

**ANNUAL MISSION ACTIVITIES REPORT
2012**

FOR THE

**NAVAL SURFACE WARFARE CENTER
PANAMA CITY DIVISION (NSWC PCD)
STUDY AREA**

Submitted To:

**Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3226**

In accordance with:

**21 January 2012 Letter of Authorization for NSWC PCD
Mission Activities; 50 CFR Part 218, Subpart S;
and the 2012 Biological Opinion for NSWC PCD Mission
Activities**



September 2012

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LIST OF ACRONYMS AND ABBREVIATIONS

BE	Biological Evaluation
BO	Biological Opinion(s)
C.F.R.	Code of Federal Regulations
DON	Department of the Navy
EIS	Environmental Impact Statement
ESA	Endangered Species Act
HFAS	high-frequency active sonar
hr	hour(s)
kHz	kilohertz
lb	pound(s)
LOA	Letter of Authorization
MFAS	mid-frequency active sonar
MMPA	Marine Mammal Protection Act
NM	nautical mile(s)
NMFS	National Marine Fisheries Service
NSWC PCD	Naval Surface Warfare Center Panama City Division
OEIS	Overseas Environmental Impact Statement
RDT&E	research, development, test, and evaluation
U.S.	United States

I. INTRODUCTION

The United States (U.S.) Navy prepared this Annual Mission Activities Report covering the period from 1 August 2011 to 2 August 2012 pursuant to the National Marine Fisheries Service (NMFS) Marine Mammal Protection Act (MMPA) regulations (NMFS 2011a, 2012a) for the Naval Surface Warfare Center Panama City Division (NSWC PCD) Study Area (50 Code of Federal Regulations [C.F.R.] Part 218, Subpart S). The report also provides the information required by NMFS's Biological Opinions (BOs) on NSWC PCD Mission Activities (NMFS 2011b, 2012b) issued pursuant to the Endangered Species Act (ESA). The scope of NMFS's BOs includes the same research, development, test, and evaluation (RDT&E) activities using sonar systems, explosives, and projectiles as governed by the above MMPA regulations. **Figures 1 and 2** show the geographic extent of the NSWC PCD Study Area.

In the MMPA regulations (NMFS 2010a [50 C.F.R. § 218.184]) and the Letters of Authorization (LOAs) for NSWC PCD Mission Activities (2011a, 2012a), annual reports are required for the following mission activities in the NSWC PCD Study Area, which are presented in **Sections II-IV** of this report:

- 1) Test Activities Involving Mid-Frequency Active Sonar (MFAS)/High-Frequency Active Sonar (HFAS).
- 2) Test Activities Involving Underwater Explosive Detonations.
- 3) Test Activities Involving Projectile Firing.

In NMFS's BO (NMFS 2011a [page 153]), the following *Reasonable and Prudent Measures* listed in the Incidental Take Statement were specified and are addressed in **Section V** of this report:

- “The U.S. Navy shall submit reports that identify the general location, timing, number of sonar hours, and other aspects of the RDT&E activities the U.S. Navy plans to conduct at NSWC PCD in Panama City, Florida, over the twelve-month period between January 2012 and January 2013.”

The information contained in this report represents the best practical data collection as of 2 August 2012. The operational data are collected through the NSWC PCD Environmental Review Process, which is detailed in Chapter 5 *Mitigation and Protective Measures* of the NSWC PCD Mission Activities Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) (DON 2009). The data provided in the following tables indicate that the U.S. Navy is not exceeding the average annual allotment of authorized test events as of 2 August 2012. Future activities conducted under the NSWC PCD Mission Activities LOA will continue to ensure that the 5-year total allotment is not exceeded. U.S. Navy test events are variable within any given year based on the evolving nature of RDT&E test plans and the current status of operating systems undergoing RDT&E, as well as scheduling, budgeting, and environmental conditions. Therefore, the data on the amount of activities conducted in the NSWC PCD Study Area may vary annually, potentially resulting in higher or lower amounts of reported NSWC PCD RDT&E mission activities in future annual mission activities reports.

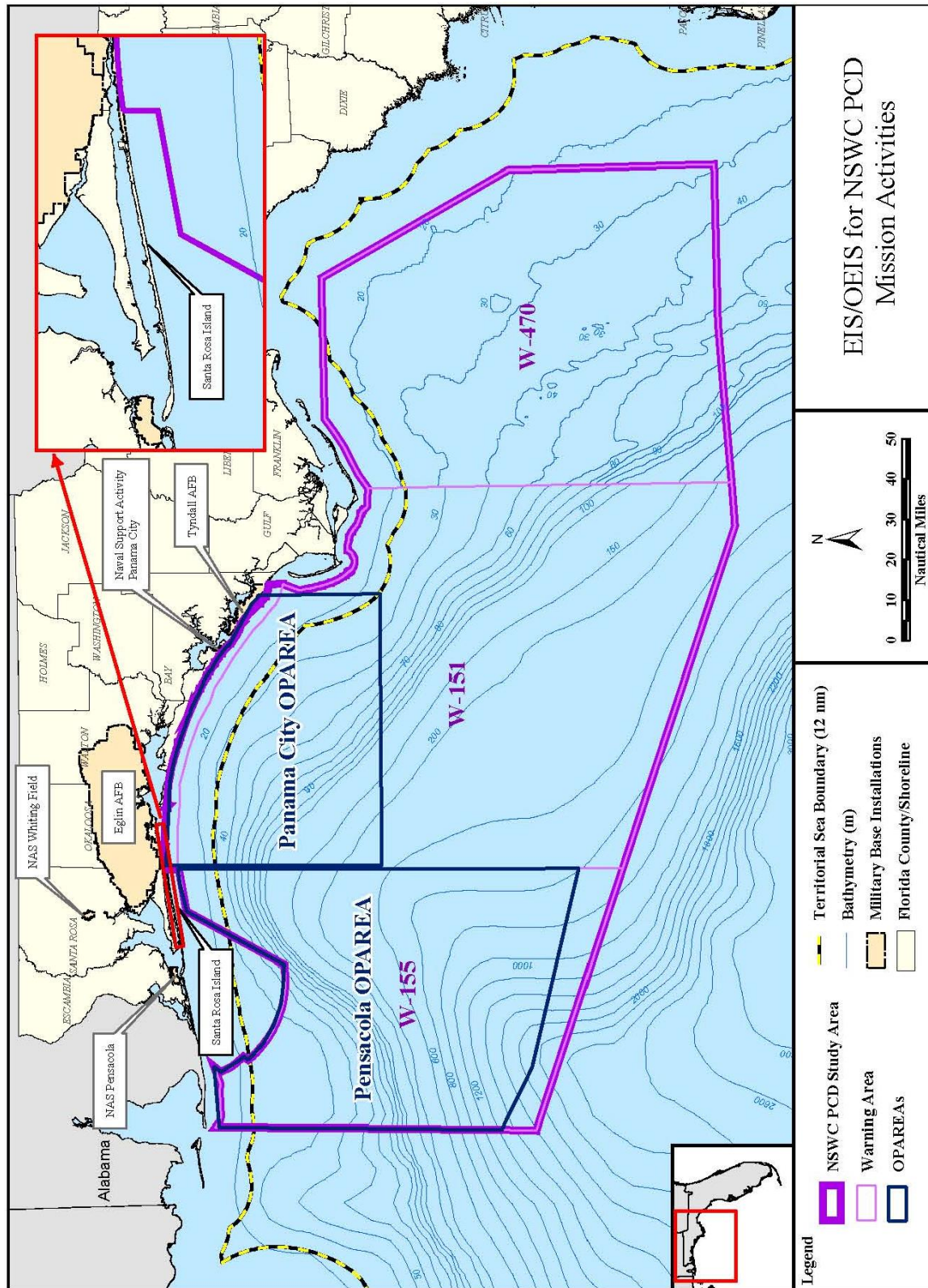


Figure 1. NSWC PCD Study Area: Gulf of Mexico.

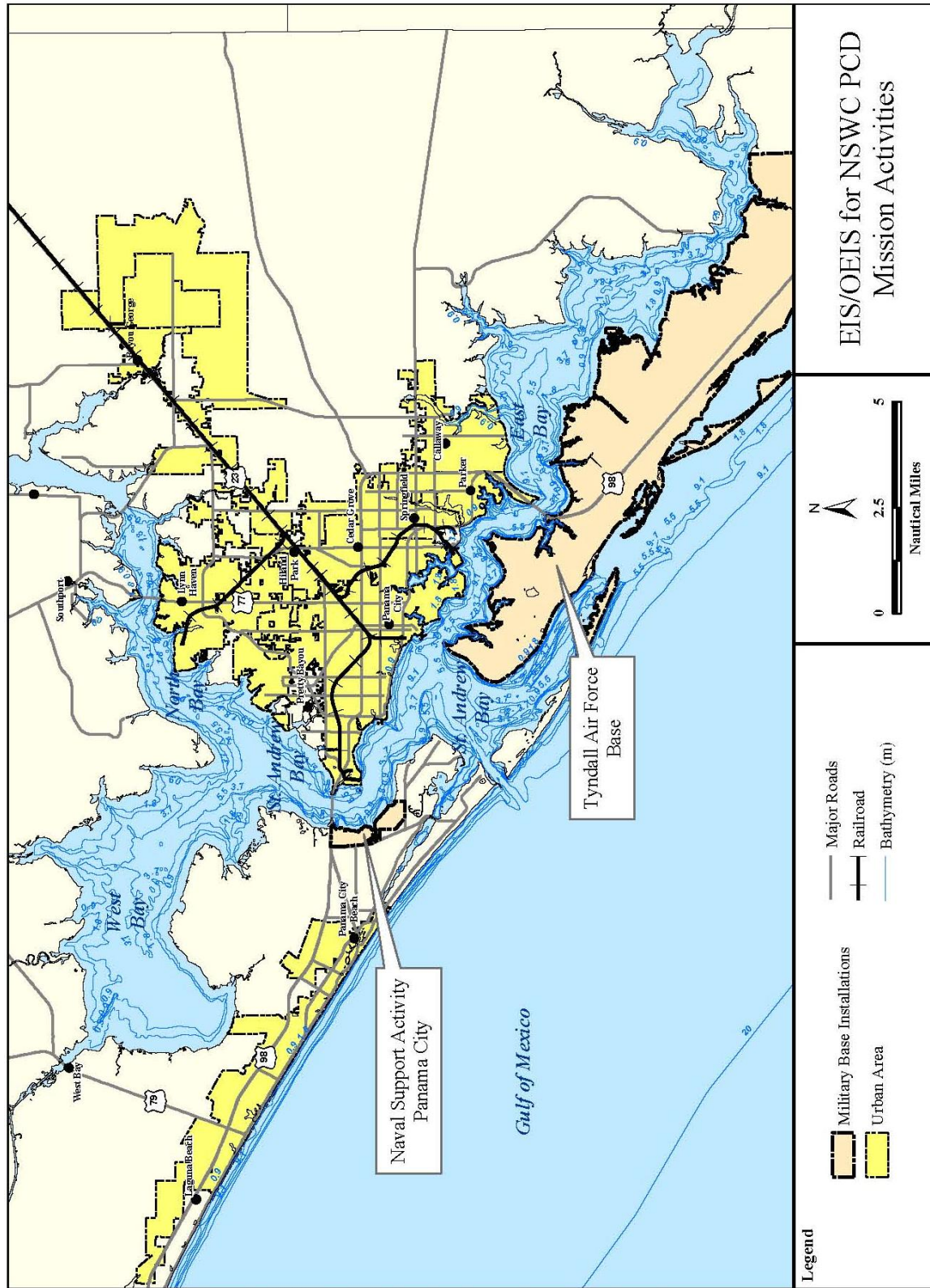


Figure 2. NSWC PCD Study Area: Nearshore and St. Andrew Bay.

II. TEST ACTIVITIES INVOLVING MFAS/HFAS

Tables 1 and 2 provide a summary of the use of MFAS and HFAS in the NSWC PCD Study Area. During this time period, NSWC PCD conducted 279.36 hours (hr) of sonar testing, including 258.65 hr in territorial waters (0 – 12 nautical miles [NM]) (**Table 1**) and 20.71 hr in non-territorial waters (> 12 NM) (**Table 2**).

Table 1. Total hr of each type of MFAS and HFAS authorized annually in the 2012 LOA versus hr conducted in the NSWC PCD study area in territorial waters.

Sonar System	Hr Authorized*	Hr Conducted
AN/SQS-53/56 Kingfisher	3	0
Sub-bottom Profiler (2-9 kilohertz [kHz])	21	0
REMUS SAS-LF (~15 kHz)	12	12
REMUS Modem	25	25
Sub-bottom Profiler (2-16 kHz)	24	0
AN/SQQ-32	30	0
REMUS-SAS-LF (~25 kHz)	20	20
SAS-LF	35	27
AN/WLD-1RMS-ACL	33.5	0
BPAUV Sidescan (~75 kHz)	25	0
TVSS	15	0
F84Y	15	0
BPAUV Sidescan (~102.5 kHz)	25	10.5
REMUS-SAS-HF	10	10
SAS-HF	11.5	11.5
AN/AQS-20	545	132.65
AN/WLD-11 RMS Navigation	15	0
BPAUV Sidescan (~120 kHz)	30	10
Total for all sonar systems	895	258.65

*Source: NMFS 2012b

During these sonar test events, the U.S. Navy employed the appropriate mitigation measures as outlined in the NSWC PCD Mission Activities EIS/OEIS (Department of the Navy [DON] 2009).

Table 2. Total hr of each type of MFAS and HFAS authorized annually in the 2012 LOA versus hr conducted in the NSWC PCD study area in non-territorial waters.

Sonar System	Hr Authorized *	Hr Conducted
AN/SQS-53/56 Kingfisher	1	0
Sub-bottom Profiler (2-9 kHz)	1	0
REMUS Modem	12	0
Sub-bottom Profiler (2-16 kHz)	1	0
AN/SQQ-32	1	0
SAS-LF	15	2.96
AN/WLD-1RMS-ACL	5	0
BPAUV Sidescan (~75 kHz)	38	2.75
TVSS	16.5	0
F84Y	15	0
REMUS-SAS-HF	25	0
SAS-HF	15	0
AN/AQS-20	15	15
BPAUV Sidescan (~120 kHz)	25	0
Total for all sonar systems	185.5	20.71

*Source: NMFS 2012b

III. TEST ACTIVITIES INVOLVING UNDERWATER EXPLOSIVE DETONATIONS

Tables 3 and 4 below provide a summary of the use of underwater explosive detonations (1–10 pounds [lb], 11–75 lb, and 76–600 lb charges, as well as line charges) in the NSWC PCD Study Area. During this time period, NSWC PCD conducted four underwater explosive detonations, including 4 detonations in territorial waters (**Table 3**) and 0 detonations in non-territorial waters (**Table 4**).

Table 3. Total number of each type of underwater explosive detonation authorized annually in the 2012 LOA versus total number conducted in the NSWC PCD study area in territorial waters.

Explosive	Number Authorized*	Number Conducted
1–10 lb	51	4
11–75 lb	3	0
76–600 lb	0	0
Line Charge	3	0
Total for all explosives	57	4

*Source: NMFS 2012b

Table 4. Total number of each type of underwater explosive detonation authorized annually in the 2012 LOA versus number conducted in the NSWC PCD study area in non-territorial waters.

Explosive	Number Authorized*	Number Conducted
1–10 lb	0	0
11–75 lb	0	0
76–600 lb	16	0
Line Charge	0	0
Total for all explosives	16	0

*Source: NMFS 2012b

During these explosive test events, the U.S. Navy employed the appropriate mitigation measures as outlined in the NSWC PCD Mission Activities EIS/OEIS (DON 2009).

IV. TEST ACTIVITIES INVOLVING PROJECTILE FIRING

NSWC PCD did not conduct any RDT&E mission activities involving projectile firing during the reporting period.

V. ANNUAL FREQUENCIES AND LOCATIONS FOR NSWC PCD MISSION ACTIVITIES

U.S. Navy RDT&E mission descriptions, frequencies, and locations for the NSWC PCD Study Area have not changed from those described in the U.S. Navy's Biological Evaluation (BE) for NSWC PCD Mission Activities (DON 2008) and the U.S. Navy's Final EIS/OEIS for NSWC PCD Mission Activities (DON 2009). RDT&E mission activities conducted in the NSWC PCD Study Area have not changed since NMFS issued the BOs (NMFS 2010b, 2011a, 2012a). The type, manner, and frequency of RDT&E activities in the NSWC PCD Study Area for the next 12 months are described in the U.S. Navy's BE (DON 2008) and are not repeated in this report.

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