

Annual Range Complex Exercise Report

2013

In accordance with: 50 C.F.R. Part 218,
Subparts A, B, C, and D; and the Annual
Biological Opinions for Three Navy East
Coast Range Complexes and the Gulf of
Mexico Range Complex

**For the U.S. Navy's Explosive
Training Activities in the
Virginia Capes, Jacksonville, Cherry
Point, Northeast, and Gulf of Mexico
Range Complexes**

February 2014

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INTRODUCTION

(U) The U.S. Navy prepared this Annual Range Complex Exercise Report covering the period from 2 January 2013 to 25 November 2013¹ pursuant to the National Marine Fisheries Service (NMFS) Marine Mammal Protection Act (MMPA) regulations for the Virginia Capes (VACAPES) (50 C.F.R. Part 218, Subpart A), Jacksonville/Charleston (JAX) (50 C.F.R. Part 218, Subpart B), Navy Cherry Point (CHPT) (50 C.F.R. Part 218, Subpart C), and Gulf of Mexico (GOMEX) (50 C.F.R. Part 218, Subpart D) Range Complexes. The report also provides the information required by the terms and conditions found in the 21 May 2012 and 2 March 2012 biological opinions (BOs) and incidental take statements for training activities occurring in the East Coast (VACAPES, CHPT, JAX) and GOMEX Range Complexes (NMFS 2012, 2012e). The scope of activities covered in the NMFS BOs include the same training activities using explosives covered by the above MMPA regulations, and also include non-explosive training conducted in the VACAPES, JAX, CHPT, and GOMEX Operating Areas (OPAREAs), Navy training in the Northeast OPAREAs, and activities associated with the Transit Protection System at Naval Submarine Base Kings Bay, Georgia. Figure 1 illustrates the geographic extent of the VACAPES, JAX, and CHPT OPAREAs, Figure 2 illustrates the Northeast OPAREAs, and Figure 3 illustrates the GOMEX OPAREAs.

(U) In the MMPA regulations² and associated Letters of Authorization (LOA) for the VACAPES, JAX, CHPT, and GOMEX Range Complexes (NMFS 2012a-d) the following reporting requirements were specified and are presented in Sections I-IV of this report:

- (1) Total annual number of each type of explosive exercise (of those identified as part of the “specified activity” in the regulations) conducted in the VACAPES, JAX, CHPT, and GOMEX Range Complexes.
- (2) Total annual expended/detonated rounds (missiles, bombs, etc.) for each explosive type.

(U) In NMFS’ 2012 East Coast (NMFS 2012) and 2012 GOMEX (NMFS 2012e) BOs the above exercise reporting requirement is repeated as a term and condition that implements, in part, the Reasonable and Prudent Measure listed in the Incidental Take Statement. The measure is the same as the exercise reporting requirement from the above MMPA regulations and is also addressed in Sections I-IV of this report.

(U) In addition, each of the range complex MMPA LOAs and regulations require an update from Navy on the status of its explosive training tracking efforts. While Navy units, such as ships and aircraft, report a variety of information on a routine basis, a specific process for reporting and

¹ The reporting date for the 2013 report ends on 25 November 2013 due to the start of the new Atlantic Fleet Training and Testing MMPA authorization covering these same activities.

² Previously codified at 50 C.F.R. §§ 218.5(g) (1) and (2), 218.14(g) (1) and (2), 218.24(g) (1) and (2), 218.34(f) (1) and (2)

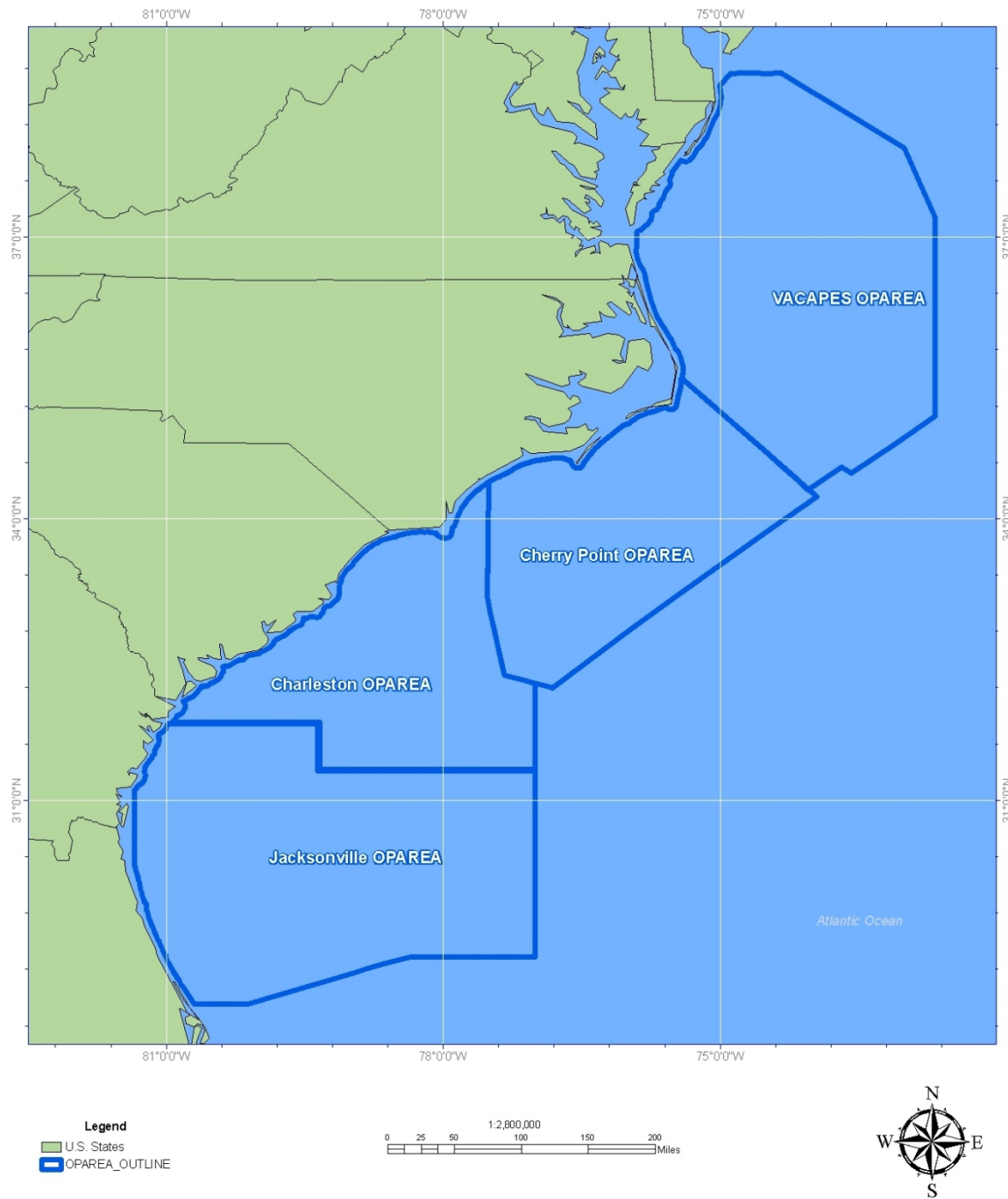
tracking the required information did not exist when the MMPA authorizations were finalized. The following update describes refinements to the Navy's tracking process since the previous reporting period.

(U) As reported in Navy's 2009 report, a protocol has been established to monitor and track the number of events conducted and the type and amount of ordnance used for those activities identified in the MMPA authorizations. To summarize, data collection efforts are a result of a collective team effort between the Fleet Forces Range Complex Support Team (RCST) personnel and Fleet users. RCST personnel receive the weekly operating schedules promulgated by the Range Scheduling Offices. Through this scheduling process and daily coordination with the Scheduling Agencies and Fleet users, RCST personnel are aware of what activities are being requested in the operating areas and receive after-action reporting of high explosive (HE) munitions expenditures. The after-action reporting is accomplished by direct interface with the naval unit upon completion of the event and reviewing the naval unit's Ammunition Transaction Reporting message that reports the type and amount of ordnance expended. The collected data is then entered into a database for analysis and reporting.

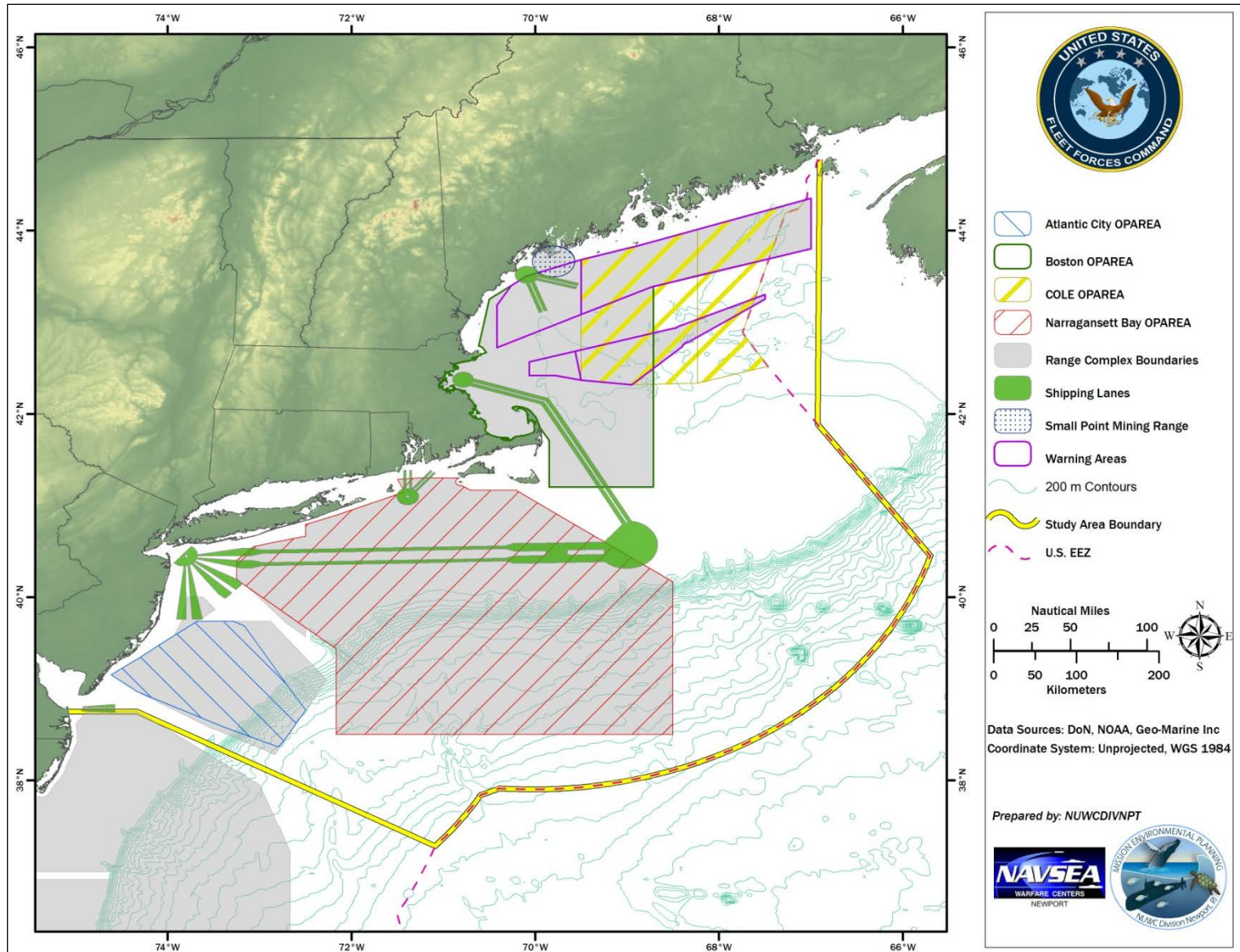
(U) To ensure the 5-year take authorization is not exceeded, the Navy routinely tracks the estimated exposures that resulted from explosive events conducted. Exposures are quantitatively calculated based on outputs derived from the Navy's original modeling and the cumulative estimated exposures are provided in tables within Sections I-IV for each range complex.

(U) The information contained in this report represents the best practical data collection as of 25 November 2013. The report provides an accounting of training activity subject to the MMPA authorizations from 2 January 2013 to 25 November 2013. The report also includes the cumulative amount of events and ordnance expended since the start of the authorizations for the East Coast (5 June 2009 – 25 November 2013) and GOMEX (18 March 2011 – 25 November 2013). The data provided in the following tables indicates that as of 25 November 2013 the Navy did not exceed the 5-year estimate of training events or takes specified in the MMPA authorizations and ESA incidental take statements.

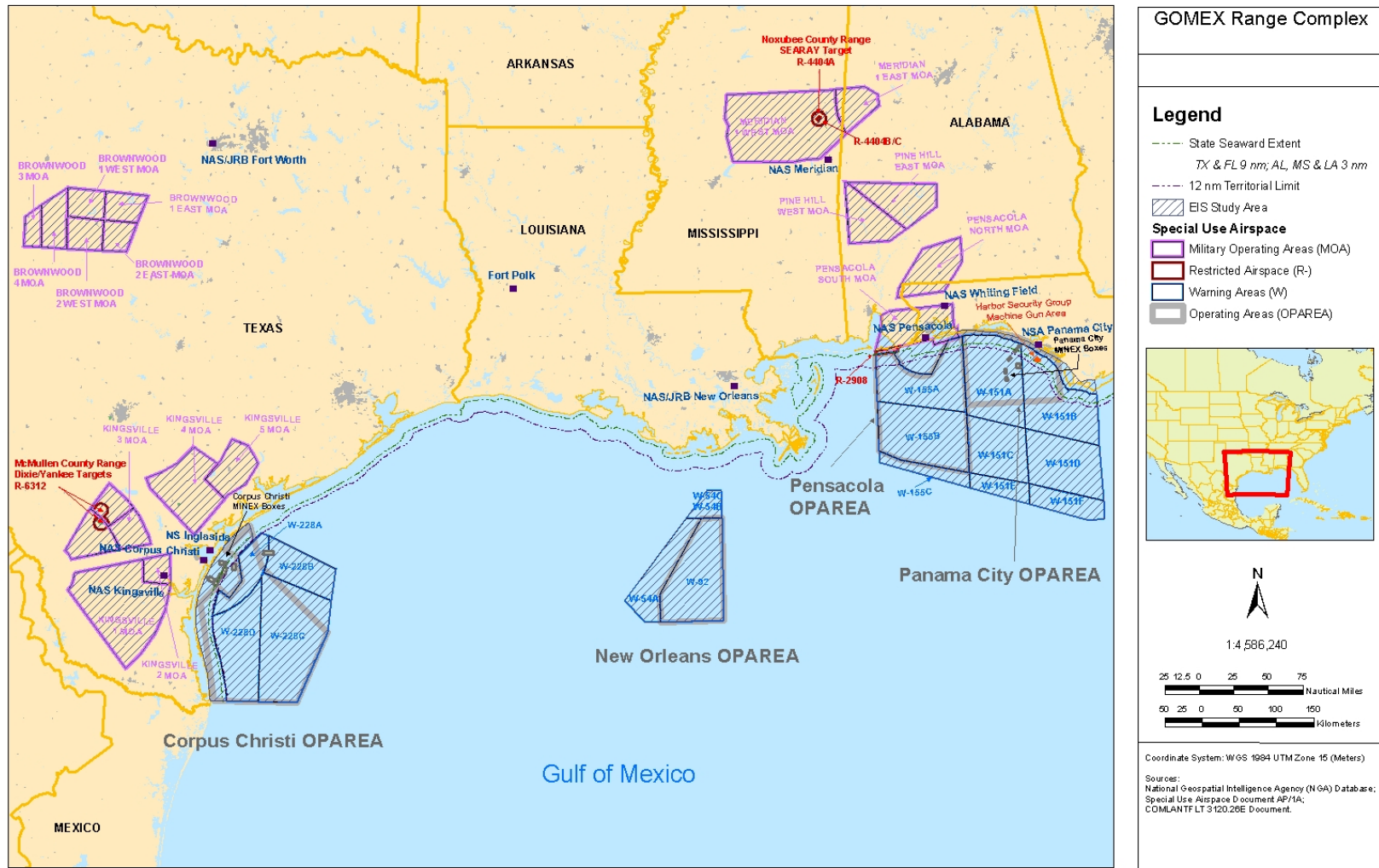
VACAPES, Jacksonville, Cherry Point Study Area



(U) Figure 1. Geographic extent of the VACAPES, JAX, and CHPT OPAREAs. Activities within the Charleston OPAREA are combined with those activities conducted within the JAX OPAREA for purposes of the MMPA authorization and this report.



(U) Figure 2. Geographic extent of the Northeast OPAREAs.



(U) Figure 3. Geographic extent of the GOMEX Range Complex.

SECTION I: Virginia Capes Range Complex

(U) The summary for explosive use within the VACAPES Range Complex is presented in Table 1. Table 2 provides the estimated takes of marine mammals and sea turtles from events conducted since the original authorization.

(U) Table 1. Total annual number of each type of explosive exercise and associated ordnance listed at 50 C.F.R. §218.1 conducted in the VACAPES Range Complex. Current reporting period is 2 January 2013 through 25 November 2013. Cumulative total includes activity from 5 June 2009 through 25 November 2013.

| Training Event | Ordnance Used | Number of Events Conducted | | Number of Expended/Detonated Rounds | |
|-------------------------------------|-------------------------------------|----------------------------|------------------|-------------------------------------|------------------|
| | | Current Reporting Period | Cumulative Total | Current Reporting Period | Cumulative Total |
| Mine Exercise | Airborne Mine Neutralization System | 0 | 0 | 0 | 0 |
| | 5-lb charge | 6 | 27 | 6 | 21 |
| | 10-lb charge | 16 | 115 | 16 | 115 |
| | 20-lb charge | 4 | 30 | 4 | 30 |
| Bombing Exercise (Air-to-Surface) | MK-83/GBU-32 (1,000 lb bomb) | 0 | 0 | 0 | 0 |
| | Mk-82 (500 lb bomb) | 5 | 25 | 20 | 103 |
| Missile Exercise (Air-to-Surface) | AGM-114 (Hellfire missile) | 29 | 69 | 29 | 69 |
| | AGM-65 (Maverick missile) | 0 | 1 | 0 | 1 |
| | AGM-88 (HARM missile) | 0 | 0 | 0 | 0 |
| Firing Exercise (FIREX with IMPASS) | 5" explosive Naval gunfire | 19 | 70 | 338 | 860 |

(U) Table 2. Estimated number of marine mammal and sea turtle takes from events conducted in VACAPES from 5 June 2009 through 25 November 2013.

| VACAPES | Number of Takes Authorized at 50 C.F.R. §218.2 or in the ESA ITS (5-year total) | | | Estimated Cumulative Takes (5 June 2009 - 25 November 2013) | | | Percentage of Authorized Takes Used | | |
|--------------------------------------|---|--------------|-----------|---|--------------|-----------|-------------------------------------|--------------|-----------|
| | Level B/Harass | Level A/Harm | Mortality | Level B/Harass | Level A/Harm | Mortality | Level B/Harass | Level A/Harm | Mortality |
| Marine Mammals | | | | | | | | | |
| Atlantic spotted dolphin | 215 | 5 | -- | 65 | 1 | 0 | 30.23% | 20.00% | -- |
| Bottlenose dolphin | 145 | -- | -- | 82 | 0 | 0 | 56.55% | -- | -- |
| Clymene dolphin | 165 | -- | -- | 69 | 0 | 0 | 41.82% | -- | -- |
| Common dolphin | 10965 | 100 | -- | 4723 | 41 | 0 | 43.07% | 41.00% | -- |
| Fin whale | 10 | -- | -- | 5 | 0 | 0 | 50.00% | -- | -- |
| Humpback whale | 10 | -- | -- | 2 | 0 | 0 | 20.00% | -- | -- |
| Kogia spp. | 15 | -- | -- | 7 | 0 | 0 | 46.67% | -- | -- |
| Pantropical spotted dolphin | 350 | 5 | -- | 147 | 0 | 0 | 42.00% | 0.00% | -- |
| Pilot whales | 50 | -- | -- | 11 | 0 | 0 | 22.00% | -- | -- |
| Risso's dolphin | 80 | -- | -- | 32 | 0 | 0 | 40.00% | -- | -- |
| Rough-toothed dolphin | 5 | -- | -- | 3 | 0 | 0 | 60.00% | -- | -- |
| Sperm whale | 10 | -- | -- | 3 | 0 | 0 | 30.00% | -- | -- |
| Striped dolphin | 340 | 15 | -- | 92 | 2 | 0 | 27.06% | 13.33% | -- |
| Turtles | | | | | | | | | |
| Hardshell turtle | 1582 | 9 | -- | 751 | 6 | 0 | 47.47% | 66.67% | -- |
| Kemp's ridley turtle | 2949 | 27 | -- | 1375 | 9 | 0 | 46.63% | 33.33% | -- |
| Leatherback turtle | 47 | -- | -- | 20 | 0 | 0 | 42.55% | -- | -- |
| Northwest Atlantic loggerhead turtle | 2428 | 34 | -- | 1018 | 7 | 0 | 41.93% | 20.59% | -- |

SECTION II: Jacksonville Range Complex

(U) The summary for explosive use within the JAX Range Complex is presented in Table 3 below. Table 4 provides the estimated takes of marine mammals and sea turtles from events conducted since the original authorization.

(U) Table 3. Total annual number of each type of explosive exercise and associated ordnance listed at 50 C.F.R. §218.10 conducted in the JAX Range Complex. Current reporting period is 2 January 2013 through 25 November 2013. Cumulative total includes activity from 5 June 2009 through 25 November 2013.

| Training Event | Ordnance Used | Number of Events Conducted | | Number of Expended/Detonated Rounds | |
|-------------------------------------|----------------------------|----------------------------|------------------|-------------------------------------|------------------|
| | | Current Reporting Period | Cumulative Total | Current Reporting Period | Cumulative Total |
| Mine Exercise | 5-lb charge | 0 | 0 | 0 | 0 |
| | 10-lb charge | 0 | 0 | 0 | 0 |
| | 20-lb charge | 0 | 0 | 0 | 0 |
| Missile Exercise (Air-to-Surface) | AGM-114 (Hellfire missile) | 14 | 36 | 14 | 36 |
| | AGM-65 (Maverick missile) | 2 | 14 | 2 | 14 |
| Firing Exercise (FIREX with IMPASS) | 5" explosive Naval gunfire | 2 | 17 | 0 ³ | 64 |
| Small Arms Training | MK3A2 grenade | 0 | 0 | 0 | 0 |

³ The 2 FIREX events used non-explosive practice rounds.

(U) Table 4. Estimated number of marine mammal and sea turtle takes from events conducted in JAX from 5 June 2009 through 25 November 2013.

| JAX | Number of Takes Authorized at 50 C.F.R. §218.11 or in the ESA ITS (5-year total) | | | Estimated Cumulative Takes (5 June 2009 - 25 November 2013) | | | Percentage of Authorized Takes Used | | |
|--------------------------------------|--|--------------|-----------|---|--------------|-----------|-------------------------------------|--------------|-----------|
| | Level B/Harass | Level A/Harm | Mortality | Level B/Harass | Level A/Harm | Mortality | Level B/Harass | Level A/Harm | Mortality |
| Marine Mammals | | | | | | | | | |
| Atlantic spotted dolphin | 310 | 10 | -- | 34 | 0 | 0 | 10.97% | 0.00% | -- |
| Beaked whale | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Bottlenose dolphin | 150 | -- | -- | 6 | 0 | 0 | 4.00% | -- | -- |
| Clymene dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Common dolphin | 150 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Kogia spp. | 15 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Minke whale | 15 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Pantropical spotted dolphin | 100 | -- | -- | 1 | 0 | 0 | 1.00% | -- | -- |
| Pilot whales | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Risso's dolphin | 150 | -- | -- | 2 | 0 | 0 | 1.33% | -- | -- |
| Striped dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Turtles | | | | | | | | | |
| Hardshell turtle | 51 | 3 | -- | 6 | 0 | 0 | 11.76% | 0.00% | -- |
| Kemp's Ridley turtle | 10 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Leatherback turtle | 55 | 3 | -- | 4 | 0 | 0 | 7.27% | 0.00% | -- |
| Northwest Atlantic loggerhead turtle | 89 | 3 | -- | 8 | 0 | 0 | 8.99% | 0.00% | -- |

SECTION III: Cherry Point Range Complex

(U) The summary for explosive use within the CHPT Range Complex is presented in Table 5 below. Table 6 provides the estimated takes of marine mammals and sea turtles from events conducted since the original authorization.

(U) Table 5. Total annual number of each type of explosive exercise and associated ordnance listed at 50 C.F.R. §218.20 conducted in the CHPT Range Complex. Current reporting period is 2 January 2013 through 25 November 2013. Cumulative total includes activity from 5 June 2009 through 25 November 2013.

| Training Event | Ordnance Used | Number of Events Conducted | | Number of Expended/Detonated Rounds | |
|-------------------------------------|----------------------------|----------------------------|------------------|-------------------------------------|------------------|
| | | Current Reporting Period | Cumulative Total | Current Reporting Period | Cumulative Total |
| Mine Exercise | 5-lb charge | 0 | 0 | 0 | 0 |
| | 10-lb charge | 0 | 0 | 0 | 0 |
| | 20-lb charge | 0 | 0 | 0 | 0 |
| Missile Exercise (Air-to-Surface) | AGM-114 (Hellfire missile) | 2 | 2 | 2 | 2 |
| | AGM-65 (TOW missile) | 0 | 0 | 0 | 0 |
| Firing Exercise (FIREX with IMPASS) | 5" explosive Naval gunfire | 1 | 2 | 0 ⁴ | 0 |

⁴ The FIREX event used non-explosive practice rounds.

(U) Table 6. Estimated number of marine mammal and sea turtle takes from events conducted in CHPT from 5 June 2009 through 25 November 2013.

| Cherry Point | Number of Takes Authorized at 50 C.F.R. §218.21 or in the ESA ITS (5-year total) | | | Estimated Cumulative Takes (5 June 2009 - 25 November 2013) | | | Percentage of Authorized Takes Used | | |
|--------------------------------------|--|--------------|-----------|---|--------------|-----------|-------------------------------------|--------------|-----------|
| Species | Level B/Harass | Level A/Harm | Mortality | Level B/Harass | Level A/Harm | Mortality | Level B/Harass | Level A/Harm | Mortality |
| Marine Mammals | | | | | | | | | |
| Atlantic spotted dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Atlantic white-sided dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Beaked whale | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Bottlenose dolphin | 150 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Clymene dolphin | 150 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Common dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Fraser's dolphin | 15 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Killer whale | 15 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Kogia spp. | 15 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Melon-headed whale | 15 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Minke whale | 15 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Pantropical spotted dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Pilot whales | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Pygmy killer whale | 15 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Risso's dolphin | 150 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Spinner dolphin | 15 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Striped dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Turtles | | | | | | | | | |
| Hardshell turtle | -- | -- | -- | 0 | 0 | 0 | -- | -- | -- |
| Kemp's Ridley turtle | -- | -- | -- | 0 | 0 | 0 | -- | -- | -- |
| Leatherback turtle | -- | -- | -- | 0 | 0 | 0 | -- | -- | -- |
| Northwest Atlantic loggerhead turtle | -- | -- | -- | 0 | 0 | 0 | -- | -- | -- |

SECTION IV: Gulf of Mexico Range Complex

(U) The summary for explosive use within the GOMEX Range Complex is presented in Table 7 below. Table 8 provides the estimated takes of marine mammals and sea turtles from events conducted since the original authorization.

(U) Table 7. Total annual number of each type of explosive exercise and associated ordnance listed at 50 C.F.R. §218.30 conducted in the GOMEX Range Complex. Current reporting period is 2 January 2013 through 25 November 2013. Cumulative total also includes activity from 18 March 2011 through 25 November 2013.

| Training Event | Ordnance Used | Number of Events Conducted | | Number of Expended/Detonated Rounds | |
|-----------------------------------|------------------------------|----------------------------|------------------|-------------------------------------|------------------|
| | | Current Reporting Period | Cumulative Total | Current Reporting Period | Cumulative Total |
| Bombing Exercise (Air-to-Surface) | MK-83/GBU-32 (1,000 lb bomb) | 0 | 0 | 0 | 0 |
| Small Arms Training | MK3A2 grenade | 0 | 0 | 0 | 0 |

(U) Table 8. Estimated number of marine mammal and sea turtle takes from events conducted in GOMEX from 18 March 2011 through 25 November 2013.

| GOMEX | Number of Takes Authorized at 50 C.F.R. §218.30 or in the ESA ITS (5-year total) | | | Estimated Cumulative Takes (5 June 2009 - 25 November 2013) | | | Percentage of Authorized Takes Used | | |
|--------------------------------------|--|--------------|-----------|---|--------------|-----------|-------------------------------------|--------------|-----------|
| | Level B/Harass | Level A/Harm | Mortality | Level B/Harass | Level A/Harm | Mortality | Level B/Harass | Level A/Harm | Mortality |
| Marine Mammals | | | | | | | | | |
| Atlantic spotted dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Beaked whale | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Bottlenose dolphin | 150 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Clymene dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| False killer whale | 50 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Fraser's dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Kogia spp. | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Melon-headed whale | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Pantropical spotted dolphin | 130 | 5 | -- | 0 | 0 | 0 | 0.00% | 0.00% | -- |
| Pygmy killer whale | 50 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Risso's dolphin | 150 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Rough-toothed dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Short-finned pilot whale | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Sperm whale | 25 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Spinner dolphin | 135 | 5 | -- | 0 | 0 | 0 | 0.00% | 0.00% | -- |
| Striped dolphin | 100 | -- | -- | 0 | 0 | 0 | 0.00% | -- | -- |
| Turtles | | | | | | | | | |
| Hardshell turtle | -- | -- | -- | 0 | 0 | 0 | -- | -- | -- |
| Kemp's Ridley turtle | -- | -- | -- | 0 | 0 | 0 | -- | -- | -- |
| Leatherback turtle | -- | -- | -- | 0 | 0 | 0 | -- | -- | -- |
| Northwest Atlantic loggerhead turtle | -- | -- | -- | 0 | 0 | 0 | -- | -- | -- |

REFERENCES

(U) NMFS. 2012. Annual Biological Opinion for U.S. Navy Training Activities on East Coast Range Complexes 5 June 2012 – 4 June 2014, issued May 21, 2012.

(U) NMFS. 2012a. Letter of Authorization, Taking Marine Mammals Incidental to U.S. Navy Training in the Virginia Capes Range Complex 5 June 2012 – 4 June 2014, issued May 21, 2012.

(U) NMFS. 2012b. Letter of Authorization, Taking Marine Mammals Incidental to U.S. Navy Training in the Jacksonville Range Complex 5 June 2012 – 4 June 2014, issued May 21, 2012.

(U) NMFS. 2012c. Letter of Authorization, Taking Marine Mammals Incidental to U.S. Navy Training in the Cherry Point Range Complex 5 June 2012 – 4 June 2014, issued May 21, 2012.

(U) NMFS. 2012d. Letter of Authorization, Taking of Marine Mammals Incidental to U.S. Navy Training in Gulf of Mexico Range Complex 18 March 2012 – 17 March 2014, issued March 2, 2012.

(U) NMFS. 2012e. Annual Biological Opinion for U.S. Navy Training Activities in the Gulf of Mexico Range Complex 18 March 2012 - 17 March 2014, issued March 2, 2012.