	22716	0
White-beaked dolphin	3795	0	3795	0
Melon-headed whale	1819	0	1819	0
Pygmy killer whale	308	0	308	0
False killer whale	592	0	592	0
Killer whale	553	0	553	0
Pilot whales	140132	0	140132	0
Harbor porpoise	168829	0	168829	0
Gray Seal	8645	0	8645	0
Harbor Seal	13925	0	13925	0
Hooded Seal	17290	0	17290	0
Harp Seal	12102	0	12102	0
* Threatened and endangered species				

**(U) 7. EFFECTS TO MARINE MAMMAL SPECIES OR STOCKS**

(U) There are no changes to Chapter 7 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).

**(U) 8. MINIMIZATION OF ADVERSE EFFECTS TO SUBSISTENCE USE**

(U) There are no changes to Chapter 8 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).

**(U) 9. EFFECTS TO THE MARINE MAMMAL HABITAT AND THE LIKELIHOOD OF RESTORATION**

(U) There are no changes to Chapter 9 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).

**(U) 10. EFFECTS TO MARINE MAMMALS FROM LOSS OR MODIFICATION OF HABITAT**

(U) There are no changes to Chapter 10 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).

**(U) 11. MEANS OF EFFECTING THE LEAST PRACTICABLE ADVERSE IMPACTS –  
MITIGATION MEASURES**

(U) There are no changes to Chapter 11 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy’s 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).



**(U) 12. MONITORING AND REPORTING**

(U) There are no changes to Chapter 12 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010) except as where noted below.

(U) In view of lessons learned during implementation of the 2010 AFAST Monitoring Plan, and as part of the Navy's adaptive management review for AFAST, a modification to the 2010 Plan is shown in **Table 3**. The modification does not include a change in overall effort, rather it is meant to enable the Navy to take advantage of additional monitoring locations and techniques to better address the questions proposed in the AFAST monitoring plan. The change involves shifting some vessel and aerial survey effort from the current location in Onslow Bay to a new location to the north, off Cape Hatteras, NC. Combined aerial and shipboard visual surveys have been conducted routinely at the Onslow Bay location for over 3 years. These surveys have established a relatively detailed baseline of marine species distribution and habitat use at that location. As a result, the Navy proposes to shift some of the current survey effort to support new initiatives that will more directly contribute to addressing the objectives of the Navy's Integrated Comprehensive Monitoring Program. The vessel and aerial surveys off Cape Hatteras will be the initial work supporting a study examining the behavioral ecology, prey fields, and reactions to sound of cetaceans. The project is an expansion of previous research conducted on pilot whales and other deep-diving odontocetes by researchers from Duke University and Woods Hole Oceanographic Institution. Baseline data will be collected in 2010-2011 from boat-based visual surveys and may also include tagging, biopsy, photo ID, and tracking. The project is anticipated to span approximately 3 years to include future experimental response studies and prey field mapping. For 2011 the Navy proposes to allow for flexibility among multiple sites within the VACAPES, CHPT, and JAX OPAREAS in order to support different monitoring efforts as described above. However, some baseline monitoring will continue at the Onslow location. **Table 4** shows a clean copy of the revised AFAST monitoring plan for 2011.

(U) Table 3. Navy’s adaptive management review for AFAST showing edits to 2010 monitoring and proposed 2011 monitoring (strike through text represent deletions and red font represents additions).

<b>STUDY 1 and 3 (exposures and behavioral responses)</b>		
<b>Aerial Surveys During Training Events</b>	- 1 event in conjunction with a SEASWITI, shallow COMPTUEX, or ULT exercise.	Adaptive Management Review (AMR)
<b>Marine Mammal Observers (MMO)</b>	- 2 events in conjunction with SEASWITI or ULT exercises.	
<b>Vessel surveys (study 3 only)</b>	- 2 events in conjunction with SEASWITI, shallow COMPTUEX, or ULT exercises.	
<b>Passive Acoustics</b>	- 2 deployments of pop-up buoys in conjunction with SEASWITI, shallow COMPTUEX, or ULT exercises.	
<b>STUDY 2 (geographic redistribution)</b>		
<b>Aerial Surveys Before And After Training Events</b>	- 1 event in conjunction with a SEASWITI, shallow COMPTUEX, or ULT exercise.	AMR
<b>Aerial Surveys <del>Onslow Bay/ Jacksonville</del> VACAPES/CHPT/JAX OPAREAS</b>	- 48 days	
<b>Vessel Surveys <del>Onslow Bay/ Jacksonville</del> VACAPES/CHPT/JAX OPAREAS</b>	- 48 days	
<b>Passive Acoustics</b>	Continue recording and data analysis for the 4 HARPS.	
<b>STUDY 4 (mitigation effectiveness)</b>		
<b>MMO/ Lookout Comparison</b>	- 40 hours	AMR
<b>Aerial Surveys Before And After Training Events</b>	- 1 event in conjunction with a SEASWITI, shallow COMPTUEX, or ULT exercise.	

(U) Table 4. Navy’s final proposed 2011 monitoring plan for AFAST.

<b>STUDY 1 and 3 (exposures and behavioral responses)</b>		
<b>Aerial Surveys During Training Events</b>	- 1 event in conjunction with a SEASWITI, shallow COMPTUEX, or ULT exercise.	Adaptive Management Review (AMR)
<b>Marine Mammal Observers (MMO)</b>	- 2 events in conjunction with SEASWITI or ULT exercises.	
<b>Vessel surveys (study 3 only)</b>	- 2 events in conjunction with SEASWITI, shallow COMPTUEX, or ULT exercises.	
<b>Passive Acoustics</b>	- 2 deployments of pop-up buoys in conjunction with SEASWITI, shallow COMPTUEX, or ULT exercises.	
<b>STUDY 2 (geographic redistribution)</b>		
<b>Aerial Surveys Before And After Training Events</b>	- 1 event in conjunction with a SEASWITI, shallow COMPTUEX, or ULT exercise.	AMR
<b>Aerial Surveys VACAPES/CHPT/JAX OPAREAS</b>	- 48 days	
<b>Vessel Surveys VACAPES/CHPT/JAX OPAREAS</b>	- 48 days	
<b>Passive Acoustics</b>	Continue recording and data analysis for the 4 HARPS.	
<b>STUDY 4 (mitigation effectiveness)</b>		
<b>MMO/ Lookout Comparison</b>	- 40 hours	AMR
<b>Aerial Surveys Before And After Training Events</b>	- 1 event in conjunction with a SEASWITI, shallow COMPTUEX, or ULT exercise.	

**(U) 13. RESEARCH**

(U) There are no changes to Chapter 13 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010).

**(U) 14. LIST OF PREPARERS**

(U) There are no changes to Chapter 14 as described under NMFS January 2009 Final Rule (NMFS 2009b), Navy's 2010 Request for Letter of Authorization (DoN 2009), and NMFS subsequent 2010 Letter of Authorization (NMFS 2010) except where noted below.

This Letter of Authorization Renewal Application was prepared for the Department of the Navy by Naval Facilities Engineering Command (NAVFAC) Atlantic. A list of key preparation and review personnel is included:

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**(U) 15. LITERATURE CITED**

(U) DoN. 2008a. Request for Letter of Authorization Under Section 101(A) (5) (A) of the Marine Mammal Protection Act Incidental to Atlantic Fleet Active Sonar Training Activities.

(U) DoN. 2008b. Final Atlantic Fleet Active Sonar Training Environmental Impact Statement\Overseas Environmental Impact Statement-December 2008. Department of the Navy.

(U) NMFS. 2008. Taking and Importing Marine Mammals; U.S. Navy's Atlantic Fleet Active Sonar Training (AFAST); Proposed Rule. October 14 2008. 73 Fed. Reg. 60754

(U) NMFS. 2009a. Letter of Authorization for taking of marine mammals incidental to U.S. Navy's Atlantic Fleet Active Sonar Training (AFAST). January 22, 2009

(U) NMFS. 2009b. Taking and Importing Marine Mammals; U.S. Navy's Atlantic Fleet Active Sonar Training (AFAST); Final Rule. January 27, 2009. 74 Fed. Reg. 4843

(U) DoN. 2009. Request for Letter of Authorization Renewal Under Section 101(A) (5) (A) of the Marine Mammal Protection Act Incidental to Atlantic Fleet Active Sonar Training Activities.

(U) NMFS. 2010. Letter of Authorization for taking of marine mammals incidental to U.S. Navy's Atlantic Fleet Active Sonar Training (AFAST) issued. January 21, 2010