



**US Army Corps
of Engineers**

Defense Environmental Restoration Program
For
Formerly Used Defense Sites

PRELIMINARY ASSESSMENT

Cape Poge Little Neck Bomb Target Site

Chappaquiddick Island, MA

Property Number – D01MA0595

FINAL – January 2014

Prepared by
U.S. Army Corps of Engineers St. Louis District
for the
U.S. Army Corps of Engineers New England District
and U.S. Army Engineering and Support Center, Huntsville

PRELIMINARY ASSESSMENT
TABLE OF CONTENTS

| | <u>Page Number</u> |
|--|--------------------|
| EXECUTIVE SUMMARY | ES-1 |
| ACKNOWLEDGEMENTS | |
| 1 INTRODUCTION | 1 |
| 1.1 AUTHORITY | 1 |
| 1.1.1 <i>Laws</i> | 1 |
| 1.1.2 <i>Regulations and Guidance</i> | 2 |
| 1.2 SUBJECT | 2 |
| 1.3 PURPOSE | 3 |
| 1.4 SCOPE | 3 |
| 2 PREVIOUS INVESTIGATIONS | 5 |
| 2.1 CORPS OF ENGINEERS INVESTIGATIONS | 5 |
| 2.1.1 <i>Inventory Project Report (INPR), Cape Poge Little Neck Bomb Target Site, Dukes County/Chappaquiddick Island, Edgartown, Massachusetts, FUDS Property No. D01MA0595, dated 8 July 2008</i> | 5 |
| 2.1.2 Archives Search Report (ASR) for the Former Tisbury Great Pond, Martha’s Vineyard, Massachusetts, FUDS Property No. D01MA045301, dated 16 November 1999..... | 5 |
| 2.1.3 <i>Moving Target Machine Gun Range, FUDS Property No. D01MA0486.</i> | 5 |
| 2.1.4 Time Critical Removal Action Memorandum for Cape Poge Little Neck Bomb Target Site , Chappaquiddick Island, Massachusetts and Former Moving Target Machine Gun Range at South Beach , Martha’s Vineyard, Massachusetts, prepared by the U.S. Army Engineer District, New England, dated 24 November 2008. | 6 |
| 2.1.5 Final Site Specific, Final Report for the Time Critical Removal Action (TCRA) at Former Cape Poge Little Neck Bomb Target Site , Chappaquiddick Island, Dukes County, Massachusetts, and Former Moving Target Machine Gun Range at South Beach , Martha’s Vineyard, Edgartown, Massachusetts, prepared by EOD Technology, Inc. (EODT), dated February 2010. | 7 |
| 2.1.6 Final, Revision 3, Remedial Investigation (RI) Work Plan, Former Cape Poge Little Neck Bomb Target MRS, Former Moving Target Machine Gun Range at South Beach MRS & Tisbury Great Pond MRS , prepared by the U.S. Army Corps of Engineers, New England District, dated 30 September 2011..... | 7 |
| 2.2 OTHER INVESTIGATIONS | 7 |

| | | |
|----------|--|-----------|
| 3 | PROPERTY DESCRIPTION, ACREAGE AND LAND USE | 8 |
| 3.1 | LOCATION | 8 |
| 3.2 | FUDS ELIGIBILITY PROPERTY | 8 |
| 3.2.1 | Confirmed FUDS..... | 8 |
| 3.2.2 | Additional Areas of Use or Impact..... | 10 |
| 3.2.3 | Potential FUDS..... | 10 |
| 3.3 | LAND USE AND OWNERSHIP HISTORY | 11 |
| 3.3.1 | Prior Land Use..... | 11 |
| 3.3.2 | Current Land Use and Ownership | 11 |
| 3.3.3 | Condition of Facilities Constructed for the Military | 13 |
| 3.3.4 | Population Demographics | 13 |
| 3.4 | PHYSICAL PROPERTY CHARACTERISTICS | 15 |
| 3.4.1 | Climatic Data..... | 15 |
| 3.4.2 | Topography..... | 16 |
| 3.4.3 | Regional Geology and Physiology | 17 |
| 3.4.4 | Regional Soils..... | 17 |
| 3.4.5 | Surface Water Hydrology..... | 20 |
| 3.4.6 | Ground Water Hydrology..... | 21 |
| 3.4.7 | Natural Resources (Threatened and Endangered Species)..... | 21 |
| 3.4.8 | Historical and Cultural Resources | 24 |
| 4 | HISTORICAL PROPERTY SUMMARY | 26 |
| 4.1 | CHRONOLOGICAL PROPERTY SUMMARY | 26 |
| 4.1.1 | Amphibious Training 1943..... | 26 |
| 4.1.2 | Naval Bombing and Air to Ground Calibration Target Use 1944-1947 | 27 |
| 4.2 | MILITARY OPERATIONS | 30 |
| 4.2.1 | Operations Involving Military Munitions | 30 |
| 4.2.2 | Operations Involving HTRW | 34 |
| 4.2.3 | Operations Involving CON\HTRW..... | 34 |
| 4.2.4 | Operations Involving other Buildings or Structures BD/DR | 34 |
| 4.3 | MAP ANALYSIS | 34 |
| 4.3.1 | Plan of Cape Poge, Chappaquiddick Island, 14 March 1944, revised 30 March 1944, Appendix I-1..... | 35 |
| 4.3.2 | Little Neck-Cape Poge, 5 August 1944, Appendix I-2 | 35 |
| 4.3.3 | Boston Sectional Aeronautical Chart, Edition 15-1, 14 Jun 1945, Appendix I-3..... | 36 |
| 4.3.4 | Boston Sectional Aeronautical Chart, Edition 18, 14 Jan 1947, Appendix I-4..... | 37 |
| 4.3.5 | U.S. Navy Acquisition Map – Massachusetts/Rhode Island, 9 May 1947, Appendix I-5 | 37 |
| 4.4 | AERIAL PHOTOGRAPHIC INTERPRETATION | 38 |
| 4.4.1 | 1938 to 1943 Imagery..... | 39 |
| 4.4.2 | 7 July 1952 Imagery (Plates 2, 3 & 4)..... | 39 |

| | | |
|----------|---|-----------|
| 5 | EVALUATION OF PRESENCE OF MILITARY MUNITIONS AND TECHNICAL DATA..... | 40 |
| 5.1 | GENERAL EVALUATION OF CONVENTIONAL MEC PRESENCE | 40 |
| 5.1.1 | Evaluation of MEC Presence..... | 40 |
| 5.1.2 | Conventional MEC Technical Data..... | 41 |
| 5.2 | GENERAL EVALUATION OF RCWM PRESENCE | 41 |
| 5.3 | GENERAL EVALUATION OF MC PRESENCE..... | 42 |
| 5.3.1 | Conventional MEC Constituents | 42 |
| 5.3.2 | CWM Constituents | 44 |
| 5.4 | PROPERTY-SPECIFIC LOCATIONS | 45 |
| 5.4.1 | Range Layout Criteria | 45 |
| 5.4.2 | L-4-V Cape Poge Beach Calibration Range..... | 45 |
| 5.4.3 | Non-Military Munitions Response Program Sites | 46 |
| 6 | EVALUATION OF HTRW PRESENCE AND AREAS | 47 |
| 6.1 | GENERAL EVALUATION OF HTRW PRESENCE | 47 |
| 6.2 | PROPERTY SPECIFIC LOCATIONS..... | 47 |
| 7 | EVALUATION OF CON/HTRW AND BD/DR PRESENCE | 48 |
| 7.1 | EVALUATION OF CON/HTRW PRESENCE AND AREAS | 48 |
| 7.2 | EVALUATION OF BD/DR..... | 48 |
| 8 | PATHWAY AND ENVIRONMENTAL HAZARD ASSESSMENT | 49 |
| 8.1 | GROUNDWATER PATHWAY..... | 49 |
| 8.1.1 | Hydrogeologic Setting..... | 49 |
| 8.1.2 | Groundwater Targets | 50 |
| 8.1.3 | Groundwater Conclusions | 51 |
| 8.2 | SURFACE WATER PATHWAY..... | 53 |
| 8.2.1 | Hydrologic Setting..... | 53 |
| 8.2.2 | Surface Water Targets | 54 |
| 8.2.3 | Surface Water Conclusions | 55 |
| 8.3 | SOIL EXPOSURE AND AIR PATHWAYS..... | 55 |
| 8.3.1 | Physical Conditions | 55 |
| 8.3.2 | Soil and Air Targets..... | 55 |
| 8.3.3 | Soil Exposure and Air Pathway Conclusions..... | 57 |
| 9 | SUMMARY AND CONCLUSIONS..... | 58 |
| 9.1 | AREAS THAT MAY WARRANT NO FURTHER ACTION..... | 58 |
| 9.1.1 | HTRW | 58 |
| 9.1.2 | PRP/HTRW | 58 |
| 9.1.3 | PRP/MMRP | 58 |
| 9.1.4 | CON/HTRW | 58 |
| 9.1.5 | BD/DR | 58 |
| 9.1.6 | CWM | 59 |

9.2 POTENTIAL HAZARDS THAT MAY WARRANT FURTHER RESPONSE 59
9.2.1 MMRP 59

APPENDICES

A REFERENCE SOURCES AND RECORDS REVIEWED A-1

A.1 TEXTUAL AND CARTOGRAPHIC REPOSITORIES A-1

A.1.1 Air Force Historical Research Agency (USAFHRA) A-1

A.1.2 National Archives at College Park, Textual Records..... A-2

A.1.3 National Archives, Cartographic and Architectural Branch A-4

A.1.4 National Archives at College Park, Still Pictures Branch A-4

A.1.5 National Personnel Records Center Military Personnel Records
(NPRC, MPR)..... A-5

A.1.6 National Archives - New England Region A-5

A.1.7 The Trustees of the Reservations A-6

A.1.8 U.S. Army Chemical Materials Agency..... A-6

A.1.9 U.S. Army Soldier Biological Chemical Command (SBCCOM)..... A-6

A.2 AERIAL PHOTOGRAPHY REPOSITORIES A-7

A.2.1 National Archives at College Park, Cartographic & Architectural
Branch..... A-7

A.2.2 U.S. Geological Survey - EROS Data Center A-8

A.2.3 U.S. Department of Agriculture - Aerial Photography Field Office A-8

B REFERENCES

C ABBREVIATIONS, ACRONYMS AND BREVITY CODES

D GLOSSARY

E PRELIMINARY ASSESSMENT FORM

F ORDNANCE TECHNICAL DATA SHEETS

G TEXTUAL REFERENCES OF SOURCE DOCUMENTS

H STILL PHOTOGRAPH REFERENCES (Not Used)

I MAPS/DRAWINGS REFERENCES

J INTERVIEWS (Not Used)

K ABBREVIATED SITE SAFETY AND HEALTH PLAN (ASSHP) (Not Used)

APPENDICES (Continued)

- L PROPERTY VISIT REPORT
- M PROPERTY VISIT PHOTOGRAPHS
- N RISK ASSESSMENT CODE (RAC) WORKSHEET (Not Used)
- O TAG REVIEW FACT SHEET (Not Applicable)
- P RESPONSE TO COMMENTS (Final Report Only)
- Q REPORT DISTRIBUTION
- R REPORT PLATES
 - 1 **Cape Poge Little Neck Bomb Target Site** – [Vicinity Map](#)
 - 2 **Cape Poge Little Neck Bomb Target Site** – [1952 Aerial Photography](#)
 - 3 **Cape Poge Little Neck Bomb Target Site** – [1952 Aerial Photography –
Detail Little Neck](#)
 - 4 **Cape Poge Little Neck Bomb Target Site** – [1952 Aerial Photography –
Detail of Cape Poge Beach](#)
 - 5 **Cape Poge Little Neck Bomb Target Site** – [Military Munitions Response
Program Sites](#)

EXECUTIVE SUMMARY

The U.S. Army Corps of Engineers administers the Defense Environmental Restoration Program (DERP) Formerly Used Defense Site (FUDS) program. The St. Louis District of the Corps of Engineers (CEMVS) prepared this Preliminary Assessment (PA) for **Property No. D01MA0595, Cape Poge Little Neck Bomb Target Site**, in support of DERP-FUDS. St. Louis District completed this effort in coordination with the New England District and the U.S. Army Engineering and Support Center, Huntsville (USAESCH), the Environmental & Munitions Center of Expertise (EM-CX) and Design Center for Military Munitions (CEHNC-EMM).

This PA compiles information obtained through historical research at various archives and records holding facilities. The investigation was primarily a textual, cartographic and photographic research and analysis effort. It also makes use of property visits and interviews to gather information concerning the property. The research directed efforts towards determining presence of hazardous substance as a result of previous use, storage, and/or disposal. The research places emphasis on establishing the types, quantities and areas of Hazardous, Toxic and Radioactive Waste (HTRW), munitions and explosives of concern (MEC), chemical warfare (CW) activities. This process obtains information for use in developing recommendations for further action at the former Cape Poge Little Neck Bomb Target Site.

The **Cape Poge Little Neck Bomb Target Site** consists of approximately 141 acres on Chappaquiddick Island on the eastern shore of Martha's Vineyard in the town of Edgartown, Dukes County, Commonwealth of Massachusetts. The FUDS property includes two parcels of land, approximately 0.9 miles apart, and consisted of the L-5-V Little Neck Dive Bombing Target and the L-4-V Cape Poge Beach Calibration Range.

The L-5-V Little Neck Dive Bombing Target consisted of 82.89 leased acreage and the L-4-V Cape Poge Beach Calibration Range consisted 58.5 of leased acres. The U.S. Navy acquired the sites as bombing targets in connection with the First Naval District flight training program headquartered at Naval Air Station (NAS) Quonset Point, Rhode Island and Naval Auxiliary Air Station (NAAS) Martha's Vineyard, Massachusetts.

The 1st Naval District had L-5-V Little Neck Dive Bombing Target under lease terms starting 1 July 1944. The 1st Naval District used the site for day and night practice bombing for approximately two years before the Chief of Naval Operations approved the discontinuance of the Little Neck target as of 15 March 1947. Prior to that, the U.S. Navy had halted use of the target for months during 1946 due to complaints from the community.

On 18 May 1947, the U.S. Navy surrendered the Little Neck properties by Special Release, though the lessors requested restoration of the property including removal of all

naval improvements and munitions debris before signing. Two lessors executed releases by December 1947, but it is unclear when the third portion was released.

Based upon historical documents, Munitions and Explosives of Concern (MEC) include miniature practice bombs, 100 pound practice bombs and flares. Historical aerial imagery identified a possible target location at coordinates: 41° 24' 32.6" North, 70° 27' 19.3" West. Mk23 practice bombs were observed on the L-5-V Little Neck Dive Bombing Target property during the April 2008 property visit (see Appendix M-Property Visit Photographs). A MEC hazard exists on the L-5-B Little Neck Dive Bombing Target area of interest (AOI) and further inspection is recommended.

The 1st Naval District had L-4-V Cape Poge Beach Calibration Range under lease NOy(R)-36802 from 1 July 1944 through 31 March 1946, although actual use as a target appears to have occurred for only a year from November 1944, when the U.S. Navy got the lease signed, to October 1945 when the U.S. Navy recommended it for release. There does not appear to be any MEC associated with this area of interest (AOI), even though the stated purpose of the lease was a "bomb target site". Decontamination documents indicate its use as a Calibration Range and apparently only used for training of glide path angles with no munitions use. Aerial imagery interpretation found no clear signs of concentric rings associated with a bomb target, nor any clear signs of strafing target lines. There is no known or suspected MEC hazard suspected with the Calibration Range.

EOD Technology, Inc. completed a Time Critical Removal Action (TCRA) which was contracted by the U.S. Army Engineering and Support Center, Huntsville (USAESCH) to remove MEC, Material Potentially Presenting an Explosive Hazard (MPPEH), and explosive hazards at the former Cape Poge Little Neck Bomb Target Site per the recommendations in the TCRA Action Memorandum, dated 24 November 2008 (see Section 2.1.4 in this Preliminary Assessment). During the course of the surface/subsurface clearance operations at Cape Poge, the clearance team removed munitions debris and non-munitions debris. The surface/subsurface clearance team removed 127 munitions debris items and 1,916 pounds of non-munitions debris (see Appendix F-Grid Tracking Logs in the February 2010 TCRA report provided in the digital backup to this Preliminary Assessment).

A Remedial Investigation / Feasibility Study (RI/FS) is currently underway per the Formerly Used Defense Sites Management Information System (FUDSMIS) database.

Currently, both parcels of the FUDS property are part of the Cape Poge Wildlife Refuge.

ACKNOWLEDGEMENTS

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1 INTRODUCTION

1.1 AUTHORITY

Under the authority of the Defense Environmental Restoration Program (10 USC §§ 2701 et seq.), and its policies and procedures relating to Formerly Used Defense Sites (DERP-FUDS), including DoD Management Guidance for the DERP dated September 28, 2001, and Engineering Regulation 200-3-1, Environmental Quality, Formerly Used Defense Sites (FUDS) Program Policy, St. Louis District of the U.S. Army Corps of Engineers conducted a Preliminary Assessment (PA) at the Cape Poge Little Neck Bomb Target Site in Dukes County, MA. Completion of the PA supports several Federal laws and rules, Department of Defense (DoD) directives and standards, and Army regulations as outlined in the subsequent sub-paragraphs.

1.1.1 Laws

In 1980, Congress enacted the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as Superfund, to respond to threats posed by uncontrolled releases of hazardous substances into the environment. This statute, amended in 1986 by the Superfund Amendments & Reauthorization Act (SARA), establishes the process for undertaking remedial actions to mitigate these threats at abandoned sites containing hazardous substances, as well as reporting requirements for releases of hazardous substances. SARA expanded the provisions of CERCLA and added major new authorities. These amendments included the addition of Section 120, Federal Facilities and Section 121, Cleanup Standards. Section 120 requires departments and agencies of the federal government to comply with the provisions of CERCLA as amended by SARA. Section 121 establishes the procedures for the selection of remedial actions and the determination of the degree of remediation.

In 1986, Congress established the Defense Environmental Restoration Program (DERP) at 10 United State Code (USC) 2701 et seq. This program directs the Secretary of Defense to “carry out a program of environmental restoration at facilities under the jurisdiction of the Secretary.” Executive Order 12580 (EO 12580, January 23, 1987), Superfund Implementation, delegated to DoD the response authority for releases or threatened releases from any facility or vessel under the jurisdiction, custody, or control of DoD, subject to Sections 120 and 121 of SARA. In March 1990, the U.S. Environmental Protection Agency (USEPA) issued a revised National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Under 40 Code of Federal Regulations (CFR) 300.120, DoD is identified as the removal response authority for incidents involving DoD military weapons and munitions or weapons and munitions under the jurisdiction, custody or control of DoD.

1.1.2 Regulations and Guidance

Since the beginning of DERP, the U.S. Army Corps of Engineers has acted as the agency responsible for environmental restoration at FUDS. The U.S. Army Corps of Engineers, St. Louis District, began conducting historical research and analysis for environmental site characterization in 1992. This research and analysis was originally captured in Archive Search Reports (ASRs) at FUDS, active DoD installations, and installation transitions under Base Realignment and Closure (BRAC) recommendations. Engineering Regulation 200-3-1, Environmental Quality, Formerly Used Defense Sites (FUDS) Program Policy dated 10 May 2004, dictates requirements of the CERCLA process as outlined in the NCP. As such, previous historical records research and analysis reports are incorporated into Preliminary Assessments (PA), which now include pathway and environmental hazard assessment.¹ The U.S. Army Corps of Engineers, St. Louis District, prepared this PA pursuant to ER 200-3-1 using USACE Formerly Used Defense Sites (FUDS) Program Guidance for Performing Preliminary Assessments under FUDS, September 2005 as a guide.

1.2 SUBJECT

The **Cape Poge Little Neck Bomb Target Site** consists of approximately 141 acres on Chappaquiddick Island on the eastern shore of Martha's Vineyard in the town of Edgartown, Dukes County, Commonwealth of Massachusetts. The FUDS includes two parcels of land, approximately 0.9 miles apart: the L-5-V Little Neck Dive Bombing Target and the L-4-V Cape Poge Beach Calibration Range.

The L-5-V Little Neck Dive Bombing Target consisted of 82.89 leased acreage and the L-4-V Cape Poge Beach Calibration Range consisted 58.5 of leased acres. The U.S. Navy acquired the sites as bombing targets in connection with the First Naval District flight training program headquartered at Naval Air Station (NAS) Quonset Point, Rhode Island and Naval Auxiliary Air Station (NAAS) Martha's Vineyard, Massachusetts.

The 1st Naval District had L-5-V Little Neck Dive Bombing Target under lease terms starting 1 July 1944. The 1st Naval District used the site for day and night practice bombing for approximately two years before the Chief of Naval Operations approved the discontinuance of the Little Neck target as of 15 March 1947. Prior to that, the U.S. Navy had halted use of the target in 1946 for months due to complaints from the community. On 18 May 1947, the U.S. Navy surrendered the Little Neck properties by Special Release, though the lessors requested restoration of the property including removal of all naval improvements and munition debris before signing. Two lessors executed releases by December 1947 but it is unclear when the third one did. Based upon historical documents, Munitions and Explosives of Concern (MEC) include miniature practice bombs, 100 pound practice bombs, and flares. Military practice ordnance, including Mk23 practice bombs, has been observed on the property.

The U.S. Navy had 1st Naval District L-4-V Cape Poge Beach Calibration Range under lease NOy(R)-36802 from 1 July 1944 through 31 March 1946, although actual use as a target appears to have occurred for only a year from November 1944, when the U.S. Navy got the lease signed, to October 1945 when the U.S. Navy recommended it for release. There does not appear to be any MEC associated with this site, even though the stated purpose of the lease was a “bomb target site”. Decontamination documents indicate its use as a Calibration Range and apparently only used for training of glide path angles with no munitions use, including strafing with small arms.

Currently, both parcels of the FUDS property are part of the Cape Poge Wildlife Refuge. Plates 1 and 2 in Appendix R-Report Plates show the general location of the property.

1.3 PURPOSE

Compiled in this PA is information obtained through historical research at various archives and records holding facilities. The investigation was primarily a textual, cartographic and photographic research and analysis effort. It also makes use of interviews with individuals associated with the property and its operations, and a visual property inspection. No sampling or quantitative field assessment techniques were conducted to gather data. Research efforts were directed toward determining the presence of hazardous substances as a result of previous DoD use, storage, and/or disposal. Emphasis was placed on establishing the types, quantities and areas of hazardous, toxic and radioactive waste (HTRW), munitions and explosives of concern (MEC), and chemical warfare material (CWM) activities. Information obtained during the archives search process was used to evaluate the potential risk of MEC and/or CWM presence. This information was also used to perform a pathway and environmental hazard assessment in order to identify potential migration pathways, potential environmental hazards, and potential hazards that may warrant further action at the Cape Poge Little Neck Bomb Target Site.

1.4 SCOPE

This PA presents and discusses the findings of historical research and other tasks directed toward identifying the potential for HTRW, MEC, and/or CWM constituents remaining on the Cape Poge Little Neck Bomb Target Site. The DERP-FUDS property number is D01MA0595. This PA includes the following:

- A review of related property investigations
- Description and characteristics of the immediate surrounding area, including real estate information, past and present
- A brief history of Cape Poge Little Neck Bomb Target Site
- Description of historic activities related to known or potential release of Hazardous, Toxic or Radiological Wastes (HTRW), use of munitions, or chemical warfare material at the property

- A map and aerial photography analysis of the property
- Findings of the visual property inspection
- Identification of potential releases of HTRW, munitions or chemical warfare material related to former use by DoD
- Evaluation of pathway receptors and potential transport/migration pathways to support further hazard assessment
- Identify recommendations for further action where known or suspected release is identified.

These factors represent the basis for the evaluation of potential HTRW, MEC and RCWM contamination and associated risks at Cape Poge Little Neck Bomb Target Site.

A description of the sources researched and a detailed listing of records reviewed are presented in Appendix A. A full bibliography of the textual references is contained in Appendix B. Hard copies of the textual references are contained in Appendix G.

2 PREVIOUS INVESTIGATIONS

2.1 CORPS OF ENGINEERS INVESTIGATIONS

2.1.1 Inventory Project Report (INPR), Cape Poge Little Neck Bomb Target Site, Dukes County/Chappaquiddick Island, Edgartown, Massachusetts, FUDS Property No. D01MA0595, dated July 2008.³

CENAD approved the Cape Poge Little Neck Bomb Target Site MMRP project on 29 July 2008. The Findings and Determination of Eligibility (FDE) for the Cape Poge Little Neck Bomb Target Site established the eligibility of 141 acres as a FUDS.

2.1.2 Archives Search Report (ASR) for the Former Tisbury Great Pond, Martha's Vineyard, Massachusetts, FUDS Property No. D01MA045301, dated 16 November 1999.⁴

This 1999 ASR provided information such as maps of the Martha's Vineyard area (including the "Bomb Target Site" listed on L-4 of that report (see Appendix I-5 of this PA)), confirmation of Naval activity in the area, and a site description of a property which lies in the same county as the subject FUDS property

2.1.3 Moving Target Machine Gun Range, FUDS Property No. D01MA0486.

FUDS Property No. D01MA0486 is located approximately three miles southwest of the subject Cape Poge Little Neck Target Bomb Site on the southern shores of Martha's Vineyard. During World War II, the first Naval District established the South Beach Gunnery Training Facility, as a ground firing range for flexible gunnery practice. This type of range is sometimes referred to as a "jeep" range based on the vehicle that moved the targets. Subsequently, the U.S. Navy established two rocket targets on that site, renaming it Katama Rocket Projectile Range but also referencing it as targets "LR-1-V" and "LR-2-V".

Given the proximity, munitions issues related to this FUDS are sometimes confused with the subject Cape Poge Little Neck Target Bomb Site.

A Time Critical Removal Action (TCRA) was completed by EOD Technologies, Inc. (EODT) on the Moving Target Machine Gun Range at South Beach (as well as Cape Poge Little Neck Bomb Target Site) property, dated February 2010. During the course of clearance operations on the Moving Target Machine Gun Range, EODT performed five demolition events. Of the 617 munitions debris items located at the South Beach site, 42 items were perforated and found to be inert.⁵

2.1.4 Time Critical Removal Action Memorandum for **Cape Poge Little Neck Bomb Target Site**, Chappaquiddick Island, Massachusetts and **Former Moving Target Machine Gun Range at South Beach**, Martha's Vineyard, Massachusetts, prepared by the U.S. Army Engineer District, New England, dated 24 November 2008.⁶

The U.S. Engineer District, New England, completed the Action Memorandum, dated 24 November 2008. The document stated a determination was made that a Time Critical Removal Action (TCRA) is required for the Cape Poge Little Neck Bomb Target Site (as well as the former Moving Target Machine Gun Range at South Beach). The Action Memorandum stated munitions items found at Cape Poge Little Neck Bomb Target included the three-pound practice bomb, and the AN-MK 23, with a spotting charge (see Figure 2.1.4). The property is currently part of the Cape Poge Wildlife Refuge and the public has been observed digging for clams using their bare hands and/or hand tools such as pitchforks within the mudflats of the former bombing target site. The public is also known to remove the practice bombs from the site and take them home as souvenirs.



Figure 2.1.4 Typical Mk 23 Miniature Practice Bomb Discovered on the Cape Poge Little Neck Target Bomb Site

Proposed actions included recommendations for removal at surface to 4 inches below the surface along beaches as well as various areas of the property, subsurface removal up to 18 inches in depth in the mudflats, creek beds, and ponds where clamming using bare hands and/or tools were taking place, providing unexploded ordnance (UXO) support for clearing items discovered, and placing large warning signs at public and vehicle access points.

- 2.1.5 Final Site Specific, Final Report for the Time Critical Removal Action (TCRA) at **Former Cape Poge Little Neck Bomb Target Site**, Chappaquiddick Island, Dukes County, Massachusetts, and **Former Moving Target Machine Gun Range at South Beach**, Martha's Vineyard, Edgartown, Massachusetts, prepared by EOD Technology, Inc. (EODT), dated February 2010.⁷

EOD Technology, Inc. was contracted by the U.S. Army Engineering and Support Center, Huntsville (USAESCH) to remove Munitions and Explosives of Concern (MEC), Material Potentially Presenting an Explosive Hazard (MPPEH), and explosive hazards at the former Cape Poge Little Neck Bomb Target Site (Project No. D01MA059501) at Chappaquiddick and former Moving Target Machine Gun Range (Property No. D01MA0486) at South Beach, Martha's Vineyard per the recommendations in the Time Critical Removal Action (TCRA) Action Memorandum, dated 24 November 2008. During the course of the surface/subsurface clearance operations at Cape Poge, the surface/subsurface clearance team removed munitions debris and non-munitions debris. The surface/subsurface clearance team removed 127 munitions debris items and 1,916 pounds of non-munitions debris.

- 2.1.6 Final, Revision 3, Remedial Investigation (RI) Work Plan, **Former Cape Poge Little Neck Bomb Target MRS**, **Former Moving Target Machine Gun Range at South Beach MRS & Tisbury Great Pond MRS**, prepared by the U.S. Army Corps of Engineers, New England District, dated 30 September 2011.⁸

The purpose of the 2011 RI Work Plan was to describe the planning and field activities required to adequately determine the nature and extent of MEC and munitions debris in order to develop future response actions. The objective of the RI process was to gather sufficient data to support an informed risk management decision regarding which remedy appears to be most appropriate. The RI Work Plan lists a summary of the February 2010 TCRA results on Figure 1-5 (locations of munitions debris items found) as well as a conceptual site model in Table 1-1 (pages 1-22 through 1-24).

UXB International, Inc. (UXB) has been directed by the U.S. Army Engineering and Support Center, Huntsville (USAESCH) to perform a Remedial Investigation/Feasibility Study (RI/FS) at the Former Cape Poge Little Neck Bomb Target.

2.2 OTHER INVESTIGATIONS

The investigation team did not locate any additional environmental investigations or reports concerning Cape Poge Little Neck Bomb Target Site dealing with MEC.

3 PROPERTY DESCRIPTION, ACREAGE AND LAND USE

3.1 LOCATION

The **Cape Poge Little Neck Bomb Target Site** consists of approximately 141 acres on Chappaquiddick Island on the eastern shore of Martha’s Vineyard in the town of Edgartown, Dukes County, Commonwealth of Massachusetts. The site is in the 10th Congressional District of Massachusetts and in zip code of 02539.

The Cape Poge Little Neck Bomb Target Site includes two parcels of land: L-5-V Little Neck Dive Bombing Target consisting of 82.89 acres at approximately Latitude N41° 24.5’ Longitude W70° 27.3’ and L-4-V Cape Poge Beach Calibration Range consisting of 58.5 acres at approximately Latitude N41° 22.8’ and Longitude W70° 27’.¹⁴ The two parcels are approximately 0.9 miles apart, separated by a narrow neck of land. Both properties lie within USEPA Region 1 and Massachusetts Department of Environmental Protection (MassDEP) Southeast Region. Cape Poge Little Neck Bomb Target Site can be reached by traveling east across Martha’s Vineyard on Chappaquiddick Road, continuing east on Dyke Road crossing Dyke Bridge, then traveling north on Lighthouse Road.

3.2 FUDS ELIGIBILITY PROPERTY

3.2.1 Confirmed FUDS

The Cape Poge Little Neck Bomb Target Site consists of a total of 141 acres of real estate. Four leases were acquired by the U.S. Navy for the purpose of establishing bombing targets in connection with the First Naval District flight training program at NAS Quonset Point, Rhode Island and Naval Auxiliary Air Station (NAAS) Martha's Vineyard, Massachusetts.

U.S. Naval interest in establishing bombing targets on Cape Poge Beach and Little Neck began during March 1944.¹⁵ By the end of November 1944, the U.S. Navy formally executed a lease for the Cape Poge Beach parcel and leases for two of three parcels for the Little Neck site with a retroactive start date of 1 July 1944.¹⁶ By 28 February 1945, the U.S. Navy formally executed the lease for the last Little Neck parcel with a similar retroactive start date of 1 July 1944. The purpose stated in all the leases was for “bomb target site”.¹⁷ The leased acreage consisted of the following four leases:

- NOy(R) 36842 – 26.8 acres with Alice Rankin Lee, et al.¹⁸ (Little Neck)
- NOy(R) 36801 – 42.59 acres with Doris Huxford Chouinard¹⁹ (Little Neck)
- NOy(R) 36819 – 13.5 acres with Luther M. Sibley²⁰ (Little Neck)
- NOy(R) 36802 – 58.5 acres with Doris Huxford Chouinard²¹ (Cape Poge)

Three leases for L-5-V Little Neck Dive Bombing Target were renewed for one-year terms through 30 June 1947, and one lease for L-4-V Cape Poge Beach Calibration Range was renewed for one-year terms through 31 March 1946.

After the end of WWII, the Commander of the First Naval District recommended releasing the L-4-V Cape Poge Beach Calibration Range by 1 October 1945 along with a number of other targets within the district but not the Little Neck site. On 31 March 1946, the U.S. Navy surrendered the Cape Poge Beach property (NOy(R)-36802) by Special Release.,^{22,23}

On 1 April 1947, the Chief of Naval Operations approved the discontinuance of the Little Neck target as of 15 March. On 18 May 1947, the U.S. Navy surrendered the Little Neck properties (NOy(R)-36801, 36819 & 36842) by Special Release. The lessor requested restoration of the property including removal of all Naval improvements together with the shattered water filled bomb shell cases to be salvaged as scrap metal in June 1947. By 5 December 1947, two lessors (NOy(R)-36819 & 36842) executed releases following removal of debris and improvements, however, the third lease (NOy(R)-36801) had all the debris and bomb cases collected and stacked on that property and the Lessor would not execute the release until the material had been removed from the island. With the inclement weather, the U.S. Navy hoped to postpone the effort until spring 1948.^{24, 25, 26, 27, 28, 29} It is unclear when or if the U.S. Navy completed this effort as no subsequent documents regarding the issue are known to exist.

By 1959, most of Cape Poge had been donated to The Trustees of Reservations by Charles S. Bird and Oliver D. Filley. Christopher P. Kennedy is the Islands Regional Director for The Trustees of Reservations. The Cape Poge Little Neck Bomb Target Site is part of the Cape Poge Wildlife Refuge.

Based on a review of available real estate documents, the War Department released Cape Poge Little Neck Bomb Target Site with no restrictive covenants or land use restrictions. Currently, both sites are part of the Cape Poge Wildlife Refuge.

It is worth noting that the actual acreage value may be higher than stated in historical documents. The boundary of the Cape Poge Beach parcel, lease number NOy(R) – 36802, between the United States of America and Doris Huxford Chouninard is described in detail as follows:

“beginning at a point in the high water mark of the Atlantic Ocean at the Northeast corner of land belonging to Edmund F. Leland, Jr., et al, and known as the “Middle Share of the Cape Poge Beach and Meadows”; thence Northerly by the High water mark of the Atlantic Ocean, 4400 feet, more or less; thence due West through land now or formerly of Joseph Huxford, et al, 1,000 feet, more or less, to the high water mark of Cape Poge Bay; thence in a general Southerly direction, by the high water mark of Cape Poge Bay and the Canal or Lagoon, by

the dyke, and by the high water mark of Poucha Pond, 5,160 feet, more or less, to the Northwesterly corner of the “Middle Share”, before mentioned; thence Easterly by said “Middle Share”, 640 feet more or less, to the beginning. The above described parcel of land is claimed wholly or in part by Mrs. Doris Huxford Chouinard, and is the Southern part of the “North Share of the Cape Poge Beach and Meadows”, formerly belonging to Joseph Huxford, one undivided half part, and Francis Smith, one undivided half part.

Meaning and intending to include any and all land appurtenant thereto lying below high water mark, together with all riparian rights, easements and/or ways.

Containing 58.5 acres of land, more or less.

The foregoing parcel of land is more fully shown as Parcel “D” on Naval Air Station, Quonset Point, Rhode Island Public Works Drawing No. 2314 entitled “Cape Poge Beach, Chappaquiddick Island, Martha’s Vineyard Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts.

Subject to previously acquired rights of the Government to operate a telephone line and have ingress and egress over the above described target site.”³⁰

The stated 58.5 acre value appears to be about half the actual acreage represented by this description. This assessment was confirmed by measuring the area within the described polygon using various mapping software products. This does not appear to affect the FUDS eligibility of the property as the entire parcel is depicted and only the stated acreage value is low.

3.2.2 Additional Areas of Use or Impact

Based on available information (e.g., historical documents, aerial photos, etc.), the investigation team did not identify any additional areas of undocumented military ownership associated with the Cape Poge Little Neck Bomb Target Site. When range safety fans or MEC potential range cells are drawn for this property, they may extend beyond the acquired FUDS boundaries. The investigation team did not find direct evidence of MEC hazards on the real estate contained within these fans beyond the FUDS boundary.

3.2.3 Potential FUDS

The investigation team identified additional areas of potential or undocumented military ownership or land use associated with the First Naval District’s activities on Martha’s Vineyard including Gay Head and Squibnocket Pond. Table 3.2.3 below depicts target areas used on Martha’s Vineyard which have not been identified by the FUDS program³¹:

| Table 3.2.3 Target Areas First Naval District, Martha's Vineyard Area | | | | | |
|--|--------------------------|----------------------------|------------------------|-------------------------------|-----------------------------|
| Target | Location | Geographic Location | Established Use | Cancellation Requested | Type of Missile |
| WX-6-V | N41° 25.5' W70° 50.7' | Gay Head | Mast Head | In Use | 100# Water Filled Miniature |
| W-1-V | N41° 19.1' W70° 47.2' | Squibnocket Pond | Dive | In Use | Miniatures |
| W-2-V | N41° 18.9' W70° 47.5' | Squibnocket Pond | Anti-Sub | In Use | Miniatures |

The “W” stands for water target; the “X” stands for shipwreck target and the “V” indicates targets associated with [NAAS Martha’s] Vineyard.

Although listed as a water targets, the two Squibnocket Pond sites appear to be FUDS eligible due to the fact that are on a pond within the confines of Martha’s Vineyard island. The Gay Head Target used the sunken hull of the Herman Winters off of Gay Head but the specific location is undetermined. It may be ineligible as an offshore ordnance property where military munitions are more than 100 yards seaward of the mean high-tide point are specifically excluded from eligibility for the FUDS program (Engineer Regulation No. 200-3-1 Formerly Used Defense Sites (FUDS) Program Policy, 10 May 2004).

3.3 LAND USE AND OWNERSHIP HISTORY

3.3.1 Prior Land Use

Prior to the U.S. Navy’s operation of Cape Poge Little Neck Bomb Target Site, the predominate land use was for agricultural purposes and as a summer resort.³² The investigative team uncovered no permanent structures erected or maintained by DoD while the property was under DoD jurisdiction.

3.3.2 Current Land Use and Ownership

Following the Government lease terminations in 1947, the properties returned to their pre-lease uses of agriculture and tourism (summer resorts). By 1959, most of Cape Poge had been donated to The Trustees of Reservations (TTOR) by Charles S. Bird and Oliver D. Filley. Christopher P. Kennedy is the Islands Regional Director for TTOR.³³

The Cape Poge Little Neck Bomb Target Site is part of the Cape Poge Wildlife Refuge. Today, the properties continue to be mostly undeveloped and the public has limited access to the Cape Poge Little Neck Bomb Target Site. Limited access is defined as some access to the former range, but that access does not involve any digging. Limited

clamming, however, is allowed. Common property activities include, but are not limited to, sunbathing, swimming, 4-wheel driving, picnicking, hiking, fishing, clamming, crabbing and visiting the lighthouse. It is anticipated that the future land use will remain the same.³⁴ Figure 3.3.2 below depicts the Land Usage/Ownership of the Cape Poge Little Neck Bomb Target Site known at the time of the PA.



CAPE POGE WILDLIFE REFUGE

(516 ACRES)

Dike Road ▪ Chappaquiddick Island, Martha's Vineyard

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www.thetrustees.org

A PROPERTY OF THE TRUSTEES OF RESERVATIONS



Figure 3.3.2 – Cape Poge Wildlife Refuge

TTOR is a nonprofit conservation organization that preserves, for public use and enjoyment, properties of exceptional scenic, historic, and ecological value in Massachusetts. As of 2004, The Trustees have protected over 23,000 acres on 94 reservations that are all open to the public. On Chappaquiddick Island, The Trustees have protected three reservations: Cape Poge Wildlife Refuge (516 acres), Wasque Reservation (200 acres), and Mytoi (14 acres) and manages another 108 acres (Leland Beach) which is owned by the Commonwealth of Massachusetts. These properties comprise over 65% of Chappaquiddick’s protected open space.

3.3.3 Condition of Facilities Constructed for the Military

The investigation team did not identify any buildings, structures or appurtenances remaining on the Cape Poge Little Neck Bomb Target Site during the 2008 property visit (see Appendix L).

3.3.4 Population Demographics

General county and state demographics of the property were obtained from the U.S. Census Bureau and presented below:³⁵

| TABLE 3.3.4 Population Demographics | | |
|---|-------------------------|----------------------|
| People Quickfacts | Dukes County | Massachusetts |
| Population, 2006 estimate | 15,515 | 6,437,193 |
| Population, percent change, April 1, 2000 to July 1, 2006 | 3.5% | 1.4% |
| Population, 2000 | 14,987 | 6,349,097 |
| Persons under 5 years old, percent, 2006 | 4.9% | 6.0% |
| Persons under 18 years old, percent, 2006 | 19.1% | 22.5% |
| Persons 65 years old and over, percent, 2006 | 14.7% | 13.3% |
| Female persons, percent, 2006 | 51.0% | 51.6% |
| White persons, percent, 2006 (a) | 92.3% | 86.5% |
| Black persons, percent, 2006 (a) | 2.6% | 6.9% |
| American Indian and Alaska Native persons, percent, 2006 (a) | 2.2% | 0.3% |
| Asian persons, percent, 2006 (a) | 0.8% | 4.9% |
| Native Hawaiian and Other Pacific Islander, percent, 2006 (a) | 0.1% | 0.1% |
| Persons reporting two or more races, percent, 2006 | 1.9% | 1.3% |
| Persons of Hispanic or Latino origin, percent, 2006 (b) | 1.5% | 7.9% |
| White persons not Hispanic, percent, 2006 | 91.1% | 80.0% |
| Living in same house in 1995 and 2000, pct 5 yrs old & over | 61.2% | 58.5% |

| TABLE 3.3.4 Population Demographics | | |
|---|-------------------------|----------------------|
| People Quickfacts (Continued) | Dukes County | Massachusetts |
| Foreign born persons, percent, 2000 | 6.3% | 12.2% |
| Language other than English spoken at home, pct age 5+, 2000 | 8.2% | 18.7% |
| High school graduates, percent of persons age 25+, 2000 | 90.4% | 84.8% |
| Bachelor's degree or higher, pct of persons age 25+, 2000 | 38.4% | 33.2% |
| Persons with a disability, age 5+, 2000 | 2,528 | 1,084,746 |
| Mean travel time to work (minutes), workers age 16+, 2000 | 16.5 | 27 |
| Housing units, 2006 | 16,105 | 2,708,986 |
| Homeownership rate, 2000 | 71.3% | 61.7% |
| Housing units in multi-unit structures, percent, 2000 | 6.3% | 42.7% |
| Median value of owner-occupied housing units, 2000 | \$304,000 | \$185,700 |
| Households, 2000 | 6,421 | 2,443,580 |
| Persons per household, 2000 | 2.3 | 2.51 |
| Median household income, 2004 | \$51,490 | \$53,657 |
| Per capita money income, 1999 | \$26,472 | \$25,952 |
| Persons below poverty, percent, 2004 | 6.2% | 9.9% |
| Business Quickfacts | Dukes County | Massachusetts |
| Private nonfarm establishments, 2005 | 1,027 | 175,291 |
| Private nonfarm employment, 2005 | 4,974 | 2,996,347 |
| Private nonfarm employment, percent change 2000-2005 | -0.8% | -2.9% |
| Nonemployer establishments, 2005 | 3,413 | 471,257 |
| Total number of firms, 2002 | 4,229 | 563,539 |
| Black-owned firms, percent, 2002 | F | 2.3% |
| American Indian and Alaska Native owned firms, percent, 2002 | F | 0.4% |
| Asian-owned firms, percent, 2002 | F | 3.2% |
| Native Hawaiian and Other Pacific Islander owned firms, percent, 2002 | F | S |
| Hispanic-owned firms, percent, 2002 | F | 2.8% |
| Women-owned firms, percent, 2002 | 34.3% | 28.7% |
| Manufacturers shipments, 2002 (\$1,000) | NA | 77,996,586 |
| Wholesale trade sales, 2002 (\$1,000) | D | 127,129,789 |
| Retail sales, 2002 (\$1,000) | 288,858 | 73,903,837 |
| Retail sales per capita, 2002 | \$18,736 | \$11,525 |
| Accommodation and foodservices sales, 2002 (\$1,000) | 87,295 | 11,789,582 |

| TABLE 3.3.4 Population Demographics | | |
|--|-------------------------|----------------------|
| Business Quickfacts (Continued) | Dukes County | Massachusetts |
| Building permits, 2006 | 184 | 19,580 |
| Federal spending, 2004 (\$1,000) | 75,736 | 53,120,445 |
| Geography Quickfacts | Dukes County | Massachusetts |
| Land area, 2000 (square miles) | 103.78 | 7,840.02 |
| Persons per square mile, 2000 | 144.1 | 809.8 |
| FIPS Code | 7 | 25 |
| Metropolitan or Micropolitan Statistical Area | None | |

(a) Includes persons reporting only one race.

(b) Hispanics may be of any race, so also are included in applicable race categories.

D: Suppressed to avoid disclosure of confidential information

F: Fewer than 100 firms

NA: Not available

S: Suppressed; does not meet publication standards

3.4 PHYSICAL PROPERTY CHARACTERISTICS

3.4.1 Climatic Data

Provided in Table 3.4.1 is a summary of the climatological data for the Cape Poge Little Neck Bomb Target Site.³⁶

| TABLE 3.4.1 Climatological Data for Martha's Vineyard, Massachusetts | | | | | | |
|---|-----------------------------|-------------------------|-------------|-----------------------|------------------------|-----------------------------------|
| Month | Temperature (°F) | | | | | Precipitation (inches) |
| | Mean Minimum | Mean Maximum | Mean | Record Low | Record High | Mean |
| January | 22° | 39° | 31° | -6° (2004) | 65° (1967) | 4.09 in. |
| February | 23° | 40° | 31° | -9° (1961) | 64° (1976) | 3.29 in. |
| March | 30° | 46° | 38° | -7° (1950) | 79° (1998) | 4.48 in. |
| April | 38° | 54° | 46° | 12° (1954) | 90° (1990) | 4.25 in. |
| May | 47° | 64° | 56° | 28° (1992) | 90° (1996) | 3.55 in. |
| June | 56° | 73° | 65° | 38° (1958) | 93° (1991) | 3.51 in. |
| July | 62° | 79° | 70° | 45° (1988) | 95° (2002) | 3.10 in. |
| August | 62° | 78° | 70° | 41° (1986) | 99° (1948) | 3.96 in. |
| September | 56° | 72° | 64° | 34° (1991) | 91° (1953) | 3.48 in. |
| October | 45° | 62° | 54° | 0° (1953) | 88° (1959) | 3.95 in. |

| TABLE 3.4.1 (Continued) | | | | | | |
|---|-----------------------------|-------------------------|-------------|-----------------------|------------------------|-----------------------------------|
| Climatological Data for Martha's Vineyard, Massachusetts | | | | | | |
| Month | Temperature (°F) | | | | | Precipitation (inches) |
| | Mean Minimum | Mean Maximum | Mean | Record Low | Record High | Mean |
| November | 37° | 53° | 45° | 14° (1989) | 74° (1990) | 4.12 in. |
| December | 28° | 44° | 36° | -5° (1950) | 67° (1998) | 4.28 in. |

- The average warmest month is July.
- The highest recorded temperature was 99°F in 1948.
- On average, the coolest month is January.
- The lowest recorded temperature was -9°F in 1961.
- The maximum average precipitation occurs in March.

Martha's Vineyard has a temperate marine climate. Although Martha's Vineyard's weather is typically more moderate than inland locations, there have been occasions where the island has dealt with extreme weather situations such as blizzards and hurricanes. Because of the influence of the Atlantic Ocean, temperatures are typically a few degrees cooler in the summer and a few degrees warmer in the winter. A common misconception is that the climate is influenced largely by the warm Gulf Stream current. That current, however, turns eastward off the coast of Virginia and the waters off the island are influenced more by the cold Canadian Labrador Current. Martha's Vineyard's climate is also notorious for a delayed spring season, being surrounded by an ocean that is still cold from the winter; however, it is also known for an exceptionally mild fall season (Indian summer), thanks to the ocean remaining warm from the summer. The highest temperature ever recorded on Martha's Vineyard was 99 °F in 1948, and the lowest temperature ever was -9°F in 1961.

Precipitation on Martha's Vineyard and the islands of Cape Cod and Nantucket is the lowest in New England region, averaging slightly less than 40 inches a year (most parts of New England average 42-46 inches). This is due to storm systems that move across western areas, building up in mountainous regions, and dissipating before reaching the coast where the land has leveled out. The region does not experience a greater number of sunny days; however, as the number of cloudy days is the same as inland locales, in addition to increased fog.³⁷

3.4.2 Topography

The topography of Little Neck can generally be described as a relatively flat maritime shrub thicket, salt marsh, and maritime beach. Salt marshes are composed of Salt Marsh

Cordgrass, Salt Meadow Cordgrass, Black Grass, Salt Marsh Fleabane, and glassworts, with Marsh Elder and Groundsel Tree along their fringes.

The topography of Cape Poge can generally be described as relatively flat dunes with cedar, maritime interdunal swale, maritime dunes, and maritime beach. Cape Poge contains maritime Eastern Red Cedar woodland thickets of Blackberry, Bristly Dewberry, Black Huckleberry, Greenbrier, and Groundsel Tree. Interdunal swales are found in small depressions in the Cedars. The swales are ephemeral and form when winds scour sand until the water table is reached.³⁸

3.4.3 Regional Geology and Physiology

The Cape Poge Little Neck Bomb Target Site and the island of Martha's Vineyard are relicts of the last ice age and the warming trends that followed. Repeated glaciations scraped soil and rock from the mainland of New England. Eighteen thousand years ago, the glaciers reached their southernmost extent and began to melt and retreat, depositing the rock and soil, once trapped within the ice, as terminal moraines. These terminal moraines can be found on Martha's Vineyard, and Chappaquiddick.³⁹

The geological deposits that make up the Cape Poge Little Neck Bomb Target Site consist of recent beach and marsh sediments, glacial deposits, interglacial deposits, and glacially deformed ancient coastal plain sediments. The county consists mostly of deposits from the last glacial stage but in places consists of glacial or interglacial deposits as much as 300,000 years old. The Quaternary section and coastal plain deposits overlie solid bedrock and range from 500 feet thick on the north shore of Martha's Vineyard to 900 feet thick on the south shore.

On Martha's Vineyard the glacial deposits form several distinctive landforms representing accumulations from several different glacial advances. The Squibnocket moraine is made up of the oldest deposit, a compact, pink and purple-gray till. This moraine is covered by a Wisconsin-age veneer consisting of stony till and outwash that also covers the Gay Head moraine, which forms a ridge and valley topography extending from Gay Head to Chilmark and West Tisbury. The Gay Head moraine consists of folded and faulted older Pleistocene Cretaceous and Tertiary Age. The common soils in this moraine are the Chilmark, Nantucket, and Eastchop soils.⁴⁰

3.4.4 Regional Soils

The soils of the Cape Poge Little Neck Bomb Target Site can be characterized as Udipsamments-Pawcatuck, 0 to 1 percent slopes; or in simpler terms, undulating or rolling, very deep, excessively drained, soils composed of windblown deposits; nearly level beaches; and nearly level, very deep, very poorly drained mucky peat formed in organic deposits; along coastal shorelines. The area north of Little Neck (north of Shear Pen Pond) can best be characterized as Carver loamy coarse sand, 3 to 8 percent slopes;

or in simpler terms, nearly level, very deep, excessively drained, sandy soils formed in glacial outwash; on outwash plains and moraines. Provided in Figure 3.4.4 below is a depiction of the Cape Poge Little Neck Bomb Target Site soils.⁴¹

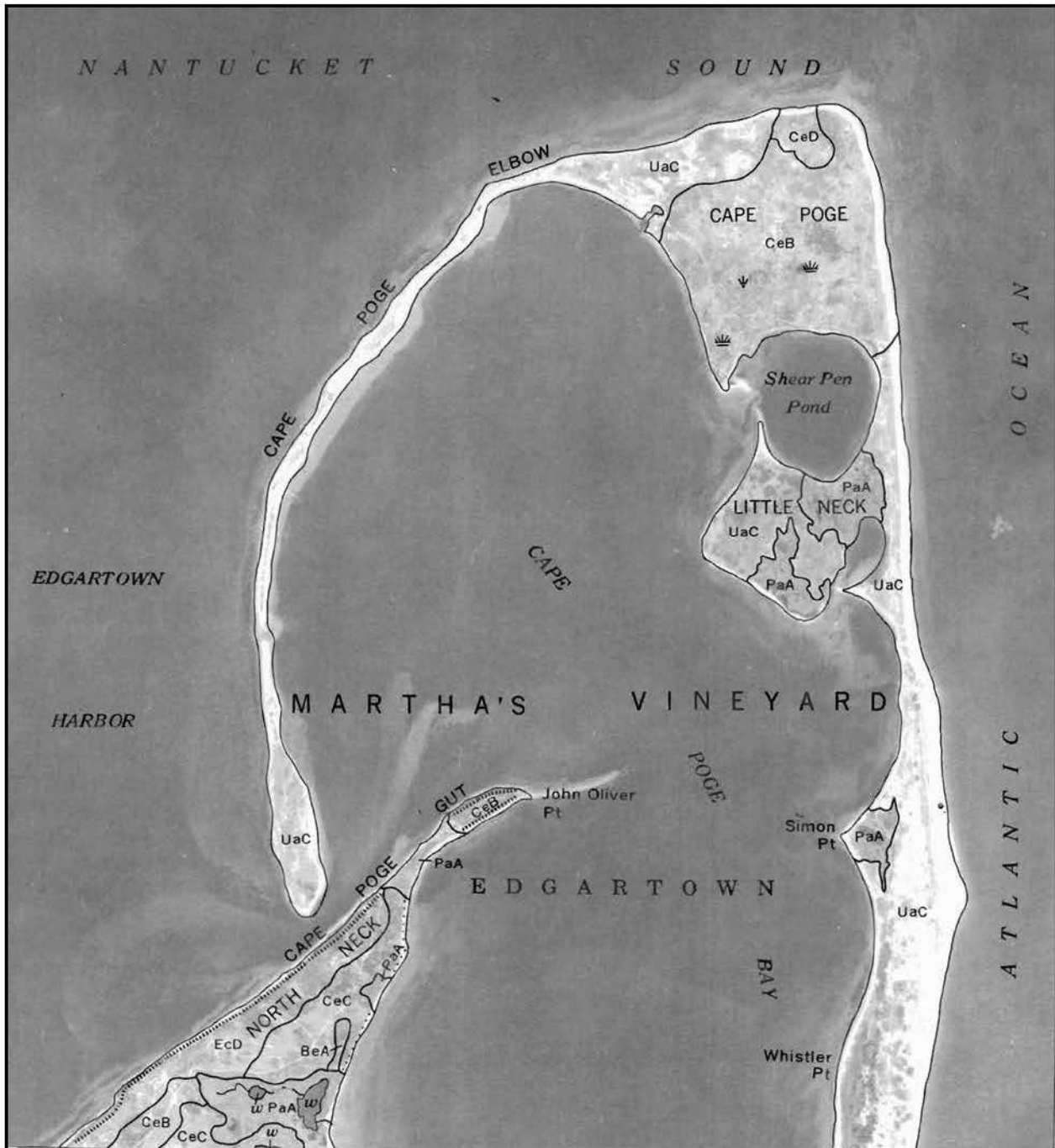


Figure 3.4.4 – Cape Poge Little Neck Bomb Target Site Soils

UaC – Udipsamments, rolling

These soils are very deep and excessively drained. They are on sand dunes along the coast. Slopes are complex and generally range from 3 to 15 percent. The areas generally are long and narrow or are irregular in shape, and they range from 4 to 500 acres.

Udipsamments are pale brown sand to a depth of 60 inches or more. Included with these soils in mapping are small areas of Matunuck and Pawcatuck soils and small, narrow areas of Beaches. Also included are areas of recently deposited sand on which there is little or no vegetation. Some areas in depressions have a seasonal high water table near the surface.

The permeability of these Udipsamments is rapid or very rapid. Available water capacity is very low. The depth to the seasonal high water table is more than 6 feet.

Most areas of these soils have a cover of grasses and shrubs. Most of the vegetation is fragile and easily destroyed by foot or vehicular traffic.

Droughtiness and low fertility make this soil poorly suited to farming or woodland. Trees are difficult to establish and grow slowly. The common plants on these soils are beachgrass, poison ivy, beach plum, and bayberry.⁴²

PaA – Pawcatuck and Matunuck mucky peats, 0 to 1 percent slopes

Nearly level Pawcatuck soils border saltwater and brackish water areas that are protected from the direct force of ocean waves. This unit consists of very deep, level, very poorly drained soils in tidal areas subject to daily inundation. The soils are adjacent to shore areas and brackish ponds. The areas are irregular in shape and range from 4 to 50 acres. Some areas consist mostly of Pawcatuck soils, some mostly of Matunuck soils, and some are both. The Pawcatuck and Matunuck soils are mapped together because there are no major differences in their use and management. The total acreage of the unit is about 50 percent Pawcatuck soils, 35 percent Matunuck soils, and 15 percent other soils.

Typically, the Pawcatuck soils have a surface layer of very dark grayish brown mucky peat about 10 inches thick. The next layer is black mucky peat about 9 inches thick. The substratum is light brownish gray loose sand to a depth of 60 inches or more.

Typically, the Matunuck soils have a surface layer of very dark grayish brown mucky peat about 10 inches thick. The substratum is black and gray coarse sand to a depth of 60 inches or more.

The permeability of these Pawcatuck soils is moderate to rapid in the organic material and very rapid in the substratum. The permeability of these Matunuck soils is rapid in the organic material and very rapid in the substratum. Available water capacity is moderate in the Matunuck soils and high in the Pawcatuck soils.

Most areas of this unit are in salt-tolerant grasses. The daily tidal flooding limits the unit for most uses other than as wetland wildlife habitat.⁴³

CeB – Carver loamy coarse sand, 3 to 8 percent slopes

This soil is very deep, gently sloping, and excessively drained. It is in large, broad, areas on the outwash plain and terminal moraines. The areas of this soil are irregular in shape and range from 5 to 1,000 acres.

Typically, the surface layer is dark grayish brown loamy coarse sand about 3 inches thick. The subsurface layer is light brownish gray loamy coarse sand about 1 inch thick. The subsoil is about 26 inches thick. The upper 10 inches of the subsoil is strong brown loamy coarse sand, and the lower 16 inches is brownish yellow coarse sand. The substratum is light yellowish brown coarse sand to a depth of 60 inches or more.

The permeability of the Carver soil is very rapid throughout. Available water capacity is very low. This soil is droughty in late summer. The depth to the seasonal high water table is more than six feet.

The Cape Poge Little Neck Bomb Target Site soils are best suited for limited recreation or as a wildlife habitat. The Udipsamments support sparse, fragile plants that are subject to severe wind erosion when disturbed. It is difficult to establish a plant cover on road cuts in this area, and tidal inundation and a high organic matter content make the Pawcatuck soils poorly suited to most uses other than as a wildlife habitat⁴⁴.

3.4.5 Surface Water Hydrology

Areas of surface water on Martha's Vineyard include salt marshes; freshwater marshes, bogs, and ponds; and small streams. Martha's Vineyard has no large streams because of the high permeability of much of the unconsolidated materials. Precipitation that is not transpired by plants or evaporated largely infiltrates the ground with little or no direct surface runoff. Unlike most other basins in the Commonwealth where ground water mainly discharges to bodies of fresh surface water, much ground water on Martha's Vineyard discharges directly to the ocean and its bays. Martha's Vineyard contains 62 lakes and ponds, 38 of which cover at least 10 acres.

Most lakes and ponds on Martha's Vineyard are located in kettle holes on outwash plains and are surface expressions of the water table. At these locations, the altitudes of the pond surfaces closely match those of the water table. Lakes and ponds on Martha's Vineyard are commonly used for irrigation, recreation, and fishing, but are not used for public-water supplies⁴⁵.

3.4.6 Ground Water Hydrology

The principal aquifers of the Cape Poge Little Neck Bomb Target Site on Martha's Vineyard are moraines and outwash deposits, which derive their water from local precipitation. The broad outwash plains are mainly composed of sand and gravel, which, in places, is mixed with till and ice-contact deposits, silt, and clay. Yields for 24-in. diameter wells in outwash deposits generally range from about 200 to 700 gal/min. Yields of 1,000 to 2,000 gallons per minute (gal/min), however, have been reported for some wells on Martha's Vineyard. In general, supplies of water for homes, cooling, and small businesses can be developed in most areas of outwash from wells that are 1.5 to 2 inches in diameter with three ft of screen set about 10 feet below the water table.

Groundwater flow systems can be identified in areas of outwash from the configuration of the water table. On Martha's Vineyard, the groundwater flows mainly in one cell, which has a water table mound that reaches an altitude of 18 to 19 ft above sea level near the center of the island. Several smaller cells are located in Edgartown and on Chappaquiddick Island.

The moraines are composed of both poorly- and well-sorted sand, silt, and clay that were transported in the glacial ice and left behind when the ice retreated. The textural composition of moraines generally varies more over short distances than does the textural composition of outwash deposits.

In addition to the outwash and moraine deposits, deeper and older preglacial sand and silt are present on Martha's Vineyard. These deposits, however, would probably yield less than 100 gal/min and could yield water with elevated iron and (or) chloride concentrations. Bedrock beneath unconsolidated deposits consists of metamorphic rocks, such as schist and gneiss, and igneous rocks, the surface of which generally slopes southeastward from about sea level on the northwestern shore of Buzzard's Bay to as much as 1,600 ft below sea level at Nantucket. Bedrock is much less permeable than the overlying sediments, commonly contains seawater, and is not considered to be part of the aquifers of Martha's Vineyard⁴⁶.

3.4.7 Natural Resources (Threatened and Endangered Species)

The U.S. Fish and Wildlife Service (USFWS) has indicated that the following Federally listed threatened or endangered species may be present on or near the Cape Poge Little Neck Bomb Target Site⁴⁷.

| TABLE 3.4.7 | | | |
|---|--------------------------------------|-----------------------|---|
| Federally Listed Threatened and Endangered Species | | | |
| Common Name | Scientific Name | Federal Status | Distribution |
| FISH | | | |
| Sturgeon, shortnose* | <i>Northeastern bulrush</i> | E | Atlantic coastal waters and rivers (Conn. R.) |
| REPTILES | | | |
| Turtle, green* | <i>Chelonia mydas</i> | T | Oceanic straggler in southern New England |
| Turtle, hawksbill* | <i>Eretmochelys imbricata</i> | E | Oceanic straggler in southern New England |
| Turtle, leatherback* | <i>Dermochelys coriacea</i> | E | Oceanic summer resident |
| Turtle, loggerhead* | <i>Caretta caretta</i> | T | Oceanic summer resident |
| Turtle, Atlantic ridley* | <i>Lepidochelys kempii</i> | E | Oceanic summer resident |
| Turtle, Northern red-bellied couter (Plymouth redbelly) | <i>Chrysemys rubriventris bangsi</i> | E | Plymouth & Dukes Counties |
| BIRDS | | | |
| Plover, piping | <i>Charadrius melodus</i> | T | Atlantic coast, nesting |
| Tern, roseate | <i>Sterna dougallii dougallii</i> | E | Atlantic coast/islands, nesting |
| MAMMALS | | | |
| Whale, blue* | <i>Balaenoptera musculus</i> | E | Oceanic |
| Whale, finback* | <i>Balenoptera physalus</i> | E | Oceanic |
| Whale, humpback* | <i>Megaptera novaeangliae</i> | E | Oceanic |
| Whale, right* | <i>Eubalaena spp. (all species)</i> | E | Oceanic |
| Whale, sei* | <i>Balaenoptera borealis</i> | E | Oceanic |
| Whale, sperm* | <i>Physeter catodon</i> | E | Oceanic |
| INSECTS | | | |
| Beetle, Northeastern beach | <i>Cicindela dorsalis dorsalis</i> | T | Dukes & Bristol Counties |

| TABLE 3.4.7 (Continued) | | | |
|---|-----------------------|----------------|-----------------------------|
| Federally Listed Threatened and Endangered Species | | | |
| Common Name | Scientific Name | Federal Status | Distribution |
| PLANTS | | | |
| Sandplain gerardia | <i>Agalinus acuta</i> | E | Barnstable & Dukes Counties |

Key to Federal Threatened and Endangered Species: (E) - Endangered, (T) – Threatened.

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service.

Federally endangered and threatened species are protected by Federal law and must be considered prior to project development. If it is determined that a proposed project may affect a Federally listed or proposed species or critical habitat, the lead Federal Agency should initiate consultation with the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). Informal consultation may be used to exchange information and resolve conflicts with respect to listed species prior to a written request for formal consultation. Federal agencies are required to confer with the USFWS, pursuant to Section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)).

No additional information on the occurrence of rare or endangered species or natural communities within the area of interest is known at this time. This does not mean that other State or Federally listed species may not be present. An on-site inspection by a biologist familiar with the property and with the species listed is recommended to verify the presence, absence, or location of listed species or natural communities, and to definitively assess the potential for direct, indirect, and cumulative effects likely to result if remedial action is recommended.

Little Neck’s salt marshes are home to the Salt Marsh Sharp-tailed Sparrow, a nursery ground for fish, and feeding grounds for several species of birds such as the Great Blue Heron and Black Crowned Night Heron. Maritime shrublands at Little Neck are upland habitats composed of Black Huckleberry, Northern Bayberry, Smooth Shadbush, roses, Catbrier, Scrub Oak, and a wide assortment of other shrubs. These shrublands are often dense and thicket-like. They are home to several nests of Northern Harrier, White-tailed Deer, and large populations of White-footed Mouse and Meadow Vole.⁴⁸

Cape Poge contains small swales. These small swales in the Cedars are home to Cranberries, Dwarf Spike Sedge, Highbush Blueberry, Three-square Sedge, Marsh Fern,

Marsh Rose Mallow, and Water Millet. Some interdunal swales are shrubby whereas others are covered with sedges.⁴⁹

3.4.8 Historical and Cultural Resources

Representatives from the Massachusetts Historical Commission (MHC) and the Corps of Engineers, New England District were contacted concerning potential natural and cultural resource issues in and near the Cape Poge Little Neck Bomb Target Site. Both agencies indicated that a complete list of historical and archeological sites on Chappaquiddick does not exist.⁵⁰

The MHC maintains the Inventory of Historic and Archeological Assets of the Commonwealth, but the specific information sought as part of this PA was not readily available and is typically not reflected in the MHC’s files. The inventory does not include all historical and archeological sites, only those that have been recorded by the MHC. Most of the historical and archeological sites in MHC’s inventory have not been formally evaluated.⁵¹

The National Register of Historic Places, as administered by the National Park Service, U.S. Department of the Interior includes one listing of historic places near the property boundaries.⁵² This listing is the Cape Poge Light, added to the registry in 1987, Structure number 87002040. A summary of the National Register of Historic Places listings in and near the property boundaries is provided in Table 3.4.8 below.

| Table 3.4.8 National Register of Historic Places | | |
|---|----------------------------------|---|
| Cape Poge Light | Historic Significance: | Event, Architecture/Engineering |
| | Architect, builder, or engineer: | Unknown |
| | Area of Significance: | Architecture, Maritime History, Engineering, Transportation |
| | Period of Significance: | 1875-1899, 1900-1924, 1925-1949 |
| | Owner: | Federal |
| | Historic Function: | Defense, Transportation |
| | Historic Sub-function: | Coast Guard Facility, Water-Related |
| | Current Function: | Defense, Transportation |

It is important to note that even though there is only one listing on the National Register of Historic Places, this does not imply that there are no other historic places. The information available to the public through the Register is limited in nature and usually denotes the most “visible and iconic” properties that local residents have taken the time to nominate. It is possible that there are Native American archeological sites in the area that are not on the Register yet are recorded in the State Historic Preservation Officer’s database. There may be offshore sites as well that were once on dry land. Shipwrecks in

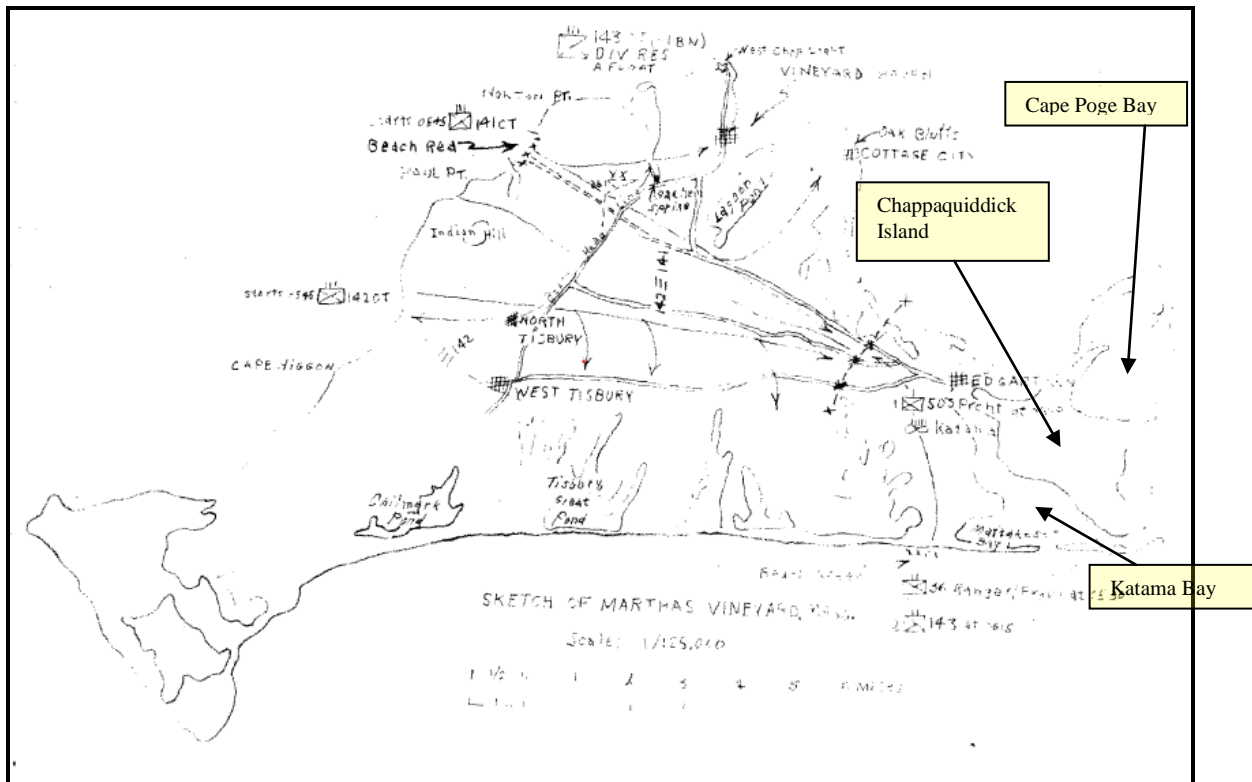
the area are another possibility. Also, the local Wampanoag Tribe of Gay Head (Aquinnah) may also be aware of other sites of sacred or spiritual significance in the area. The Massachusetts Historical Commission should be contacted if ground-penetrating work is to be conducted in the area.

4 HISTORICAL PROPERTY SUMMARY

4.1 CHRONOLOGICAL PROPERTY SUMMARY

4.1.1 Amphibious Training 1943

In 1942, during World War II, the U.S. Army used the island of Martha's Vineyard as an amphibious training area in association with the Amphibious Training Center based out of Camp Edwards, Cape Cod, Massachusetts. The Amphibious Training Center terminated training of an infantry division with a three-day amphibious exercise. An October 1942 document states that one such exercise involved a reinforced infantry division moving from New Bedford, Massachusetts to the island of Martha's Vineyard, located adjacent to Chappaquiddick Island. An attached poor quality sketch depicted numerous areas being used on Martha's Vineyard (see sketch below).⁵⁴



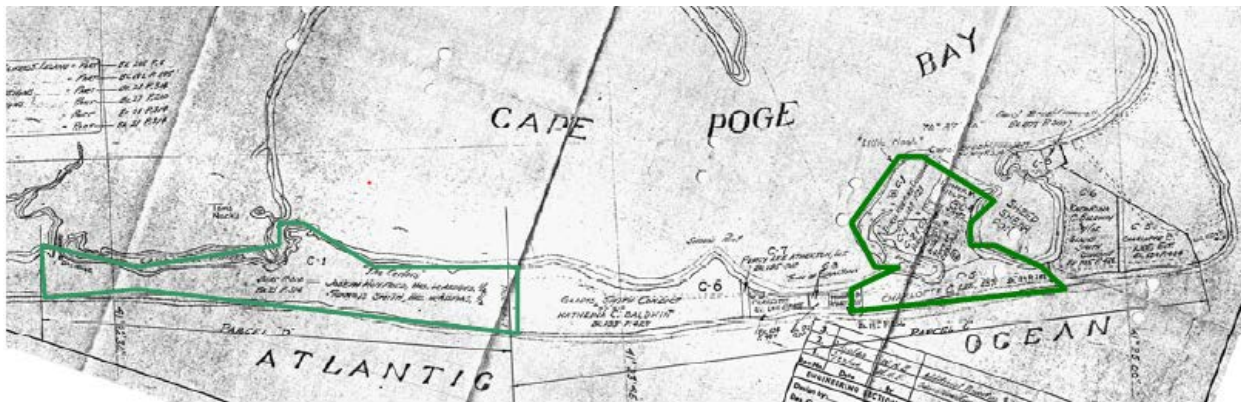
The exercise involved a tactical situation concerned with the assumed occupation of German forces of Martha's Vineyard. The task of the division was to invade the island, drive out the German forces and secure the island with its airfield as a base for further operations against German forces occupying Nantucket Island.⁵⁵ Other infantry divisions also conducted similar amphibious operations training. For example, elements of the 4th Engineer Special Brigade returned from Martha's Vineyard on or about 14 August 1943.⁵⁶

Military use of the Cape Poge peninsula in WWII appears to have begun by 1943 with Amphibious Training Exercises by the U.S. Army out of Camp Edwards. Owners granted trespass rights to the U.S. Army circa 1943 and at least one Cape Poge property owner reported that the U.S. Army's horses were using her property.⁵⁷ It is not known what portion of Cape Poge was used for training exercises.

4.1.2 Naval Bombing and Air to Ground Calibration Target Use 1944-1947

Naval Air Station (NAS) Quonset Point in Rhode Island served as the headquarters for the First Naval District aviation activities during World War II. NAS Quonset Point oversaw activities at twenty NAS, Naval Auxiliary Air Station (NAAS) and Naval Air Fields (NAF) dispersed across Rhode Island, Maine, and Massachusetts. Among these was NAAS Martha's Vineyard, commissioned in March 1943. Squadrons operating from the NAAS Martha's Vineyard including torpedo, fighter, scouting, composite, Marine fighter squadrons and two Carrier Air Groups. The aircraft from these units included the TBF Avenger, TBM Avenger, F4F Wildcat, F6F Hellcat, F4U Corsair, F7F Tigercat, SBD Dauntless, and OS2U Kingfisher. In 1945, the installation's mission changed to Night Attack Combat Training Unit-Atlantic.⁶⁰

Naval interest in establishing bombing targets on Cape Poge beach and Little Neck began by March 1944. At least one landowner granted permission to the U.S. Navy to use the site on 20 March 1944 and the Public Works Department had identified the real estate parcels.^{61,62,63}



On 26 May 1944, the NAS Quonset Point Commander identified seven additional practice bombing targets in the First Naval District for acquisition, including two on Chappaquiddick Island of Martha's Vineyard: Little Neck at approximately Latitude N41° 24.5' Longitude W70° 27.2' and Cape Poge at approximately Latitude N41° 22.8' Longitude W70° 27'.⁶⁴ On 26 June, the U.S. Navy entered onto both properties in order to erect targets, which were complete by 4 July. The IATCB (Interdepartmental Air Traffic Control Board) granted approval for use of the sites and negotiations for lease

hold interests continued through October with retroactive rental being requested for locations that received “right to use” permission by the owners.^{65,66,67,68}

By the end of November 1944, the U.S. Navy formally executed a lease for the Cape Poge parcel and leases for two of three parcels for the Little Neck site with a retroactive start date of 1 July 1944.⁶⁹ By 28 February 1945, the U.S. Navy formally executed the lease for the last Little Neck parcel with a similar retroactive start date of 1 July 1944. The purpose stated in all the leases was for “bomb target site”.⁷⁰ With completion of the leases, Naval use of the sites for air-to-ground training began.

The First Naval District referenced the two sites as L-4-V Cape Poge Beach and L-5-V Little Neck (the “L” standing for land target, the “V” for one associated with Martha’s Vineyard). The “4” and “5” indicate they are the fourth and fifth land targets associated with NAAS Martha’s Vineyard. The other targets associated with NAAS Martha’s Vineyard are included in the table below:⁷¹

| TABLE 4.1.1.2 | | | | | |
|--|--------------------------|----------------------------|------------------------|-------------------------------|---------------------------|
| Target Areas - First Naval District, Martha’s Vineyard Area | | | | | |
| Target | Location | Geographic Location | Established Use | Cancellation Requested | Type of Missile |
| L-4-V | N41° 23.6’ W70° 27’ | Cape Poge Beach | Calibration | 12/7/45 | |
| WX-6-V | N41° 25.5’ W70° 50.7’ | Gay Head | Mast Head | In Use | 100# Water Fill Miniature |
| L-5-V | N41° 24.5’ W70° 27.3’ | Little Neck | Dive | In Use | 100# Water Fill Miniature |
| LR-1-V | N40° 20.8’ W70° 32’ | South Beach (Katama) | Rocket Projectile | 9/3/46 | R. P. |
| LR-2-V | N40° 20.8’ W70° 32’ | South Beach (Katama) | Rocket Projectile | 9/3/46 | R. P. |
| | | South Beach (Katama) | Fixed M.G. Range | 9/3/46 | Machine Gun |
| L-3-V | N41° 20.8’ W70° 39’ | Tisbury Pond | Mast Head | In Use | 100# Water Fill Miniature |
| W-1-V | N41° 19.1’ W70° 47.2’ | Squibnocket Pond | Dive | In Use | Miniatures |
| W-2-V | N41° 18.9’ W70° 47.5’ | Squibnocket Pond | Anti-Sub | In Use | Miniatures |

(Note: “W” stands for water target; “X” stands for shipwreck target; “L” stands for land target; “V” stands for site associated with Martha’s Vinyard)

After the end of WWII, the Commander of the First Naval District recommended releasing the L-4-V Cape Poge Beach target/range by 1 October 1945 along with a number of other targets within the district but not the Little Neck site. In December, 1945, the First Naval District directed that action required on the excess targets, such as Cape Poge Beach, included “policing of target areas to remove debris” and removal of all targets. A decontamination summary report (reproduced in part as Table 4.1.1.2 above) indicated that target L-4-V Cape Poge Beach had been used for “Calibration” and had been policed on 1 March 1946. The summary report further noted that decontamination was “not required” and no entry was made under the “type of missile”. On 31 March 1946, the U.S. Navy surrendered the Cape Poge Beach property (NOy(R)-36802) by Special Release.^{72, 73, 74, 75}

After the end of WWII, the U.S. Navy closed NAAS Martha’s Vineyard on 27 May 1946.⁷⁶ However, that same month, the U.S. Navy renewed the three leases for the Little Neck target for another year through 30 June 1947.^{77, 78, 79} During the summer of 1946, the U.S. Navy’s continued use of the target became controversial. The issue gained traction with a telegram on 23 July from a number of citizens to the Chairmen of Senate Naval Affairs, Senator Walsh, complaining about the threat of fires from flares and explosions from past use. The citizens also complained that the Navy had undertaken target repairs in anticipation of resumption of bombing on “Cape Poge” (actually Little Neck site). On 26 August 1946, the Chief of Naval Operations notified Senator Walsh that bombing at the site would be suspended until the matter could be resolved. Two days later, he notified the Senator that the target had experienced limited use that summer, no flares had been dropped in over a year and only practice bombs of the miniature and water filled types were in use and that the complaints were from summer residents. On 5 September the Commander of the First Naval District committed to continuation of the suspension of bombing for the immediate future; they would give ample notification before resuming operations; in case of resumption, the target would be used only from October through May and restricted on the weekends and holidays; and that the U.S. Navy would make every effort to substitute a different target before the next summer and abandon target L-5-V.^{80, 81, 82}

It is unclear if or when the U.S. Navy began reusing target L-5-V; however, on 12 November 1946, the Operations Officer for the First Naval District reported dive bombing target L-5-V Little Neck was in use and that policing and decontamination of the areas was necessary. On 1 April 1947, the Chief of Naval Operations approved the discontinuance of the Little Neck target as of 15 March. On 18 May 1947, the U.S. Navy surrendered the Little Neck properties (NOy(R)-36801, 36819 & 36842) by Special Release. The lessor requested restoration of the property including removal of all Naval improvements together with the shattered water filled bomb shell cases to be salvaged as scrap metal in June 1947. By 5 December 1947, two lessors (NOy(R)-36819 & 36842) executed releases following removal of debris and improvements, however, the third lease (NOy(R)-36801) had all the debris and bomb cases collected and stacked on that property and the Lessor would not execute the release until the material had been

removed from the island. With the inclement weather, the U.S. Navy hoped to postpone the effort until spring 1948.^{83, 84, 85, 86, 87, 88, 89} It is unclear when or if the U.S. Navy completed this effort as no subsequent documents regarding the issue are known to exist.

By 1959, most of the Cape Poge Little Neck Bomb Target Site had been donated to The Trustees of Reservations by Charles S. Bird and Oliver D. Filley. Currently, both parcels are part of the Cape Poge Wildlife Refuge.

4.2 MILITARY OPERATIONS

4.2.1 Operations Involving Military Munitions

4.2.1.1 *Summary of MEC Activities*

Although originally both acquired as bomb targets, MEC activities at the Cape Poge Little Neck Bomb Target Site FUDS appear only connected with the northern site, L-5-V Little Neck Dive Bombing Target. The L-5-V target was used for day and night practice bombing activities using water filled bombs, miniature bombs, and flares.⁹⁰

The southern site, L-4-V Cape Poge Beach Calibration Range, appears to have only been used for calibrating glide path angles, with no munitions use, including strafing with small arms.

In September 1946, the Little Neck Bomb Target Site was the subject of complaints regarding its peace-time use. The U.S. Navy's list of established facts concerning the L-5-V site includes:

- One or more brush fires were started in the area during the war when flares were used in connection with the training program of Night Fighters.
- No damage has resulted from recent use of the target as a day dive bombing target.

The local community representatives were told by a Naval Officer that:

- The restriction of the Cape Poge target to use of water filled and miniature bombs.
- The restriction on runs to North-South direction in order to avoid populated areas.
- The discontinuation many months ago of the night training program and use of flares.

Comments were also made, one of which indicates that bombing activities had already ceased by 5 September 1946 – “that the present suspension of bombing operations at the subject target would be kept in effect for the immediate future.”⁹¹

The types of munitions used at the L-5-V Little Neck Dive Bombing Target included: miniature practice bombs, 100-pound water filled bombs and flares.⁹² Although not

specifically stated in historical documents these correspond to the items in use by the U.S. Navy during WWII:

- Bomb, Practice 100-Pound, MK15-series
- Bombs, Miniature Practice AN-Mark 5 Mod 1, AN-Mark 23, AN-Mk43
- Signal, Practice Bomb, Mark 4 Mods 3 & 4
- Signal, Practice Bomb, Mk 6 Mod 0
- Flare, Aircraft, Parachute, M26 & AN-MK26

See Section 5 for an evaluation of the presence of the above listed MEC and Appendix F-Ordnance Technical Data Sheets for a full description of the above listed munitions.

Available records do not specify the precise layout or facilities installed at the L-5-V Little Neck Dive Bombing Target; however, typical Naval land dive and glide bombing target elements of the period are depicted by Drawing Number S-1310 (see Figure 4.2.1.1 below). Drawing Number S-1310 shows a 6' x 6' pyramid set up at the target center.⁹³

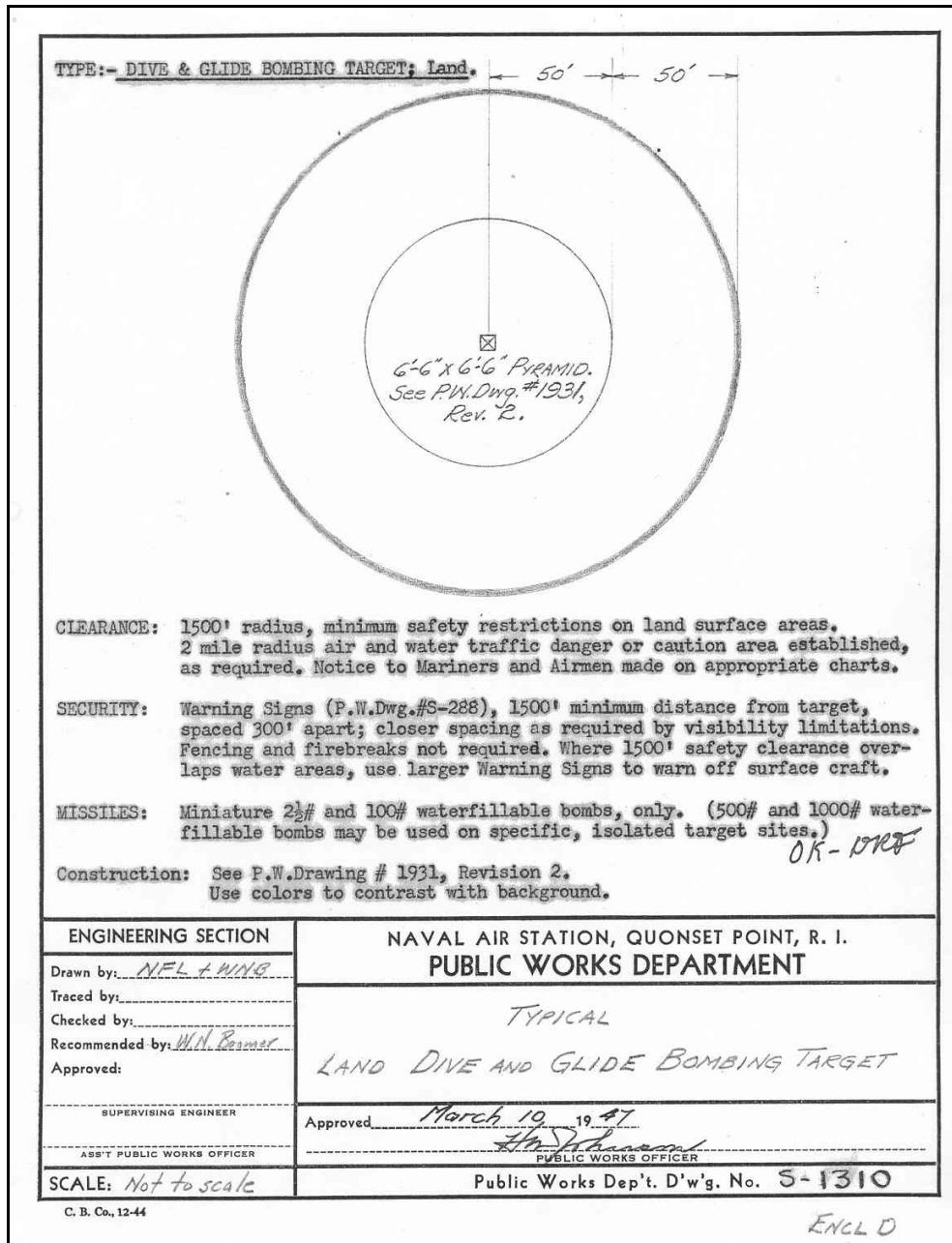


Figure 4.2.1.1 – Land Dive and Glide Bombing Target, 10 March 1947

A December 1946 decontamination summary report for First Naval District targets indicates that the U.S. Navy used the L-4-V Cape Poge Beach target/range used for “Calibration”. The report notes it had been policed on 1 March 1946 that decontamination was “not required” and no entry was made under the “type of missile”. Based on these statements, it appears that “calibration” refers to calibrating the glide angle approach path for dive bombing, No entry under “type of missile” indicates that no explosive hazards associated with spotting rounds or that even water filled practice bombs were in use. Other targets in the decontamination report used for strafing with small arms are so noted, so it appears the L-4-V site was not used for that purpose either⁹⁴

4.2.1.2 Summary of CWM Activities

The investigation team uncovered no documentation relating to CWM activities at the Cape Poge Little Neck Bomb Target Site. The investigation team found no indication that the U.S. Army, U.S. Navy or U.S. Marine Corps conducted CWM activities such as training, storage or disposal at this FUDS property.

4.2.1.3 Certificates of Clearance

On 1 March 1946, the U.S. Navy policed the L-4-V Cape Poge Beach target area to remove debris remnants of target. A December 1946 decontamination summary report of First Naval District targets indicated that Cape Poge Beach had been used for “Calibration” and that decontamination was “not required”, making no entry under the “type of missile” used on site.⁹⁵ That same report indicated that dive bombing target L-5-V Little Neck was in use and that policing and decontamination of the areas was necessary. When the U.S. Navy surrendered the Little Neck properties in May 1947, the lessors requested restoration of the property including removal of all Naval improvements together with the shattered water filled bomb shell cases to be salvaged as scrap metal. By 5 December 1947, this occurred on two of the three properties, however, the third lease had all the debris and bomb cases collected and stacked on that property and the Lessor would not execute the release until the material had been removed from the island. With the inclement weather, the U.S. Navy hoped to postpone the effort until spring 1948.^{96 97 98 99 100 101 102} It is unclear when or if the U.S. Navy completed this effort as no subsequent documents regarding the issue were not found during research.

4.2.1.4 EOD Incidents

The Trustees of Reservations (TTOR), who provide oversight of the Cape Poge Wildlife Refuge, and Massachusetts Department of Environmental Protection, first informed the Corps of Engineers New England District of the existence of practice bombs at Little Neck, Chappaquiddick on 2 August 2007. Since the initial notification, there have been AN-MK 23 practice bombs reported with some destroyed by the Massachusetts State

Police and U.S. Navy explosive ordnance disposal (EOD) personnel and the remainder disappearing before they could be destroyed.¹⁰³

There are accounts of the public removing practice bombs at the L-5-V Little Neck Dive Bombing Target. A Chappaquiddick Island resident reported finding an item to the TTOR after reading one of the warning signs; the item was recovered from their residence. Other bombs have disappeared between the time of reporting and the arrival of Naval EOD personnel due to either tidal wave action and/or members of the public picking them up and taking them home.¹⁰⁴

4.2.2 Operations Involving HTRW

This investigation did not identify any areas of potential HTRW concerns associated with the military's use of the Cape Poge Little Neck Bomb Target Site.

4.2.3 Operations Involving CON\HTRW

This investigation did not identify any military operations or use of material involving CON/HTRW at the Cape Poge Little Neck Bomb Target Site.

4.2.4 Operations Involving other Buildings or Structures BD/DR

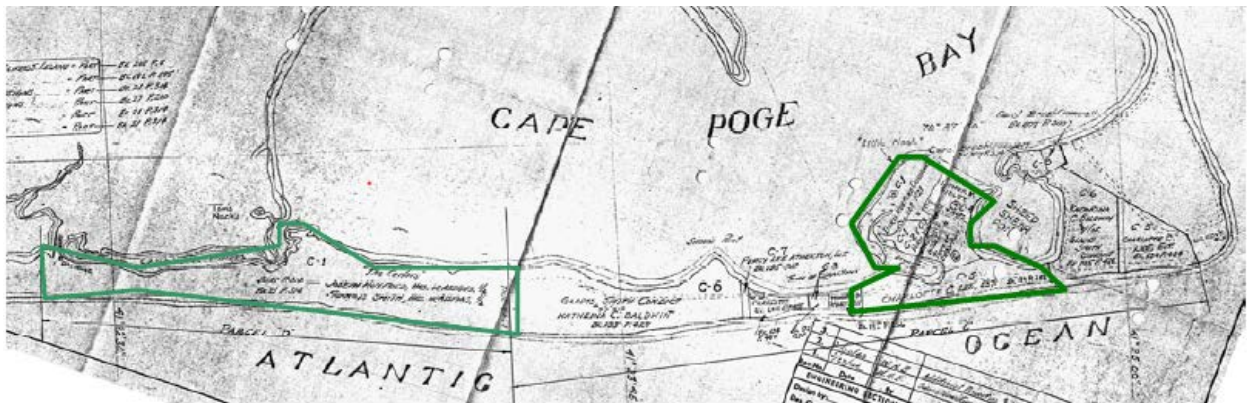
The investigation team did not identify any buildings, structures and appurtenances remaining on the Cape Poge Little Neck Bomb Target Site during the property visit. The target or targets are no longer present. No remains were discovered that meet the criteria for debris removal actions of Inherently Hazardous Structures and Debris Presenting a Clear Danger as outlined in Table 3-1 of the FUDS Policy guidance, ER 200-3-1.¹⁰⁵

4.3 MAP ANALYSIS

The investigation team located general U.S. Navy acquisition and Navy Public Works maps for the L-5-V Little Neck Dive Bombing Target and L-4-V Cape Poge Beach Calibration Range; however, no specific layout plans, diagrams, or related descriptions of any targets built and maintained to support the ranges were discovered.

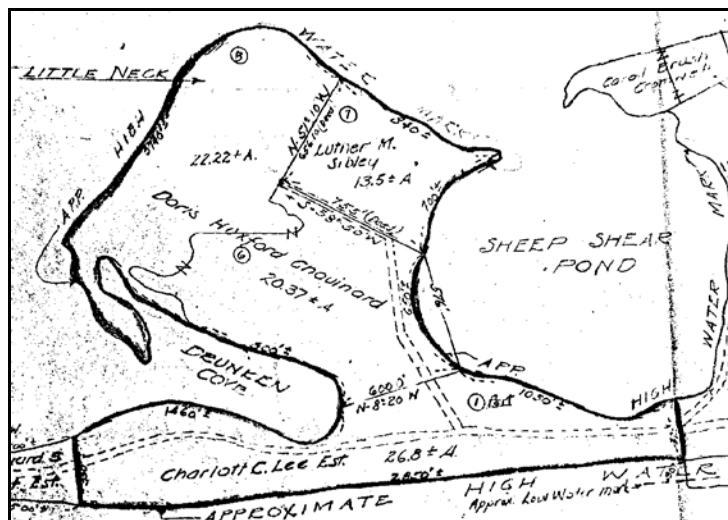
The paragraphs below discuss the relevant information retrieved from the reviewed maps included in Appendix I. All historical maps and site plans contained in Appendix I are printed on 11- by 17-inch paper for reproduction. The underlined map titles are hyperlinked to *.JPG compliant images of the subject maps on the digital version of this report. Full size copies of the maps remain in the PA backup files. The maps are discussed in order of creation or final revision.

4.3.1 *Plan of Cape Poge, Chappaquiddick Island, 14 March 1944, revised 30 March 1944, Appendix I-1*¹⁰⁶



This March 1944 drawing depicts the real estate tracts the U.S. Navy is seeking for the Cape Poge and Little Neck targets. ‘Parcel “D”’ on this site plan equates to the boundary described for lease number NOy(R) – 36802 for L-4-V Cape Poge Beach Calibration Range. ‘Parcel “C”’ on this site plan includes all the property between ‘Parcel “D”’ and the US Government Lighthouse parcel. It includes three tracts C-1, C-2 and C-5 which equates to the tracts acquired for L-5-V Little Neck Dive Bombing Target. No references indicate that the U.S. Navy acquired any of the other tracts of ‘Parcel “C”’ in between Cape Poge Beach and Little Neck or further north.

4.3.2 *Little Neck-Cape Poge, 5 August 1944, Appendix I-2*¹⁰⁷

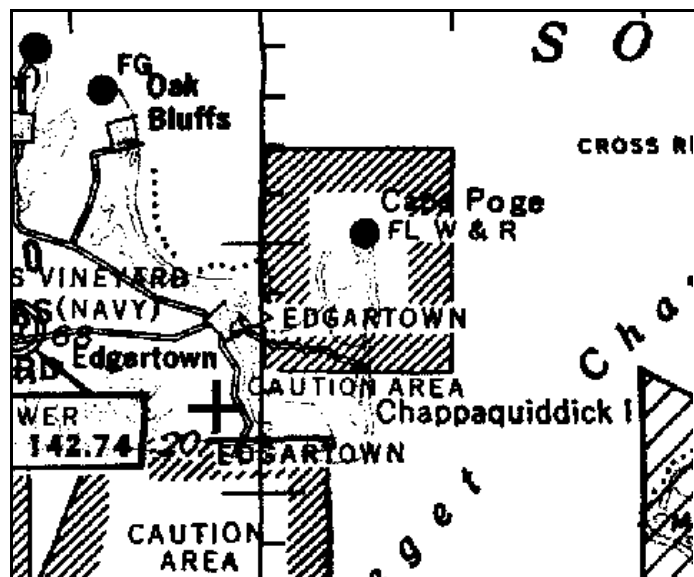


This real estate site plan depicts the L-5-V Little Neck Dive Bombing Target while the U.S. Navy had permission from the landowners, but prior to the signing of the leases. It does not depict the target or any detail regarding the impact area but does depict the owners of the property along with the acreage of each parcel. This sheet depicts a trail forking from the

one along Cape Poge onto Little Neck to a property corner. Parcel “C” depicts the following acreage which correlates to the noted lease:

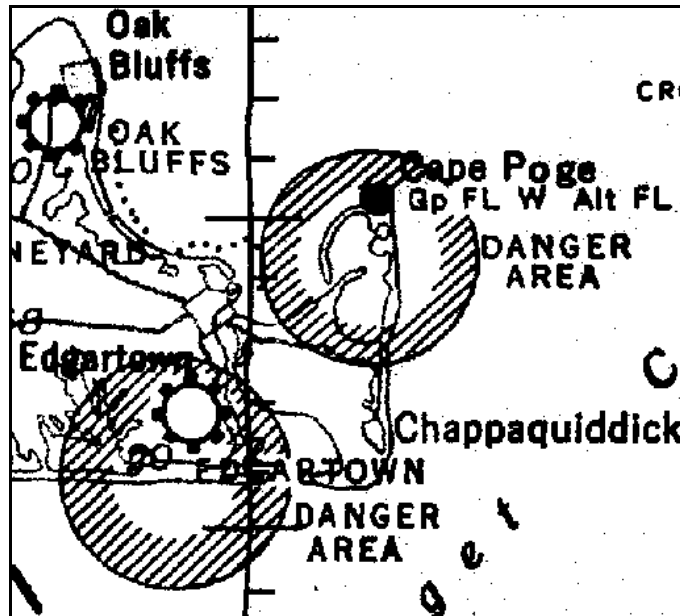
| Share | Owner(s) | Area (acres) | Lease Number |
|--------|-------------------------|--------------|------------------------------|
| Part 1 | Charlotte C. Lee (est.) | 26.8 | NOy(R) -36842 ¹⁰⁸ |
| Part 6 | Doris H. Chouinard | 20.37 | NOy(R) -36801 ¹⁰⁹ |
| Part 7 | Doris H. Chouinard | 22.22 | NOy(R) -36801 ¹¹⁰ |
| Part 8 | Luther Sibley | 13.5 | NOy(R) -36819 ¹¹¹ |
| | TOTAL | 82.89 | |

4.3.3 *Boston Sectional Aeronautical Chart, Edition 15-1, 14 Jun 1945, Appendix I-3*¹¹²



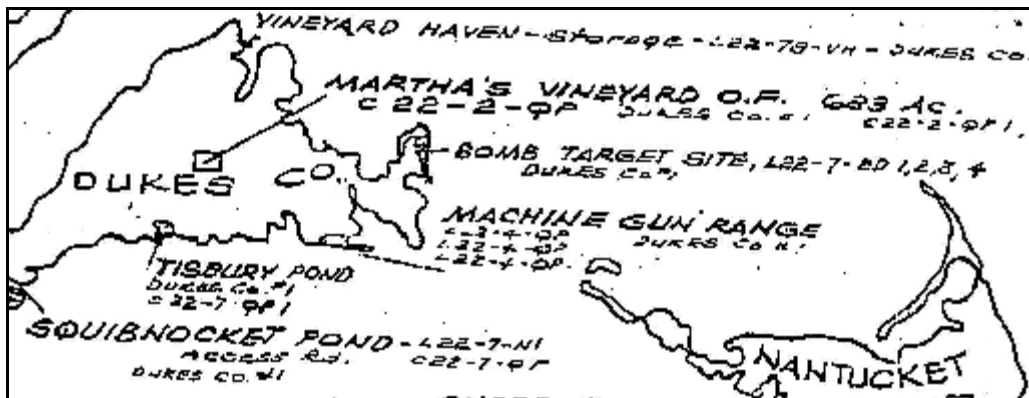
The Sectional Aeronautical Charts air navigation maps were reviewed for 1940s for the Martha’s Vineyard area. These maps do not depict target specifics but the Caution Area (CA) or Danger Area (DA) depicted on these charts typically correlate to the location of ranges and the times of their use. This is the first published chart depicting a “CA” or “DA” for Cape Poge/Little Neck. The “CA” for the Cape Poge/Little Neck is first delineated on this chart as a parallelogram that is approximately five miles East/West and six miles North/South centered at approximately N41° 24.5’ W70° 27.3’. The “CA” designation agrees to the lease for the final tract for L-5-V in February 1945.

4.3.4 Boston Sectional Aeronautical Chart, Edition 18, 14 Jan 1947, Appendix I-4¹¹³



The 14 January 1947 edition is the last one that depicts a “CA” or “DA” at Cape Poge Little Neck. It differs from the 1945 version in that it is now a Danger Area defined as an Invisible Hazard (specific authority required for flight within area) as opposed to a “CA”. The “DA” is depicted as a 2 mile radius area centered at N41° 24.5’ W70° 27.3’. That this is the last chart with a “DA” or “CA” on it for Cape Poge/Little Neck correlates with the discontinuance of the Little Neck target in spring 1947, a couple months after this chart is published.

4.3.5 U.S. Navy Acquisition Map – Massachusetts/Rhode Island, 9 May 1947, Appendix I-5¹¹⁴



This map depicts the southern portion of Massachusetts to including islands of Nantucket, and Martha’s Vineyard. An area labeled “Bomb Target Site, L22-7-ED” is in the Cape Poge Little Neck Bomb Target Site area. Although the map does not depict the specific

location or locations of targets, it does confirm the presence of the bomb target site on the eastern shore of Chappaquiddick Island and is consistent with other documents concerning the location of the site.

4.4 AERIAL PHOTOGRAPHIC INTERPRETATION

Government and contractor personnel conducted an aerial photography database search (included in Appendix A.2 Aerial Photography Repositories). The aerial photography retrieved covered Cape Poge Little Neck Bomb Target Site prior to and following the U.S. Navy's use of the site. The imagery acquired is in photographic print format. Interpretation was performed using the following source materials:

| Photography Date | Approx. Scale | Appendix R - Plate Nos. |
|-------------------------|----------------------|--------------------------------|
| 21 November 1938 | 1:20,000 | NA |
| 27 February 1941 | 1:26,000 | NA |
| 25 September 1942 | 1:21,000 | NA |
| 11 April 1943 | 1:10,000 | NA |
| 24 July 1943 | 1:15,000 | NA |
| 27 July 1943 | 1:15,000 | NA |
| 23 August 1943 | 1:6,500 | NA |
| 7 July 1952 | 1:20,000 | 2, 3 & 4 |

Imagery containing important areas are delineated on hard copy plots and digitized it using Computer-Aided Drafting and Design (CADD) software. The digitized features overlay scanned aerial photography, resulting in the final plots (see Appendix R-Report Plates 2, 3 and 4). Stereo viewing of photography was used which allows more accurate identifications than monoscopic interpretations. The resolution and scale of the imagery limited the identification of features discussed in this study. The word “probable” is used when discussing features for which identification is reasonably accurate. The term “possible” is used when identification is not positive, but the object/area matched known features/locations on other sources. Analysis of the aerial photographs referenced the maps discussed in Section 4.3 above. The boldfaced numbers in parentheses referenced in the sub-paragraphs below refer to the feature descriptions on the annotated aerial photography plates. The sub-paragraphs below describe the relevant features identified on the imagery. In the digital version of this report, the paragraph headings are all hyperlinked to *.JPEG images of the resultant plates.

The measurements of features in the aerial photo analysis are **ALL** approximations, whether specifically stated or not. Measurements from the photo prints are converted to distances based on the stated accuracy of the imagery, which vary between frames and flight lines. Another factor affecting the measurements of the features is the scale of the

imagery. At the higher scales, the features being measured are smaller and more difficult to measure. The interpretation measurements are estimated to be within approximately 20% of the actual values.

4.4.1 1938 to 1943 Imagery

The 1938 through 1943 imagery was acquired and reviewed to observe the condition of the site prior to the U.S. Navy acquisition of the sites as targets. Some of the 1943 imagery corresponds to when the U.S. Army and Camp Edwards had trespass rights for amphibious maneuvers taking place in the area, but no clearly discernible impact from that potential use was noted on the subject site.

4.4.2 7 July 1952 Imagery (Plates 2, 3 & 4)

The 1952 imagery is the first available following the U.S. Navy's use of the site and comes some five to six years after the leases were terminated. Review of both sites does not provide clear use of the U.S. Navy past use or activities. As noted on the available real estate site plans and discussed in Section 4.3, there is clearly a main trail or road along the Cape Poge (1) spit that passes north to south through both sites providing access to the light house and some homes on the northern end of the cape. Those real estate plans indicated that a trail forked to the east providing access to the center of Little Neck, however there is no discernible evidence of a road or trail onto Little Neck. On Little Neck itself (see Plate 3), there is no clear evidence of a bombing target. Typically targets of the period coincided of concentric rings around a center target. A few hundred feet landward of the western edge, there are two concentric arcs approximately 75 feet and 100 feet in radius (2) that are barely discernible. These may represent the remains of concentric rings of a target but it is not certain. There is no path to it from the water or discernible evidence of a debris pile. There are a number of other devegetated areas discernible elsewhere on Little Neck that may represent rock outcrops, targets or simply a patch of unvegetated ground. At the Cape Poge Beach parcel (see Appendix R-Report Plate 4) there are no clear signs of past military use either. The stated use as a "calibration" range appears to mean a glide angle calibration with no munition use but there is no sign of a rake hut remaining. There are also no clear signs of concentric rings associated with a bomb target, which was the stated purpose for original acquisition, nor are there clear signs of strafing target lines.

Later imagery from the last two decades are available from internet sources and were reviewed for additional evidence of the military's use of the property, though no features of any significance beyond those described above were noted.

5 EVALUATION OF PRESENCE OF MILITARY MUNITIONS AND TECHNICAL DATA

5.1 GENERAL EVALUATION OF CONVENTIONAL MEC PRESENCE

5.1.1 Evaluation of MEC Presence

The investigation team uncovered evidence that the U.S. Navy utilized practice ordnance at the L-5-V Little Neck Dive Bombing Target. The MEC activities at L-5-V Little Neck Dive Bombing Target centered on day and night aerial bombing training and included use of practice water filled bombs, practice miniature bombs, and flares. The investigative team did not uncover any evidence that Cape Poge Little Neck Bombing Target Site was used as a storage facility to store, transport, treat, or dispose of the associated munitions used on property. Probable munitions associated with the Little Neck Bomb Target Site include practice 100-pound bombs with signals (also known as spotting charges), miniature practice bombs with spotting charges, and pyrotechnics.

Listed in Table 5.1.1 below are the 2 areas of interest (AOI) identified from this investigation. The L-5-V Little Neck Dive Bombing Target is depicted on Plate 5 in Appendix R-Report Plates.

The FUDS property contains two non-contiguous parcels of land/areas of interest:

| TABLE 5.1.1 | | | |
|---|--|--|---|
| Areas of Interest | Acreage (est.) | Munitions Related Function | MEC Potential |
| L-5-V Little Neck Dive Bombing Target | 162 acres (49 acres land and 113 acres water) | Practice bombing using practice munitions. | Confirmed MEC debris (physical evidence) from MK 23 practice bombs and documented past use (see Section 5.1.2). |
| L-4-V Cape Poge Beach Calibration Range | Unknown | Calibration | None (historical evidence) , confirmed by historical documents that the property was used for calibration only. No known or suspected hazards. |

EOD Technology, Inc. completed a Time Critical Removal Action (TCRA) which was contracted by the U.S. Army Engineering and Support Center, Huntsville (USAESCH) to remove MEC, Material Potentially Presenting an Explosive Hazard (MPPEH), and explosive hazards at the former Cape Poge Little Neck Bomb Target Site per the

recommendations in the TCRA Action Memorandum, dated 24 November 2008 (see Section 2.1.4 in this Preliminary Assessment). During the course of the surface/subsurface clearance operations at Cape Poge, the clearance team removed munitions debris and non-munitions debris. The surface/subsurface clearance team removed 127 munitions debris items and 1,916 pounds of non-munitions debris (see Appendix F-Grid Tracking Logs in the February 2010 TCRA report provided in the digital backup to this Preliminary Assessment).

A Remedial Investigation / Feasibility Study (RI/FS) is currently underway per the Formerly Used Defense Sites Management Information System (FUDSMIS) database.

5.1.2 Conventional MEC Technical Data

The investigation team identified the following conventional ordnance items associated with L-5-V Little Neck Dive Bombing Target. The team compiled this list from archival documentation, the April 2008 property visit, and EOD incident reports.^{115,116}

- Miniature practice bomb
- 100-pound water filled bomb
- Flares

The Ordnance Technical Data Sheets of typical examples of MEC items identified with L-5-V Little Neck Dive Bombing Target are contained in Appendix F and are listed below:

BOMBS

| | |
|------|--|
| F-2 | Bomb, Practice 100-Pound, MK15-series |
| F-7 | Bombs, Miniature Practice AN-Mark 5 Mod 1, AN-Mark 23, AN-Mk43 |
| F-10 | Signal, Practice Bomb, Mark 4 Mods 3 & 4 |
| F-14 | Signal, Practice Bomb, Mk 6 Mod 0 |

PYROTECHNICS

| | |
|------|---|
| F-16 | Flare, Aircraft, Parachute, M26 & AN-MK26 |
|------|---|

These are general descriptions and may not include all the specific variations of a particular ammunition item. This list is compiled from information found regarding the site and may not be comprehensive.

5.2 GENERAL EVALUATION OF RCWM PRESENCE

The investigation team uncovered no evidence of chemical warfare materials storage, usage or disposal at the Cape Poge Little Neck Bomb Target Site. The mission of the site does not imply the presence of CWM. Research discovered no historical records

associating CWM with the property. Additionally, the property visit team did not uncover any evidence of CWM hazards.

5.3 GENERAL EVALUATION OF MC PRESENCE

5.3.1 Conventional MEC Constituents

The Ordnance Technical Data Sheets listed above in Section 5.1.2 and in Appendix F include information regarding the munitions constituents on the items identified at the L-5-V Little Neck Dive Bombing Target.

The MEC Ordnance Technical Data Sheets included in Appendix F contain information regarding the MC associated with the munitions potentially used on the L-5-V Little Neck Dive Bombing Target. This information is summarized below.

MK 4 SIGNAL

| COMPONENT | PEP MC | QUANTITY |
|-------------------|---|--|
| Percussion primer | Primer mix (approximate proportions) <ul style="list-style-type: none"> • Lead styphnate (37%) • Barium nitrate (32%) • Antimony sulfide (15%) • Aluminum powder (7%) • PETN (5%) • Tetracene (4%) OR Primer, lead styphnate | [less than 1 grain *] .88 grains |
| Expelling charge | Black powder: <ul style="list-style-type: none"> • Potassium nitrate (74%) • Charcoal (15.6%) • Sulfur (10.4%) | 3 grams |
| Marker load | Mark 4 Mod 3: Red phosphorus pyrotechnic mixture No. 7 (may also contain Sodium nitrate and Magnesium powder) OR Mark 4 Mod 4: Zinc oxide | 21– 24 grams Approximately 21 grams |

*15.4 grains = 1 gram; 7,000 grains = 1 pound

MK 7 SIGNAL,

| COMPONENT | PEP MC | QUANTITY |
|---|--|------------------------|
| Percussion primer in caliber .38-gage blank cartridge | Primer mix (approximate proportions) <ul style="list-style-type: none"> • Lead styphnate (37%) • Barium nitrate (32%) • Antimony sulfide (15%) • Aluminum powder (7%) • PETN (5%) • Tetracene (4%) | [less than 1 grain *] |
| Propellant in caliber .38-gage blank cartridge | Smokeless powder -- Pyrocellulose (Nitrocellulose with 12.6% nitrogen): | Approximately 4 grains |
| Spotting charge | Black powder: <ul style="list-style-type: none"> • Potassium nitrate (74%) • Charcoal (15.6%) • Sulfur (10.4%) | 1 pound |

*15.4 grains = 1 gram; 7,000 grains = 1 pound

Bomb Casing and Carcasses: Practice bombs normally consist of a metal container that may be filled with water, water-sand mix, or sand-plaster mix to achieve the desired weight. The MK15 casing is made of light-cased steel body. Standard steels can be classified into three major groups: carbon steels, alloy steels, and stainless steels.¹¹⁷ Carbon steels contain the alloying elements of carbon, copper, manganese, phosphorus, silicon, and sulfur. Alloy steels also contain elements not found in carbon steels such as nickel, chromium, cobalt, etc. Stainless steels contain chromium, with or without other elements such as nickel, aluminum, and titanium.^{118,119,120} The exact type of steel used in the Mk15 casing is not known. Miniature practice bombs are constructed of solid metal (iron, lead alloy, or zinc alloy) with a hollow central tube for installation of the spotting charge. The MC of these casings may include, therefore, iron, copper, manganese, phosphorus, silicon, sulfur, nickel, chromium, cobalt, aluminum, and titanium. Practice bombs often contain a spotting charge or signal to allow a visual identification of the location of the bomb impact. These spotting charges may contain black powder or contain a smoke mixture such as red phosphorus or zinc oxide that is ejected upon impact. More detailed and complete information regarding the properties of the identified constituent items can be found at the [National Institute of Health's Hazardous Substances Data Bank on Chemical Properties, Environmental Fate and Human Health Effects](#).

The types of munitions constituents released when an item functions differs somewhat from its original state. A comprehensive determination of munitions constituents

released during detonation does not currently exist. As of this writing, the EPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: *Stationary Point and Area Sources*, is being updated to include Chapter 15: Ordnance Detonation. Eleven sections have been identified to be included within Chapter 15 including:

1. Small cartridges (<30mm)
2. Medium cartridges (30-75mm)
3. Large cartridges (>75mm)
4. Projectiles, canisters and charges
5. Grenades
6. Rockets, rocket motors, and igniters
7. Mines and smoke pots
8. Signals and simulators
9. Blasting caps, demolition charges, and detonators
10. Fuses and primers
11. Guided missiles

This appears to be the best source of constituent data following detonation currently available, although it would not directly correspond to all the historic munitions noted above.

An emission factor is a representative value that attempts to relate the quantity of an air pollutant released to the atmosphere with an activity associated with the release of that pollutant. These factors are usually expressed as the weight of the air pollutant divided by a unit weight, volume, distance, or duration of the activity emitting the pollutant (e. g., kilograms of particulate emitted per megagram of coal burned). Such factors facilitate estimation of emissions from various sources of air pollution. In most cases, these factors are simply averages of available data of acceptable quality, and are generally assumed to be representative of long-term averages. The emission factors presented in AP-42, however, are only determined for criteria pollutants, hazardous air pollutants as defined by the Clean Air Act (CAA), and toxic chemicals (i.e., those chemicals regulated under Section 313 of the Emergency Planning and Community Right-to-Know Act [EPCRA]).

5.3.2 CWM Constituents

The investigation team did not identify any CWM associated with the Cape Poge Little Neck Bomb Target Site; therefore, there are no CWM constituents to discuss.

5.4 PROPERTY-SPECIFIC LOCATIONS

5.4.1 Range Layout Criteria

The investigation team confirmed one area of interest (AOI), the former L-5-V Little Neck Dive Bombing Target (see Appendix R-Report Plate 5). Available records do not specify the precise layout and usage of this target; however, Drawing Number S-1310, shown in Figure 4.2.2, shows a typical Naval land dive and glide bombing target and is thought to be likely representative of the land target at Little Neck. The dimensions provided in the drawing were used to calculate an estimated size of 162 acres for the impact area. Training manuals identified the recommended release altitude as 2,500 feet, thus low altitude bombing is more likely.^{121,122} Although MEC is expected to be concentrated around the former target, MEC would also be expected to be present beyond the scoring arcs. The standard range cell depicted above consisted of a circle with a radius of 1,500 feet from the target center and consisting of 162 acres. Training manuals identified the recommended release altitude as 2,500 feet. From studies compiled during WWII and doubling the release altitude to 5,000 feet as a safety factor, 99 percent of the bombs released should land within 590 feet of the target center and, therefore, over an area of approximately 26 acres. These data assume that no mechanical or aiming errors occurred.^{123,124}

Of the 162 acres, an estimated 49 acres are on land and the remaining 113 acres are waters of Cape Poge Bay. The MEC hazard identified with the site include 100-pound practice bombs and miniature practice bombs, each with signal charges and flares. Mk23 miniature practice bombs have been observed on the property.

5.4.2 L-4-V Cape Poge Beach Calibration Range

The former L-4-V Cape Poge Beach Calibration Range was originally acquired as a “bomb target site”, but the U.S. Navy used it for calibration only with no munition hazards. A December 1946 decontamination summary report for First Naval District targets indicates that the U.S. Navy policed the L-4-V Cape Poge Beach target/range on 1 March 1946. Decontamination was “not required” and no entry was made under the “type of missile”. Based on these statements, it appears that “calibration” refers to calibrating the glide angle approach path for dive bombing. No entry under “type of missile” indicates that no explosive hazards associated with spotting rounds or that even water filled practice bombs were in use. Other targets in the decontamination report used for strafing with small arms are so noted, so it appears the L-4-V site was not used for that purpose either.¹²⁵ This investigation discovered no indication of any ordnance being expended on the Calibration Range; there are no known or suspected hazards.

5.4.3 Non-Military Munitions Response Program Sites

Analysis of the information gathered during this investigation did not identify any other potential MEC / CWM sites, such as a gas chamber, ordnance storage area or indoor range at the Cape Poge Little Neck Bomb Target Site.

6 EVALUATION OF HTRW PRESENCE AND AREAS

6.1 GENERAL EVALUATION OF HTRW PRESENCE

The review of historical information related to the Cape Poge Little Neck Bomb Target Site indicates the property was used solely for the training of bomber pilots. Based on the findings of this investigation, there is not a Hazardous, Toxic and Radioactive Waste (HTRW) potential on the Cape Poge Little Neck Bomb Target Site FUDS as a result of the military's previous use. The investigation team did not locate any evidence that the previous use by the U.S. Navy produced HTRW that may remain on the FUDS property.

6.2 PROPERTY SPECIFIC LOCATIONS

As noted above, this investigation did not identify an HTRW potential on the Cape Poge Little Neck Bomb Target Site.

7 EVALUATION OF CON/HTRW AND BD/DR PRESENCE

7.1 EVALUATION OF CON/HTRW PRESENCE AND AREAS

Based on the findings of this investigation, there is not a Containerized Hazardous, Toxic and Radioactive Waste (CON/HTRW) potential on the Cape Poge Little Neck Bomb Target Site FUDS as a result of the military's previous use.

7.2 EVALUATION OF BD/DR

There is no evidence of Building Demolition/Debris Removal (BD/DR) hazards on the Cape Poge Little Neck Bomb Target Site. The only suspected construction at the L-5-V Little Neck Dive Bombing Target were the target rings, wooden pyramid target (6 1/2 feet by 6 1/2 feet in size), warning signs, and fencing around the target area. No target or building debris was observed on the FUDS property during the April 2008 property visit. There are no current DoD buildings located on the property.

8 PATHWAY AND ENVIRONMENTAL HAZARD ASSESSMENT

In the previous sections waste characteristics and the likelihood for releases at the Cape Poge Little Neck Bomb Target Site were presented. In this section, the physical characteristics of the FUDS property and surrounding areas, potential waste characteristics and proximity/characteristics of potential targets (e.g., people and resources that might be threatened by a release from the FUDS property) are combined to draw conclusions regarding potential exposures, or lack thereof. Chemicals or items that are not CERCLA hazardous substances or listed in Section 3-2.4.1 of ER 200-3-1, such as POLs, or hazards related to BD/DR are not evaluated in this section. As discussed in previous sections, only MEC/MC could be expected to be present in the Cape Poge Little Neck Bomb Target Site, and then, only on the L-5-V Little Neck Dive Bombing Target.

8.1 GROUNDWATER PATHWAY

8.1.1 Hydrogeologic Setting

The geological and groundwater setting are discussed in Sections 3.4.3 and 3.4.6 of this report. Martha's Vineyard has been designated a sole source aquifer by the USEPA.

The principal aquifer of the L-5-V Little Neck Dive Bombing Target on Martha's Vineyard is moraines and outwash deposits, which derive their water from local precipitation. Yields for 24-in. –diameter wells in outwash deposits generally range from about 200 to 700 gal/min. However, yields of 1,000 to 2,000 gal/min have been reported for some wells on Martha's Vineyard. In general, supplies of water for homes, cooling, and small businesses can be developed in most areas of outwash from wells that are 1.5 to 2 inches in diameter with 3 ft of screen set about 10 ft below the water table.

On Martha's Vineyard, the groundwater flows mainly in one cell, which has a water table mound that reaches an altitude of 18 to 19 ft above sea level near the center of the island.

In addition to the outwash and moraine deposits, deeper and older preglacial sand and silt are present on Martha's Vineyard; however, these deposits would probably yield less than 100 gal/min and could yield water with elevated iron and (or) chloride concentrations. Bedrock beneath unconsolidated deposits consists of metamorphic rocks, such as schist and gneiss, and igneous rocks, the surface of which generally slopes southeastward from about sea level on the northwestern shore of Buzzard's Bay to as much as 1,600 ft below sea level at Nantucket. Bedrock is much less permeable than the overlying sediments, commonly contains seawater, and is not considered to be part of the aquifers of Martha's Vineyard¹²⁷.

8.1.2 Groundwater Targets

The USEPA’s Safe Drinking Water Information System (SDWIS) is the national regulatory compliance database for the drinking water program and includes information on the nation's 160,000 public water systems. The SDWIS Drinking Water Mapping Application (DWMA) indicates that there is one groundwater drinking water well within four miles of the property, located at N41° 23’, W70° 30’. The drinking water supply is a ground water well for a small business located approximately 2.90 miles west of the center of Cape Poge and 3.13 miles west/southwest of Little Neck and it supplies water for approximately 800 people.¹²⁸ Although this well is within four miles of the Cape Poge Little Neck Bomb Target Site, the well and the Bomb Target Site are separated by the Cape Poge Bay and thus are not likely to be hydraulically connected.

The U.S. Geological Survey (USGS), National Water Information System (NWIS) indicates there are nine groundwater wells within four miles of the property.¹²⁹ The NWIS information is summarized in Table 8.1.2.

| TABLE 8.1.2 | | | | |
|---|------------------|---|----------------------|-------------------|
| Groundwater Targets Site Inventory | | | | |
| Latitude | Longitude | National Aquifer | Local Aquifer | Well Depth |
| N41° 21’ 09” | W70° 30’ 38” | Sand and Gravel Aquifer (glaciated regions) | Outwash | 41.9 feet |
| N41° 22’ 24” | W70° 28’ 19” | Sand and Gravel Aquifer (glaciated regions) | _____ | 20.9 feet |
| N41° 22’ 25” | W70° 28’ 19” | Sand and Gravel Aquifer (glaciated regions) | _____ | _____ |
| N41° 22’ 26” | W70° 28’ 17” | Sand and Gravel Aquifer (glaciated regions) | _____ | 29.0 feet |
| N41° 22’ 30” | W70° 29’ 56” | Sand and Gravel Aquifer (glaciated regions) | _____ | 34.0 feet |
| N41° 22’ 32” | W70° 28’ 04” | Sand and Gravel Aquifer (glaciated regions) | Outwash | _____ |
| N41° 23’ 40” | W70° 30’ 56” | Sand and Gravel Aquifer (glaciated regions) | _____ | 35.0 feet |
| N41° 23’ 44” | W70° 31’ 04” | Sand and Gravel Aquifer (glaciated regions) | _____ | 42.0 feet |
| N41° 23’ 44” | W70° 31’ 04” | Sand and Gravel Aquifer (glaciated regions) | _____ | 21.0 feet |

A map showing the location of the wells in relation to the L-5-V Little Neck Dive Bombing Target is not included in this report. All the wells are located south and/or west of Little Neck across the Cape Poge Bay and are, therefore, not downgradient.

This investigation did not identify any private groundwater water wells within four miles of the property (i.e., ones not included in the SDWIS or the NWIS). Although the SDWIS contains drinking water information for populations as little as 1, the Safe Water Drinking Act that is the impetus for the database applies to drinking water supplies serving populations of 25 or greater. Additional local research would be required to confirm that there are no additional wells present.

Federal and state-listed endangered (E), threatened (T), or candidate (C) species known to occur within the FUDS property include the following: Sturgeon, shortnose (*Northeastern bulrush*); Turtle, green (*Chelonia mydas*); Turtle, hawksbill (*Eretmochelys imbricate*); Turtle, leatherback (*Dermochelys coriacea*); Turtle, loggerhead (*Caretta caretta*); Turtle, Atlantic ridley (*Lepidochelys kempii*); and Turtle, Northern red-bellied couter (*Chrysemys rubriventris bangsi*).

Groundwater contamination from the residue of munitions is not suspected.

8.1.3 Groundwater Conclusions

A detectable release of MC into the groundwater resulting from deterioration of practice bombs at the Cape Poge Little Neck Bomb Target Site is not suspected, but is possible. Due to the construction of the pyrotechnic signals in the practice bombs (cardboard and thin metal), the pyrotechnic MC are expected to have already been released and likely already migrated through the shallow groundwater and into the ocean and/or bay.

There are three types of soils at the Cape Poge Little Neck Bomb Target Site. One type are the very deep, excessively drained, sandy Udipsamments soils composed of windblown deposits. Another type are the nearly level, very deep, very poorly drained mucky peat Pawatuck soils formed in organic deposits along coastal shorelines. These mucky peat soils are in tidal areas that border saltwater and brackish water areas protected from the direct force of ocean waves but subject to daily inundation. Typically, they consist of very dark grayish brown and black mucky peat to a depth of about 20 inches. Below the peat and extending to a depth of 60 inches or more is light brownish gray sand. The last type are the Carver loamy course sands. Typically, the surface layer is dark grayish brown loamy coarse sand about 3 inches thick. The subsurface layer is light brownish gray loamy coarse sand about 1 inch thick. The subsoil is about 26 inches thick. The upper 10 inches of the subsoil is stron brown loamy coarse sand, and the lower 16 inches is brownish yellow coarse sand. The substratum is light yellowish brown coarse sand to a depth of 60 inches or more.

Residual bomb casings may still be releasing metals MC into the environment, including the shallow groundwater. At a pH >5.5, aluminum compounds exist predominantly in an undissolved form such as gibbsite, Al(OH)₃, or as aluminosilicates, except in the presence of high amounts of dissolved organic material or fulvic acid, which binds with aluminum

and can cause increased dissolved aluminum. In general, decreasing pH results in an increase in aluminum mobility¹³⁰. Copper's movement in soil is determined by a host of physical and chemical interactions of copper with the soil components. These components include pH, cation exchange capacity, the organic content of the soil, the presence of manganese and iron oxides, and even the presence of inorganic carbon such as carbonates. In general, copper will adsorb to organic matter, carbonate minerals, clay minerals, or hydrous iron and manganese oxides. Sandy soils with low pH have the greatest potential for leaching. Soil microorganisms also affect the absorption of copper in soils due to the uptake and assimilation of the metal by these microorganisms. It is not known, however, how the rate of uptake and absorption capacity of the microorganisms for copper compares with the binding capacity and affinities of copper by organic matter in soils, such as humic and fulvic acids. In groundwater, copper shows a pronounced solubility only in an oxidizing environment. In a reducing environment, solubility is low, possibly due to the formation of sulfides¹³¹. Chromium in soil is present mainly as insoluble oxide and is not very mobile in soil, possibly because it forms complexes with organic matter. Flooding of soils and the subsequent anaerobic decomposition of plant detritus may increase the mobilization of chromium(III) in soils due to the formation of soluble complexes. A smaller percentage of total chromium in soil exists as soluble chromium(VI) and chromium(III), which are more mobile in soil. The mobility of soluble chromium in soil depends on the sorption characteristics of the soil. The sorption of chromium to soil depends primarily on the clay content of the soil and, to a lesser extent, on iron oxide and the organic content of soil. Soluble and unadsorbed chromium(VI) and chromium(III) complexes in soil may leach into groundwater. The leachability of chromium(VI) in the soil increases as the pH of the soil increases. Chromium speciation in groundwater depends on the redox potential and pH conditions in the aquifer. Chromium(VI) predominates under highly oxidizing conditions; whereas chromium(III) predominates under reducing conditions. Oxidizing conditions are generally found in shallow aquifers, and reducing conditions generally exist in deeper groundwaters¹³².

The tendency of soluble manganese compounds to adsorb to soils and sediments depends mainly on the cation exchange capacity and the organic composition of the soil, but may be highly variable. Through cation exchange reactions, manganese ions and the charged surface of soil particles form manganese oxides, hydroxides, and oxyhydroxides. Manganese can also be adsorbed to other oxides, hydroxides, and oxyhydroxides through ligand exchange reactions. In some cases, adsorption of manganese to soils may not be a readily reversible process. At low concentrations, manganese may be "fixed" by clays and will not be released into solution readily¹³³. Most soils have an extremely high affinity for nickel. Once sorbed, nickel is difficult to desorb, which may indicate covalent bond formation. There are many adsorbing species in soil, and many factors affect the extent to which nickel is adsorbed, so the adsorption of nickel by soil is site specific. Soil properties such as texture, bulk density, pH, organic matter, the type and amount of clay minerals, and certain hydroxides, as well as the extent of groundwater flow, influence the retention and release of metals by soil. Amorphous oxides of iron and

manganese and, to a lesser extent, clay minerals, are the most important adsorbents in soil. In alkaline soils, adsorption may be irreversible, which limits nickel's availability and mobility in these soils¹³⁴.

The amount of soluble lead in surface waters depends upon the pH of the water and the dissolved salt content. Equilibrium calculations show that at pH >5.4, the total solubility of lead is approximately 30 micrograms per liter (µg/L) in hard water and approximately 500 µg/L in soft water. Sulfate ions, if present in soft water, limit the lead concentration in solution through the formation of lead sulfate. Above pH 5.4, the lead carbonates, PbCO₃ and Pb₂(OH)₂CO₃, limit the amount of soluble lead. The carbonate concentration is in turn dependent upon the partial pressure of carbon dioxide, pH, and temperature. Uptake of lead in animals may occur as a result of inhalation of contaminated ambient air or ingestion of contaminated plants. Lead, however, is not biomagnified in aquatic or terrestrial food chains. Older organisms tend to contain the greatest body burdens of lead. In aquatic organisms, lead concentrations are usually highest in benthic organisms and algae, and lowest in upper trophic level predators (e.g., carnivorous fish). The fate of lead in soil is affected by the adsorption at mineral interfaces, the precipitation of sparingly soluble solid forms of the compound, and the formation of relatively stable organic-metal complexes or chelates with soil organic matter. These processes are dependent on such factors as soil pH, soil type, particle size, organic matter content of soil, the presence of inorganic colloids and iron oxides, cation exchange capacity (CEC), and the amount of lead in soil¹³⁵.

Based on the foregoing, it appears that metal MCs are most likely to migrate to groundwater through the Udipsaments and Carver soils. The high organic content of the Pawatuck make migration of metal MCs to groundwater unlikely. In groundwater, lead and copper show a pronounced solubility only in an oxidizing environment. Due to the shallow nature of the groundwater, the groundwater is expected to be an oxidizing environment. Any metals MC present in the shallow groundwater are not expected to be present at detectable levels at the point of groundwater discharge to surface water due to the dynamic nature of the surface water (tides, wind-driven currents, etc.).

8.2 SURFACE WATER PATHWAY

8.2.1 Hydrologic Setting

The surface water bodies in the vicinity of Cape Poge are the Cape Poge Bay (west) and the Atlantic Ocean (east). The terrain in the area of the bombing target is flat. Surface water drainage from the land may enter any of the two saltwater bodies. Due to the porous and permeable nature of the Udipsamments and Carver soils, little, if any, surface water runoff is expected to reach either the Cape Poge Bay or the Atlantic Ocean from deteriorating casings that are present on or in these soils. Due to the poorly drained nature of the Pawatuck soils, surface water drainage from areas covered by these soils may well

reach surface water bodies. Much of the groundwater on Martha's Vineyard, including the Cape Poge Little Neck Bomb Target Site, discharges directly to the ocean and its bays.

Based on the discussion in Section 8.1.3, it appears that lead is the metal MC most likely to migrate to the groundwater at Little Neck and, subsequently, into Cape Poge Bay and the Atlantic Ocean surface waters. Due to the location of the target at Little Neck, most of the groundwater is expected to discharge into Cape Poge Bay.

The regional surface water is discussed in Section 3.4.5 of this report. Areas of surface water on Martha's Vineyard include salt marshes; freshwater marshes, bogs, and ponds; and small streams. Martha's Vineyard has no large streams because of the high permeability of much of the unconsolidated materials. Precipitation that is not transpired by plants or evaporated largely infiltrates the ground with little or no direct surface runoff.

Martha's Vineyard contains 62 lakes and ponds, 38 of which cover at least 10 acres. Six of these lakes are larger than 500 acres: Edgartown Great Pond in Edgartown (1,157 acres), Tisbury Great Pond in West Tisbury (772 acres), Sengekontacket Pond in Edgartown (716 acres), Menemsha Pond in Gay Head (640 acres), Squibnocket Pond in Chilmark and Gay Head (609 acres), and Lagoon Pond in Tisbury (535 acres).

Most lakes and ponds on Martha's Vineyard are located in kettle holes on outwash plains and are surface expressions of the water table. At these locations, the altitudes of the pond surfaces closely match those of the water table.¹³⁶

8.2.2 Surface Water Targets

As mentioned above, lakes and ponds on Martha's Vineyard are commonly used for irrigation, recreation, and fishing, but are not used for public-water supplies¹³⁷. This investigation did not identify any surface drinking water intakes within 15 miles downstream of the Cape Poge Little Neck Bomb Target Site.¹³⁸

The property drainage to both the west and east empties into Cape Poge Bay and the Atlantic Ocean, respectively. Both bodies of water are used by untold numbers of recreational fishermen, and thus, creates a potential human receptor.

Surface water targets include the flora and fauna in and around the Cape Poge Little Neck Target Bomb Site. Federal and state-listed endangered (E), threatened (T), or candidate (C) species known to occur within the FUDS property include the following: Sturgeon, shortnose (*Northeastern bulrush*); Turtle, green (*Chelonia mydas*); Turtle, hawksbill (*Eretmochelys imbricate*); Turtle, leatherback (*Dermochelys coriacea*); Turtle, loggerhead (*Caretta caretta*); Turtle, Atlantic ridley (*Lepidochelys kempii*); Turtle, Northern red-bellied cooter (*Chrysemys rubriventris bangsi*); Plover, piping (*Charadrius*

melodus); Tern, roseate (*Sterna dougallii dougallii*); and Beetle, Northeastern beach (*Cicindela dorsalis dorsalis*).

8.2.3 Surface Water Conclusions

Current releases of MC from the pyrotechnic signals in the practice bombs to surface water are not suspected. Due to the construction of these pyrotechnic signals (cardboard and thin metal), the pyrotechnic MC are expected to have already been released and no longer present in the surface water environment at detectable levels. No MC are associated with the bomb fillers of sand and water. The bomb casings, however, may still be present on the surface and continuing to degrade. Any metal MC released from residual bomb casings on the surface are not expected to be present at detectable levels in surface water as discussed in Section 8.1.3 above. There may be detectable levels in the runoff from the Pawatuck soils, but not once they reach the ocean or bay. There is no runoff from the other soil types.

8.3 SOIL EXPOSURE AND AIR PATHWAYS

8.3.1 Physical Conditions

The current land use is discussed in Section 3.3.2 of this report. In general, the Cape Poge Little Neck Bomb Target Site has been redeveloped for public use as a recreation area under the auspices of the TTOR.¹³⁹

Common activities on the FUDS property include, but are not limited to, sunbathing, swimming, 4-wheel driving, picnicking, hiking, fishing, clamming, crabbing and visiting the lighthouse. It is anticipated that the future land use will remain the same.¹⁴⁰

The topography of L-5-V Little Neck Dive Bombing Target can generally be described as a relatively flat maritime shrub thicket, salt marsh, and maritime beach. The topography of L-4-V Cape Poge Beach Calibration Range can generally be described as relatively flat dunes with cedar, maritime interdunal swale, maritime dunes, and maritime beach. Interdunal swales are ephemeral and form when winds scour sand until the water table is reached.¹⁴¹

Due to the types of residual MC potentially present on the property, i.e., deteriorating bomb casings, the air pathway for the L-5-V Little Neck Dive Bombing Target consists of the migration of soil via wind.

8.3.2 Soil and Air Targets

The Cape Poge Little Neck Bomb Target Site has remained mostly undeveloped as a wildlife refuge.

Using LandView6 Census 2000 Population Estimator¹⁴², the population within various radii and rings around the approximate center of the Cape Poge Little Neck Bomb Target Site (41 24.5 N/70 27.2 W) are included in Table 8.3.2 below. This table assumes the “on site” population is the number found within a 3,000 foot radius or 0.57 miles from the target center. Concentric population rings were figured beyond this “on site” area.

| TABLE 8.3.2 | | | |
|--------------------------------------|-----------------------------------|--------------------------------|---------------------------------|
| Total Population on or Within | | | |
| Radius from center | Population within a Radius | Ring Radii | Population within a Ring |
| On Site | 0 | On Site | 0 |
| 0.82 Miles | 0 | 0 – ¼ Mile (less “On Site”) | 0 |
| 1.07 Miles | 2 | > ¼ - ½ Mile | 2 |
| 1.57 Mile | 6 | > ½ - 1 Mile | 4 |
| 2.57 Miles | 21 | > 1 – 2 Miles | 15 |
| 3.57 Miles | 91 | > 2 – 3 Miles | 70 |
| 4.57 Miles | 151 | > 3 – 4 Miles | 60 |

This database also indicates that the property lies within the 02539 zip code and the 10th Congressional District of Massachusetts.

Cape Poge contains maritime Eastern Red Cedar woodland thickets of Blackberry, Bristly Dewberry, Black Huckleberry, Greenbrier, and Groundsel Tree. Small swales in the Cedars are home to Cranberries, Dwarf Spike Sedge, Highbush Blueberry, Three-square Sedge, Marsh Fern, Marsh Rose Mallow, and Water Millet. Some interdunal swales are shrubby whereas others are covered with sedges.¹⁴³

Salt marshes are composed of Salt Marsh Cordgrass, Salt Meadow Cordgrass, Black Grass, Salt Marsh Fleabane, and glassworts, with Marsh Elder and Groundsel Tree along their fringes. Salt marshes are home to Salt Marsh Sharp-tailed Sparrow, are a nursery ground for fish, and are feeding grounds for several species of birds such as Great Blue Heron and Black Crowned Night Heron. Maritime shrublands at Little Neck are upland habitats composed of Black Huckleberry, Northern Bayberry, Smooth Shadbush, roses, Catbrier, Scrub Oak, and a wide assortment of other shrubs. These shrublands are often dense and thicket-like. They are home to several nests of Northern Harrier, White-tailed Deer, and large populations of White-footed Mouse and Meadow Vole. Potential Terrestrial Sensitive Environments consisting of the habitats of Federal and State listed rare, threatened or endangered animal and plant species (see Section 3.3.5 Natural Resources) may be present in the vicinity of Cape Poge Little Neck Bomb Target Site. This investigation did not positively establish these habitats to be present on the property, however.

8.3.3 Soil Exposure and Air Pathway Conclusions

Direct contact and/or ingestion of surface MC by humans and animals are possible at Cape Poge Little Neck Target Bomb Site. Due to the construction of the pyrotechnic signals in the practice bombs (cardboard and thin metal), the pyrotechnic constituents are expected to have already been released and no longer present in the environment at detectable levels due to degradation. No MC is associated with the bomb fillers of sand and water.

In addition to identifying past incidents regarding MEC being found (see Section 4.2.1.4), the rusting nature of the casings indicates the release of MC. Casing metals MC may be present at detectable levels in the Pawatuck soils proximal to residual surface and subsurface casings. Further evaluation may be necessary to determine if detectable levels exist.

When munitions functioned at Cape Poge Little Neck Bomb Target Site while it was in operation between 1 July 1944 and 30 June 1947, they released substances into the atmosphere, which would have been detectable at the time. However, that material has long since dispersed and there is not a recent suspected release to the air except during the very intermittent blow-in-place render safe incidents, nor would any material from past munitions functioning be currently detectable except in the case of detonation of the MEC. Measurable releases of MC from the property via wind erosion of soil are not suspected.

Although direct contact of MC remaining in surface soil by persons visiting the property is possible, the potential exposure is remote and minimal due to the brief amount of time Wildlife Refuge visitors are on the property.

9 SUMMARY AND CONCLUSIONS

Summarized in this section are the findings of the PA, including the identification of areas of potential concern, MC, MEC, and any absence of a particular type of concern (e.g., no MMRP activities).

9.1 AREAS THAT MAY WARRANT NO FURTHER ACTION

This investigation found no evidence of L-4-V Cape Poge Beach Calibration Range being used other than as a calibration range (no munitions use / no known or suspected hazard).

9.1.1 HTRW

Neither this investigation, nor earlier studies, identified a Hazardous, Toxic and Radioactive Waste (HTRW) potential at the Cape Poge Little Neck Bomb Target Site.

9.1.2 PRP/HTRW

This investigation did not identify any previous or subsequent use of the property relating to hazardous, toxic or radioactive waste; therefore, there are no Potentially Responsible Party (PRP) considerations regarding HTRW at the Cape Poge Little Neck Bomb Target Site.

9.1.3 PRP/MMRP

This investigation did not identify any previous or subsequent use of the property relating to munitions or explosives; therefore, there are no Potentially Responsible Party (PRP) considerations regarding MMRP at the Cape Poge Little Neck Bomb Target Site.

9.1.4 CON/HTRW

The mission of Cape Poge Little Neck Bomb Target Site as a bombing target does not imply the potential presence of fuel storage tanks. The investigation team did not uncover any evidence indicating that the military ever placed underground storage tanks (USTs) or aboveground storage tanks (ASTs) at the Cape Poge Little Neck Bomb Target Site.

9.1.5 BD/DR

This investigation did not identify any unsafe structures or debris remaining as a result of the military's previous use of the Cape Poge Little Neck Bomb Target Site.

9.1.6 CWM

The investigation team uncovered no evidence of chemical warfare materials storage, usage or disposal at the Cape Poge Little Neck Bomb Target Site. The mission of the site does not imply the presence of CWM. Research discovered no historical records associating CWM with the property. Interviews did not disclose any correlation of CWM with the property. Additionally, the April 2008 property visit team did not uncover any evidence of CWM hazards.

9.2 POTENTIAL HAZARDS THAT MAY WARRANT FURTHER RESPONSE

9.2.1 MMRP

Based on the findings of previous investigations (see Section 2), there is a MEC potential on the former L-5-V Little Neck Dive Bombing Target. The investigation team uncovered evidence that the U.S. Navy used 100-lb. water-filled practice bombs, miniature bombs, and flares.

Due to the construction of the pyrotechnic signals in the practice bombs (cardboard and thin metal), the pyrotechnic constituents are expected to have already been released and no longer present in the environment at detectable levels. Residual casings are present in the surface soil and may be present in subsurface soil and detectable levels of casing MC may be present in soil proximal to the residual casings.

The investigation team confirmed the presence of MEC at the former L-5-V Little Neck Dive Bombing Target based on historical records indicating ordnance use and disposal and the observance of deteriorating munitions debris during the April 2008 property visit. The concern at the former L-5-V Little Neck Dive Bombing Target is that the public has been removing the practice bombs. An additional concern is that the public digs for clams within the area of the potential presence of MEC.¹⁴⁴

APPENDIX A
REFERENCE SOURCES AND RECORDS REVIEWED

APPENDIX A

A REFERENCE SOURCES AND RECORDS REVIEWED

Appendix B contains full references of all in text citations, along with the location of where the document was found. The research team searched at the following locations for records relating to MEC and CW activities at Cape Poge Little Neck Bomb Target Site. At these repositories the research team used finding aids and records managers to assist in locating documents relevant to the research topic. The investigation team also accumulated complementary documents reviewed on Cape Poge Little Neck Bomb Target Site but not specifically used. These complementary documents are stored with the original PA documents. Appendix J lists additional repositories and personnel contacted which reported no pertinent information. The following subparagraphs described the research team's efforts at the noted archival repositories:

A.1 TEXTUAL AND CARTOGRAPHIC REPOSITORIES

The following repositories were consulted for primarily for textual and cartographic information regarding Cape Poge Little Neck Bomb Target Site.

A.1.1 Air Force Historical Research Agency (USAFHRA)

600 Chennault Circle
Maxwell AFB AL 36112-6424
POC: Joseph Caver
334-953-7648
POC: Archie Difante
334-953-2447 DSN: 493
FAX: 334-953-4434
<http://www.au.af.mil/au/afhra/>

K412.01 V. 4 Camp Edwards History and Training 1953

172.1-22 Amphibious Training Center 1946

A.1.2 National Archives at College Park, Textual Records

8601 Adelphi Road

College Park, MD 20740-6001

POC: Rich Boylan

301-837-6800

<http://www.archives.gov/dc-metro/college-park/index.html>

Record Group 71 (Records of the Bureau of Yards and Docks)

Entry 1001 Naval Property Case Files, 1941-1958

Boxes 620-621, 649-653, 658-661, 680-681

Record Group 72 (Records of the Bureau of Aeronautics)

Entry 62B General Correspondence, 1943-1945

Boxes 2807-2813, 2839, 2840, 2858-2860, 2865, 2932-2938, 3393, 3394, 3414-3415, 3461

Entry 62B General Correspondence, 1946

Boxes 396, 397, 402, 406, 407, 424, 437, 438, 491, 494, 506

Entry 62B General Correspondence, 1947

Boxes 400, 420, 424

Entry 67 Confidential Correspondence, 1922-1944

Boxes 1080, 1083, 1085, 1086, 1107, 1108, 1124, 1126, 1127, 1167, 1201

Entry 67A Confidential General Correspondence, 1945

Boxes 287, 303, 308-311, 319, 320

Entry 75A Formerly Secret Correspondence, 1939-1947

Boxes 57, 345

Entry 1001A Unclassified General Correspondence 1948-1949

Boxes 403, 437, 438, 441, 442, 458-466

Record Group 74 (Records of the Bureau of Ordnance)

Entry 25I Confidential Correspondence, 1942

Boxes 101, 202, 203, 208

Entry 25J Restricted Correspondence, 1942

Boxes 179, 435, 440, 441, 454

Entry 25O Restricted Correspondence, 1943
Boxes 133-136, 467, 475, 476

Entry 25U Confidential Correspondence, 1944
Boxes 239-244, 501-507, 548

Entry 25V Restricted Correspondence, 1944
Boxes 169-173, 829, 847, 910

Entry 1002A Office of Construction and Procurement Subject Files, 1945
Boxes 355-362, 445-447

Entry 1003A Office of Administration General Subject Files, 1942-1946
Boxes 6-10, 13

Record Group 80 (Records Records of the Department of the Navy 1798-1947)

Entry 16 SEC/NAV General Correspondence (formerly Security Classified), 1940-1967
Box 693

Record Group 160 (Headquarters Army Service Forces)

Entry 27 Installations Branch, Correspondence Files Relating to Construction, Utilization and Disposition of Bases, 1942-1946
Box 28

Record Group 269 (Records of the General Services Administration)

Entry 62 Real Property Disposal Case Files Transferred From the Farm Credit Administration
Box 42

Record Group 291 (Records of the Federal Property Resources Service)

Entry 5 Real Property Disposal Case Files, 1949-1962
Box 97

Record Group 338 (Records of U.S. Army Operational, Tactical, and Support Organizations [World War II and Thereafter])

Entry 37042 Unit Records Infantry Divisions, 1940-1967
Boxes 2924-2929, 4014-4020

A.1.3 National Archives, Cartographic and Architectural Branch
8601 Adelphi Road
College Park, MD 20740
301-837-3200

Record Group 71 (Records of the Bureau of Yards and Docks)

Entry Index Cards Bureau of Yards and Docks Drawings
Boxes 26, 30-32

Entry Naval Facilities included in Yards and Docks Drawings on Paper
Folder 215-35 thru 215-45
No 215-44

Entry Microfilm Reels Series #2
Reels 123, 136-138

**Record Group 23 (Records of the U.S. Coast and Geodetic Survey); filed under
Record Group 370 (Records of the National Oceanic and Atmospheric
Administration)**

Entry Sectional Aeronautical Charts – Boston
Folder 1933-1950 (1 of 2)

A.1.4 National Archives at College Park, Still Pictures Branch
8601 Adelphi Road
College Park, MD 20740
POC: Reference Desk
301-837-0561

Record Group 80 (General Records of the Department of the Navy 1798-1947)

Entry 80 G General Photographs, 1918-1945
Box 1545

Entry 80 G General Photograph, 1946-58
Boxes 1689, 2343

**A.1.5 National Personnel Records Center Military Personnel Records (NPRC,
MPR)**

Appraisal and Disposition Section

9700 Page Avenue

St. Louis, MO 63132-5100

POC: Wilson Sullivan, Archivist, Military Operations Branch

314-801-9174

<http://www.archives.gov/st-louis/index.html>

The research team did not identify any pertinent records relating to the subject property that would be located at this repository.

A.1.6 National Archives - New England Region

380 Trapelo Road

Waltham, MA 02452

781-663-0130

Record Group 181 (Records of Naval Districts and Shore Establishments)

Entry 1st Naval District Public Works Officer, Real Estate Disposal Files, 1940-1954
Boxes 11-13, 44, 45, 73-75

Entry Real Property Disposal Quonset Point Naval Air Base, 1946
Box 6

Entry 1st Naval District Director of Training, General Correspondence, 1943 to 1949
Boxes 502, 503, 508, 509

Entry 1st Naval District Public Works Office, Formerly Classified General
Correspondence
Boxes 1-5

Entry 1st Naval District, General Correspondence, Commandant, 1940-1947
Boxes 1-4

Entry 1st Naval District, Formerly Classified General Correspondence, Assistant
Commandant, 1942-1943
Boxes 5, 6

Entry 1st Naval District, General Correspondence, 1946-1949
Box 1

Record Group 338 (Records of U.S. Army Commands)

Entry HQs Amphibian Command Camp Edwards, MA General Correspondence, 1942-1944

Boxes 1-11

**A.1.7 The Trustees of the Reservations
Islands Regional Office
PO Box 2106
Vineyard Haven, MA 02568
POC: Christopher Kennedy, Director, The Trustees of the Reservations
508-693-7662**

The research team discussed the MEC situation with the director of the TTOR, along with other topics such as history of the property, EOD calls, safety, and courses of action.

**A.1.8 U.S. Army Chemical Materials Agency
AMSCM-SSP
5183 Blackhawk Road
APG-EA, MD 21010-5424
1-800-488-0648, Public Affairs
POC: Rusty Fendick, NSCMP PM
410-436-8094
<http://www.cma.army.mil/home.aspx>**

The U.S. Army Chemical Materials Agency's Non-Stockpile Chemical Materiel Project (NSCMP) provides centralized management and direction to the U.S. Department of Defense for the disposal of non-stockpile chemical warfare materiel. In 1993 the NSCMP developed a Survey and Analysis Report to identify location, types and quantities of non-stockpile chemical material (NSCM). That report was updated in 1996 and released publicly and the Cape Poge Little Neck Bomb Target Site property was not included among the listed properties.

**A.1.9 U.S. Army Soldier Biological Chemical Command (SBCCOM)
Historical Office
Bldg. E-5027, Blackhawk
Aberdeen Proving Ground Edgewood Area, MD 21010-5423
POC: Jeff Smart and Cathy Ciolfi
410-436-4430**

The research team consulted the SBCCOM History Office Finding Aid - Areas Used by the Chemical Warfare Service during the 1900s for the subject sites and looked up the noted references within the SBCCOM collection. They also reviewed the state and

WWII drawers in the file cabinets for related material. No pertinent information was gathered.

A.2 AERIAL PHOTOGRAPHY REPOSITORIES

The following repositories were consulted for aerial imagery of the property. Note historical imagery that exceeded 1:40,000 scale was not considered for acquisition. The light gray shading indicates historical imagery that was actually acquired for use in aerial photography interpretation.

A.2.1 National Archives at College Park, Cartographic & Architectural Branch 8601 Adelphi Road College Park, MD 20740 POC: Henry Gwiazda, RG 71 301-713-7040

The research team consulted the aerial photo coverage overlays in Record Group 373 (Records of the U.S. Defense Intelligence Agency) for imagery at a scale of 1:40,000 or better covering the area. They pulled the index sheet for N41 W70.

| Date | Scale | Old Can | New Can | IM/NUS # | Frames | Total Frames |
|--------------|----------|---------|---------|----------|---|--------------|
| 27 Feb 1941 | 1:26,000 | H-14888 | 6533 | 10198211 | F1 thru F10 F11 thru 21 | 21 |
| 25 Sept 1942 | 1:21,000 | H-14829 | 6500 | 10198243 | STRIP NB24- 63 thru 65 STRIP25- 55 thru 59 | 8 |
| 24 July 1943 | 1:15,000 | 6-568 | 10293 | 10195165 | 43 thru 48 | 6 |
| 27 July 1943 | 1:15,000 | 4A-626 | 9709 | 10197148 | 42 thru 49 55 thru 63 69 thru 77 | 26 |
| 23 Aug 1943 | 1:6,500 | 5A-688 | 10087 | 10197412 | OBLIQUES; 0-153 thru 0- 154 | 2 |
| 23 Aug 1943 | 1:6,500 | 5A-688 | 10087 | 10197412 | 43 thru 75 | 33 |
| 4 Nov 1943 | 1:10,000 | N/A | 4276 | 10211724 | 37 thru 41 56 thru 60 | 10 |

The research team also consulted *Aerial Photographs in the National Archives-Special List 25*, dated 1990, for available imagery from:

Record Group 57 (Records of the U.S. Geological Survey)
Record Group 95 (Records of the U.S. Forest Service)
Record Group 114 (Records of the Soil Conservation Service)
Record Group 145 (Records of the Agriculture Stabilization and Conservation Service)

The team located the following imagery in Record Group 145:

| Date | Scale | Record Group | New Can | IM/NUS# | Frames | Total Frames |
|------|---------|--------------|-------------|----------|---|--------------|
| 1938 | 1:20000 | 57 | 2945 | N/A | GSF5-173 thru 178 GSF5-207 & 208 | 8 |
| 1952 | 1:20,00 | 145 | ON 34550 | 10231775 | DPO2K-28 thru 30, DPO2K-47 thru 52 DPO2K-55 thru 61 | 16 |

A.2.2 U.S. Geological Survey - EROS Data Center
Sioux Falls, South Dakota 57198
POC: Kimberly Kringen
605-594-6151 ext. 2075

CEMVS-EC-S tasked a contractor to perform an initial search of available imagery for Cape Poge Little Neck Bomb Target Site, Dukes County, MA.

Preliminary research revealed that imagery available was well past time of property usage. No further research was conducted.

A.2.3 U.S. Department of Agriculture - Aerial Photography Field Office
2222 W 2300 S
Salt Lake City, Utah 84119-2020
POC: Sharon McGiff
801-975-3503

CEMVS-EC-S tasked a contractor to perform an initial search of available imagery for Cape Poge Little Neck Bomb Target Site, Dukes County, MA.

Preliminary research revealed that imagery available was well past time of property usage. No further research was conducted.

APPENDIX B

REFERENCES

The following list of references only represents the items cited in preparation of this report, and does not illustrate all the documents reviewed or copied for the backup files (see Reference Sources and Records Reviewed Appendix A for further details). Source listings for locating each underlined reference are noted and printed portions are included in the noted Appendix of this PA, as well as being hyperlinked to scanned images of the backup documents on the digital version of this report on disc. An exception to this is made for large general, non-site specific references which are only included on the disc. References that are not underlined are generally available and not reproduced for this report.

¹ Corps of Engineers (CEMP-D)

2004 [ER 200-3-1, Environmental Quality - Formerly Used Defense Sites \(FUDS\) Program Policy](#), 10 May 2004.

Environmental Protection Agency

1991 [Guidance for Performing Preliminary Assessments Under CERCLA, EPA/540/G-91/013, Publication 9345.0-01A](#), September 1991.

³ [Section 2.0 PREVIOUS INVESTIGATIONS](#)

U.S. Army Corps of Engineers, New England District

2008 Inventory Project Report (INPR) for Project No. D01MA059500, Cape Poge Little Neck Bomb Target Site, Dukes County/Chappaquiddick Island, Edgartown, MA, FUDS Site No. D01MA0595. INPR Files, U.S. Army Corps of Engineers, New England District. 29 July 2008.

Appendix G-1

⁴ U.S. Army Corps of Engineers, Rock Island District

1999 [Archives Search Report for the Former Tisbury Great Pond, Martha's Vineyard, MA](#), FUDS Project No. D01MA045301, dated 16 Nov 1999. Backup Files, U.S. Army Corps of Engineers, Rock Island District.

⁵ 2010-02 Final Site Specific TCRA – EODT, Inc.pdf

⁶ U.S. Army Corps of Engineers, New England District

2008 [Memorandum, Subj: Time Critical Removal Action \(TCRA\) Memorandum for Cape Poge Little Neck Bomb Target Site, Chappaquiddick Island, Massachusetts and Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, Massachusetts, 3 December 2008](#). Backup Files, U.S. Army Corps of Engineers, New England District.

Appendix G-3

⁷ 2010-02 Final Site Specific TCRA – EODT, Inc.pdf

⁸ 2011-09-30 Final, Revision 3, Remedial Investigation Work Plan, Former Cape Poge Little Neck Bomb Target MRS, Former Moving Target Machine Gun Range at South Beach MRS & Tisbury Great Pond MRS, prepared by the U.S. Army Corps of Engineers, New England District.

¹⁴ Section 3.1 LOCATION

U.S. Navy, Naval Air Bases First Naval District, Quonset Point, RI

1946 [Letters to the War Assets Administration Re: Decontamination of Naval Facilities declared surplus to WAA, 4 December 1946 and 12 November 1946](#). RG 72, Entry 62B, Box 506. NARA II, College Park, MD.

Appendix G-4

¹⁵ U.S. Naval Air Station Quonset Point, Rhode Island

1944 [Correspondence to Chief of the Bureau of Aeronautics. Subj: Practice Bombing Target Sites – Request for Leasehold Interests](#). 4 July 1944, NARA College Park, RG72, Entry 62B 1943-45, Box 2839, Folder N1-9/NA43.

Appendix G-14

¹⁶ U.S. Navy, Navy Department, Washington, DC

1944 [Memorandum, Subj: Lease NOy\(R\) -36801 with Doris Huxford Chouinard, and Lease NOy\(R\) – 36802 with the same Lessor, covering land on “Little Neck” at Martha’s Vineyard, Mass., for use as a bomb target site, 27 November 1944](#). RG 72, Entry 62B, Box 2839. NARA II, College Park, MD.

Appendix G-6

¹⁷ U.S. Navy, Navy Department, Washington, DC

1944 [Memorandum, Subj: Lease NOy\(R\) -36819 with Luther M. Sibley, covering land on “Little Neck”, Martha’s Vineyard, Mass., for use as a bomb target site, 30 November 1944](#). RG 72, Entry 62B 1943-1945, Box 2839. NARA II, College Park, MD.

Appendix G-7

¹⁸ U.S. Navy, Navy Department, Washington, DC

1945 [Memorandum, Subj: Lease NOy\(R\) -36842 with Alice Rankin Lee, et al, covering land at Little Neck, Cape Poge, Chappaquiddick Island, Martha’s Vineyard to be used for a Bomb Target Site, 28 February 1945](#). RG 72, Entry 62B 1943-45, Box 2839. NARA II, College Park, MD.

Appendix G-5

- ¹⁹ U.S. Navy, Navy Department, Washington, DC
1944 [Memorandum, Subj: Lease NOy\(R\) -36801 with Doris Huxford Chouinard, and Lease NOy\(R\) – 36802 with the same Lessor, covering land on “Little Neck” at Martha’s Vineyard, Mass., for use as a bomb target site, 27 November 1944.](#) RG 72, Entry 62B, Box 2839. NARA II, College Park, MD.
Appendix G-6
- ²⁰ U.S. Navy, Navy Department, Washington, DC
1944 [Memorandum, Subj: Lease NOy\(R\) -36819 with Luther M. Sibley, covering land on “Little Neck”, Martha’s Vineyard, Mass., for use as a bomb target site, 30 November 1944.](#) RG 72, Entry 62B 1943-1945, Box 2839. NARA II, College Park, MD.
Appendix G-7
- ²¹ U.S. Navy, Navy Department, Washington, DC
1944 [Memorandum, Subj: Lease NOy\(R\) -36801 with Doris Huxford Chouinard, and Lease NOy\(R\) – 36802 with the same Lessor, covering land on “Little Neck” at Martha’s Vineyard, Mass., for use as a bomb target site, 27 November 1944.](#) RG 72, Entry 62B, Box 2839. NARA II, College Park, MD.
Appendix G-6
- ²² U.S. Navy, Chief of the Bureau of Aeronautics
1945 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: Targets, Gunnery and Rocket Ranges, and Boat Facilities Excess to Post-War Aviation Requirements dated 31 October 1945.](#) RG72, Entry 67A, Box 287, Folder NA43. NARA II, College Park, MD.
Appendix G-22
- ²³ U.S. Navy
1946 [Special Release. Lease number NOy\(R\)-36802 between the United States and Doris Chouinard](#) effective 12 April 1946. RG72, Entry 62B General Correspondence 1946, Box 396, Folder N1-9/NA43 Vol 2. NARA II, College Park, MD.
Appendix G-23

- ²⁴ U.S. Navy, Chief of the Bureau of Aeronautics
1947 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: First Naval District – Practice Target Area, Disestablishments of](#) dated 11 April 1947. NARA College Park, RG72, Entry 62B General Correspondence 1947, Box 424, Folder NDI Vol 2.
Appendix G-31
- ²⁵ U.S. Navy, Navy Department, Washington, DC
1947 [Correspondence to Alice R. Lee concerning lease number NOy\(R\)-36842 dated 18 April 1947.](#) RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.
Appendix G-32
- ²⁶ U.S. Navy
1947 [Special Release. Lease number NOy\(R\)-36819 between the United States and Luther Sibley](#) effective 1 July 1944. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44, Vol 2. NARA Northeast Region, Waltham, MA.
Appendix G-33
- ²⁷ U.S. Navy
1948 [Special Release. Lease number NOy\(R\)-36801 between the United States and Doris Chouinard](#) effective 17 May 1948. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44, Vol 2. NARA Northeast Region, Waltham, MA.
Appendix G-34
- ²⁸ U.S. Navy, Naval Air Bases, First Naval District
1947 [Correspondence to the Commandant, First Naval District. Subj: Leases NOy\(R\)-36801, NOy\(R\)-36819, and NOy\(R\)-36842 – cancellation of dated 10 June 1947.](#) RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 73. NARA Northeast Region, Waltham, MA.
Appendix G-35
- ²⁹ U.S. Navy, Commandant, First Naval District
1947 [Memorandum, Subj: Cancellation of Leases NOy\(R\)-36842, NOy\(R\)-36819, NOy\(R\)-36801, NOy\(R\)-35559 and NOy\(R\)-39456, dated 5 December 1947.](#) RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 73. NARA Northeast Region, Waltham, MA.
Appendix G-36

³⁰ U.S. Navy, Navy Department, Washington, DC
1944 [Memorandum, Subj: Lease NOy\(R\) -36801 with Doris Huxford Chouinard, and Lease NOy\(R\) – 36802 with the same Lessor, covering land on “Little Neck” at Martha’s Vineyard, Mass., for use as a bomb target site, 27 November 1944.](#) RG 72, Entry 62B, Box 2839. NARA II, College Park, MD.

Appendix G-6

³¹ U.S. Navy, Naval Air Bases First Naval District, Quonset Point, RI
1946 [Letters to the War Assets Administration Re: Decontamination of Naval Facilities declared surplus to WAA, 4 December 1946 and 12 November 1946.](#) RG 72, Entry 62B, Box 506. NARA II, College Park, MD.

Appendix G-4

³² Section 3.3.1 Prior Land Use

U.S. Navy. U.S. Naval Air Station, Quonset Point, R.I.

1944 [Memorandum, Subj: Practice Bombing Target Sites – Request for leasehold interests, 18 August 1944.](#) RG72, Entry 62B, Box 3071. NARA II, College Park, MD.

Appendix G-8

³³ Section 3.3.2 Current Land Use and Ownership

The Trustees of the Reservation

2004 Cape Poge & Wasque Management Plan, Section 3: Land-Use History & Cultural Resources, January 2004.
http://www.thetrustees.org/pages/1975_management_plan.cfm as of 2 December 2008.

³⁴ The Trustees of the Reservation

2004 Cape Poge & Wasque Management Plan, Section 6: The Visitor Experience, January, 2004.
http://www.thetrustees.org/pages/1975_management_plan.cfm as of 2 December 2008.

³⁵ Section 3.3.4 Population Demographics

U.S. Department of Commerce - Bureau of the Census

2008 <http://quickfacts.census.gov/qfd/states/25/25007.html> downloaded information 24 November 2008.

³⁶ Section 3.4.1 Climatic Data

The Weather Channel
2008

http://www.weather.com/outlook/recreation/outdoors/wxclimatology/monthly/graph/USMA0239?from=text_bottomnav_outdoors, as of 25 November 08.

³⁷ U.S. Geological Survey

Oldale, Robert N. "Coastal Erosion on Cape Cod: Some Questions and Answers". WoodsHole.er.usgs.gov accessed 25 November 2008.

³⁸ Section 3.4.2 Topography

The Trustees of the Reservation

2004 Cape Poge & Wasque Management Plan, Section 5: Natural Resources, January, 2004. http://www.thetrustees.org/pages/1975_management_plan.cfm as of 2 December 2008.

³⁹ Section 3.4.3 Regional Geology and Physiology

The Trustees of the Reservation

2004 Cape Poge & Wasque Management Plan, Section 5: Natural Resources, January, 2004. http://www.thetrustees.org/pages/1975_management_plan.cfm as of 2 December 2008.

⁴⁰ United States Department of Agriculture

1986 [Soil Survey of Dukes County, Massachusetts](#), September 1986, by Peter C. Fletcher and Rino J. Roffinoli, Soil Conservation Service. United States Department of Agriculture, Soil Conservation Service in cooperation with Massachusetts Agricultural Experiment Station.

⁴¹ Section 3.4.4 Regional Soils

United States Department of Agriculture

1986 [Soil Survey of Dukes County, Massachusetts](#), September 1986, by Peter C. Fletcher and Rino J. Roffinoli, Soil Conservation Service. United States Department of Agriculture, Soil Conservation Service in cooperation with Massachusetts Agricultural Experiment Station. Inset sheet number 12.

⁴² United States Department of Agriculture

1986 [Soil Survey of Dukes County, Massachusetts](#), September 1986, by Peter C. Fletcher and Rino J. Roffinoli, Soil Conservation Service. United States Department of Agriculture, Soil Conservation Service in cooperation with Massachusetts Agricultural Experiment Station. p 43.

- ⁴³ United States Department of Agriculture
1986 [Soil Survey of Dukes County, Massachusetts](#), September 1986, by Peter C. Fletcher and Rino J. Roffinoli, Soil Conservation Service. United States Department of Agriculture, Soil Conservation Service in cooperation with Massachusetts Agricultural Experiment Station. p 36.
- ⁴⁴ United States Department of Agriculture
1986 [Soil Survey of Dukes County, Massachusetts](#), September 1986, by Peter C. Fletcher and Rino J. Roffinoli, Soil Conservation Service. United States Department of Agriculture, Soil Conservation Service in cooperation with Massachusetts Agricultural Experiment Station.
- ⁴⁵ Section 3.4.5 Surface Water Hydrology
U.S. Geological Survey
1992 [Water Resources of Massachusetts](#): U.S. Geological Survey Water-Resources Investigations Report 90-4144,94 by A.C. Simcox, 1992, p.50.
- ⁴⁶ Sections 3.4.6 Ground Water Hydrology
U.S. Geological Survey
1992 [Water Resources of Massachusetts](#): U.S. Geological Survey Water-Resources Investigations Report 90-4144,94 by A.C. Simcox, 1992, p.50-53.
- ⁴⁷ Section 3.4.7 Natural Resources (Threatened and Endangered Species)
U.S. Fish & Wildlife Service
2008 <http://www.fws.gov/northeast/endangered/>, as of 24 November 2008
- ⁴⁸ The Trustees of the Reservation
2004 Cape Poge & Wasque Management Plan, Section 5: Natural Resources, January, 2004. http://www.thetrustees.org/pages/1975_management_plan.cfm as of 2 December 2008.
- ⁴⁹ The Trustees of the Reservation
2004 Cape Poge & Wasque Management Plan, Section 5: Natural Resources, January, 2004. http://www.thetrustees.org/pages/1975_management_plan.cfm as of 2 December 2008.

⁵⁰ Section 3.4.8 Historic and Cultural Resources

Massachusetts Historical Commission

2008 [Official Correspondence from the Commonwealth of Massachusetts, Massachusetts Historical Commission, entitled Cape Poge Little Neck Chappaquiddick Island, Edgartown, MA](#), by Edward L. Bell, Technical Services Division. MHC #RC.45470, dated 2 December 2008.

Appendix G-9

⁵¹ Massachusetts Historical Commission

2008 [Official Correspondence from the Commonwealth of Massachusetts, Massachusetts Historical Commission, entitled Cape Poge Little Neck Chappaquiddick Island, Edgartown, MA](#), by Edward L. Bell, Technical Services Division. MHC #RC.45470, dated 2 December 2008.

Appendix G-9

⁵² National Register of Historic Places

2008 Web site: <http://www.nationalregisterofhistoricplaces.com/> as accessed on 25 November 2008.

⁵⁴ U.S. Army, Amphibious Training Command, Camp Edwards, MA

1942 [Official correspondence, Memorandum for General Anderson, Subj: Amphibious Exercise, No. 2](#), 6 October 1942. Box 10 143.04-2 Sep-Oct 1942 to 143.04D 1944-1946, Folder 143.04-2 Sep-Oct 1942. USAFHRA, Maxwell AFB, Montgomery, AL.

Appendix G-10

⁵⁵ U.S. Army, The Amphibious Training Center

1946 [The Amphibious Training Center Study No. 22. Subj: Studies in the History of Army Ground Forces](#), 1 September 1946. Box 16, 172.1-9 1946 to 172.1-29 1946, Folder 172.1-15 1946. Section VI, pages 49-56. USAFHRA, Maxwell AFB, Montgomery, AL.

Appendix G-11

⁵⁶ U.S. Army Engineer Amphibian Command

1943 [Correspondence from Headquarters, Engineer Amphibian Command dated 7 August 1943](#). RG 77, Entry 1950 Engineer Amphibian Command Camp Edwards, MA 1942-1943, Folder HQ, EAC, General Orders 1943. NARA II, College Park, MD.

Appendix G-12

- ⁵⁷ Lee, Alice R.
1944 [Correspondence from Cape Poge property owner, Alice R. Lee, to the Navy Department of Yards and Docks – Real Estate Division – Regional Office, 25 Oct 1944](#). RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA, Northeast Region, Waltham, MA.
Appendix G-13
- ⁶⁰ Shettle, Jr., M.L.
1995 [United States Naval Air Stations of World War II, Vol I – Eastern States, page 127](#). Schaertel Publishing Co., Bowersville, Georgia.
Appendix G-22
- ⁶¹ U.S. Naval Air Station Quonset Point, Rhode Island
1944 [Correspondence to Chief of the Bureau of Aeronautics. Subj: Practice Bombing Target Sites – Request for Leasehold Interests](#). RG72, Entry 62B 1943-45, Box 2839, Folder N1-9/NA43, NARA II, College Park, MD.
Appendix G-14
- ⁶² Chouinard, Doris
1944 [Correspondence to the Navy Department, Bureau of Yards and Docks](#). RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA, Northeast Region, Waltham, MA.
Appendix G-15
- ⁶³ Lee, Alice R.
1944 [Correspondence from Cape Poge property owner, Alice R. Lee, to the Navy Department of Yards and Docks – Real Estate Division – Regional Office, 25 Oct 1944](#). RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA Northeast Division, Waltham, MA.
Appendix G-13
- ⁶⁴ U.S. Navy, Naval Air Station Quonset Point
1944 [Memorandum, Subj: Practice Bombing Target Sites – Request for Leasehold Interests, 26 May 1944](#). RG72, Entry 62B, Box 3071. NARA II, College Park, MD.
Appendix G-16

⁶⁵ Section 4.2 Military Operations

U.S. Navy, U.S. Naval Air Station, Quonset Point, R.I.

1944 [Memorandum, Subj: Practice Bombing Target Sites – Request for leasehold interests, 18 August 1944.](#) RG72, Entry 62B, Box 3071. NARA II, College Park, MD.

Appendix G-8

⁶⁶ U.S. Navy, Naval Air Station Quonset Point

1944 [Memorandum, Subj: Practice Bombing Target Sites – Request for Leasehold Interests, 26 May 1944.](#) RG72, Entry 62B, Box 3071. NARA II, College Park, MD.

Appendix G-16

⁶⁷ Chief of Bureau of Aeronautics

1944 [Correspondence to Chief of Yards and Docks. Subj: NAS Quonset Point, R.I. – Practice Bombing Target Sites – Request for Leasehold Interests, 19 August 1944.](#) RG72, Entry 62B General Correspondence 1943-45, Box 3071, Folder N12/NA43 Vol 2. NARA II, College Park, MD.

Appendix G-17

⁶⁸ U.S. Naval Air Station Quonset Point, Rhode Island

1944 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: Practice Bombing Target Sites, Request for Leasehold Interests, 25 September 1944.](#) RG72, Entry 62B General Correspondence 1943-45, Box 3071, Folder N12/NA43 Vol 2. NARA II, College Park, MD.

Appendix G-18

⁶⁹ U.S. Navy, Navy Department, Washington, DC

1944 [Memorandum, Subj: Lease NOy\(R\) -36801 with Doris Huxford Chouinard, and Lease NOy\(R\) – 36802 with the same Lessor, covering land on “Little Neck” at Martha’s Vineyard, Mass., for use as a bomb target site, 27 November 1944.](#) RG 72, Entry 62B, Box 2839. NARA II, College Park, MD.

Appendix G-19

⁷⁰ U.S. Navy, Navy Department, Washington, DC

1944 [Memorandum, Subj: Lease NOy\(R\) -36819 with Luther M. Sibley, covering land on “Little Neck”, Martha’s Vineyard, Mass., for use as a bomb target site, 30 November 1944.](#) RG 72, Entry 62B 1943-1945, Box 2839. NARA II, College Park, MD.

Appendix G-20

- ⁷¹ U.S. Navy, Naval Air Bases First Naval District, Quonset Point, RI
1946 [Letters to the War Assets Administration Re: Decontamination of Naval Facilities declared surplus to WAA, 4 December 1946 and 12 November 1946](#). RG 72, Entry 62B, Box 506. NARA II, College Park, MD.
Appendix G-4
- ⁷² U.S. Navy
1945 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: Request for Cancellation of Leases for Land Used for Practice Bombing Targets](#) dated 17 December 1945. RG72, Entry 62B General Correspondence 1943-1945, Box 2859, Folder N1-9/NDI. NARA II, College Park, MD.
Appendix G 21
- ⁷³ U.S. Navy, Chief of the Bureau of Aeronautics
1945 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: Targets, Gunnery and Rocket Ranges, and Boat Facilities Excess to Post-War Aviation Requirements dated 31 October 1945](#). RG72, Entry 67A, Box 287, Folder NA43. NARA II, College Park, MD.
Appendix G-22
- ⁷⁴ U.S. Navy, Naval Air Bases First Naval District, Quonset Point, RI
1946 [Letters to the War Assets Administration Re: Decontamination of Naval Facilities declared surplus to WAA, 4 December 1946 and 12 November 1946](#). RG 72, Entry 62B, Box 506. NARA II, College Park, MD.
Appendix G-4
- ⁷⁵ U.S. Navy
1946 [Special Release. Lease number NOy\(R\)-36802 between the United States and Doris Chouinard](#) effective 12 April 1946. G72, Entry 62B General Correspondence 1946, Box 396, Folder N1-9/NA43 Vol 2. NARA II, College Park, MD.
Appendix G-23
- ⁷⁶ Shettle, Jr., M.L.
1945 [United States Naval Air Stations of World War II, Vol I – Eastern States, page 127](#). Schaertel Publishing Co., Bowersville, Georgia.
Appendix G-22

- ⁷⁷ U.S. Navy
1946 [Renewal of Government Lease, NOy\(R\)-36801 with Doris Chouinard](#), dated 31 May 1946. RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.
Appendix G-25
- ⁷⁸ U.S. Navy
1946 [Renewal of Government Lease, NOy\(R\)-36842 with Alice R. Lee](#), dated 31 May 1946. RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.
Appendix G-26
- ⁷⁹ U.S. Navy
1946 [Renewal of Government Lease, NOy\(R\)-36819 with Luther Sibley](#) dated 31 May 1946. RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.
Appendix G-27
- ⁸⁰ U.S. Navy, Chief of Naval Operations
1946 [Correspondence to the Commander Naval Air Bases, First Naval District. Subj: Cape Poge Bombing Target – Civilian Protest To](#) dated 19 August 1946. RG72, Entry 62B General Correspondence 1946, Box 437. NARA II, College Park, MD.
Appendix G 28
- ⁸¹ U.S. Navy, Office of the Chief of Naval Operations
1946 [Correspondence to Senator Walsh dated 26 and 28 August 1946 Concerning the bombing target at Cape Poge.](#) RG72, Entry 62B General Correspondence 1946, Box 402, Folder N1-9/ND4. NARA II, College Park, MD.
Appendix G-29
- ⁸² U.S. Navy, Naval Air Bases First Naval District
1946 [Correspondence to the Chief of Naval Operations. Subj: Cape Poge Bombing Target](#) dated 5 September 1946. G72 Entry 62B General Correspondence 1946, Box 437, Folder N12/NA43. NARA II, College Park, MD.
Appendix G- 30

- ⁸³ U.S. Navy, Naval Air Bases First Naval District, Quonset Point, RI
1946 [Letters to the War Assets Administration Re: Decontamination of Naval Facilities declared surplus to WAA, 4 December 1946 and 12 November 1946](#). RG 72, Entry 62B, Box 506. NARA II, College Park, MD.
Appendix G-4
- ⁸⁴ U.S. Navy, Chief of the Bureau of Aeronautics
1947 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: First Naval District – Practice Target Area, Disestablishments of](#) dated 11 April 1947. RG72, Entry 62B General Correspondence 1947, Box 424, Folder NDI Vol 2. NARA II, College Park, MD.
Appendix G-31
- ⁸⁵ U.S. Navy, Navy Department, Washington, DC
1947 [Correspondence to Alice R. Lee concerning lease number NOy\(R\)-36842 dated 18 April 1947](#). RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.
Appendix G-32
- ⁸⁶ U.S. Navy
1947 [Special Release. Lease number NOy\(R\)-36819 between the United States and Luther Sibley](#) effective 1 July 1944. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44, Vol 2. NARA Northeast Region, Waltham, MA.
Appendix G-33
- ⁸⁷ U.S. Navy
1948 [Special Release. Lease number NOy\(R\)-36801 between the United States and Doris Chouinard](#) effective 17 May 1948. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44, Vol 2. NARA Northeast Region, Waltham, MA.
Appendix G-34
- ⁸⁸ U.S. Navy, Naval Air Bases, First Naval District
1947 [Correspondence to the Commandant, First Naval District. Subj: Leases NOy\(R\)-36801, NOy\(R\)-36819, and NOy\(R\)-36842 – cancellation of dated 10 June 1947](#). RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 73. NARA Northeast Region, Waltham, MA.
Appendix G-35

- ⁸⁹ U.S. Navy, Commandant, First Naval District
1947 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: Cancellation of Leases NOy\(R\)-36842, NOy\(R\)-36819, NOy\(R\)-36801, NOy\(R\)-35559 and NOy\(R\)-39456](#) dated 5 December 1947. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 73. NARA Northeast Region, Waltham, MA.
Appendix G-36
- ⁹⁰ Section 4.2.1.1 Summary of MEC Activities
U.S. Navy, First Naval District (Headquarters)
1946 [Memorandum, Subj: Cape Poge Bombing Target, 5 September 1946. RG72, Entry 62B, General Correspondence 1946, Box 437.](#) NARA II, College Park, MD.
Appendix G-30
- ⁹¹ U.S. Navy, First Naval District (Headquarters)
1946 [Memorandum, Subj: Cape Poge Bombing Target, 5 September 1946. RG72, Entry 62B, General Correspondence 1946, Box 437.](#) NARA II, College Park, MD.
Appendix G-30
- ⁹² U.S. Navy, Naval Air Bases First Naval District, Quonset Point, RI
1946 [Letters to the War Assets Administration Re: Decontamination of Naval Facilities declared surplus to WAA, 4 December 1946 and 12 November 1946.](#) RG 72, Entry 62B, Box 506. NARA II, College Park, MD.
Appendix G-4
- ⁹³ U.S. Naval Air Station, Quonset Point, Rhode Island
1947 Public Works Department, Drawings: Typical Land Dive and Glide Bombing Target, Drawing Number S-1310, 10 March 1947.
- ⁹⁴ U.S. Army Corps of Engineers, New England District
2008 [Memorandum, Subj: Time Critical Removal Action \(TCRA\) Memorandum for Cape Poge Little Neck Bomb Target Site, Chappaquiddick Island, Massachusetts and Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, Massachusetts, 3 December 2008.](#) Backup Files, U.S. Army Corps of Engineers, New England District.
Appendix G-3

- ⁹⁵ U.S. Navy, Naval Air Bases First Naval District, Quonset Point, RI
1946 [Letters to the War Assets Administration Re: Decontamination of Naval Facilities declared surplus to WAA, 4 December 1946 and 12 November 1946](#). RG 72, Entry 62B, Box 506. NARA II, College Park, MD.
Appendix G-4
- ⁹⁶ U.S. Navy, Naval Air Bases First Naval District, Quonset Point, RI
1946 [Letters to the War Assets Administration Re: Decontamination of Naval Facilities declared surplus to WAA, 4 December 1946 and 12 November 1946](#). RG 72, Entry 62B, Box 506. NARA II, College Park, MD.
Appendix G-4
- ⁹⁷ U.S. Navy, Chief of the Bureau of Aeronautics
1947 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: First Naval District – Practice Target Area, Disestablishments of](#) dated 11 April 1947. RG72, Entry 62B General Correspondence 1947, Box 424, Folder NDI Vol 2. NARA II, College Park, MD.
Appendix G-31
- ⁹⁸ U.S. Navy, Navy Department, Washington, DC
1947 [Correspondence to Alice R. Lee concerning lease number NOy\(R\)-36842 dated 18 April 1947](#). RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.
Appendix G-32
- ⁹⁹ U.S. Navy
1947 [Special Release. Lease number NOy\(R\)-36819 between the United States and Luther Sibley](#) effective 1 July 1944. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44, Vol 2. NARA Northeast Region, Waltham, MA.
Appendix G-33
- ¹⁰⁰ U.S. Navy
1948 [Special Release. Lease number NOy\(R\)-36801 between the United States and Doris Chouinard](#) effective 17 May 1948. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44, Vol 2. NARA Northeast Region, Waltham, MA.
Appendix G-34

- ¹⁰¹ U.S. Navy, Naval Air Bases, First Naval District
1947 [Correspondence to the Commandant, First Naval District. Subj: Leases NOy\(R\)-36801, NOy\(R\)-36819, and NOy\(R\)-36842 – cancellation of dated 10 June 1947.](#) RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 73. NARA Northeast Region, Waltham, MA.
Appendix G-35
- ¹⁰² U.S. Navy, Commandant, First Naval District
1947 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: Cancellation of Leases NOy\(R\)-36842, NOy\(R\)-36819, NOy\(R\)-36801, NOy\(R\)-35559 and NOy\(R\)-39456](#) dated 5 December 1947. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 73. NARA Northeast Region, Waltham, MA.
Appendix G-36
- ¹⁰³ Section 4.2.1.4 EOD Incidents
U.S. Army Corps of Engineers, New England District
2008 [Memorandum, Subj: Time Critical Removal Action \(TCRA\) Memorandum for Cape Poge Little Neck Bomb Target Site, Chappaquiddick Island, Massachusetts and Former Moving Target Machine Gun Range at South Beach, Martha’s Vineyard, Massachusetts, 3 December 2008.](#) Backup Files, U.S. Army Corps of Engineers, New England District.
Appendix G-3
- ¹⁰⁴ U.S. Army Corps of Engineers, New England District
2008 [Memorandum, Subj: Time Critical Removal Action \(TCRA\) Memorandum for Cape Poge Little Neck Bomb Target Site, Chappaquiddick Island, Massachusetts and Former Moving Target Machine Gun Range at South Beach, Martha’s Vineyard, Massachusetts, 3 December 2008.](#) Backup Files, U.S. Army Corps of Engineers, New England District.
Appendix G-3
- ¹⁰⁵ Section 4.2.4 Operations Involving other Buildings or Structures BD/D
Corps of Engineers (CEMP-D)
2004 [ER 200-3-1, Environmental Quality - Formerly Used Defense Sites \(FUDS\) Program Policy](#), 10 May 2004.

¹⁰⁶ Section 4.3 MAP ANALYSIS

U.S. Navy, NAS Quonset Point

1944 [Plan of Cape Poge Chappaquiddick Island, Public Works Department, 14 March 1944, revised 30 March 1944](#). RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 12/44. NARA Northeast Region, Waltham, MA.

Appendix I-1

¹⁰⁷ U.S. Navy, NAS Quonset Point

1944 [Little Neck - Cape Poge Chappaquiddick Island, Public Works Department, approved 5 August 1944](#). RG181, Entry First Naval District Real Estate Disposal Files 1940-1954, Box 12. NARA Northeast Region, Waltham, MA.

Appendix I-2

¹⁰⁸ U.S. Navy, Navy Department, Washington, DC

1945 [Memorandum, Subj: Lease NOy\(R\) -36842 with Alice Rankin Lee, et al. covering land at Little Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard to be used for a Bomb Target Site, 28 February 1945](#). RG 72, Entry 62B 1943-45, Box 2839. NARA II, College Park, MD.

Appendix G-37

¹⁰⁹ U.S. Navy, Navy Department, Washington, DC

1944 [Memorandum, Subj: Lease NOy\(R\) -36801 with Doris Huxford Chouinard, and Lease NOy\(R\) – 36802 with the same Lessor, covering land on “Little Neck” at Martha’s Vineyard, Mass., for use as a bomb target site, 27 November 1944](#). RG 72, Entry 62B, Box 2839. NARA II, College Park, MD.

Appendix G-19

¹¹⁰ U.S. Navy, Navy Department, Washington, DC

1944 [Memorandum, Subj: Lease NOy\(R\) -36801 with Doris Huxford Chouinard, and Lease NOy\(R\) – 36802 with the same Lessor, covering land on “Little Neck” at Martha’s Vineyard, Mass., for use as a bomb target site, 27 November 1944](#). RG 72, Entry 62B, Box 2839. NARA II, College Park, MD.

Appendix G-19

- ¹¹¹ U.S. Navy, Navy Department, Washington, DC
1944 [Memorandum, Subj: Lease NOy\(R\) -36819 with Luther M. Sibley, covering land on “Little Neck”, Martha’s Vineyard, Mass., for use as a bomb target site, 30 November 1944.](#) RG 72, Entry 62B 1943-1945, Box 2839. NARA II, College Park, MD.
Appendix G-20
- ¹¹² Department of Commerce
1945 [Boston Sectional Aeronautical Chart \(UV-10\) Edition 15-1, 25 November 1943.](#) RG 370, Entry Sectional Aeronautical Charts – Boston. NARA II, Cartographic and Architectural Branch, College Park, MD.
Appendix I-3
- ¹¹³ Department of Commerce
1947 [Boston Sectional Aeronautical Chart \(UV-10\) Edition 18,](#) 14 January 1947, RG 370, Entry Sectional Aeronautical Charts – Boston. NARA II, Cartographic and Architectural Branch, College Park, MD.
Appendix I-4
- ¹¹⁴ U.S. Navy
1947 [U.S. Navy Acquisition Map of Massachusetts/Rhode Island, dated 9 May 1947.](#) Appendix L-4 of U.S. Army Corps of Engineers, Rock Island District, Tisbury Great Pond Archive Search Report, Project Number D01MA045301 dated 16 November 1999.
Appendix I-5
- ¹¹⁵ Section 5.1.2 Conventional MEC Technical Data
U.S. Navy, First Naval District (Headquarters)
1946 [Memorandum, Subj: Cape Poge Bombing Target, 5 September 1946.](#) RG72, Entry 62B, General Correspondence 1946, Box 437. NARA II, College Park, MD.
Appendix G-30
- ¹¹⁶ U.S. Navy, Naval Air Station Quonset Point, R.I.
1944 [Memorandum, Subj: Practice Bombing Target Sites – Request for Leasehold Interests, 26 May 1944.](#) RG72, Entry 62B, , Box 3071. NARA II, College Park, MD.
Appendix G-16

¹¹⁷ Section 5.3.1. Conventional MEC Constituents

U.S. Army Corps of Engineers, Fort Worth District

2003 Inventory Project Report, Bombing Target B-1, Project Number K06TX121900, April 2003. INPR Files, U.S. Army Corps of Engineers, Fort Worth District.

¹¹⁸ John Wiley & Sons, Inc.

2004 Sax's Dangerous Properties of Industrial Materials, 11th Edition, 2004. John Wiley & Sons, Inc., pp. 2107,3301.

¹¹⁹ Efundu (Engineering Fundamentals)

2009 http://www.efunda.com/materials/alloys/alloy_home/steels.cfm, accessed 3 February 2009.

¹²⁰ Admiral Steel

2009 <http://www.admiralsteel.com/reference/alcomp.html> accessed 3 February 2009.

¹²¹ U.S. Naval Air Station Quonset Point, Rhode Island

1942 Quonset Point Standard Drawing No. S1310; TM 1-260, Dive Bombing, 14 December 1942

¹²² U.S. Army Air Corps

1942 Army Air Corps Studies and Reports on Bombing Analysis and Bombing Accuracy, 1942.

¹²³ U.S. Naval Air Station Quonset Point, Rhode Island

1942 Quonset Point Standard Drawing No. S1310; TM 1-260, Dive Bombing, 14 December 1942

¹²⁴ U.S. Army Air Corps

1942 Army Air Corps Studies and Reports on Bombing Analysis and Bombing Accuracy, 1942.

¹²⁵ U.S. Navy, Naval Air Bases First Naval District, Quonset Point, RI

1946 [Letters to the War Assets Administration Re: Decontamination of Naval Facilities declared surplus to WAA, 4 December 1946 and 12 November 1946](#). RG 72, Entry 62B, Box 506. NARA II, College Park, MD.

Appendix G-4

¹²⁷ Sections 3.4.6 Ground Water Hydrology

U.S. Geological Survey

1992 Water Resources of Massachusetts: U.S. Geological Survey Water-Resources Investigations Report 90-4144,94 by A.C. Simcox, 1992, p.50-53.

¹²⁸ Section 8.1.1 Hydrogeologic Setting

U.S. Environmental Protection Agency

[Safe Drinking Water Information System \(SDWIS\)](#) web page

¹²⁹ U.S. Geological Survey (USGS), National Water Information System (NWIS)

[Ground Water Data for the Nation](#) web page

¹³⁰ U.S. Department of Health and Human Services

2006 Draft Toxicology Profile for Aluminum, U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, September 2006, Section 6.3.

¹³¹ U.S. Department of Health and Human Services

2004 Toxicological Profile for Copper, U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, September 2004, Section 6.3.

¹³² U.S. Department of Health and Human Services

2000 Toxicological Profile for Chromium, U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, September 2000, Section 5.3.

¹³³ U.S. Department of Health and Human Services

2000 Toxicological Profile for Manganese, U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, September 2000, Section 5.3.

¹³⁴ U.S. Department of Health and Human Services

2005 Draft Toxicology Profile for Nickel, U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, August 2005, Section 6.3.

¹³⁵ U.S. Department of Health and Human Services

2007 Toxicological Profile for Lead, U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, September 2007, Section 6.3.

¹³⁶ Section 3.4.5 Surface Water Hydrology

U.S. Geological Survey

1992 Water Resources of Massachusetts: U.S. Geological Survey Water-Resources Investigations Report 90-4144,94 by A.C. Simcox, 1992, p.50.

¹³⁷ Section 3.4.5 Surface Water Hydrology

U.S. Geological Survey

1992 Water Resources of Massachusetts: U.S. Geological Survey Water-Resources Investigations Report 90-4144,94 by A.C. Simcox, 1992, p.50.

¹³⁸ Section 8.2.2 Surface Water Targets

U.S. Environmental Protection Agency

[Safe Drinking Water Information System \(SDWIS\)](#) web page

¹³⁹ Section 8.3.1 Physical Conditions

The Trustees of the Reservation

2004 Cape Poge & Wasque Management Plan, Section 3: Land-Use History & Cultural Resources, January 2004.
http://www.thetrustees.org/pages/1975_management_plan.cfm, as of 2 December 2008.

¹⁴⁰ The Trustees of the Reservation

2004 Cape Poge & Wasque Management Plan, Section 6: The Visitor Experience, January, 2004.
http://www.thetrustees.org/pages/1975_management_plan.cfm, as of 2 December 2008.

¹⁴¹ Section 3.4.2 Topography

The Trustees of the Reservation

2004 Cape Poge & Wasque Management Plan, Section 5: Natural Resources, January, 2004. http://www.thetrustees.org/pages/1975_management_plan.cfm, as of 2 December 2008.

¹⁴² Section 8.3.2 Soil and Air Targets

U.S. Census Bureau

2004 LandView 6 software

¹⁴³ The Trustees of the Reservation

2004 Cape Poge & Wasque Management Plan, Section 5: Natural Resources, January, 2004.
http://www.thetrustees.org/pages/1975_management_plan.cfm as of 2 December 2008.

- ¹⁴⁴ U.S. Army Corps of Engineers, New England District
2008 [Memorandum, Subj: Time Critical Removal Action \(TCRA\)
Memorandum for Cape Poge Little Neck Bomb Target Site,
Chappaquiddick Island, Massachusetts and Former Moving Target Machine
Gun Range at South Beach, Martha's Vineyard, Massachusetts, 3
December 2008.](#) Backup Files, U.S. Army Corps of Engineers, New
England District.
Appendix G-3

APPENDIX C

**ABBREVIATIONS, ACRONYMS,
AND BREVITY CODES**

ABBREVIATIONS, ACRONYMS AND BREVITY CODES

The following list contains abbreviations, acronyms and brevity codes within this Preliminary Assessment, as well as typical others.

| | |
|--------|--|
| AA | Anti-Aircraft |
| AAF* | Army Air Field |
| ACGIH | American Conference of Governmental Industrial Hygienist |
| ACM | Asbestos-Containing Materials |
| AEC | Army Environmental Center |
| AFB | Air Force Base |
| AGO | Adjutant General's Office |
| ANSI | American National Standards Institute |
| AP | Armor Piercing |
| APDS | Armor Piercing Discarding Sabot |
| APERS | Anti-Personnel |
| APT | Armor Piercing-with Tracer |
| AR | Army Regulation |
| ARAR | Applicable or Relevant and Appropriate Requirements |
| ARID | Army Range Inventory Database |
| ARS | Advanced Range Survey |
| ASR | Archives Search Report |
| ASSHP | Abbreviated Site Safety and Health Plan |
| AT | Anti-Tank |
| ATG | Air-to-Ground |
| Aux | Auxiliary |
| BD | Base Detonating |
| BD/DR | Building Demolition/Debris Removal |
| BE | Base Ejection |
| BGR | Bombing and Gunnery Range |
| BLM | Bureau of Land Management |
| BRAC | Base Realignment and Closure |
| BTEX | Benzene, Toluene, Ethylbenzene and Xylene |
| BWM | Biological Warfare Material |
| CAA | Clean Air Act |
| CAAA | Clean Air Act Amendments of 1990 |
| CADD | Computer-Aided Drafting and Design |
| CAIS | Chemical Agent Identification Set |
| cal | Caliber |
| CBDA | Chemical and Biological Defense Agency |
| CBDCOM | Chemical and Biological Defense Command |
| CE | Corps of Engineers |
| CEC | Cation Exchange Capacity |
| CEHNC | Corps of Engineers, Engineering and Support Center, Huntsville |

| | |
|----------|--|
| CEMVS | Corps of Engineers, Mississippi Valley Division, St. Louis District |
| CEMVK | Corps of Engineers, Mississippi Valley Division, Vicksburg District |
| CEP | Circular Error of Probability |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| CERFA | Community Environmental Response Facilitation Act |
| CFR | Code of Federal Regulations |
| cfs | Cubic Feet Per Second |
| CHE | Chemical Warfare Material Hazard Evaluation |
| CN | Chloroacetopheno |
| COC | Chemicals of concern |
| COE | Chief of Engineers |
| COMP | Composition |
| CON/HTRW | Containerized/Hazardous, Toxic, and Radioactive Waste |
| COPC | Constituents of Potential Concern |
| CSM | Chemical Surety Material |
| CSM | Command Sergeant Major |
| ctg | Cartridge |
| CW | Chemical Warfare |
| CWM | Chemical Warfare Materials |
| CWS* | Chemical Warfare Service |
| CX | Center of Expertise |
| DA | Department of the Army |
| DANC | Decontaminating Agent, Non-Corrosive |
| DARCOM | Development and Readiness Command |
| DEET | Diethyltoluamide |
| DERA | Defense Environmental Restoration Account |
| DERP | Defense Environmental Restoration Program |
| DMM | Discarded Military Munitions |
| DoD | Department of Defense |
| DOE | Department of Energy |
| DOI | Department of Interior |
| DOJ | Department of Justice |
| DWMA | Drinking Water Mapping Application |
| EE/CA | Engineering Evaluation/Cost Analysis |
| EFIG | Emission Factor and Inventory Group |
| EHE | Explosive Hazard Evaluation |
| EIR | Environmental Impact Report |
| EIS | Environmental Impact Statement |
| EM | Engineer Manual |
| EO | Executive Order |
| EOD | Explosive Ordnance Disposal |
| EPA | Environmental Protection Agency |
| EPCRA | Emergency Planning and Community Right-to-Know Act |

| | |
|----------|--|
| ERDA | Environmental Restoration Defense Account |
| ESA | Endangered Species Act |
| ESI | Expanded Site Inspection |
| ETL | Engineering Technical Letter |
| FDE | Findings and Determination of Eligibility |
| FEMA | Federal Emergency Management Agency |
| FFMC | Federal Farm Mortgage Corporation |
| FGDC | Federal Geographic Data Committee |
| FM | Field Manual |
| FS | Feasibility Study |
| FUDS | Formerly Used Defense Sites |
| GIS | Geographic Information System |
| GP | General Purpose |
| GPM | Gallons Per Minute |
| GPS | Global Positioning System |
| GSA | General Services Administration |
| HAP | Hazardous Air Pollutant |
| HAZWOPER | Hazardous Waste Operations |
| HBX | high blast explosives; mixtures of RDX, TNT and aluminum |
| HC | Hexachloroethane |
| HE | High Explosive |
| HEAT | High Explosive Anti-Tank |
| HEI | High Explosive Incendiary |
| HEP | High Explosive Plastic |
| HHE | Health Hazard Evaluation |
| HMX | cyclotetramethylenetetranitramine (a type of high explosive) |
| HQ | Headquarters |
| HQDA | Headquarters, Department of the Army |
| HQUSACE | Headquarters, U.S. Army Corps of Engineers |
| HTH | High Test Bleach |
| HTRW | Hazardous Toxic and Radioactive Waste |
| HTW | Hazardous and Toxic Waste |
| IAS | Initial Assessment Study |
| IATCB | Interdepartmental Air Traffic Control Board |
| ILLUM | Illuminating |
| INPR | Inventory Project Report |
| IRP | Installation Restoration Program |
| LRDP | Long Range Development Plan |
| MASSDEP | Massachusetts Department of Environmental Protection |
| MC | Munitions Constituents |
| MCX | Mandatory Center of Expertise |
| MEC | Munitions and explosives of concern |
| MG | Machine Gun |
| MG | Major General |

| | |
|--------|---|
| MHC | Massachusetts Historical Commission |
| MLLW | Mean Lower Low Water |
| mm | Millimeter |
| MM | Military Munitions |
| MMR | Military Munitions Response |
| MMRP | Military Munitions Response Program |
| MPPEH | Material Potentially Presenting an Explosive Hazard |
| MR | Molasses Residuum |
| MRA | Munitions Response Area |
| MRS | Munitions Response Site |
| MRSPP | Munitions Response Site Prioritization Protocol |
| MT | Mechanical Time |
| MTSQ | Mechanical Time Super Quick |
| NAAS* | Naval Auxiliary Air Station |
| NARA | National Archives and Records Administration |
| NAS* | Naval Air Station |
| NAVSEA | Naval Sea Systems Command |
| NCDC | National Climatic Data Center |
| NCP | National Contingency Plan |
| n.d. | No Date |
| NDAI | No DoD Action Indicated |
| NEW | Net Explosive Weight |
| NFS | National Forest Service |
| NG | National Guard |
| NGVD | National Geographic Vertical Datum |
| NIMA | National Imagery and Mapping Agency |
| NIOSH | National Institute for Safety and Health |
| NMAS | National Map Accuracy Standards |
| NOAA | National Oceanic and Atmospheric Administration |
| NOFA | No Further Action |
| NPL | National Priorities List |
| NPRC | National Personnel Records Center |
| NRC | National Records Center |
| NSCM | Non-Stockpile Chemical Material |
| NSCMP | Non-Stockpile Chemical Materiel Project |
| NWIS | National Water Information System |
| NWS | National Weather Service |
| OCE | Office Chief of Engineers |
| OE | Ordnance and Explosives |
| OEW | Ordnance and Explosive Waste |
| OP | Ordnance Pamphlet |
| OSHA | Occupational Safety and Health Administration |
| PA | Preliminary Assessment |
| PAE | Preliminary Assessment of Eligibility |

| | |
|--------|--|
| PAH | Polycyclic Aromatic Hydrocarbons |
| PBR | Practice Bombing Range |
| PBR | Precision Bombing Range |
| PCB | Polychlorinated Biphenyls |
| PCOC | Potential Chemicals of Concern |
| PE | Professional Engineer |
| PIBD | Point Initiating, Base Detonating |
| PIRS | Project Information Retrieval System |
| PL | Public Law |
| PM | Project Manager |
| POC | Point of Contact |
| POL | Petroleum, Oils and Lubricants |
| PPE | Personal Protective Equipment |
| PRP | Potentially Responsible Party |
| PWS | Performance Work Statement |
| QASAS | Quality Assurance Specialist, Ammunition Surveillance |
| RA | Removal Action |
| RAC | Risk Assessment Code |
| RCRA | Resource Conservation and Recovery Act of 1976 |
| RCWM | Recovered Chemical Warfare Material |
| RD | Remedial Design |
| RDX | Royal Dutch Explosive - cyclotrimethylenetrinitramine; also known as cyclonite or hexogen (a type of high explosive) |
| RDT&E | Research, Development, Testing and Evaluation |
| RG | Record Group |
| RI | Remedial Investigation |
| RI/FS | Remedial Investigation/Feasibility Study |
| RMIS | Restoration Management Information System |
| ROD | Record of Decision |
| ROE | Right of Entry |
| SARA | Superfund Amendments and Reauthorization Act |
| SBCCOM | Soldier Biological Chemical Command |
| SCAITS | Simulant Chemical Agent Identification Training Sets |
| SCS | Soil Conservation Service |
| SDWIS | Safe Drinking Water Information System |
| SEP | Spherical Error of Probability |
| SHPO | State Historic Preservation Office |
| SI | Site Inspection |
| SLD | St. Louis District, Corps of Engineers |
| SOP | Standing Operating Procedure |
| SOP | Standard Operating Procedure |
| SPB* | Surplus Property Board |
| SPCC | Spill Prevention, Containment and Countermeasures |
| SSHO | Site Safety and Health Officer |

| | |
|----------|---|
| SSHP | Site Safety and Health Plan |
| STB | Supertropical Bleach |
| SWMU | Solid Waste Management Units |
| TAG | Technical Advisory Group |
| TB | Technical Bulletin |
| TCRA | Time Critical Removal Action |
| TECOM | Test Evaluation Command |
| TEU | United States Army Technical Escort Unit |
| TIF | Tagged Information File |
| TM | Technical Manual |
| TNT | Tri-Nitro-Toluene |
| TOE | Table of Organization and Equipment |
| TP | Target Practice |
| TTOR | The Trustees of Reservations |
| USA | United States of America |
| USACE | U.S. Army Corps of Engineers |
| USADACS | U.S. Army Defense Ammunition Center and School |
| USAEC | U.S. Army Environmental Center |
| USAED | U.S. Army Engineer District |
| USAESCH | U.S. Army Engineering and Support Center, Huntsville |
| USAFETAC | U.S. Air Force Environmental Technical Application Center |
| USAFHRA | U.S. Air Force Historical Research Agency |
| USATCES | U.S. Army Technical Center for Explosive Safety |
| USATHMA | U.S. Army Toxic and Hazardous Materials Agency |
| USC | United States Code |
| USCG | United States Coast Guard |
| USDA | U.S. Department of Agriculture |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| UST | Underground Storage Tank |
| UXO | Unexploded Ordnance |
| UXOSO | Unexploded Ordnance Safety Officer |
| VE | Value Engineering |
| WAA* | War Assets Administration |
| WAGE | Wide Area GPS Enhancement |
| WD | War Department |
| WGS | World Geodetic System |
| WHPA | Wellhead Protection Area |
| WNRC | Washington National Records Center |
| WWI | World War I |
| WWII | World War II |

* designates an historic acronym

APPENDIX D

GLOSSARY

GLOSSARY

The following list contains a glossary of selected terms within this Preliminary Assessment. Source references for the definitions are provided in the endnotes that follow.

Active Rangeⁱ

A military range that is currently in service and is being regularly used for range activities

Anomaly Avoidance

Techniques employed on property known or suspected to contain UXO, other munitions that may have experienced abnormal environments (e.g., DMM), munitions constituents in high enough concentrations to pose an explosive hazard, or CA, regardless of configuration, to avoid contact with potential surface or subsurface explosive or CA hazards, to allow entry to the area for the performance of required operations.

Chain of Custody

The activities and procedures taken throughout the inspection, re-inspection and documentation process to maintain positive control of MPPEH to ensure the veracity of the process used to determine the status of material as to its explosive hazard. This includes all such activities from the time of collection through final disposition.

Chemical Agent (CA)ⁱⁱ

A chemical compound (to include experimental compounds) that, through its chemical properties produces lethal or other damaging effects on human beings, in intended intended for use in military operations to kill, seriously injure, or incapacitate a person through its physiological effects. Excluded are research, development, testing and evaluation (RDTE) solutions, riot control agents, chemical defoliants and herbicides, smoke and other obscuration materials; flame and incendiary materials; and industrial chemicals.

Chemical Agent (CA) Hazard

A condition where danger exists because CA is present in a concentration high enough to present potential unacceptable effects (e.g., death, injury, damage) to people, operational capability, or the environment.

Chemical Agent Identification Sets (CAIS)ⁱⁱⁱ

CAIS are military training aids containing small quantities of various chemical warfare agents and other chemicals.

Chemical Agent (CA) Safety

A condition where operational capability and readiness, people, property, and the environment are protected from the unacceptable effects or risks of a mishap involving chemical warfare material (CWM) and CA in other than munitions configurations.

Chemical Warfare Agents (CWA)

Are the V- and G-series nerve agents, H-series (i.e., “mustard” agents) and L-series (i.e., lewisite) blister agents, and certain industrial chemicals used by the military as weapons, including hydrogen cyanide (AC), cyanogens chloride (CK), or carbonyl dichloride (called phosgene or CGI00. CWA do not include riot control agents (e.g., w-chloroacetophenone (CN) and ochlorobenzylidenemalononitrile (CS) tear gas), chemical herbicides, smoke or incendiary compounds, and industrial chemicals that are not configured as a military munition.

Chemical Warfare Material (CWM)

Items generally configured as a munition containing a chemical compound that is intended to kill, seriously injure, or incapacitate a person through its physiological effects. CWM includes V- and G- series nerve agents or H-series (mustard) and L-series (lewisite) blister agents in other-than-munition configurations; and certain industrial chemicals (e.g., hydrogen cyanide (AC), cyanogen chloride (CK), or carbonyl dichloride (called phosgene or CG)) configured as a military munition. Due to their hazards, prevalence and military-unique application, chemical agent identifications sets (CAIS) are also considered CWM. CWM does not include: riot control devices; chemical defoliants and herbicides; industrial chemicals (e.g., AC, CK, or CG) not configured as a munition; smoke and other obscuration producing items; flame and incendiary producing items; or soil, water, debris or other media contaminated with low concentrations of chemical agents where no CA hazards exist.^{iv}

Chemical Warfare Material (CWM) is a general term that includes four subcategories of specific materials:

- CWM, explosively configured are all munitions that contain a CWA fill and any explosive component. Examples include M55 rockets with CWA, the M23 VX mine, and the M360 105-millimeter GB artillery cartridge.
- CWM, nonexplosively configured are all munitions that contain a CWA fill but that do not include any explosive components. Examples include any chemical munition that does not contain an explosive component and VX or mustard agent spray canisters.
- CWM, bulk container are all non-munitions-configured containers of CWA (e.g., a tone container).
- Chemical Agent Identification Sets (CAIS). All forms of CAIS are scored the same except for CAIS K941, toxic gas set M-1; and K942, toxic gas set M-2/E-11, which are scored higher due to the relatively large quantities of agent they contain.^{vi}

Chemical Warfare Material (CWM) Response

Munitions responses and other responses to address the chemical safety; explosives safety, when applicable; human health; or environmental risks presented by CA-filled munitions and CA in other than munitions configurations. (See munitions response.)

Closed Range^{vi}

A military range that has been taken out of service as a range and that either has been put to new uses that are incompatible with range activities or is not considered by the military to be a potential range area. A closed range is still under the control of a DoD component.

Construction Support

Assistance provided by DoD EOD or UXO-qualified personnel and/or by personnel trained and qualified for operations involving CA, regardless of configuration, during intrusive construction activities on property known or suspected to contain UXO, other munitions that may have experienced abnormal environments (e.g., DMM), munitions constituents in high enough concentrations to pose an explosive hazard, or CA, regardless of configuration, to ensure the safety of personnel or resources from any potential explosive or CA hazards.

¹ On 23 April 2007, the Department of the Army changed the 5 September 1997 Inerim Guidance for biological Warfare Material (BWM) and Non-stockpiled Chemical Warfare Material (CWM) Response Activities that CAIS that do not contain dilute amounts of nerve agent or neat Chemical Agent (i.e., CAIS K941 and K942) are not longer considered CWM.

Cultural Debris

Debris found on operational ranges or munitions response sites, which may be removed to facilitate a range clearance or munitions response, that is not related to munitions or range operations. Such debris includes, but is not limited to: rebar, household items (refrigerators, washing machines, etc.), automobile parts and automobiles that were not associated with range targets, fence posts, and fence wire.

Defense Site^{vii}

Locations that are or were owned by, leased to, or otherwise possessed or used by the Department of Defense. The term does not include any operational range, operating storage or manufacturing facility, or facility that is used for or was permitted for the treatment or disposal of military munitions.

Discarded Military Munitions (DMM)^{viii}

Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include unexploded ordnance, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of, consistent with applicable environmental laws and regulations.

Disposal

End of life tasks or actions for residual materials resulting from demilitarization or disposition operations.

Disposition

The process of reusing, recycling, converting, redistributing, transferring, donating, selling, demilitarizing, treating, destroying, or fulfilling other life-cycle guidance, for DoD property.

Documentation of the Explosives Safety Status of Material

Documentation attesting that material:

- (1) does not present an explosive hazard and is consequently safe for unrestricted transfer within or release from DoD control, or*
- (2) is MPPEH, with the known or suspected explosive hazards stated, that is only transferable or releasable to a qualified receiver.*

This documentation must be signed by a technically qualified individual with direct knowledge of:

- (1) the results of both the material's 100 percent inspection and 100 percent re-inspection or of the approved process used and the appropriate level of re-inspection, and*
- (2) the veracity of the chain-of-custody for the material. This signature is followed by the signature of another technically qualified individual who inspects the*

material on a sampling basis (sampling procedures are determined by DoD entity that is inspecting the material).

Environmental Regulators and Safety Officials

Include, but may not be limited to environmental regulators, environmental coordinators or hazardous material coordinators, law enforcement officers, and safety personnel of the U.S. Environmental Protection Agency (USEPA), American Indians and Alaska Natives, other Federal Land Managers, and/or the States. When appropriate, public health officials of various agencies may also be involved.

Explosive Hazard

A condition where danger exists because explosives are present that may react (e.g., detonate, deflagrate) in a mishap with potential unacceptable effects (e.g., death, injury, damage) to people, property, operational capability, or the environment.

Explosive Ordnance Disposal (EOD)

The detection, identification, on-site evaluation, rendering safe, recovery, and final disposal of unexploded ordnance and of other munitions that have become an imposing danger, for example, by damage or deterioration.

Explosive Ordnance Disposal (EOD) Personnel

Military personnel who have graduated from the Naval School, Explosive Ordnance Disposal; are assigned to a military unit with a Service-defined EOD mission; and meet Service and assigned unit requirements to perform EOD duties. EOD personnel have received specialized training to address explosive and certain CA hazards during both peacetime and wartime. EOD personnel are trained and equipped to perform Render Safe Procedures (RSP) on nuclear, biological, chemical, and conventional munitions, and on improvised explosive devices.

Explosive Ordnance Disposal (EOD) Unit

A military organization constituted by proper authority; manned with EOD personnel; outfitted with equipment required to perform EOD functions; and assigned an EOD mission.

Explosives or Munitions Emergency Response^{ix}

All immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions, and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any

reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.

Explosives Safety

A condition where operational capability and readiness, people, property, and the environment are protected from the unacceptable effects or risks or potential mishaps involving military munitions.

Former Range^x

Former range means the munitions response site is a location that was:

- (1) Closed by a formal decision made by the DoD Component with administrative control over the location, or*
- (2) Put to a use incompatible with the presence of UXO, DMM, or MC.*

Formerly Used Defense Sites (FUDS)^{xi}

A FUDS is defined as a facility or site (property) that was under the jurisdiction of the Secretary of Defense and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to contamination by hazardous substances. By the Department of Defense Environmental Restoration Program (DERP) policy, the FUDS program is limited to those real properties that were transferred from DoD control prior to 17 October 1986. FUDS properties can be located within the 50 States, District of Columbia, Territories, Commonwealths, and possessions of the United States.

Historical Evidence^{xii}

Historical evidence means that the investigation:

- (1) Found written documents or records, or*
- (2) Documented interviews of persons with knowledge of site conditions, or*
- (3) Found and verified other forms of information.*

Inactive Range^{xiii}

A military range that is not currently being used, but that is still under military control and considered by the military to be a potential range area, and that has not been put to a new use that is incompatible with range activities.

Interim Holding Facility (IHF)

A temporary storage facility designed to hold recovered chemical warfare material (RCWM).

Land Use Controls (LUC)

LUC are physical, legal, or administrative mechanisms that restrict the use of, or limit access to, real property, to manage risks to human health and the environment. Physical Mechanisms encompass a variety of engineered remedies to contain or reduce contamination and/or physical barriers to limit access to real property, such as fences or signs.

Long-Term Management (LTMgt)

The period of site management (including maintenance, monitoring, record keeping, 5-year reviews, etc.) initiated after response (removal or remedial) objectives have been met (i.e., after Response Complete).

Material Potentially Presenting an Explosive Hazard (MPPEH)^{xiv}

Material potentially containing explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris); or material potentially contaminating a high enough concentration of explosives such that the material presents an explosive hazard (e.g., equipment, drainage systems, holding tanks, piping, ventilation ducts that were associated with munitions production, demilitarization or disposal operations). Excluded from MPPEH are munitions within DoD's established munitions management system and other hazardous items that may present explosion hazards (e.g., gasoline cans, compressed gas cylinders) that are not munitions and are not intended for use as munitions.

Military Munitions^{xv}

Military munitions means all ammunition products and components produced or used by the armed forces for national defense and security, including ammunition products or components under the control of the Department of Defense, the Coast Guard, the Department of Energy, and the National Guard. The term includes: confined gaseous, liquid, and solid propellants; explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives, and chemical warfare agents; chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof.

The term does not include wholly inert items; improvised explosive devices; and nuclear weapons, nuclear devices, and nuclear components, other than nonnuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) have been completed.

Military Munitions Burial Site

A site, regardless of location, where military munitions or CA, regardless of configuration, were intentionally buried, with the intent to abandon or discard. This term includes burial sites used to dispose of military munitions or CA, regardless of configuration, in a manner consistent with applicable environmental laws and regulations or the national practice at the time of burial. It does not include sites where munitions were intentionally covered with earth during authorized destruction by detonation, or where in-situ capping is implemented as an engineered remedy under an authorized response action.

Military Munitions Response Program (MMRP) Site^{xvi}

A discrete location within a Munitions response Area (MRA) that may or may not require a munitions response.

Military Range^{xvii}

Designated land and water areas set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas.

Military Separation Distance (MSD)

MSD is the distance at which personnel in the open must be from an intentional or unintentional detonation.

Munitions Constituents (MC)^{xviii}

Any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and nonexplosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

Munitions and Explosives of Concern (MEC)^{xix}

This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks, means:

- (a) Unexploded Ordnance (UXO), as defined in 10 U.S.C. 2710 (e) (9);*
- (b) Discarded military munitions (DMM), as defined in 10 U.S.C. 2710 (e) (2); or*
- (c) Munitions constituents (e.g., TNT, RDX) present in high enough concentrations to pose an explosive hazard.*

Munition Debris^{xx}

Remnants of munitions (e.g., penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization or disposal.

Munition Response Area (MRA)^{xxi}

Any area on a defense site that is known or suspected to contain UXO, DMM, or MC. Examples include former ranges and munitions burial areas. A munitions response area is comprised of one or more munitions response sites.

Munition Response Site (MRS)^{xxii}

A discrete location within a MRA that is known to require a munitions response.

Munition with the Greatest Fragmentation Distance (MGFD)

The munition with the greatest fragment distance that is reasonably expected (based on research or characterization) to be encountered in any particular area.

Munitions and Explosives of Concern (MEC)

This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks means:

- (A) Unexploded ordnance (UXO), as defined in 10 U.S. C. 101(e)(5);*
- (B) Discarded military munitions (DMM), as defined in 10 U.S.C. 2710(e)(2); or*
- (C) Munitions constituents (e.g., TNT, RDX) as defined in 10 U.S.C. 2710(e)(3)).*

Munitions Constituents (MC)^{xxiii}

Any materials originating from unexploded ordnance (UXO), discarded military munitions (DMM), or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

Munitions Debris

Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

Munitions Response

Response actions, including investigation, removal actions and remedial actions to address the explosives safety, human health, or environmental risks presented by unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC), or to support a determination that no removal or remedial action is required.

Munitions Response Area (MRA)

Any area on a defense site that is known or suspected to contain UXO, DMM, or MC. Examples include former ranges and munitions burial areas. A munitions response area is comprised of one or more munitions response sites.

Munitions Response Site (MRS)

A discrete location within an MRA that is known to require a munitions response.

Mutual Agreement

A meeting of the minds on a specific subject, and a manifestation of intent of the parties to do or refrain from doing some specific act or acts. Inherent in any mutual agreement or collaborative process are the acknowledgement of each member's role in the process and their differing views of their authorities. The mutual agreement process will provide a means of resolving differences without denying the parties an opportunity to exercise their respective authorities should mutual agreement fail to be achieved.

One Percent Lethality Distance

A distance calculated from a given CA Maximum Credible Event (MCE) and meteorological conditions (temperature, wind speed, Pasquill stability factor) and established as the distance at which dosage from that MCE agent release would be 150 mg-min/m³ for H and HD agents, 75 mg-min/m³ for HT agent, 150 mg-min/m³ for Lewisite, 10 mg-min/m³ for GB agent, 4.3 mg-min/m³ for VX vapor, and 0.1 mg-min/m³ for inhalation and deposition of liquid VX.

On-call Construction Support

Construction support provided, on an as needed basis, where the probability of encountering UXO, other munitions that may have experienced abnormal environments (e.g., DMM), munitions constituents in high enough concentrations to pose an explosive hazard, or CA, regardless of configuration, has been determined to be low. This support can respond from off-site when called, or be on-site and available to provide required construction support.

On-Site Construction Support

Dedicated construction support, where the probability of encountering UXO, other munitions that may have experienced abnormal environments (e.g., DMM), munitions constituents in high enough concentrations to pose an explosive hazard, or CA, regardless of configuration, has been determined to be moderate to high.

On-the-Surface

A situation in which UXO, DMM or CA, regardless of configuration, are: (A) entirely or partially exposed above the ground surface (i.e., the top of the soil layer); or (B) entirely or partially exposed above the surface of a water body (e.g., because of tidal activity).

Open Burn (OB)

An open-air combustion process by which excess, unserviceable, or obsolete munitions are destroyed to eliminate their inherent explosive hazards.

Open Detonation (OD)

An open-air process used for the treatment of excess, unserviceable or obsolete munitions whereby an explosive donor charge initiates the munitions being treated.

Operational Range

A range that is under the jurisdiction, custody, or control of the Secretary of Defense and that is used for range activities; or although not currently being used for range activities, that is still considered by the Secretary to be a range and has not been put to a new use that is incompatible with range activities. (10 U.S.C. 101(e)(3)(A) and (B)). Also includes “military range,” “active range,” and “inactive range” as those terms are defined in 40 CFR 266.201.

Ordnance and Explosives (OE)^{xxiv}

Anything related to munitions designed to cause damage to personnel or material through explosive force, incendiary action or toxic effects. OE is: bombs and warheads, missiles; artillery, mortar and rocket ammunition, small arms ammunition; antipersonnel and antitank mines; demolition charges; high explosives and propellants; depleted uranium rounds; military chemical warfare materials as defined [below]; and all similar and related items or components, explosive in nature or otherwise designed to cause damage to personnel or material (e.g., fuze, boosters/propellants or soils/media contaminated with explosives if the concentration is sufficient to be reactive.) . . .Unexploded Ordnance (UXO) is an item of explosive ordnance which has failed to function as designed or has been abandoned, discarded or improperly disposed of and is still capable of functioning, causing damage to personnel or material.

Operational Range^{xxv}

A military range that is used for range activities, or a military range that is not currently being used, but that is still considered by the DoD Component to be a range area; is under the jurisdiction, custody, or control of the Department of Defense; and has not been put to a new use that is incompatible with range activities.

Other Than Operational Range

Replaces the previous definitions for Closed, Transferring, or Transferred ranges

Physical Evidence^{xxvi}

Physical evidence means:

- (1) Recorded observations from on-site investigations, such as finding intact UXO or DMM, or components, fragments, or other pieces of military munitions, or*
- (2) The results of field or laboratory sampling and analysis procedures, or*
- (3) The results of geophysical investigations.*

Primary Explosives

Primary explosives are highly sensitive compounds that are typically used in detonators and primers. A reaction is easily triggered by heat, spark, impact or friction. Examples of primary explosives are lead azide and mercury fulminate.

Public Access Exclusion Distance (PAED)

The PAED is defined as longest distance of the hazardous fragment distance, inhabited building distance (IBD) for overpressure, or the One Percent Lethality Distance. For siting purposes, the PAED is analogous to the IBD for explosives; therefore, personnel not directly associated with the chemical operations are not to be allowed within the PAED.

Qualified Receiver

Entities that have personnel who are, or individuals who are, trained and experienced in the identification and safe handling of used and unused military munitions, and any known or potential explosive hazards that may be associated with the MPPEH they receive; and are licensed and permitted or otherwise qualified to receive, manage, and process MPPEH.

Range^{xxvii}

A designated land or water area that is set aside, managed, and used for range activities of the Department of Defense. The term includes firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, electronic scoring sites, buffer zones with restricted access, and exclusionary areas. The term also includes airspace areas designated for military use in accordance with regulations and procedures prescribed by the Administrator of the Federal Aviation Administration.

Range Activities^{xxviii}

Research, development, testing, and evaluation of military munitions, other ordnance, and weapons systems; and the training of members of the armed forces in the use and handling of military munitions, other ordnance, and weapons systems.

Range Clearance^{xxix}

The destruction, or removal and proper disposition of used military munitions (e.g., unexploded ordnance (UXO) and munitions debris) and other range-related debris (e.g., target debris, military munitions packaging and crating material) to maintain or enhance operational range safety or prevent the accumulation of such material from impairing or preventing operational range use. "Range clearance" does not include removal, treatment, or remediation of chemical residues or munitions constituents from environmental media, nor actions to address discarded military munitions (e.g., burial pits) on operational ranges.

Range Related Debris^{xxx}

Debris, other than munitions debris, collected from operational ranges or from former ranges (e.g., target debris, military munitions packaging and crating material).

Recovered Chemical Warfare Materiel (RCWM)^{xxxii}

CWM used for its intended purpose or previously disposed of as waste, which has been discovered during a CWM response or by chance (e.g., accidental discovery by a member of the public), that DoD has either secured in place or placed under DoD control, normally in a DDESB-approved storage location or interim holding facility, pending final disposition.

Render Safe Procedures (RSP)

The portion of EOD procedures that involves the application of special disposal methods or tools to interrupt the functioning or otherwise defeat the firing train of UXO from triggering an unacceptable detonation.

Secondary Explosives

Secondary explosives are generally less sensitive to initiation than primary explosives and are typically used in booster and main charge applications. A severe shock is usually required to trigger a reaction. Examples are TNT, cyclo-1,3,5-trimethylene-2,4,6-trinitramine (RDX or cyclonite), HMX, and tetryl.

Small Arms Ammunition^{xxxii}

Ammunition, without projectiles that contain explosives (other than tracers) that is .50 caliber or smaller, or for shotguns.

Team Separation Distance (TSD)

The distance that munitions response teams must be separated from each other during munitions response activities involving intrusive operations.

Technical Escord Unit (TEU)

A DoD organization manned with specially trained personnel that provide verification, sampling, detection, mitigation, render safe, decontamination, packaging, escort and remediation of chemical, biological and industrial devices or hazardous material.

Technology-aided Surface Removal

A removal of UXO, DMM or CWM on the surface (i.e., the top of the soil layer) only, in which the detection process is primarily performed visually, but is augmented by technology aids (e.g., hand-held magnetometers or metal detectors) because vegetation, the weathering of UXO, DMM or CWM, or other factors make visual detection difficult.

Time Critical Removal Action (TCRA) ^{xxxiii}

Removal actions where, based on the site evaluation, a determination is made that a removal is appropriate, and that less than 6 months exists before on-site removal activity must begin.

Transferred range ^{xxxiv}

A military range that is no longer under military control and has been leased, transferred, or returned to another entity, including Federal entities. This includes a military range that is no longer under military control but was used under the terms of a withdrawal, executive order, special-use permit or authorization, right-of-way, public land order, or other instrument issued by the Federal land manager.

Transferring Range ^{xxxv}

A military range that is proposed to be leased, transferred, or returned from the Department of Defense to another entity, including Federal entities. This includes a military range that is used under the terms of a withdrawal, executive order, special-use permit or authorization, right-of-way, public land order, or other instrument issued by the Federal land manager. An active range will not be considered a "transferring range" until the transfer is imminent.

Unexploded Ordnance (UXO) ^{xxxvi}

Military munitions that:

- (a) Have been primed, fuzed, armed, or otherwise prepared for actions;*
- (b) Have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and*
- (c) Remain unexploded whether by malfunction, design, or any other cause.*

UXO Technicians

Personnel who are qualified for and filling Department of Labor, Service Contract Act, Directory of Occupations, contractor positions of UXO Technician I, UXO Technician II, and UXO Technician III.

UXO-Qualified Personnel

Personnel who have performed successfully in military EOD positions, or are qualified to perform in the following Department of Labor, Service Contract Act, Directory of Occupations, contractor positions: UXO Technician II, UXO Technician III, UXO Safety Officer, UXO Quality Control Specialist, or Senior UXO Supervisor.

Venting

Exposing any internal cavities of MPPEH, to include training or practice munitions (e.g., concrete bombs), using DDESB- or DoD Component-approved procedures, to confirm that an explosive hazard is not present.

ⁱ Environmental Protection Agency, Military Munitions Rule, published 12 February 1997 (62 FR 6622)

ⁱⁱ Corps of Engineers Safety Office (CESO), [ER 385-1-92, Safety - Safety and Occupational Health Requirements for Hazardous, Toxic, and Radioactive Waste \(HTRW\) Activities](#), 1 September 2000

ⁱⁱⁱ Department of Defense, Munitions Response Site Prioritization Protocol; Proposed Rule, 22 August 2003; 32 CFR Part 179

^{iv} Corps of Engineers Safety Office (CESO), [ER 385-1-92, Safety - Safety and Occupational Health Requirements for Hazardous, Toxic, and Radioactive Waste \(HTRW\) Activities](#), 1 September 2000

^v Department of Defense, Munitions Response Site Prioritization Protocol; Proposed Rule, 22 August 2003; 32 CFR Part 179

^{vi} Originally defined in the 26 September 1997 DOD proposed range rule, *Closed, Transferred, and Transferring Ranges Containing Military Munitions*, Title 32 Code of Federal Regulations (CFR) Part 178, which the DoD withdrew on 13 November 2000.

^{vii} 10 U.S.C. 2710(e)(1)

^{viii} 10 U.S.C. 2710(e)(2)

^{ix} Military Munitions Rule, 40 CFR 260.10

^x Department of Defense, Munitions Response Site Prioritization Protocol; Proposed Rule, 22 August 2003; 32 CFR Part 179

^{xi} Department of the Army Office of the Assistant Secretary Installations Logistics and Environment, Memorandum Subject: Formerly Used Defense Sites (FUDS) Program Charter, 29 June 1994

^{xii} Department of Defense, Munitions Response Site Prioritization Protocol; Proposed Rule, 22 August 2003; 32 CFR Part 179

^{xiii} Environmental Protection Agency, Military Munitions Rule, published 12 February 1997 (62 FR 6622)

^{xiv} Department of the Army Office of the Assistant Secretary Installations and Environment, Memorandum for the Assistant Chief of Staff For Installation

Management, Subject: Definition Related to Munitions Response Action, 28 October 2003:

^{xv} 10 U.S.C. 101(e)(4)(A) through (C)

^{xvi} U.S. Army Corps of Engineers-St. Louis District, Ordnance and Technical Services Branch CEMVS-ED-P developed this term in lieu of using Munitions Response Site (MRS)

^{xvii} Military Munitions Rule, 40 CFR 266.201

^{xviii} 10 U.S.C. 2710(e)(4)

^{xix} Department of the Army Office of the Assistant Secretary Installations and Environment, Memorandum for the Assistant Chief of Staff For Installation Management, Subject: Definition Related to Munitions Response Action, 28 October 2003:

^{xx} Department of the Army Office of the Assistant Secretary Installations and Environment, Memorandum for the Assistant Chief of Staff For Installation Management, Subject: Definition Related to Munitions Response Action, 28 October 2003:

^{xxi} Department of the Army Office of the Assistant Secretary Installations and Environment, Memorandum for the Assistant Chief of Staff For Installation Management, Subject: Definition Related to Munitions Response Action, 28 October 2003:

^{xxii} Department of the Army Office of the Assistant Secretary Installations and Environment, Memorandum for the Assistant Chief of Staff For Installation Management, Subject: Definition Related to Munitions Response Action, 28 October 2003:

^{xxiii} 10 U.S.C. 2710(e)(3)

^{xxiv} Corps of Engineers Safety Office (CESO), [ER 385-1-92, Safety - Safety and Occupational Health Requirements for Hazardous, Toxic, and Radioactive Waste \(HTRW\) Activities](#), 1 September 2000

^{xxv} 10 U.S.C. 2710(e)(5)

^{xxvi} Department of Defense, Munitions Response Site Prioritization Protocol; Proposed Rule, 22 August 2003; 32 CFR Part 179

^{xxvii} 10 U.S.C. 101(e)(1)(A) and (B)

^{xxviii} 10 U.S.C. 101(e)(2)(A) and (B)

^{xxix} Department of the Army Office of the Assistant Secretary Installations and Environment, Memorandum for the Assistant Chief of Staff For Installation Management, Subject: Definition Related to Munitions Response Action, 28 October 2003:

^{xxx} Department of the Army Office of the Assistant Secretary Installations and Environment, Memorandum for the Assistant Chief of Staff For Installation Management, Subject: Definition Related to Munitions Response Action, 28 October 2003:

^{xxxi} U. S. Army Corps of Engineers (CESO-I)
2003 [ER 385-1-95, Safety - Safety and Health Requirements for Ordnance and Explosives \(OE\) Operations](#), 16 June 2003

^{xxxii} Department of Defense, Munitions Response Site Prioritization Protocol; Proposed Rule, 22 August 2003; 32 CFR Part 179

^{xxxiii} *40 CFR 300.5*

^{xxxiv} Originally defined in the 26 September 1997 DOD proposed range rule, *Closed, Transferred, and Transferring Ranges Containing Military Munitions*, Title 32 Code of Federal Regulations (CFR) Part 178, which the DoD withdrew on 13 November 2000.

^{xxxv} Originally defined in the 26 September 1997 DOD proposed range rule, *Closed, Transferred, and Transferring Ranges Containing Military Munitions*, Title 32 Code of Federal Regulations (CFR) Part 178, which the DoD withdrew on 13 November 2000.

^{xxxvi} 10 U.S.C. 101(e)(5)(A) through (C)

APPENDIX E

PA (PRELIMINARY ASSESSMENT) DATA AND SITE CHARACTERISTICS FORM

Reference: U. S. Environmental Protection Agency, [*Guidance for Performing Preliminary Assessments Under CERCLA, EPA/540/G-91/013, Publication 9345.0-01A*](#), September 1991; Appendix D.

OMB Approval Number: 2050-0095
Approved for Use Through: 1/92

| | | | | | | |
|--|--------------------------------|--|-----------------------------------|--|--|--|
| Potential Hazardous Waste Site Preliminary Assessment Form | | Identification | | | | |
| | | State: | CERCLIS Number: | | | |
| | | <i>Massachusetts</i> | <i>Not Applicable</i> | | | |
| | | CERCLIS Discovery Date: | | | | |
| | | <i>Not Applicable</i> | | | | |
| 1. General Site Information | | | | | | |
| Name: <i>Cape Poge Little Neck Bomb Target Site, D01MA059501</i> | | Street Address: <i>Not Applicable</i> | | | | |
| City: <i>Chappaquiddick Island</i> | State: <i>MA</i> | Zip Code: <i>02539</i> | County: <i>Dukes</i> | Co. Code: <i>(MA) (007)ⁱ</i> | Cong. Dist: ⁱⁱ <i>10</i> | |
| Latitude: <i>41 24.5 N/70 27.3W</i> | Longitude: | Approximate Area of Site: <i>141.00</i> Acres <i>see above</i> Square Ft. | | Status of Site: <input type="checkbox"/> Active <input type="checkbox"/> Not Specified <input checked="" type="checkbox"/> Inactive <input type="checkbox"/> NA (GW plume, etc.) | | |
| 2. Owner/Operator Information | | | | | | |
| Owner: <i>The Trustees of the Reservations</i> | | Operator: <i>Cape Poge Wildlife Refuge Christopher Kennedy - Director</i> | | | | |
| Street Address: <i>860 State Road PO Box 2106</i> | | Street Address: <i>Dike Road islands@ttor.org</i> | | | | |
| City: <i>Vineyard Haven</i> | | City: <i>Chappaquiddick Island</i> | | | | |
| State: <i>MA</i> | Zip Code: <i>02568-2106</i> | Telephone: <i>508-693-7662</i> | State: <i>MA</i> | Zip Code: <i>02539</i> | Telephone: <i>508-627-7689</i> | |
| Type of Ownership: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> Federal Agency <input type="checkbox"/> Municipal Name _____ <input type="checkbox"/> Not Specified <input type="checkbox"/> State <input type="checkbox"/> Other _____ <input type="checkbox"/> Indian | | How Initially Identified: <input type="checkbox"/> Citizen Complaint <input checked="" type="checkbox"/> Federal Program <input type="checkbox"/> PA Petition <input type="checkbox"/> Incidental <input type="checkbox"/> State/Local Program <input type="checkbox"/> Not Specified <input type="checkbox"/> RCRA/CERCLA Notification <input checked="" type="checkbox"/> Other <i>_DERP-FUDS_</i> | | | | |
| 3. Site Evaluator Information | | | | | | |
| Name of Evaluator: <i>Hal Graef, 314-331-8790</i> | | Agency/Organization: <i>U.S. Army Corps of Engineers-St. Louis District (CEMVS-ED-P)</i> | | Date Prepared: <i>3 February 2009</i> | | |
| Street Address: <i>1222 Spruce St</i> | | City: <i>St Louis</i> | | State: <i>Missouri</i> | | |
| Name of EPA or State Agency Contact: <i>EPA New England, Region 1</i> | | Street Address: <i>1 Congress Street, Suite 1100</i> | | | | |
| City: <i>Boston</i> | | State: <i>MA</i> | Telephone: <i>617-918-1111</i> | | | |
| 4. Site Disposition (for EPA use only) | | | | | | |
| Emergency Response/Removal Assessment Recommendation: Yes No Date: _____ | | CERCLIS Recommendation: Higher Priority SI Lower Priority SI NFRAP RCRA Other _____ Date: _____ | | Signature: Name (typed): Position: | | |



5. General Site Characteristics


| | | | |
|---|---|---|----------------------------|
| Predominant Land Uses Within 1 Mile of Site (check all that apply): | | Site Setting: | Years of Operation: |
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Agriculture | <input type="checkbox"/> Urban | Beginning Year <u>1944</u> |
| <input checked="" type="checkbox"/> Commercial | <input type="checkbox"/> Mining | <input type="checkbox"/> Suburban | Ending Year <u>1947</u> |
| <input type="checkbox"/> Residential | <input type="checkbox"/> DOD | <input checked="" type="checkbox"/> Rural | Unknown |
| <input type="checkbox"/> Forest/Fields | <input type="checkbox"/> DOE | | |
| | <input checked="" type="checkbox"/> Other <u>Recreational</u> | | |

| | |
|---|--|
| Type of Site Operations (check all that apply): | Waste Generated: |
| Manufacturing (must check subcategory) Lumber and Wood Products Inorganic Chemicals Plastic and/or Rubber Products Paints, Varnishes Industrial Organic Chemicals Agricultural Chemicals (e.g., pesticides, fertilizers) Miscellaneous Chemical Products (e.g., adhesives, explosives, ink) Primary Metals Metal Coating, Plating, Engraving Metal Forging, Stamping Fabricated Structural Metal Products Electronic Equipment Other Manufacturing Mining Metals Coal Oil and Gas Non-metallic Minerals | Onsite Offsite Onsite and Offsite Waste Deposition Authorized By: Present Owner <u>Former Owner</u> Present & Former Owner Unauthorized Unknown Waste Accessible to the Public: <u>Yes</u> No Distance to Nearest Dwelling, School, or Workplace: <u>Unknown</u> Feet |
| Retail Recycling Junk/Salvage Yard Municipal Landfill Other Landfill <u>DoD</u> DOB DOI Other Federal Facility _____ RCRA Treatment, Storage, or Disposal Large Quantity Generator Small Quantity Generator Subtitle D Municipal Industrial "Converter" "Protective Filer" "Non- or Late Filer" Not Specified Other _____ | |

6. Waste Characteristics Information

| Source Type: (check all that apply) | Source Waste Quantity: (include units) | Tier*: | General Types of Waste (check all that apply) |
|---|---|--------|--|
| Landfill | _____ | _____ | <u>Metals</u> Organics Inorganics Solvents Paints/Pigments Lab/Hospital Waste Radioactive Waste Construction/Demolition Waste Other <u>Munition Constituents</u> Pesticides/Herbicides Acids/Bases Oily Waste Municipal Waste Mining Waste <u>Explosives</u> |
| Surface Impoundment | _____ | _____ | |
| Drums | _____ | _____ | |
| Tanks and Non-Drum Containers | _____ | _____ | |
| Chemical Waste Pile | _____ | _____ | |
| Scrap Metal or Junk Pile | _____ | _____ | |
| Tailing Pile | _____ | _____ | |
| Trash Pile (open dump) | _____ | _____ | |
| Land Treatment | _____ | _____ | |
| Contaminated Ground Water Plume (unidentified source) | _____ | _____ | |
| Contaminated Surface Water/Sediment (unidentified source) | _____ | _____ | |
| Contaminated Soil | _____ | _____ | |
| Other <u>Impact area for former ranges</u> | <u>undetermined</u> | _____ | |
| No Sources | | | |
| * C = Constituent, W = Wastestream, V = Volume, A = Area | | | Physical State of Waste as Deposited (check all that apply): <u>Solid</u> Sludge Powder Liquid Gas |

WWII-era 3 pound practice bombs discovered on the property

|  Potential Hazardous Waste Site Preliminary Assessment Form - Page 3 of 4 | | CERCLIS Number: : <i>Not Applicable</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|-------------------------|------------|------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------|--|--|-------|
| 7. Ground Water Pathway | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Is Ground Water Used for Drinking Water Within 4 Miles: <u>Yes</u> No | Is There a Suspected Release to Ground Water: Yes <u>No</u> | List Secondary Target Population Served by Ground Water Withdrawn From: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type of Drinking Water Wells Within 4 Miles (check all that Apply): Municipal <u>Private</u> None | Have Primary Target Drinking Water Wells Been Identified: <u>Yes</u> No If Yes, Enter Primary Target Population: <u>800-1000</u> People | 0 - ¼ Mile <u>0</u> > ¼ - ½ Mile <u>2</u> > ½ – 1 Mile <u>6</u> > 1 – 2 Miles <u>21</u> > 2 – 3 Miles <u>91</u> > 3 – 4 Miles <u>151</u> Total Within 4 Miles <u>151</u> Using LandView6 Census 2000 Population Estimator, the population within various radii around the approximate center of the Cape Poge Little Neck Bomb Target Site (41 24.5 N/70 27.2 W). | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Depth to Shallowest Aquifer: <u>Unknown</u> Feet | Nearest Designated Wellhead Protection Area: Underlies Site > 0 – 4 Miles None Within 4 Miles | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Karst Terrain/Aquifer Present: Yes No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. Surface Water Pathway | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type of Surface Water Draining Site and 15 Miles Downstream (check all That apply): Stream River Pond Lake <u>Bay</u> <u>Ocean</u> Other _____ | Shortest Overland Distance From Any Source to Surface Water: <u>0</u> Feet <u>0</u> Miles Property is bounded on the west by Cape Poge Bay and on the east by the Atlantic Ocean. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Is There a Suspected Release to Surface Water: <u>Yes</u> <u>Unknown if at detectable levels.</u> No | Site is Located in: Annual – 10 yr Floodplain <u>> 10 yr – 100 yr Floodplain</u> > 100 yr – 500 yr Floodplain > 500 yr Floodplain | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drinking Water Intakes Located Along the Surface Water Migration Path: Yes <u>No</u> Lakes and ponds on Martha’s Vineyard are not used for public water supplies. Have Primary Target Drinking Water Intakes Been Identified: Yes <u>No</u> Lakes and ponds on Martha’s Vineyard are not used for public water supplies. If Yes, Enter Population Served by Primary Target Intakes: <u>0</u> People | List All Secondary Target Drinking Water Intakes: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Water Body</th> <th style="text-align: left;">Flow (cfs)</th> <th style="text-align: left;">Population Served</th> </tr> </thead> <tbody> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr> <td colspan="3" style="text-align: right;">Total within 15 Miles</td> <td>_____</td> </tr> </tbody> </table> | | Name | Water Body | Flow (cfs) | Population Served | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | Total within 15 Miles | | | _____ |
| Name | Water Body | Flow (cfs) | Population Served | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total within 15 Miles | | | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fisheries Located Along the Surface Water Migration Path: <u>Yes</u> No Have Primary Target Fisheries Been Identified: Yes <u>No</u> | List All Secondary Target Fisheries: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Water Body/Fishery Name</th> <th style="text-align: left;">Flow (cfs)</th> </tr> </thead> <tbody> <tr><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td></tr> </tbody> </table> | | Water Body/Fishery Name | Flow (cfs) | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | |
| Water Body/Fishery Name | Flow (cfs) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Potential Hazardous Waste Site Preliminary Assessment Form - Page 4 of 4 | | CERCLIS Number: : <i>Not Applicable</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|----------------|--|--------------|---|--------------|---|---------------|---|---------------|-----------------------|---------------|------------------------|----------------------|--|---|------------|------------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7. Surface Water Pathway (continued) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wetlands Located Along the Surface Water Migration Path: <u>Yes</u> No | Other Sensitive Environments Located Along the Surface Water Migration Path: Yes <u>No</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Have Primary Target Wetlands Been Identified: Yes <u>No</u> | Have Primary Target Sensitive Environments Been Identified: Yes <u>No</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| List Secondary Target Wetlands: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Water Body</th> <th style="text-align: left; border-bottom: 1px solid black;">Flow (cfs)</th> <th style="text-align: left; border-bottom: 1px solid black;">Frontage Miles</th> </tr> </thead> <tbody> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> | Water Body | Flow (cfs) | Frontage Miles | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | List Secondary Target Sensitive Environments: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Water Body</th> <th style="text-align: left; border-bottom: 1px solid black;">Flow (cfs)</th> <th style="text-align: left; border-bottom: 1px solid black;">Sensitive Environment Type</th> </tr> </thead> <tbody> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> | | Water Body | Flow (cfs) | Sensitive Environment Type | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Water Body | Flow (cfs) | Frontage Miles | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water Body | Flow (cfs) | Sensitive Environment Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. Soil Exposure Pathway | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Are People Occupying Residences or Attending School or Daycare on or Within 200 Feet of Areas of Known or Suspected Contamination: Yes <u>No</u> | Number of Workers Onsite: None <u>1- 100</u> 101 - 1,000 > 1,000 | Have Terrestrial Sensitive Environments Been Identified on Or Within 200 Feet of Areas of Known or Suspected Contamination: <u>Yes</u> No If Yes, List Each Terrestrial Sensitive Environment <u>Cape Poge Wildlife Refuge</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. Air Pathway | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Is There a Suspected Release to Air: Yes <u>No</u> | Wetlands Located Within 4 Miles of the Site: <u>Yes</u> No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enter Total Population on or Within: <table style="width: 100%; border-collapse: collapse;"> <tr><td style="padding-left: 20px;">Onsite</td><td style="text-align: right;">_____ <u>0</u> _____</td></tr> <tr><td style="padding-left: 20px;">0 - ¼ Mile</td><td style="text-align: right;">_____ <u>0</u> _____</td></tr> <tr><td style="padding-left: 20px;">> ¼ - ½ Mile</td><td style="text-align: right;">_____ <u>2</u> _____</td></tr> <tr><td style="padding-left: 20px;">> ½ - 1 Mile</td><td style="text-align: right;">_____ <u>6</u> _____</td></tr> <tr><td style="padding-left: 20px;">> 1 - 2 Miles</td><td style="text-align: right;">_____ <u>21</u> _____</td></tr> <tr><td style="padding-left: 20px;">> 2 - 3 Miles</td><td style="text-align: right;">_____ <u>91</u> _____</td></tr> <tr><td style="padding-left: 20px;">> 3 - 4 Miles</td><td style="text-align: right;">_____ <u>151</u> _____</td></tr> <tr><td style="padding-left: 20px;">Total Within 4 Miles</td><td style="text-align: right;">_____ <u>151</u> _____</td></tr> </table> | Onsite | _____ <u>0</u> _____ | 0 - ¼ Mile | _____ <u>0</u> _____ | > ¼ - ½ Mile | _____ <u>2</u> _____ | > ½ - 1 Mile | _____ <u>6</u> _____ | > 1 - 2 Miles | _____ <u>21</u> _____ | > 2 - 3 Miles | _____ <u>91</u> _____ | > 3 - 4 Miles | _____ <u>151</u> _____ | Total Within 4 Miles | _____ <u>151</u> _____ | Other Sensitive Environments Located Within 4 Miles of the Site: <u>Yes</u> <u>Cape Poge Wildlife Refuge</u> No | | | | | | | | | | | | | | | |
| Onsite | _____ <u>0</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 - ¼ Mile | _____ <u>0</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| > ¼ - ½ Mile | _____ <u>2</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| > ½ - 1 Mile | _____ <u>6</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| > 1 - 2 Miles | _____ <u>21</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| > 2 - 3 Miles | _____ <u>91</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| > 3 - 4 Miles | _____ <u>151</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Within 4 Miles | _____ <u>151</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | List All Sensitive Environments Within ½ Mile of the Site: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Distance</th> <th style="text-align: left; border-bottom: 1px solid black;">Sensitive Environment Type/Wetlands Area (acres)</th> </tr> </thead> <tbody> <tr> <td style="padding-left: 20px;">Onsite</td> <td style="text-align: right;">_____ <u>Cape Poge Wildlife Refuge (> 141 acres)</u> _____</td> </tr> <tr> <td style="padding-left: 20px;">0 - ¼ Mile</td> <td style="text-align: right;">_____ <u>Cape Poge Wildlife Refuge (> 141 acres)</u> _____</td> </tr> <tr> <td style="padding-left: 20px;">> ¼ - ½ Mile</td> <td style="text-align: right;">_____ <u>Cape Poge Wildlife Refuge (> 141 acres)</u> _____</td> </tr> </tbody> </table> | | Distance | Sensitive Environment Type/Wetlands Area (acres) | Onsite | _____ <u>Cape Poge Wildlife Refuge (> 141 acres)</u> _____ | 0 - ¼ Mile | _____ <u>Cape Poge Wildlife Refuge (> 141 acres)</u> _____ | > ¼ - ½ Mile | _____ <u>Cape Poge Wildlife Refuge (> 141 acres)</u> _____ | | | | | | | | | | | | | | | | | | | | | | |
| Distance | Sensitive Environment Type/Wetlands Area (acres) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Onsite | _____ <u>Cape Poge Wildlife Refuge (> 141 acres)</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 - ¼ Mile | _____ <u>Cape Poge Wildlife Refuge (> 141 acres)</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| > ¼ - ½ Mile | _____ <u>Cape Poge Wildlife Refuge (> 141 acres)</u> _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ⁱ National Institute of Science and Technology (NIST), Information Technology Laboratory
[Index of Codes for FIPS 6-4](#) web page

ⁱⁱ U.S. Census Bureau
[Fast Facts for Congress](#) web page

APPENDIX F

ORDNANCE TECHNICAL DATA SHEETS

ORDNANCE TECHNICAL DATA SHEETS

Page No. Ordnance Technical Data Sheets¹

Munitions Technical Data Sheets

Bombs

| | |
|------|--|
| F-2 | Bomb, Practice 100-Pound, MK15-series |
| F-7 | Bombs, Miniature Practice AN-Mark 5 Mod 1, AN-Mark 23, AN-Mk43 |
| F-10 | Signal, Practice Bomb, Mark 4 Mods 3 & 4 |
| F-14 | Signal, Practice Bomb, Mk 6 Mod 0 |

Pyrotechnics

| | |
|------|---|
| F-16 | Flare, Aircraft, Parachute, M26 & AN-MK26 |
|------|---|

¹ All Ordnance Technical Data Sheets prepared by U.S. Army Corps of Engineers St. Louis District, Ordnance and Technical Services Branch-Engineering Division.

APPENDIX F-1

Bomb, Practice 100-Pound, MK15-series

Bomb, Practice, 100-pound Mk 15-series

2-52. Bomb, Practice: 100-Pound, MK15 Mods 2, 3 and 4

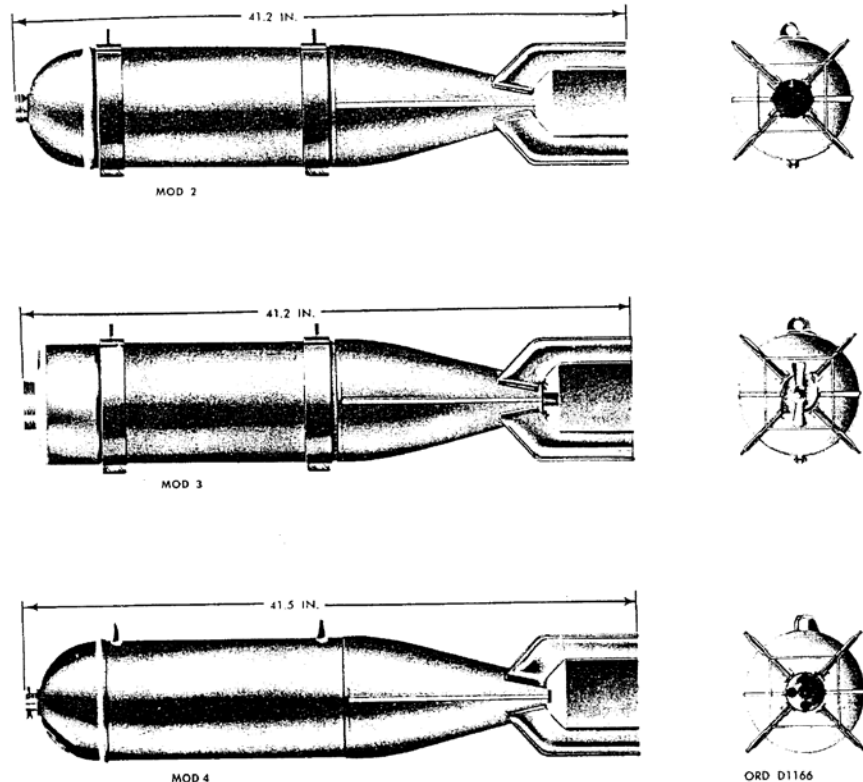
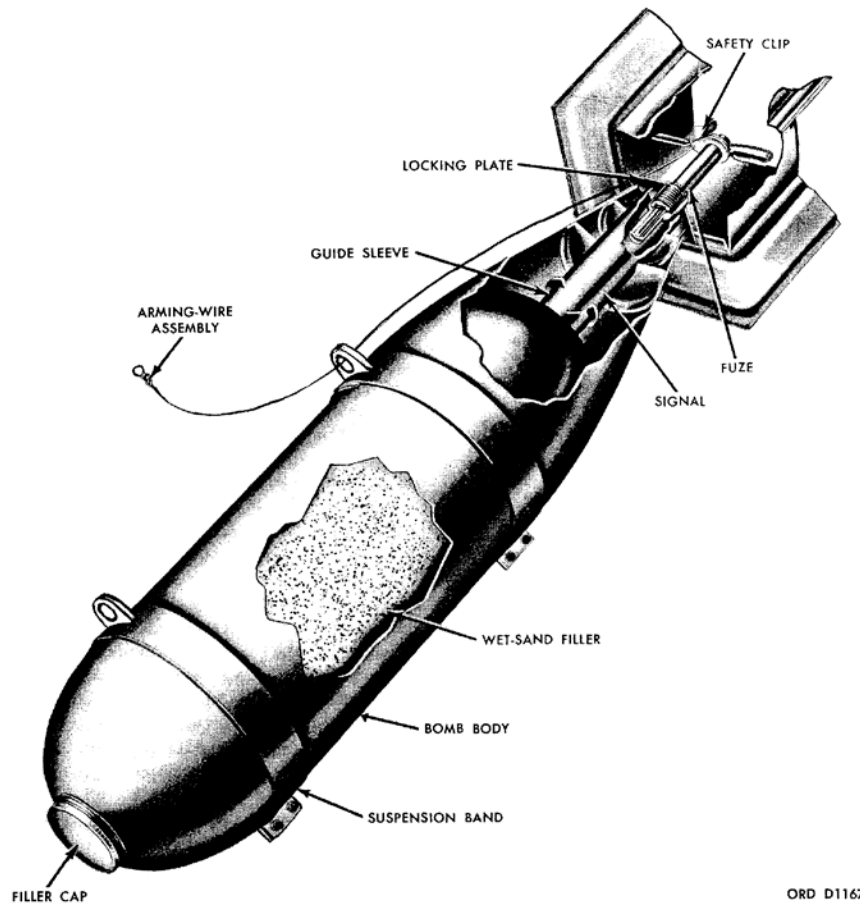


Figure 2-62. Bomb, practice: 100-pound, MK15 Mods 2, 3, and 4.

History: This series of bombs represented the Navy's primary practice bombs during World War II. These bombs are still listed in a 1966 manual, but their use by that time was probably limited. The first versions, the Mark 15 (also written "Mark XV," or "Mk 15") Mark 15 Mod 1, and Mark 15 Mod 2, which used no spotting charges, entered service in the late 1930's and were followed by Modifications 3 and 4, which took the Signal Mark 7 and Mark 4 respectively.

Description: The Mk 15 series of practice bomb have a light-cased, cylindrical body with a threaded filling hole in its rounded nose (Mark 15 had the filling hole topside, seven inches aft of the nose). A box fin assembly consisting of four metal vanes attached to a cone is welded to the aft end of the body. The bomb has two metal suspension band assemblies (each consisting of a circular clamp, a suspension lug, and two cap screws) for tightening the band to the bomb. The bomb is used with the practice bomb signal, Mk 7 Mod 0 and inert fuze Mk 247 Mod 0, both of which are secured to the aft of the bomb. Upon impact of the bomb with the target, the signal is detonated, producing a flash and a large puff of smoke. The bomb can be filled with wet sand or just water. When fully assembled and loaded with wet sand, it weighs approximately 100 pounds.



MK 15 Mod 3 without flat nose attachment

| Mark Mod | 15 2 | 15 3 | 15 4 |
|----------------------------------|-----------------|-------------------|------------------------|
| Length of Assembled bomb (in)... | 41.2..... | 41.2..... | 41.5 |
| Diameter of Body (in)..... | 8.0..... | 8.0..... | 8.0 |
| Fin Span (in)..... | 11.24..... | 11.24..... | 11.24 |
| Weight of Assembled Bomb (lb): | | | |
| Loaded with Wet Sand..... | 100.0..... | 100.0..... | 97.0 |
| Loaded with Water..... | 56.0..... | 67.0..... | 60 |
| Wet Sand Filler (lb)..... | 76.0..... | 77.4..... | 76.0 |
| Water Filler (lb)..... | 39.0..... | 40.0..... | 39.0 |
| Water Filler (gal)..... | 4.6..... | 4.7..... | 4.6 |
| Signal..... | None..... | MK 7 Mod 0..... | MK 4 Mods 0,1,2,3,4 |
| Fuze..... | None..... | MK 247 Mod 0..... | None |
| Firing-Pin Assembly..... | None..... | None..... | MK 1 Mod 0 |
| Arming-Wire Assembly..... | MK 1 or AN-M6A2 | MK 1 or AN-M6A2 | No Arming Wire.0 |

Table 2-50. Bomb, Practice: 100 pound MK15 Mods 2, 3, and 4

a. *Description.* Practice bomb MK15 Mod 2 (fig. 2-62 and table 2-50) is identical to the Mod 3 except that it is not adapted for the use of a fuze and signal. It is filled with water or a mixture of sand and water (fig. 2-63) for spotting purposes. For training purposes, a small washer may be soldered to the nose of the bomb to simulate a fuze. The end of an arming wire (which is normally inserted in the fuze of service type bombs) is then secured to the washer. For armed releases, the washer is torn free of the bomb by the arming wire; for safe releases, the arming wire remains secured to the washer. When used against armored-deck target boats, it is filled with water and released from an altitude of less than 7,000 feet.

b. *Bomb, Practice: MK 15 Mod 3.* Practice bomb MK15 Mod 3 has a light cased, cylindrical body with a threaded filling hole in its rounded nose. A box-fin assembly consisting of four metal vanes attached to a cone is welded to the aft end of the body. The bomb has two metal suspension band assemblies (each consisting of a circular clamp, a suspension lug, and two cap screws) for tightening the band to the bomb. The bands may be adjusted for double suspension of the bomb by orienting to suit the rack or shackle to which the bomb is to be attached. A flat nose attachment that reduces

ricochet of the bomb at entrance angles as low as 90 degrees is used during antisubmarine practice. The attachment is secured in place by a cap which threads onto the filling hose. The bomb is used with practice bomb signal MK7 Mod 0 and inert fuze MK247 Mod 0, both of which are secured to the aft end of the bomb.

c. *Bomb, Practice, 100-pound: MK15 Mod 4.* The practice bomb MK15 Mod 4 is a light-cased, cylindrical bomb with a round nose and an integral box fin and cone. A flash tube, extending throughout its transverse axis, housed a pyrotechnic signal and firing-pin assembly. Two suspension lugs are welded to the bomb body 14 inches apart. A filling hole is located off center on the bomb nose and is sealed by a filler cap similar to those used on automobile gas tanks. The firing-pin assembly consists of two shallow metal cups, separated by a spacer which housed the firing pin. A cotter-pin through the nose end of the flash tube and two recesses in the lip of the forward cup locks the firing-pin assembly and signal in place.

d. *Functioning.* Upon impact of the bomb with the target, the signal is detonated, producing a flash and a large puff of smoke, which permits observation of the bombing accuracy.

References:

TM 9-1984, *Disposal of Allied Bombs and Fuzes*, 12 November 1942

OP 1280, *Aircraft Bombs*, 17 February 1945

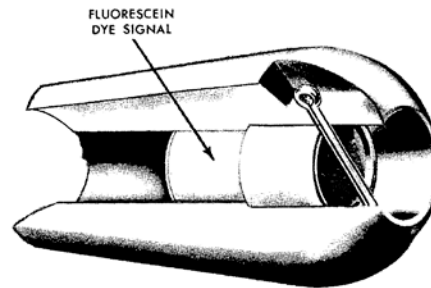
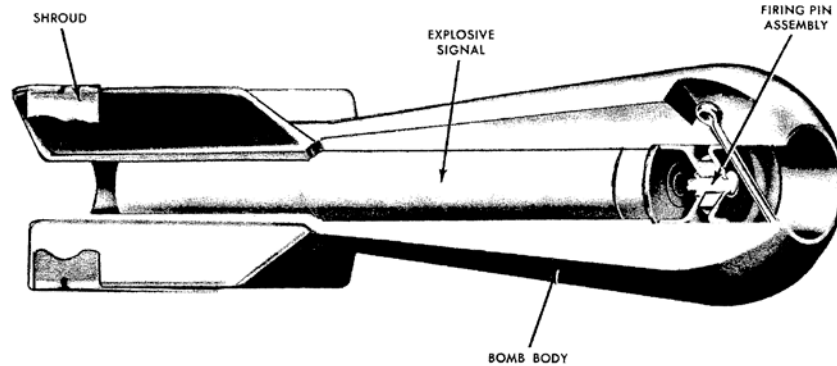
OP 1664, *U.S. Explosive Ordnance*, 28 May 1947

TM 9-1325-200/NAVWEPS OP 3530/TO 1-1-28, *Bombs and Bomb Components*, 29 April 1966

APPENDIX F-2

Bombs, Miniature Practice AN-Mk5 Mod 1, AN-Mk23, AN-Mk43

Bombs, Miniature Practice AN-Mk 5 Mod 1, AN-Mk 23, AN-Mk 43



ORD D1160

Historical Notes: These miniature practice bombs (sometimes the designation “AN-Mk” is used) were in use for a long period time, from circa the late 1930’s to the 1960’s (although it is still listed in current publications). Some were designed for armored-deck boat targets and others were not suitable. Some bomb racks could carry up to eight of these small bombs.

Description: These bombs are used for low-altitude horizontal, or dive-bombing practice. The three bombs are similar in physical appearance, but differ basically in the metal used to cast the body, and thus, their weight. The AN-Mark 43 is made of lead-antimony alloy and the AN-Mark 5 is made of a zinc alloy. These bombs are used with the AN-Mark 4 practice bomb signal that is a blank 10-gauge shotgun shell (extended length). Signals contain a black powder expelling charge and a red phosphorous pyrotechnic mixture. These bombs also are used with the Mark 5 signal that contains a fluorescent dye and is actuated by impact on water. When the Mk5 signal is installed, the firing pin assembly is not used.

| | |
|------------------------------|-------------|
| Over-all length | 8.25 inches |
| Body Diameter | 2.18 inches |
| Fin Dimension | 2.5 inches |

Weight (nominal) AN-Mk 5 Mod 1: 2 lb. 11 oz. (zinc alloy)
AN-Mk 23: 3 lb. (cast iron)
AN-Mk 43: 4 lb. 7 oz. (lead-antimony alloy)

Signal AN-Mark 4 or Mark 5

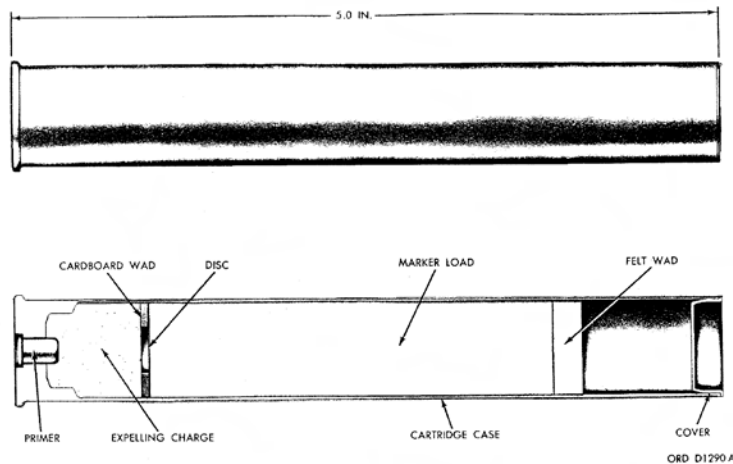
References:

TM 9-1984, *Disposal of Allied Bombs and Fuzes*, 12 November 1942
TM 9-1904, *Ammunition Inspection Guide*, 2 March 1944
OP 1280, *Aircraft Bombs*, 17 February 1945
OP 1664, *U.S. Explosive Ordnance*, 28 May 1947
TM 9-1325-200/NAVWEPS OP 3530/TO 1-1-28, *Bombs and Bomb Components*, 29 April 1966

APPENDIX F-3

Signal Practice Bomb, Mk4 Mods 3 & 4

Signal, Practice Bomb, Mk 4 Mods 3 & 4



Description. Practice Bomb signals Mark 4 (also written “MK” or Mk”) Mods 3 and 4 are essentially extended 10-gauge shotgun shells. They contain an expelling charge of smokeless powder and a marker load of either red phosphorus or zinc oxide and are primed with a commercial primer.

Use. The signals are used in either the miniature or the larger practice bombs. However, installed in the miniature practice bombs, the signals do not consistently produce a visible signal when dropped from an altitude of 10,000 feet or higher. Released from that height, the bomb enters the water or earth so quickly that the signal frequently does not have time to function.

Functioning. When the practice bomb strikes water or the earth, impact causes the firing pin in the nose of the bomb to impinge upon the primer of the signal. The primer ignites the expelling charge, forcing the marker load out through an opening in the bomb. The resulting flash and puff of white smoke permit observation of bombing accuracy.

Differences. Signals Mk 4 Mod 0 was the first of this type developed. Mods 1 and 2 were procured later for issue to activities limited by environment to performing practice bombing in the vicinity of flammable areas. These signals contain inert materials that produce very little flash and are markedly inferior to the Mod 0. Mod 3 is similar to the Mod 0 but differs in that the cartridge case of the Mod 3 is extruded aluminum instead of paper; a primer mixture with improved storage characteristics has been used, a new pyrotechnic load has been incorporated. The Mod 4 signal is similar to the Mod 3 with the exception of an inert marker load of zinc oxide. In both Mods, the cover and cartridge case are cemented together; in Mod 3 the assembly also is staked in four equally spaced places.

| | |
|----------------------------------|--|
| Length and diameter | 5.0 inches by 0.85 inches |
| Expelling charge | Smokeless powder |
| Marker load | Mod 3 Stabilized Red Phosphorous Mod 4 Zinc Oxide |

Summary of Propellant, Explosives & Pyrotechnics (PEP)

SIGNAL, MARK 4 (1938-PRESENT)

| COMPONENT | PEP | QUANTITY |
|-------------------|--|---------------------------|
| Percussion primer | Primer mix (approximate proportions) <ul style="list-style-type: none"> • Lead styphnate (37%) • Barium nitrate (32%) • Antimony sulfide (15%) • Aluminum powder (7%) • PETN (5%) • Tetracene (4%) | [less than 1 grain *] |
| | 1.0 OR Primer, lead styphnate | .88 grains |
| Expelling charge | Black powder: <ul style="list-style-type: none"> • Potassium nitrate (74%) • Charcoal (15.6%) • Sulfur (10.4%) | 3 grams |
| Marker load | Mark 4 Mod 3: Red phosphorus pyrotechnic mixture No. 7 (may also contain Sodium nitrate and Magnesium powder) | 21– 24 grams |
| | OR Mark 4 Mod 4: Zinc oxide | Approximately 21 grams |

* 15.4 grains = 1 gram; 7,000 grains = 1 pound

References:

TM 9-1984, *Disposal of Allied Bombs and Fuzes*, 12 November 1942

OP 1280, *Aircraft Bombs*, 17 February 1945

OP 1664, *U.S. Explosive Ordnance*, 28 May 1947

TM 9-1305-200, *Small Arms Ammunition*, 14 June 1961

TM 9-1325-200/NAVWEPS OP 3530/TO 1-1-28, *Bombs and Bomb Components*, 29 April 1966

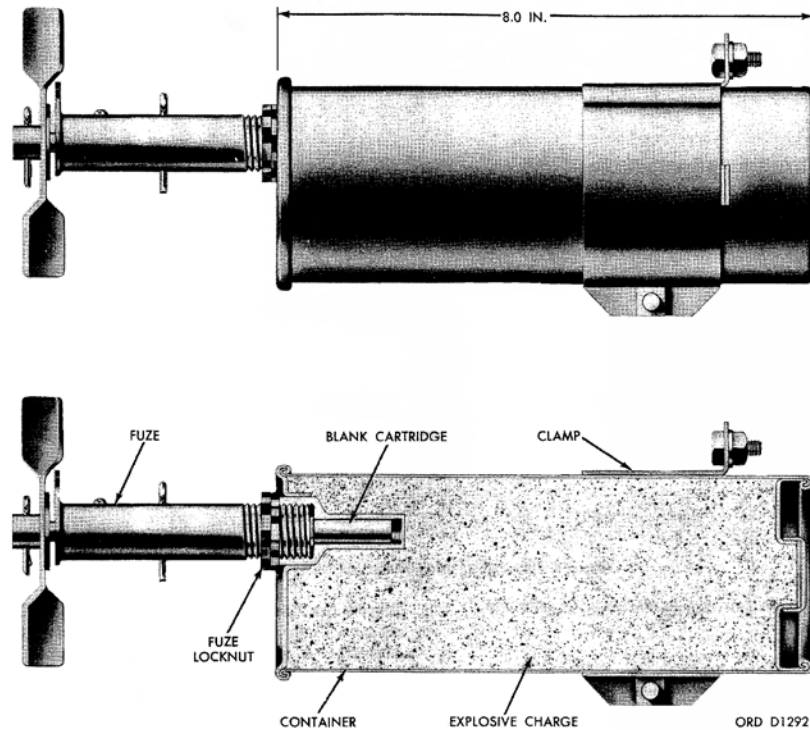
*SW050-AB-MMA-010, Pyrotechnics, Screening, Marking and
Countermeasures, Vols. 1 & 2, 1 JUL 94*

U.S. Army Defense Ammunition Center's "MIDAS" web site

APPENDIX F-4

Signal, Practice Bomb, Mk6

SIGNAL, PRACTICE BOMB, Mk 6 Mod 0



Description. Practice bomb signal Mk 6 Mod 0 consists of a can of black powder fitted with inert fuze AN-Mk 247 Mod 0 and a blank .38-caliber cartridge used as a detonator. The signal is used with practice bombs for observation of bombing accuracy. The Mk 6 is generally the same as the Mk 7 signal except that the fuze is mounted off-center in the Mk 6 and the black-powder filling weighs about 1 pound more.

Functioning. Upon release of the bomb from the aircraft, the arming wire is withdrawn, permitting the fuze-arming vane to rotate and arm the signal. Upon impact, the firing pin in the fuze over-comes a creep spring and impinges upon the primer of the blank cartridge, which in turn, ignites the black-powder charge. The resulting explosion produces a flash of light, and a large puff of gray smoke.

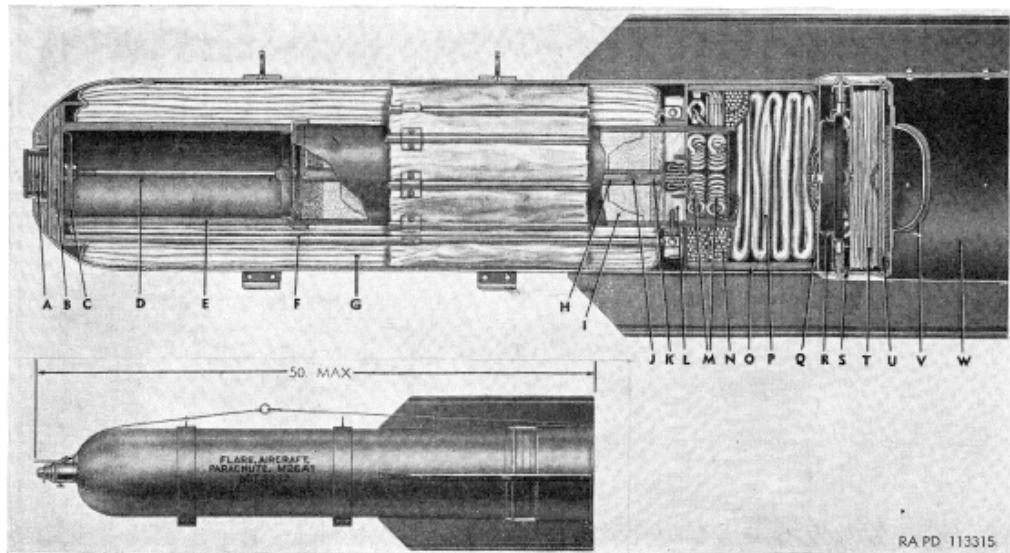
| | |
|---|-----------------------|
| Length | 8.0 in |
| Diameter | 3.0 in |
| Weight of assembled signal | 3.7 lbs |
| Container Material | Steel |
| Explosive Charge | Black Powder, 2.0 lbs |

Reference: TM 9-1325-200, *Bombs and Bomb Components*, April 1966

APPENDIX F-5

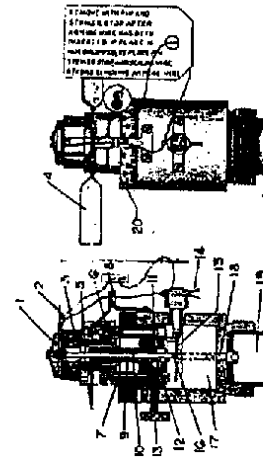
Flare, Aircraft, Parachute, M26 & AN-M26

Flare, Aircraft, Parachute, M26 & AN-M26



- | | |
|---------------------------|-------------------------|
| A-Shipping plug. | M-Shock absorber assys. |
| B-Shade retainer support. | N-Shrouds. |
| C-Rib retainer. | O-Thrust spacer. |
| D-Stem. | P-Parachute |
| E-Lower spacer. | Q-Releasing cup disk. |
| F-Ribs. | R-Cover releasing cup. |
| G-Shade. | S-Cover. |
| H-Quickmatch. | T-Stabilizing sleeve. |
| I-Flare charge. | U-Hangwire. |
| J-Relay charge. | V-Handle assy. |
| K-Delay element. | W-Pin stiffener. |
| L-Base block assy. | |

M26 Flare



M111-series Fuze

History: This aircraft flare entered service in late 1941 or early 1942. Manuals from the 1960's suggest that it continued to be used during the Vietnam War. The original M26 was soon replaced by the AN-M26, although there is little to distinguish each type (one reference seems to indicate that the nomenclature again reverted to "M26," so it is not entirely clear). There are also "blue band" versions that contain a substitute-standard flare composition and are used only for training.

Use: This flare is used to provide illumination for high altitude night bombardment. It can also be used to blind enemy anti-aircraft defenses. It is a parachute-supported type that burns with a yellowish light. It can illuminate up to a 1,500-foot circle on the ground. The M111 time fuze

[see separate data sheet] is used with this flare and can be set to function at 3,000 feet, when released from any altitude between 5,000 and 25,000 feet.

Description: The flare case is cylindrical sheet metal with a rounded nose and four fins. It is equipped with two suspension lugs, 14 inches apart. The flare contains one flare charge that when deployed, is suspended from a 14 ½-foot parachute. An umbrella-like, glass-cloth shade shields the bombardier from the glare.

Functioning: [Also see M111 Fuze] Releasing the flare from the aircraft withdraws the arming wire from the fuze, allowing it to arm. The hang wire pulls off the cover of the stabilizing-sleeve compartment and, as the flare continues to drop, the stabilizing sleeve is pulled out. When the nose fuze functions, the gases from the black powder booster force off a cover that allows a pull-out cord to withdraw the parachute. When the parachute opens with a jerk, the pull-out cord breaks, and this permits the entire flare assembly to be pulled out of the flare case. At the same time a friction igniter ignites a delay element in the central tube of the illuminant assembly, which burns for approximately 5 ½ seconds. The flame is then transmitted in turn by relay charge to the quickmatch, first-fire charge and the 17.7-pound flare charge. Burning time of the flare is 3 to 3 ½ minutes.

Over-all length.....50 inches
Diameter.....8 inches
Weight as dropped53 pounds
Intensity800,000 candlepower

Summary of Propellant, Explosives & Pyrotechnics (PEP)

| COMPONENT | PEP | QUANTITY |
|------------------|---|--|
| Friction Igniter | Pull wire coated with Friction composition (typical): <ul style="list-style-type: none"> • Stabilized red phosphorus (40%) • Acetone (40%) • Egyptian lacquer (20%) Ignition composition: <ul style="list-style-type: none"> • Potassium chlorate • Charcoal • Dextrin binder | [unknown] [unknown] |
| Delay Charge | Black Powder: <ul style="list-style-type: none"> • Potassium nitrate (74%) • Charcoal (15.6%) • Sulfur (10.4%) | [unknown] |
| Quickmatch | Laundry starch and Black Powder: <ul style="list-style-type: none"> • Potassium nitrate (74%) • Charcoal (15.6%) • Sulfur (10.4%) | 4 segments with total weight of .19 ounces |

| COMPONENT | PEP | QUANTITY |
|-------------------|--|------------------|
| Priming Charge | Priming composition: <ul style="list-style-type: none"> • Black Powder (97%) • Dextrin (3%) | .08 ounces |
| Relay Charge | Black Powder: <ul style="list-style-type: none"> • Potassium nitrate (74%) • Charcoal (15.6%) • Sulfur (10.4%) | .01 ounces |
| First-fire Charge | 75% Flare Composition (see below) + 25% Black Powder (see above) | 6 ounces |
| Fuse | Lead spitter fuse, Black Powder | .12 ounces |
| Flare Charge | Illuminant composition (primary mixture): <ul style="list-style-type: none"> • Magnesium (36%) • Barium nitrate (34%) • Sodium oxalate (20%) • Aluminum (8%) • Castor oil (1%) • Linseed oil (1%) <p style="text-align: center;">OR</p> Illuminant composition (substitute mixture): <ul style="list-style-type: none"> • Barium nitrate (59%) • Aluminum (24.5%) • Sodium oxalate (11%) • Sulfur (3.5%) • Castor oil (1%) • Linseed oil (1%) | 14 - 17.7 pounds |
| | 18.2 pounds | |

* 15.4 grains = 1 gram; 7,000 grains = 1 pound

References:

U.S. Army Specification PXS-673, 10 July 1936

Ordnance drawing number 78-2-249, 28 June 1941

TM 9-981, *Military Pyrotechnics*, 30 May 1942

Ordnance drawing number P-42965, 15 August 1942

TM 9-1984, *Disposal of American and Allied Bombs and Fuses*, 12 November 1942

U.S. Army Specification PXS-770, 9 June 1943

TM 9-1981, *Military Pyrotechnics*, 8 December 1943

Catalogue of Standard Ordnance Items, Second Edition, Volume III, Office of the Chief of Ordnance Technical Division, 1 March 1944

TM 9-1904, *Ammunition Inspection Guide*, 2 March 1944

OP 1664, NAVSEA, *US Explosive Ordnance*, Vol. 1 & 2, 28 May 1947

OP 998, *Aircraft Pyrotechnics and Accessories*, 29 May 1947

TM 9-1981, *Military Pyrotechnics*, 29 January 1951

Complete Round Charts, Book III, *Bombs, Pyrotechnics, Grenades, Mines, Rockets, JATOS, Demolition Material & Miscellaneous Items of Ammunition*, 15 October 1959

TM 9-1370-200, *Military Pyrotechnics*, 14 September 1966

APPENDIX G

TEXTUAL REFERENCES

Due to the volume of textual references of source documents gathered and cited for this PA effort, it was determined not to include a printout of some of them as an appendix. Those documents not included in the following pages are scanned and included on the digital version of this report.

*The gathered textual document scans are in Adobe *.PDF format.*

TEXTUAL REFERENCES

| <u>Section No.</u> | <u>Reference</u> |
|--------------------|--|
| G-1 | U.S. Army Corps of Engineers, New England District 2008 Inventory Project Report (INPR) for Project No. D01MA0595, <i>Cape Poge Little Neck Bomb Target Site</i> , Chappaquiddick Island, MA, dated 29 July 2008. |
| G-2 | U.S. Army Corps of Engineers, New England District 2008 Draft Performance Work Statement, Time Critical Removal Action (TCRA) at the Former Cape Poge Little Neck Bomb Target Site Chappaquiddick Island, Dukes County, Massachusetts, FUDS D01MA0595 and Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard Edgartown, Massachusetts, FUDS Project Number D01MA0486, 25 November 2008, Revision: 0, Revision Date: N/A. Backup Files, U.S. Army Corps of Engineers, New England District. |
| G-3 | U.S. Army Corps of Engineers, New England District 2008 Memorandum, Subj: Time Critical Removal Action (TCRA) Memorandum for Cape Poge Little Neck Bomb Target Site, Chappaquiddick Island, Massachusetts and Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, Massachusetts, 3 December 2008. Backup Files, U.S. Army Corps of Engineers, New England District. |
| G-4 | U.S. Navy, Naval Air Bases First Naval District, Quonset Point, RI 1946 Letters to the War Assets Administration Re: Decontamination of Naval Facilities declared surplus to WAA, 4 December 1946 and 12 November 1946. RG 72, Entry 62B, Box 506. NARA II, College Park, MD. |
| G-5 | U.S. Navy, Navy Department, Washington, DC 1945 Memorandum, Subj: Lease NOy(R) -36842 with Alice Rankin Lee, et al. covering land at Little Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard to be used for a Bomb Target Site, 28 February 1945. RG 72, Entry 62B 1943-45, Box 2839. NARA II, College Park, MD. |

- G-6 U.S. Navy, Navy Department, Washington, DC
1944 [Memorandum, Subj: Lease NOy\(R\) -36801 with Doris Huxford Chouinard, and Lease NOy\(R\) – 36802 with the same Lessor, covering land on “Little Neck” at Martha’s Vineyard, Mass., for use as a bomb target site, 27 November 1944.](#) RG 72, Entry 62B, Box 2839. NARA II, College Park, MD.
- G-7 U.S. Navy, Navy Department, Washington, DC
1944 [Memorandum, Subj: Lease NOy\(R\) -36819 with Luther M. Sibley, covering land on “Little Neck”, Martha’s Vineyard, Mass., for use as a bomb target site, 30 November 1944.](#) RG 72, Entry 62B 1943-1945, Box 2839. NARA II, College Park, MD.
- G-8 U.S. Navy. U.S. Naval Air Station, Quonset Point, R.I.
1944 [Memorandum, Subj: Practice Bombing Target Sites – Request for leasehold interests, 18 August 1944.](#) RG72, Entry 62B, Box 3071. NARA II, College Park, MD.
- G-9 Massachusetts Historical Commission
2008 [Official Correspondence from the Commonwealth of Massachusetts, Massachusetts Historical Commission, entitled Cape Poge Little Neck Chappaquiddick Island, Edgartown, MA,](#) by Edward L. Bell, Technical Services Division. MHC #RC.45470, dated 2 December 2008.
- G-10 U.S. Army, Amphibious Training Command, Camp Edwards, MA
1942 [Official correspondence, Memorandum for General Anderson, Subj: Amphibious Exercise, No. 2,](#) 6 October 1942. Box 10 143.04-2 Sep-Oct 1942 to 143.04D 1944-1946, Folder 143.04-2 Sep-Oct 1942. USAFHRA, Maxwell AFB, Montgomery, AL. pp 10 and 55.
- G-11 U.S. Army, The Amphibious Training Center
1946 [The Amphibious Training Center Study No. 22. Subj: Studies in the History of Army Ground Forces,](#) 1 September 1946. Box 16, 172.1-9 1946 to 172.1-29 1946, Folder 172.1-15 1946. Section VI, pages 49-56. USAFHRA, Maxwell AFB, Montgomery, AL.

- G-12 U.S. Army Engineer Amphibian Command
1943 [Correspondence from Headquarters, Engineer Amphibian Command dated 7 August 1943](#). RG 77, Entry 1950
Engineer Amphibian Command Camp Edwards, MA 1942-
1943, Folder HQ, EAC, General Orders 1943. NARA II,
College Park, MD.
- G-13 Lee, Alice R.
1944 [Correspondence from Cape Poge property owner, Alice R. Lee, to the Navy Department of Yards and Docks – Real Estate Division – Regional Office, 25 Oct 1944](#). RG181,
Entry 1st Naval District, Real Estate Disposal Files, 1940-
1954, Box 44. NARA, Northeast Region, Waltham, MA.
- G-14 U.S. Naval Air Station Quonset Point, Rhode Island
1944 [Correspondence to Chief of the Bureau of Aeronautics. Subj: Practice Bombing Target Sites – Request for Leasehold Interests](#). RG72, Entry 62B 1943-45, Box 2839, Folder N1-
9/NA43. NARA College Park, MD.
- G-15 Chouinard, Doris
1944 [Correspondence to the Navy Department, Bureau of Yards and Docks, 28 September 1944](#). RG181, Entry 1st Naval
District, Real Estate Disposal Files, 1940-1954, Box 44.
NARA, Northeast Region, Waltham, MA.
- G-16 U.S. Navy, Naval Air Station Quonset Point
1944 [Memorandum, Subj: Practice Bombing Target Sites – Request for Leasehold Interests, 26 May 1944](#). RG72, Entry
62B, Box 3071. NARA II, College Park, MD.
- G-17 Chief of Bureau of Aeronautics
1944 [Correspondence to Chief of Yards and Docks. Subj: NAS Quonset Point, R.I. – Practice Bombing Target Sites – Request for Leasehold Interests, 19 August 1944](#). RG72,
Entry 62B General Correspondence 1943-45, Box 3071,
Folder N12/NA43 Vol 2. NARA II, College Park, MD.

- G-18 U.S. Naval Air Station Quonset Point, Rhode Island
1944 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: Practice Bombing Target Sites, Request for Leasehold Interests, 25 September 1944.](#) RG72, Entry 62B General Correspondence 1943-45, Box 3071, Folder N12/NA43 Vol 2. NARA II, College Park, MD.
- G-19 U.S. Navy, Navy Department, Washington, DC
1944 [Memorandum, Subj: Lease NOy\(R\) -36801 with Doris Huxford Chouinard, and Lease NOy\(R\) – 36802 with the same Lessor, covering land on “Little Neck” at Martha’s Vineyard, Mass., for use as a bomb target site, 27 November 1944.](#) RG 72, Entry 62B, Box 2839. NARA II, College Park, MD.
- G-20 U.S. Navy, Navy Department, Washington, DC
1944 [Memorandum, Subj: Lease NOy\(R\) -36819 with Luther M. Sibley, covering land on “Little Neck”, Martha’s Vineyard, Mass., for use as a bomb target site, 30 November 1944.](#) RG 72, Entry 62B 1943-1945, Box 2839. NARA II, College Park, MD.
- G-21 U.S. Navy
1945 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: Request for Cancellation of Leases for Land Used for Practice Bombing Targets](#) dated 17 December 1945. RG72, Entry 62B General Correspondence 1943-1945, Box 2859, Folder N1-9/NDI. NARA II, College Park, MD.
- G-22 U.S. Navy, Chief of the Bureau of Aeronautics
1945 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: Targets, Gunnery and Rocket Ranges, and Boat Facilities Excess to Post-War Aviation Requirements dated 31 October 1945.](#) RG72, Entry 67A, Box 287, Folder NA43. NARA II, College Park, MD.
- G-23 U.S. Navy
1946 [Special Release. Lease number NOy\(R\)-36802 between the United States and Doris Chouinard](#) effective 12 April 1946. RG72, Entry 62B General Correspondence 1946, Box 396, Folder N1-9/NA43 Vol 2. NARA II, College Park, MD.

- G-24 Shettle, Jr., M.L.
1945 [United States Naval Air Stations of World War II, Vol I – Eastern States, page 127.](#) Schaertel Publishing Co., Bowersville, Georgia.
- G-25 U.S. Navy
1946 [Renewal of Government Lease, NOy\(R\)-36801 with Doris Chouinard,](#) dated 31 May 1946. RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.
- G-26 U.S. Navy
1946 [Renewal of Government Lease, NOy\(R\)-36842 with Alice R. Lee,](#) dated 31 May 1946. RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.
- G-27 U.S. Navy
1946 [Renewal of Government Lease, NOy\(R\)-36819 with Luther Sibley](#) dated 31 May 1946. RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.
- G-28 U.S. Navy, Chief of Naval Operations
1946 [Correspondence to the Commander Naval Air Bases, First Naval District. Subj: Cape Poge Bombing Target – Civilian Protest To](#) dated 19 August 1946. RG72, Entry 62B General Correspondence 1946, Box 437. NARA II, College Park, MD.
- G-29 U.S. Navy, Office of the Chief of Naval Operations
1946 [Correspondence to Senator Walsh dated 26 and 28 August 1946 Concerning the bombing target at Cape Poge.](#) RG72, Entry 62B General Correspondence 1946, Box 402, Folder N1-9/ND4. NARA II, College Park, MD.
- G-30 U.S. Navy, Naval Air Bases First Naval District
1946 [Correspondence to the Chief of Naval Operations. Subj: Cape Poge Bombing Target](#) dated 5 September 1946. RG72 Entry 62B General Correspondence 1946, Box 437, Folder N12/NA43. NARA II, College Park, MD.

- G-31 U.S. Navy, Chief of the Bureau of Aeronautics
1947 [Correspondence to the Chief of the Bureau of Yards and Docks. Subj: First Naval District – Practice Target Area, Disestablishments of](#) dated 11 April 1947. RG72, Entry 62B General Correspondence 1947, Box 424, Folder NDI Vol 2. NARA II, College Park, MD.
- G-32 U.S. Navy, Navy Department, Washington, DC
1947 [Correspondence to Alice R. Lee concerning lease number NOy\(R\)-36842, dated 18 April 1947.](#) RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.
- G-33 U.S. Navy
1947 [Special Release. Lease number NOy\(R\)-36819 between the United States and Luther Sibley](#) effective 1 July 1944. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44, Vol 2. NARA Northeast Region, Waltham, MA.
- G-34 U.S. Navy
1948 [Special Release. Lease number NOy\(R\)-36801 between the United States and Doris Chouinard](#) effective 17 May 1948. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 44, Vol 2. NARA Northeast Region, Waltham, MA.
- G-35 U.S. Navy, Naval Air Bases, First Naval District
1947 [Correspondence to the Commandant, First Naval District. Subj: Leases NOy\(R\)-36801, NOy\(R\)-36819, and NOy\(R\)-36842 – cancellation of dated 10 June 1947.](#) RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 73. NARA Northeast Region, Waltham, MA.
- G-36 U.S. Navy, Commandant, First Naval District
1947 [Memorandum, Subj: Cancellation of Leases NOy\(R\)-36842, 36819, 36801, 35559, and 39456, 5 December 1947.](#) RG181, Entry 1st Naval District, Real Estate, Disposal Files, 1940-1954, Box 73. NARA Northeast Region, Waltham, MA.

G-37

U.S. Navy, Navy Department, Washington, DC

1945 [Memorandum, Subj: Lease NOy\(R\) -36842 with Alice Rankin Lee, et al. covering land at Little Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard to be used for a Bomb Target Site, 28 February 1945.](#) RG 72, Entry 62B 1943-45, Box 2839. NARA II, College Park, MD.

APPENDIX G-1

Corps of Engineers – New England

**Inventory Project Report (INPR) for
Project No. D01MA0595, Chappaquiddick
Island, *Cape Poge Little Neck Bomb Target Site*,
Chappaquiddick Island, MA,
dated 29 July 2008.**



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NORTH ATLANTIC DIVISION, US ARMY CORPS OF ENGINEERS
FORT HAMILTON MILITARY COMMUNITY
BROOKLYN, NEW YORK 11252-6700

CENAD-PD-IIS-P

JUL 29 2008

MEMORANDUM FOR COMMANDER, U.S. ARMY ENGINEER DISTRICT, NEW ENGLAND

SUBJECT: Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS), Inventory Project Report(INPR) for Site No. DO1MA0595, Cape Pogue Little Neck Bomb Target Site, Chappaquiddick Island, Dukes County, Massachusetts.

1. Reference:

- a. Memorandum, CENAE, dtd 23 July 2008, SAB.
- b. Memorandum, CENAD, dtd 30 June 2008, Findings and Determination of Eligibility for Little Neck/Cape Pogue Bomb Target Site.

2. This property is proposed for a Military Munitions Response Program (MMRP) project at the Cape Pogue Little Neck Bomb Target Site. A Finding and Determination of Eligibility (FDE) as an eligible property was approved by this office, ref. B. This proposed MMRP is an eligible project under FUDS.

3. You are therefore authorized an MMRP project as requested. This will serve as confirmation of the approval of this project as presented in the attached INPR documents.

4. Please ensure that this project is properly identified and entered into the FUDSMIS database and ensure that this project's files are developed and maintained in accordance with the provisions of the FUDS Information Improvement Plan (FIIP).

5. The North Atlantic Division point of contact for this action is Alan R. Koppel, Program Manager, (718) 765-7113.

David J. Leach
Chief
IIS & Environmental Division

ENCL

CF:

CENAE-PP-M (Sullivan)
CENAD-PD-IIS-P (Koppel)
CENAD-PD-IIS-S (Lopez)
CENAD-RIT (Koran)

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D01MA059501_01.08_0500_a



REPLY TO:
ATTENTION OF:

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

CENAE-PP-M

23 July 2008

MEMORANDUM FOR Commander, North Atlantic Division, ATTN: CENAD-PD-IIS-P
(Alan Koppel), Fort Hamilton Military Community, Bldg 301, 302 General Lee Ave,
Brooklyn, NY 11252-6700

SUBJECT: Defense Environmental Restoration Program - Formerly Used Defense Sites
(DERP-FUDS) Inventory Project Report (INPR) for Cape Pogue Little Neck Bomb Target
Site, Chappaquiddick Island, Dukes County, Massachusetts, FUDS Property No.
D01MA0595

1. This memorandum, including enclosures, comprises the INPR for the Military Munitions Response Program (MMRP) project at the Cape Pogue Little Neck Bomb Target Site. Enclosure 1 is the 2008 Property Survey Summary Sheet. Enclosure 2 is the vicinity and property map.
2. The property was determined to be eligible for inclusion into the FUDS Program. The Findings and Determination of Eligibility for this property was previously approved in July 2008 and is included here as Enclosure 3. The INPR checklist is provided as Enclosure 4.
3. One new MMRP project is proposed. Enclosure 5 contains the Project Summary Sheet. The Munitions Response Site Prioritization Protocol (MRSPP) results for the proposed MMRP Project are presented in Enclosure 6. The MRSPP Priority is Priority 5.
5. I recommend that:
 - a. North Atlantic Division approve the new MMRP Project.
 - b. North Atlantic Division forward a copy of the approval memo and this INPR to the Environmental and Munitions Center of Expertise.

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D01MA059501_01.08_0501_a

CENAE-PP-M

23 July 2008

SUBJECT: Defense Environmental Restoration Program - Formerly Used Defense Sites (DERP-FUDS) Inventory Project Report (INPR) for Cape Pogue Little Neck Bomb Target Site, Chappaquiddick Island, Dukes County, Massachusetts, FUDS Property No. D01MA0595

6. Please contact me directly if I can be of further assistance. Detailed information desired by your staff can be obtained by contacting Heather Sullivan, of my staff, who may be reached at (978) 318-8543.



PHILIP T. FEIR
COL, EN
Commanding

6 Encls:

1. Property Survey Summary Sheet
2. Vicinity and Property Map
3. FDE
4. INPR Checklist
5. Project Summary Sheet
6. MRSP

**PROPERTY SURVEY SUMMARY SHEET
FOR
DERP-FUDS PROPERTY No. D01MA0595
CAPE POGUE LITTLE NECK BOMB TARGET SITE
Chappaquiddick Island, Dukes County, Massachusetts
JULY 2008**

PROPERTY NAME: Cape Pogue Little Neck Bomb Target Site (also known as Little Neck, L-5-V, Chappaquiddick Bomb Target Site, and East Beach). The official site name listed in FUDSMIS is "Cape Pogue/Little Neck Bomb Target Site"; however, this site has also been referred to as "Chappaquiddick Bomb Target Site."

LOCATION: The former Cape Pogue Little Neck Bomb Target Site consists of approximately 141 acres on Little Neck and Cape Pogue Beach on Chappaquiddick Island in the Town of Edgartown, Massachusetts on Martha's Vineyard. The target is located at approximately Latitude 41° 24.5' North; Longitude 70° 27.3' West. The location of the Cape Pogue Little Neck Bomb Target Site is approximate and may be adjusted as new information becomes available.

PROPERTY HISTORY: The United States acquired four leasehold interests in approximately 141 acres beginning 1 July 1944. The leases were acquired by the Department of the Navy for the purpose of a bombing target in connection with the 1st Naval District flight training program at Naval Air Station Quonset Point, Rhode Island and Naval Auxiliary Air Station Martha's Vineyard, Massachusetts. Three leases were renewed for one-year terms through 30 June 1947 and one lease was renewed for one-year terms through 30 June 1946. Prior to 1944, Chappaquiddick Island and Cape Pogue were used for agricultural purposes and as a summer resort. One lease was terminated on 31 March 1946. The other three leases were terminated on 18 May 1947. By 1959, most of Cape Pogue had been donated to The Trustees of Reservations by Charles S. Bird and Oliver D. Filley. Christopher P. Kennedy is the Island's Regional Director for The Trustees of Reservations. The former Cape Pogue Little Neck Bomb Target Site is part of the Cape Pogue Wildlife Refuge. Cape Pogue can be reached by traveling over Dyke Bridge or by private boat. The Refuge is open to the public for recreational use, hunting, canoeing, kayaking, fishing, clamming, and crabbing. Military practice ordnance, including Mk23 practice bombs, has been observed on the property.

PROPERTY VISIT: A property visit was conducted on the former Cape Pogue Little Neck Bomb Target Site by Carol Charette, Dave Larsen and Ralph Turner of U.S. Army Corps of Engineers (USACE) North Atlantic District on 14 April 2008. Massachusetts Department of Environmental Protection employee Michael Moran accompanied the USACE representatives on the property visit.

CATEGORY OF HAZARDS: MMRP

PROJECT DESCRIPTION:

a. Project 01. A Military Munitions Response Program (MMRP) project is proposed for the former Cape Pogue Little Neck Bomb Target Site. The Site was used by the Navy from 1944 to 1947 for practice bombing. Military ordnance, consisting primarily of MK23 practice bombs, is found regularly throughout the Site. A Preliminary Assessment (PA) is scheduled for completion in Fiscal Year 2009.

Enclosure 1

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AVAILABLE STUDIES AND REPORTS: Information provided in the FDE and INPR is based on historical Naval records and other information obtained from the National Archives and Records Administration (NARA) as well as information obtained during the 14 April 2008 property visit. Additional historical research efforts and property visits will be conducted during the PA.

POINT OF CONTACT: New England District, Heather Sullivan, CENAE-PP-M, FUDS Program Manager, (978) 318-8543.

LEAD REGULATOR: Massachusetts Department of Environmental Protection (MADEP), Anne Malewicz, (617) 292-5659.

Enclosure 1



Vicinity Map
Chappaquiddick Bombing Target Site
DERP/FUDS Site No. D01MA0595
Little Neck/Cape Poge, Chappaquiddick Island, Dukes County, Massachusetts
N41° 24.5', W70° 27.3' or N41° 24' 30", W70° 27' 18"

Enclosure 2



Property Map
Chappaquiddick Bombing Target Site
DERP/FUDS Site No. D01MA0595
Little Neck/Cape Poge, Chappaquiddick Island, Dukes County, Massachusetts
N41° 24.5', W70° 27.3' or N41° 24' 30", W70° 27' 18"

Enclosure 2

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FOR
FORMERLY USED DEFENSE SITES
FINDINGS AND DETERMINATION OF ELIGIBILITY
CHAPPAQUIDDICK BOMBING TARGET SITE
FUDS Property Number D01MA0595
Little Neck/Cape Poge, Chappaquiddick Island, Dukes County, Massachusetts

1. The property that comprises the former Chappaquiddick Bombing Target Site at Little Neck and Cape Poge Beach on Chappaquiddick Island in the Town of Edgartown, Massachusetts consists of approximately 141 acres. Cape Poge is at the northern section of the easterly side of Chappaquiddick Island. It is separated from Little Neck, along the middle section of the easterly side of Chappaquiddick Island, by a strip of land about a mile long. The site is a barrier beach consisting of a strip of land surrounded on two sides by water.
2. The United States acquired four leasehold interests in approximately 141 acres beginning 1 July 1944. The leases were acquired by the Department of the Navy for the purpose of a bombing target area in connection with a flight training program at Quonset Naval Air Station, Rhode Island. By memorandum dated 4 November 1944, the Navy indicated that they entered the target area for the purpose of constructing target(s). The leases ran to 30 June 1945. Three leases were renewed for one-year terms through 30 June 1947 and one lease was renewed for one-year terms through 30 June 1946. Prior to 1944, Chappaquiddick Island and Cape Poge were used for agricultural purposes and as a summer resort. Although the leases did not cover a strip of land about a mile long between the Cape Poge and Little Neck areas, this mile-long area (as well as other areas adjacent to Cape Poge and Little Neck) is considered as part of the site because it is an extended range fan for Cape Poge and Little Neck. Additionally, munitions may have migrated to these areas adjacent to Cape Poge and Little Neck due to shoreline erosion and ocean currents.
3. One lease was terminated on 31 March 1946. The other three leases were terminated on 18 May 1947. A release was executed by each property owner on the termination of each lease. The site is currently owned by the Trustees of Reservations (portions may be co-owned with others) and known as the Cape Poge Wildlife Refuge. The Trustees of Reservations is a charitable corporation that has as its mission preserving, for public use and enjoyment, properties of exceptional scenic, historic, and ecological value in Massachusetts. The Trustees of Reservations acquired most of Cape Poge in the 1950s and 1960s. The Cape Poge Wildlife Refuge site is open to the public for recreational use. The site contains over-land (sand) vehicle trails and walking trails, and beachfront. The site is also used for hunting, canoeing, kayaking, and fishing activities. Fishing takes place both at the site and in the waters adjacent to the site. Military ordnance has been found on the Refuge. In

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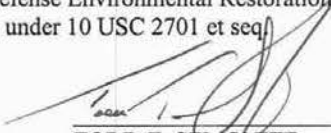
Findings and Determination of Eligibility
FUDS Property No. D01MA0595
Chappaquiddick Bombing Target Site, MA

March 2008 a live bomb was detonated by appropriate authorities at Wasque Point, an area located just south of the Cape Poge site.

4. There has been no information obtained through coordination with regulators or affected tribes that influenced the determination below.

DETERMINATION

Based on the foregoing findings of fact, the property has been determined to have been under the jurisdiction of the Secretary of Defense and owned by, leased to, or otherwise possessed by the United States prior to 17 October 1986. This property is therefore eligible for inclusion into the Defense Environmental Restoration Program – Formerly Used Defense Sites established under 10 USC 2701 et seq.



TODD T. SEMONITE
Brigadier General, USA
Commanding

Worksheet B-3. Inventory Project Report (INPR) Checklist
(Use space at bottom of this worksheet for continuation)

| | | |
|--|--------------------------------|-----------------------|
| Checklist Preparer: | | Date: July 2008 |
| Name: Deborah McKinley, P.E. | | Title: Civil Engineer |
| District: St. Louis | Phone Number: (314) 331- 8842 | |
| Email address: Deborah.k.mckinley@usace.army.mil | | |
| Property Information: | | |
| Property Name: Cape Pogue Little Neck Bomb Target Site | Property #: DOIMA0595 | |
| Previous Names, if any: Little Neck, L-5-V | | |
| Former Service: Navy | | |
| Property Location (Section, Township, Range): N/A | | |
| Street: Little Neck/Cape Pogue | | |
| City: Chappaquiddick Island | County: Dukes | State: MA |
| Latitude (D/M/S): 41° 24.5' N | Longitude (D/M/S): 70° 27.3' W | |
| Current Use (residential, commercial, etc.): Recreation | | |
| Primary Property Owner Information (address multiple owners in Comments): | | |
| Name: Trustees of Reservations | | |
| Address (if other than above): c/o Christopher P. Kennedy, Islands Regional Director | | |
| Street: PO Box 2106, 860 State Road | | |
| City: Vineyard Haven | Zip Code: 02568-2106 | |
| Phone Number: 508-693-7662 | County: Dukes | State: MA |

Indicate the status of the following checklist items in determining the completeness of the INPR. Provide a narrative in the comments section below to explain, and keyed to, the shaded boxes checked:

| | | Yes | No | N/A |
|-------------------------------------|--|-----|----|-----|
| Property Document Search: | | | | |
| <input checked="" type="checkbox"/> | Were the following records available and used in the preparation of the INPR? | | | |
| 1. | Archive records | X | | |
| 2. | Site Maps, including facility as-built drawings | X | | |
| 3. | Aerial or ground photographs | X | | |
| 4. | Prior studies, documents, reports, property contamination records, or public/private sampling data | | X | |
| 5. | Compliance orders issued to current or past owners/operators | | X | |
| 6. | Real estate records, deeds, or property transfer records | X | | |
| 7. | Local historical societies and public libraries | | X | |
| 8. | EPA/State environmental records or reports | | X | |
| 9. | EOD incident reports | X | | |

Enclosure 4

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| | | Yes | No | N/A |
|-------------------------------------|--|-----|----|-----|
| 10. | Other Documentation | X | | |
| Property Visit: | | | | |
| <input checked="" type="checkbox"/> | Indicate whether the following have been contacted and interviewed to obtain information. | | | |
| 11. | Current landowner(s) | X | | |
| 12. | Neighbors | X | | |
| 13. | Previous landowner(s) | | X | |
| 14. | Prior employee(s) | | | |
| 15. | Federal agencies, including regulatory agencies | X | | |
| 16. | State agencies, including regulatory agencies | X | | |
| 17. | Local agencies, including regulatory and law enforcement agencies | X | | |
| 18. | Other available sources | X | | |
| 19. | Was access to the property possible (right of entry provided by landowner)? | X | | |
| 20. | Was the property physically visited? | X | | |
| 21. | Was access sufficient to allow for a thorough property inspection? | X | | |
| 22. | Was access sufficient to identify potential hazards? | X | | |
| 23. | Did regulatory agencies accompany USACE on the property visit? | X | | |
| 24. | Did the landowner accompany USACE on the property visit? | X | | |
| 25. | Was there evidence of a release of hazardous material or use/disposal of military munitions during DoD control? | X | | |
| 26. | Was there evidence of a release of potential DoD hazardous material into a public or private drinking water supply? ¹ | | X | |
| 27. | Is there evidence of a release into a public or private drinking water supply due to deterioration of the system through ordinary use? ¹ | | X | |
| 28. | Is there evidence of a release from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures? ² | | X | |
| 29. | Is some other program actively involved with the property (i.e., another Federal, state, or tribal program)? | X | | |
| 30. | Is there evidence that activities by non-DoD parties at the property may be the source of potential contamination? | | X | |
| 31. | Was information on hazards found at similar types of FUDS properties considered in identifying potential hazards at this property? | X | | |
| 32. | Were site maps compared to actual conditions during the property visit? | | X | |
| 33. | Were photographs taken? | X | | |
| 34. | Were property owners advised to contact USACE if evidence of potential hazards is found later? | X | | |
| 35. | Was a trip report of the property visit prepared? | X | | |

¹ This can be determined by reviewing public water supply sampling data. Provide discussion of how it was determined to be release due to DoD activities rather than by current or past owners/operators.

² This question is from the EPA Pre-CERCLIS Screening Assessment Checklist/Decision Form, EPA-540-F-98-039 "Improving Site Assessment: Pre-CERCLIS Screening Assessments."

Enclosure 4

| | | Yes | No | N/A |
|--|---|-----|----|-----|
| Property Eligibility Determination (refer to Chapter 3):Yes | | | | |
| 36. | Is the property Categorically Excluded? | | X | |
| 37. | Are there release, hold harmless, "as-is", or indemnification clauses in deeds or property transfer documents that limit DoD liability? | X | | |
| 38. | Is there evidence of this property being a Third Party Site? | | X | |
| 39. | Is the property eligible under FUDS? | X | | |
| 40. | If necessary, has a "Categorical Exclusion or Ineligible Property" worksheet been prepared (Worksheet B-1) | | | X |
| FUDS Property Screening: | | | | |
| 41. | Was a CERCLA Preliminary Assessment completed? | | X | |
| 42. | Was a RAC Worksheet prepared for the property? | X | | |
| Project Eligibility Determination (refer to Chapter 3): | | | | |
| 43. | Have all typical hazards been investigated for possible occurrence at this type of property? | X | | |
| 44. | Were hazards identified? | X | | |
| 45. | Are identified hazards of DoD Origin? | X | | |
| 46. | If identified hazards were of non-DoD origin, has the lead regulatory agency been informed? (Provide name, phone number, date) | | | X |
| 47. | Is the current owner under a RCRA or CERCLA clean-up order? | | X | |
| 48. | Has the "right of first refusal" been exercised by an adjacent DoD installation? | | | X |
| 49. | Is there evidence of beneficial use? | | X | |
| 50. | Are there other policy considerations against recommending a project? | | X | |
| 51. | Are eligible FUDS projects recommended? (If yes, identify projects below) | X | | |
| INPR Preparation and Review: | | | | |
| 52. | Is the INPR prepared consistent with INPR content Matrix (Table B-1) | X | | |
| 53. | Is the INPR Property Survey Summary Sheet consistent with Table B-2? | X | | |
| 54. | Is the Project Summary Sheet(s) consistent with Table B-3 | X | | |
| 55. | If appropriate, has a "BD/DR Project Summary Sheet Checklist" been prepared? (see Worksheet B-2) | | | X |
| 56. | If the INPR recommends a PRP/HTRW project, has the PRP District reviewed the INPR? (See Figure B-1) | | | X |
| 57. | If the INPR recommends a PRP/HTRW project, has the HTRW Center of Expertise reviewed the INPR? (See Figure B-1) | | | X |
| 58. | If the INPR recommends a MMRP or PRP/MMRP project, has the MM Center of Expertise reviewed the INPR? (See Figure B-1) | X | | |
| 59. | Was the draft INPR coordinated with Office of Counsel and Real Estate? | X | | |
| 60. | Was the draft INPR shared with the Lead Regulatory Agency after internal USACE review? | X | | |

Enclosure 4

Narrative comments to explain above notations: (Key your comments to the checklist item number)

1 - Only preliminary research has been conducted. Additional research efforts will be conducted during the Preliminary Assessment (PA).

4 - Preparation of the INPR package is based on historical Naval records and other information obtained from the National Archives and Records Administration (NARA) as well as information obtained during the 14 April 2008 property visit. Additional historical research efforts and property visits will be conducted during the PA.

7 - Preparation of the INPR package is based on historical Naval records and other information obtained from NARA. Local historical societies and public libraries may contain relevant information and will be researched during the PA.

8 - Preparation of the INPR package is based on historical Naval records and other information obtained from NARA. EPA/State environmental records or reports may contain relevant information and will be researched during the PA.

21, 22 - More extensive property visits are scheduled for Fiscal Year 2009 (FY09)

29 - The State of Massachusetts is working to acquire a contract to secure the area until the explosive ordnance disposal (EOD) unit arrives.

37 - There are release, hold harmless, "as-is", or indemnification clauses in the deeds or property transfer documents that limit DoD liability, however, Office of Council has conducted a Responsibility Assessment and determined that the clauses will not impact the Government's ability to perform work under the FUDS program.

41 - Completion of the PA is scheduled for FY09

42 - The MRSPP replaces the RAC. Only the EHE module of the MRSPP was completed based on the information currently available. As more information is obtained, the MRSPP will be revised to include the new information collected.

51 - MMRP Project 01 is proposed. A PA will be prepared for the property.

60 - A copy of the INPR was provided to the Massachusetts Department of Environmental Protection on 9 July 2008.

Enclosure 4

**PROJECT SUMMARY SHEET
FOR
DERP-FUDS MMRP PROJECT NO. D01MA059501
DERP-FUDS PROPERTY No. D01MA0595
FEDERAL FACILITY ID NUMBER: MA9799FA289
CAPE POGUE LITTLE NECK BOMB TARGET SITE
Chappaquiddick Island, Dukes County, Massachusetts
JULY 2008**

PROJECT DESCRIPTION: A Military Munitions Response Program (MMRP) project is proposed for the former Cape Pogue Little Neck Bomb Target Site. Limited information is currently available regarding the use of the Site and the munitions utilized. The Navy utilized the Site as a bombing target from 1944 until 1947. Military practice ordnance, including Mk23 practice bombs, has been observed on the property. The location of the Cape Pogue Little Neck Bomb Target Site as depicted on the Vicinity Map and Property Map is approximate and may be adjusted as new information becomes available.

PROJECT ELIGIBILITY: The former Cape Pogue Little Neck Bomb Target Site Bombing Target Site was used by the U.S. Navy as a bomb target from 1944 until 1947. The property consists of 141 acres acquired by leases in 1944. The leases were acquired for the purpose of a bombing target area. All leases were terminated by 1947.

POLICY CONSIDERATIONS: The property has not been beneficially used since 1947. No other entity is known to have used the Site as a bomb target.

PROPOSED ACTIVITIES: A Preliminary Assessment (PA) is scheduled for completion in Fiscal Year 2009. Further investigation of the Site may be conducted on the basis of the PA findings.

POINT OF CONTACT: New England District, Heather Sullivan, CENAE-PP-M, FUDS Program Manager, (978) 318-8543.

LEAD REGULATOR: Massachusetts Department of Environmental Protection (MADEP), Anne Malewicz, (617) 292-5659.

Enclosure 5

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APPENDIX G-2

**U.S. Army Corps of Engineers, New England
District**

**Draft Performance Work Statement, Time
Critical Removal Action (TCRA) at the Former
Cape Poge Little Neck Bomb Target Site
Chappaquiddick Island, Dukes County,
Massachusetts, FUDS D01MA0595 and Former
Moving Target Machine Gun Range at South
Beach, Martha's Vineyard Edgartown,
Massachusetts, FUDS Project Number
D01MA0486, 25 November 2008, Revision: 0,
Revision Date: N/A.**
**Backup Files, U.S. Army Corps of Engineers,
New England District.**

PERFORMANCE WORK STATEMENT (PWS)

**Time Critical Removal Action (TCRA) at the Former Cape Poge Little Neck Bomb Target Site
Chappaquiddick Island, Dukes County, Massachusetts, FUDS D01MA0595 and
Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard
Edgartown, Massachusetts, FUDS Project Number D01MA0486**

25 November 2008

Revision: 0

Revision Date: N/A

1.0 OBJECTIVE. There are three objectives for this task order. The primary objective is to remove Munitions and Explosives of Concern (MEC), Materials Potentially Presenting an Explosive Hazard (MPPEH), and Explosive Hazards at the former Cape Poge Little Neck Bomb Target Site and former Moving Target Machine Gun Range at South Beach, Martha's Vineyard per the recommendations in the Time Critical Removal Action (TCRA) Action Memorandum, dated 24 November 2008, see Appendix A. The secondary objective is to provide on-call UXO support within 24 hours of notification and verification that photographs of suspect items are virtually confirmed as MPPEH. The third objective for this task order is to purchase and install Public Educational Awareness signs as specified in Task 5.

2.0 BACKGROUND: Work required under this Performance Work Statement (PWS) falls under the Formerly Used Defense Sites (FUDS) Military Munitions Response Program (MMRP).

2.1 Location: See Figure 1

2.1.1 The former Cape Poge Little Neck Bomb Target Site consists of approximately 141 acres on Little Neck and Cape Poge Beach on Chappaquiddick Island in the Town of Edgartown, Massachusetts on Martha's Vineyard. The target is located at Latitude 41 0 24.5' North; Longitude 70 27.3' West. The location of the Cape Pogue Little Neck Bomb Target Site is approximate and may be adjusted as new information becomes available. The former Cape Poge Little Neck Bomb Target Site is part of the Cape Poge Wildlife Refuge. Cape Poge can be reached by traveling over Dyke Bridge or by private boat.

2.1.2 The former Moving Target Machine Gun Range at South Beach was located along the southern shore of Martha's Vineyard, south of Edgartown, Massachusetts. Due to extensive beach erosion the former range is now thought to be approximately 150 yards off South Beach. South Beach is managed by the Commonwealth of Massachusetts, Department of Resource and Conservation (MassDCR) and managed by the Edgartown Parks and Recreation Department from May 1 through Labor Day of each year.

2.2 History:

2.2.1 **Cape Poge Little Neck Bomb Target Site:** The United States acquired four leasehold interests in approximately 141 acres beginning 1 July 1944. The leases were acquired by the Department of the Navy for the purpose of a bombing target in connection with the 1st Naval District flight training program at Naval Air Station Quonset Point, Rhode Island and Naval Auxiliary Air Station Martha's Vineyard, Massachusetts. Three leases were renewed for one-year terms through 30 June 1947 and one lease was renewed for one-year terms through 30 June 1946. Prior to 1944, Chappaquiddick Island and Cape Pogue were used for agricultural purposes and as a summer resort. One lease was terminated on 31 March 1946. The other three leases were terminated on 18 May 1947. By 1959, most of Cape Pogue had been donated to The Trustees of Reservations by Charles S. Bird and Oliver D. Filley. Christopher P. Kennedy is the Island's Regional Director for The Trustees of Reservations. The Refuge is open to the public for recreational use, hunting, canoeing, kayaking, fishing, clamming, and crabbing. Military practice ordnance, including Mk23 practice bombs, has been observed on the property.

2.2.2 **Moving Target Machine Gun Range at South Beach:** The Department of the Navy leased approximately 264.3 acres for military training at South Beach. The gunnery range was used by Naval Air Station Quonset Point, Rhode Island for aerial machine gun and rocket firing practice. An observation bunker, an oval shaped target and other support features were constructed within a few yards of the ocean. A large portion of the beach has eroded since 1947.

2.3 Previous Activities/Investigations:

2.3.1 Cape Poge Little Neck Bomb Target Site: The Inventory Project Report (INPR) for the former Cape Poge Little Neck Bomb Target Site was completed on May 2008 and established the eligibility of this site as a Formerly Used Defense Site.

2.3.2 Moving Target Machine Gun Range at South Beach: During 1988-1989, a removal of unexploded ordnance was performed on the beach and dunes of South Beach. No removal was performed in the water. The former Moving Target Machine Gun Range at South Beach INPR was amended in July 2008 to include adjoining lands east to Norton Point and Wasque Point

2.4 Recent Activities:

2.4.1 St. Louis District is in the process of developing the Archive Search Report for this project site.

2.4.2 The USAESCH performed initial geophysical studies in the former Cape Poge Little Neck Bomb Target Site on 7 August 2008. The data from this study will be provided to the Contractor.

3.0 SPECIFIC TASKS. The Contractor will be evaluated periodically during each of the following tasks to ensure compliance with the PWS and to document that quality objectives, delivery schedule, and the overall completion date are being met. This evaluation will be performed according to a Quality Assurance Surveillance Plan (QASP). An example of a QASP is contained in EM 1110-1-4009 and will be modified for the specific task order requirements and the Contractor's Quality Control Plan (QCP). Failure to adequately complete any service or submittal to at least a satisfactory level of quality or timeliness may result in a repeat of the work, or a poor performance evaluation, or both. Performance metrics are provided in Section 6.0. Minimum requirements for contractor performance and QC are provided in Section 7.0.

3.1 Task 1, Work Plan (WP): This is a Firm Fixed Price task. The objective of this task is for the contractor to prepare, submit and gain acceptance of a WP that is a detailed and comprehensive plan covering all aspects of the work effort in accordance with (IAW) data item description (DID) MR-005-01 and EM 1110-1-4009. The approved TCRA Explosives Safety Submission (ESS) will be provided to the contractor and referenced in the WP instead of preparing an Explosive Siting Plan. The TCRA ESS shall be on-site at all times during intrusive operations. As part of this work plan the contractor shall work with The Trustees of Reservations and the U.S. Army Corps of Engineers (USACE) to delineate the areas where removal shall take place for Cape Poge Little Neck. For Moving Target Machine Gun Range at South Beach, the Contractor shall analyze available beach erosion and accretion data to determine the location of the mid-summer mean low tide mark. With beach erosion and accretion analysis data prepared, the contractor shall consult with USACE to delineate the area where removal shall take place for the Moving Target Machine Gun Range at South Beach.

3.2 Task 2, Field Work: This is a Time & Materials task.

3.2.1 The objective of this task is for the contractor to perform all necessary field activities to meet the primary and secondary objectives of this task order. The contractor shall use the USAESCH Chappaquiddick Geophysical Government Site Visit Report and pre-proposal site visit to determine density and level of effort. South Beach Removal action shall be completed no later than 31 May 08. Cape Poge Little Neck Removal Action shall follow completion of South Beach Removal Action. On-call UXO support will be in a similar manner as performed by the Massachusetts Department of Environmental Protection (MassDEP) contract with the exception that under this task order the Contractor is required to perform demolition if required. The MassDEP contract specifics will be provided by the U.S. Army Engineering and Support Center, Huntsville (USAESCH).

3.2.2 MEC Disposal: The Contractor shall be responsible for the destruction of all MEC encountered during project activities.

3.2.3 Backfilling Excavations: All access/excavation/detonation holes shall be backfilled by the Contractor. The Contractor shall restore such areas to their prior condition.

3.2.4 MEC Accountability: The Contractor shall maintain a detailed accounting of all MEC items/components encountered. This accounting shall include the amounts of MEC, nomenclature and condition, location and depth of MEC, and disposition. The accounting system shall also account for all demolition materials utilized to detonate MEC on site. The Contractor shall take digital photographs of identifiable MPPEH and MEC found during the investigation.

3.2.5 Disposal/Disposition of MPPEH: All MPPEH and munitions debris shall be handled in accordance with Chapter 14, EM 1110-1-4009 and Errata Sheet No. 2.

3.3 Task 3, Geospatial Data: This is a Firm Fixed Price task. The objective of this task is for the Contractor to utilize GIS in the development of the removal approach and management of all data during the removal action. The GIS will be established and managed IAW DID MR-005-07.01. A pre and post-project response action geospatial data analysis shall be performed using a GIS. All available existing data that is applicable to the project shall be consolidated into the GeoDatabase and analyzed to relay pertinent information to the PDT. The analysis of data from the GIS shall support all discussions and conclusions in the Site Specific Final Report. The management of data from the removal action may detail the fieldwork strategies, areas of concern, survey requirements, environmental concerns, milestones and/or other factors that affect product delivery and future action planning. Entities that may be affected by response actions include but are not limited to: landowners, homeowners, rental tenants, schools, utilities, roads, businesses, recreational areas, air traffic, water bodies and/or industries. The GeoDatabase shall be a living repository that is refined throughout the life of the project. The contractor shall incorporate layers that overlay on maps of the site that identify physical features, and MPPEH/MD and Range-Related Debris found during the investigation. Examples include: streets, anomalies, MEC positively identified, identifiable MD, cultural resources, environmental, biological, and socio-economic variables. Archeological site location(s) will not be released to the public without written permission from USACE. The Contractor shall perform civil surveys IAW EM 1110-1-4009 and DID MR-005-07.01. The Contractor shall delineate and provide a map of the actual clearance footprint.

3.4 Task 4, Administrative Record: This task is a Firm Fixed Price task. The objective of this task is for the Contractor to establish and maintain the Administrative Record for the on-going project in accordance with the guidance given in EP 1110-3-8, Chapter 4 (Establishing and Maintaining Administrative Records) and Standard Operating Procedure for Formerly Used Defense Sites (FUDS) Records Management, Revision 5, dated January 2008. This task requires close coordination with the New England District (CENAE) and USAESCH to secure all required documents to support the Administrative Record. The Contractor will secure a place to establish and house the Administrative Record in the local city or community of the project. The Contractor shall provide all final documents in the Administrative Record on CD/DVD to USAESCH and CENAE. The Contractor shall submit 2 copies each to USAESCH and CENAE.

3.5 Task 5, Purchase and Install Warning Signs: This is a Firm Fixed Price task. The objective of this task is for the Contractor to order and install KVO Viratek porcelain enamel signs, or equivalent, using the sign designs provided by the Government with Corten weathering steel frames per the following list:

- Four (4) Chappaquiddick KVO Exhibit Base, Double Pedestal Model, or equivalent, for a 36" W x 24" H Educational Awareness signs at pedestrian height

- a. at the Mytoi tire inflation area
- b. at the Dyke Bridge
- c. at the Wasque tire inflation area
- d. at the Wasque boardwalk beach access point

- Seven (7) South Beach KVO Exhibit Base, Double Pedestal Model, or equivalent, for a 36" W x 24" H Educational Awareness signs at pedestrian height

- a. at the five board walk entrances
- b. at the Left Fork
- c. at the Right Fork

- Four (4) Chappaquiddick KVO Exhibit Base, Double Leg Upright Model, or equivalent, for a 48" W x 36" H Educational Awareness signs at Off-Road Vehicle height

a. Off-Road Vehicle trail entrances

- Two (2) Norton Point KVO Exhibit Base, Double Leg Upright Model, or equivalent, for a 48" W x 36" H Educational Awareness signs at Off-Road Vehicle height

a. Off-Road Vehicle trail entrances

3.5.1 Minimum frame column length below grade is four feet for all Off-Road Vehicle Trail signs and will not be installed with permanent concrete foundations due to the changing locations of the Off-Road Trails. All pedestrian signs will have permanent foundations per the manufacturer's recommendations. Four different sign templates will be required. Draft designs will be provided to the contractor.

3.5.2 A sample sign layout is provided in Appendix B.

3.6 Task 6, Public Involvement Plan (PIP): This task is a Firm Fixed Price task.

The objective of this task is for the Contractor to prepare, submit and gain acceptance of a PIP in accordance with EP 1110-3-8.

3.7 Task 7, Site Specific Final Report: This is a Firm Fixed Price task. The objective of this task is for the Contractor to prepare, submit and gain acceptance of a Site Specific Final Report (SSFR) IAW DID MR-030, to include MEC, MPPEH, and identifiable MD discussed in the report to include photographs and maps and locations. The Contractor shall include discussions on all work performed including the purchasing of the signs and their installation, establishment of the Administrative Record and the Public Involvement Plan. The contractor shall prepare and insert as an appendix a Munitions Response Site Prioritization Protocol for each FUDS.

4.0 SUBMITTALS AND CORRESPONDENCE:

4.1 Computer Files: All final text and spreadsheet files generated by the Contractor under this task order shall be furnished to the Contract Officer in MS Office Suite 2003 compatible format. Other computer files shall be in accordance with the DIDs. All computer files shall be submitted on CD or DVD.

4.2 PDF Deliverables: In addition to the paper and digital copies of submittals, all versions of any and all reports and/or plans shall be submitted, uncompressed, on CD or DVD in PDF format along with a linked table of contents, linked tables, linked photographs, linked graphs and linked figures, all of which shall be suitable for viewing on the Internet. PDF files shall be produced from source documents wherever possible. PDF files shall be provided without security restrictions.

4.3 Identification of Responsible Personnel: Each submittal shall identify the specific members and title of the Contractor's and subcontractor staff that had significant input into the report's preparation or review. All submittals shall be signed by a registered Professional-In-Charge.

4.4 Public Affairs: The Contractor shall not publicly disclose any data generated or reviewed under this contract. The Contractor shall refer all requests for information concerning site conditions to the CENAE PAO with a copy furnished to the CENAE Project Manager and USAESCH Project Manager. Reports and data generated under this contract are the property of the DoD and distribution to any other source by the Contractor, unless authorized by the Contracting Officer, is prohibited.

4.5 Submittals: The Contractor shall furnish copies of the plans, maps, and reports as identified in Table 4-1 to each addressee listed below in the quantities indicated in the Submittal Guidance table, Table 4-2. The Contractor shall submit 1 copy on CD with each hard copy of all submittals (WPs, Reports, Plans, etc) in accordance with paragraphs computer files and PDF Deliverables.

4.6 Addressees:

US Army Engineering & Support Center, Huntsville
Attn: CEHNC-OE-CW (Ralph Campbell)
PO Box 1600

Huntsville, AL 35807-4301
4820 University Square
Huntsville, AL 35816-1822

Commander
US Army Corps of Engineers, New England District
Attn: CENAE-PP-M (Ms. Carol Charette)
696 Virginia Road
Concord, MA 01742-2751

The Trustees of Reservations
Islands Regional Office
Attn: Chris Kennedy, Regional Director
PO Box 2106
Vineyard Haven, MA 02568

Commonwealth of Massachusetts
Department of Environmental Protection
ATTN: Anne Malewicz, Environmental Engineer
One Winter Street
Boston, MA 02108

The Commonwealth of Massachusetts,
Department of Resource and Conservation
Attn: John Varkonda
Correllus State Forest
P.O. Box 1612
Vineyard Haven, MA 02568

(Only Correspondence for South Beach)

Town of Edgartown
Parks and Recreation Department
Attn: Marilyn Wortman
Edgartown, MA

Note: Addresses shall be verified by the Contractor.

4.7 Submittals and Due Dates.

Table 4-1 List of Deliverables

| Submittals | Due Dates (Calendar days) |
|---|--|
| Schedule | 7 days after kick-off conference call |
| Draft Work Plan w/ GIS on CD/DVD | 21 days after award of Task Order |
| Draft Final Work Plan (Electronically) by teleconference | 7 days after receipt of comments and on-board review |
| Final Work Plan | 3 days after On-board |
| Draft Public Involvement Plan | TBD |
| Final Public Involvement Plan | 14 days after receipt of comments |
| Draft Site Specific Final Report (SSFR) w/GIS on CD/DVD | 21 days after fieldwork completion |
| Draft Final SSFR | 14 days after receipt of comments |
| Final SSFR | 14 days after on board Review |
| Final Administrative Record (On CD/DVD) | Upon completion of the Data for the Record |
| Final GIS Files on CD | End of Project |

4.8 Submittal Quantities

Provide the number of submittals shown in Table 4-2 to the addressees given in Section 4.6.

Table 4-2 Submittal Guidance

| | Draft Plans /Reports/Documents | Draft Final/Final Plans /Reports/Documents | Others |
|---------|-----------------------------------|---|--------|
| USAESCH | 6 | 6 | TBD |
| CENAE | 4 | 4 | TBD |
| MassDEP | 1 | 1 | TBD |
| TTOR | 2 | 2 | TBD |
| MassDCR | 1 | 1 | TBD |

4.9 Review Comments: Various reviewers will have the opportunity to review submittals made by the Contractor under this contract. The Contractor shall review all comments received through the Project Delivery Team/Contracting Officer and evaluate their appropriateness based upon their merit and the requirements of the PWS. The Contractor shall issue to the Project Manager a formal, annotated response to all comments. The Contractor shall discuss with the PM and/or comment maker all comments with which the contractor takes issue. Where comments refer to a specific paragraph of a document and the paragraph number has changed since the comment was made, the Contractor shall note the new paragraph number in the annotated response to the comment.

4.10 Schedule: A schedule shall be submitted in a format compatible with Microsoft Project. A PDF version shall also be submitted. This is an electronic submittal only. The Contractor shall update the schedule in accordance with DID MR-085 Project Status Report.

4.11 Telephone Conversations/Correspondence Records/Meeting Minutes: The Contractor shall keep a record of each phone conversation, written correspondence concerning this Task Order and meeting minutes in accordance with DID MR-055 and DID MR-045. A copy of these records shall be attached to the Project Status Report.

4.12 Project Status Reports: The Contractor shall prepare and submit Project Status Reports in accordance with DID MR-085 and include any other items required in the PWS.

4.13 Period of Performance: The Completion Date for this Task Order is 12 months from date of award.

4.14 Milestone Payments for firm fixed price tasks: Milestones will be considered met or completed when the required QC documentation has been submitted, QA completed and the submittal and/or product is accepted. Any payment vouchers submitted that do not coincide with the final accepted milestones or do not have the appropriate QC documentation will be rejected. All payments will be made utilizing an agreed upon Payment Milestone Schedule. The Contractor may recommend interim payment milestones.

5.0 REFERENCES:

5.1 Refer to "Basic Contract."

5.2 Data Item Descriptions: are available at the following: <http://www.hnd.usace.army.mil/oew/didsindex.aspx>. DIDs MR-005-05, MR-005-05A, MR-005-07 and MR-005-10 have been revised. The new DIDs are MR-005-05.01, MR-005-07.01 and MR-005-10.01. MR-005-05A is no longer used.

6.0 PERFORMANCE METRICS:

6.1 Performance Metrics for Performance Assessment Record (PAR)

| | Exceptional | Very Good | Satisfactory | Marginal | Unsatisfactory |
|--|--|---|--|--|--|
| PAR Category: Quality of Product or Service | | | | | |
| Performance indicator: Document reviews | | | | | |
| <i>Draft</i> Plans, Reports, and documents [Plans, documents and reports are considered draft until accepted as final by the Government] | All contract-milestone documents accepted as submitted | One or more documents or subplans were accepted as submitted, but exceptions were noted. Resubmissions were not required. | One or more documents or subplans required revisions to be resubmitted for acceptance prior to proceeding. Resubmission of an entire document or subplan was not required. | One or more documents or subplans required revisions to be resubmitted for acceptance prior to proceeding. Resubmission of an entire document or subplan was required. | One or more documents or subplans did not comply with contract requirements, or one or more documents or subplans required more than one resubmission of the entire document or subplan prior to its acceptance. |
| Performance indicator: Project Execution | | | | | |
| Process Compliance | Zero Corrective Action Requests (CAR) | 1-5 CARs for non-critical WP violations (no impact to overall cost and schedule resulting from the non-compliance) | 6 or more CARS for non-critical violations (no impact to overall cost and schedule resulting from the non-compliance) | >1 CAR where non-compliance adversely impacted overall cost or schedule | Repeated non-compliance with WP requirements resulted in cost overruns or repeated schedule extensions |
| Quality Control | Zero QA failures. | 1-2 non-critical, non-repetitive QA failures corrected within Government established time period. | 3-4 non-repetitive, non-critical QA failures corrected within Government established time period. | 5 non-repetitive, non-critical QA failures corrected within Government established time period, or 1 repetitive QA failures were documented. | >5 QA failures or more than 2 repetitive QA failures occurred. |
| Task Completion | | | All QC documentation submitted and accepted | | Final QC documentation submitted but not accepted |
| PAR Category: Schedule | | | | | |
| Performance indicator: Timely completion of tasks | | | | | |
| <i>Final</i> Plans and Reports, project milestones, T.O. invoices | All document submittals and task order milestones and invoices complete and accepted by T.O date, project closed | Project closed out/final invoice accepted ahead of schedule | project closed out/final invoice accepted on T.O. date | Project closed out/final invoice accepted within 30 calendar days after T.O. date. | Project closed out/final invoice accepted more than 30 calendar days after T.O. date. |

| | Exceptional | Very Good | Satisfactory | Marginal | Unsatisfactory |
|---|---|---|---|--|---|
| | out/final invoice approved ahead of schedule | | | | |
| Project status reports accurate | | | Yes | | No |
| Performance indicator: Impacts to schedule | | | | | |
| Impacts caused by Contractor or other causes identified, in writing to HNC CO/ PM, in a timely manner to apply acceptable corrective actions. | | | Yes | | No |
| PAR Category: Cost Control | | | | | |
| Performance indicator: No unauthorized cost overruns | | | | | |
| Unauthorized cost overruns | | | No | | Yes |
| Total Project Costs | Total contract invoices less than 98% of T.O. authorized amount | Total contract invoices greater than 98% but less than 99.99% of T.O. authorized amount | Total contract invoices between 99.99% and 100% of T.O. authorized amount | Total contract invoices greater than 100% but less than 105% of T.O. authorized amount | Total contract invoices greater than or equal to 105% of T.O. authorized amount |
| Performance indicator: Monthly cost report | | | | | |
| Monthly cost reports accurate | | | Yes | | No |
| Performance indicator: Impacts to cost | | | | | |
| Impacts caused by Contractor or other causes identified, in writing to HNC CO/PM, in a timely manner to apply acceptable corrective actions. | | | Yes | | No |
| PAR Category: Business Relations | | | | | |
| Performance indicator: Met contractual obligations | | | | | |
| Corrective Actions taken were timely and effective (Refer to CARs issued to Contractor) | | | Yes | | No |
| Performance indicator: Professional and Ethical Conduct | | | | | |
| Meetings and correspondences with Public, project delivery | Zero letters of reprimand, grievances, or formal | | Zero letters of reprimand, grievances, or formal | One letter of reprimand, grievance or formal complaint | More than one letter of reprimand, grievance or |

| | Exceptional | Very Good | Satisfactory | Marginal | Unsatisfactory |
|--|---|------------------------------------|--|---|--|
| team and other stakeholders | complaints AND one or more unsolicited letters of commendation | | complaints | that was resolved through negotiation | formal complaint that were resolved through negotiation OR removal of one or more project personnel as a results of a letter of reprimand, grievance or formal complaint. |
| Performance indicator: Customer has overall satisfaction with work performed | | | | | |
| Customer survey results for rating period | 4.0-5.0 | 3.0-3.9 | 2.0-2.9 | 1.0-1.9 | <1.0 |
| Performance indicator: Personnel responsive and cooperative | | | | | |
| Key personnel responsive, and cooperative | Always | | Most Times | | Almost Never |
| PAR Category: Management of Key Personnel and Resources | | | | | |
| Performance indicator: Personnel knowledgeable and effective in their areas of responsibility | | | | | |
| Personnel assigned to tasks | All personnel proposed by Contractor were assigned to project, some personnel were substituted by higher qualified individuals. | | All personnel proposed by Contractor were assigned to project, some personnel were substituted by equally qualified individuals. | All personnel proposed by Contractor were assigned to project, some personnel were substituted by equally qualified individuals, Letter of reprimand received for personnel conduct from HNC. | All personnel proposed by Contractor were assigned to project, some personnel were substituted by lesser qualified individuals or HNC requested, in writing, removal of assigned personnel for poor performance. |
| Performance indicator: Personnel able to manage resources efficiently | | | | | |
| Instances when resource management had negative impact on project execution | 0 | 1-2 | 3-4 | 5-6 | >6 |
| PAR Category: Safety | | | | | |
| Performance indicator: Accidents and Violations | | | | | |
| *No Class A Accidents, Contractor at fault | 0 No class A accidents IAW AR 385-40 | No class A accidents IAW AR 385-40 | <1 non-explosive related Class D, accidents, or <2 | <2 non-explosive related Class C accidents, or 1 non-explosive | 1 Any Class A accident IAW AR-385-40, or |

| | Exceptional | Very Good | Satisfactory | Marginal | Unsatisfactory |
|--------------------------|---|---|---|------------------------------------|---|
| | | | non-explosive Class C accidents IAW AR 385-40. | Class B accident, IAW AR 385-40 | Any explosive related accident. |
| *Major safety violations | 0 accidents/injuries No safety violations | 0 accidents/injuries No safety violations | 0 accidents/injuries 1 non-explosive related safety violation. | 2 non-explosive safety violations. | >1 any violation of procedures for handling, storage, transportation, or use of explosives IAW the WP, and all Federal, State and local laws/ordinances |
| *Minor safety violations | No safety violations | 1 safety violation | 2 safety violations. | 3 safety violations | >3 safety violations |

Classes of Accidents:

- **Class A:** Fatality or permanent total disability (Government Civilian, Military Personnel, and/or Contractor), or >\$1,000,000 property damage.
- **Class B:** Permanent partial disability or impatient hospitalization of 3 or more persons (Government Civilian, Military Personnel, and/or Contractor), \$200,000 < \$1,000,000 property damage.
- **Class C:** Lost Workday (Contractor) or Lost Time (Government Civilians), \$20,000 < \$200,000 property damage.
- **Class D:** \$2000, \$20,000 property damage.

* From Section C of Solicitation Number W912DY-04-R-0003, Amendment 0001 (may be included but are not limited to these).

The following guidelines are provided for issuing ratings that are subjective in nature, these ratings will be supported by the weight of evidence documented during the government's surveillance efforts:

Exceptional: Performance *meets* contractual requirements and *exceeds many* to the Government's benefit. The contractual performance of the element or sub-element being assessed was accomplished with *few minor problems* for which corrective actions taken by the Contractor were *highly effective*.

Very Good: Performance *meets* contractual requirements and *exceeds some* to the Government's benefit. The contractual performance of the element or sub-element being assessed was accomplished with *some minor problems* for which corrective actions taken by the Contractor were *effective*.

Satisfactory: Performance *meets* contractual requirements. The contractual performance of the element or sub-element contains *some minor problems* for which corrective actions taken by the Contractor *appear or were satisfactory*.

Marginal: Performance *does not meet all* contractual requirements. The contractual performance of the element or sub-element being assessed reflects a *serious problem* for which the Contractor has *not yet identified corrective actions*. The Contractor's proposed actions appear only *marginally effective or were not fully implemented*.

Unsatisfactory: Performance *does not meet most* contractual requirements and *recovery is not likely* in a timely manner. The contractual performance of the element or sub-element contains *serious problems* for which the Contractor's corrective actions *appear or were ineffective*

7.0 CONTRACTOR MINIMUM QC REQUIREMENTS: These tables will be used for land survey only. Marine removal QC shall be recommended by the Contractor in the QCP. The Contractor shall include in their QC plan specific tests that are itemized below. The values listed in the various requirements listed in Tables 7-1 and 7-2 below may be adjusted upon request, provided the Contractor supplies supporting documentation and rationales for Government concurrence. All reported QC results from these tests will be reviewed as part of government QA. In the event a requirement is not met and the contractor submits the data to the Government, the contractor shall provide rationales for accepting them. All such rationales will be reviewed as part of government QA. If the rationales are either insufficient or technically unfeasible, or are attempts to justify non-conformances that should be corrected to meet project needs, the Government will issue a Corrective Action Request to the contractor and the submittal(s) will be rejected. Some performance standards are default values and may be changed by the PDT to suit project needs. These requirements are marked with an asterisk (*). These QC requirements supersede the required QC entries in the DID MR-005-05.01 Access Database. The database template shall be used; however, the required fields will change based on these tables.

Table 7-1 Performance Requirements for RA using DGM Methods¹

| Requirement | Applicability (Specific to Collection Method/Use) | Performance Standard | Frequency | Consequence of Failure ² |
|--|--|--|---|--|
| Static Repeatability (instrument functionality) ³ | All | Response (mean static spike minus mean static background) $\pm 10\%$ of GPO/original value on all channels | Min 1 daily | Day's data fails unless seed item is mapped that day with repeatable anomaly characteristics (see Dynamic Detection Repeatability) |
| Along Line Measurement Spacing | All | 98% $\leq 25\text{cm}$ along line ⁴ | By dataset | Dataset submittal fails |
| Coverage(*) | Data using electronic positioning equipment | $>95\%$ coverage at project design line spacing. ⁵ | By grid or dataset ⁶ | submittal fails |
| | Data using fiducial positioning | All blind coverage seeds detected at their emplacement location within the dynamic positioning repeatability metric ⁷ | Variable rate at 2, 3 or 4 per system per grid or dataset. ^[6] | submittal fails |
| Dynamic Detection Repeatability | All | Test item anomaly characteristics (peak response and size) repeatable within allowable variation $\pm 25\%$. ⁸ | 1 test item per grid or dataset ^[6] | submittal fails |
| Dynamic Positioning Repeatability | Data using electronic positioning equipment | Position offset of Test item target $\leq 35\text{cm} + 1/2$ line spacing. ⁹ | 1 test item per grid or dataset ^[6] (same item as Dynamic Detection Repeatability) | submittal fails |
| | Data using fiducial positioning | Position offset of Test item target $\leq 50\text{cm} + 1/2$ line spacing. | 1 test item per grid or dataset ^[6] (same item as Dynamic Detection Repeatability) | submittal fails |
| Target Selection | All | All dig list targets are selected according to project design (zero unselected and not over-selecting) | By grid or dataset ^[6] | submittal fails |
| Anomaly Resolution(*) ¹⁰ | Verification checking by DGM re-mapping ¹¹ Or Verification checking with original instrument of anomaly footprint | 90% confidence $< 1\%$ unresolved anomalies ¹³ Accept on zero. | Rate varies depending on lot size. ¹⁴ See Acceptance Sampling Table. | Lot submittal fails |

| Requirement | Applicability (Specific to Collection Method/Use) | Performance Standard | Frequency | Consequence of Failure ² |
|-------------------------------------|---|---|---|---|
| | after excavation ¹² | | | |
| Geodetic Equipment Functionality(*) | All | Position offset of known/temporary control point within expected range as described in the approved work plan. ¹⁵ | Daily | Redo affected work or re-process affected data |
| Geodetic Internal Consistency | Grids with line/fiducial positioning | Grid corners are internally consistent within 30cm on any leg or diagonal. | Per Grid | Redo affected work (corner placement & data collection, or data processing) |
| Geodetic Accuracy | Points used for RTK or RTS base stations | Project network must be tied to HARN, CORS, OPUS or other recognized network ¹⁶ . Project control points that are used more than once must be repeatable to within 5cm | For points used more than once, repeat occupation ¹⁷ of each point used, either monthly (for frequently used points) or before re-use (if used infrequently ¹⁸). | Re-set points not located at original locations or resurvey point following approved work plan. |

¹ These are the critical requirements for RA DGM methods. Contractors shall use additional methods/frequencies that they deem beneficial and as required in their SOPs.

² All failures also require a Root Cause Analysis.

³ Item should be placed on a jig that ensures consistent geometry between the sensor and item to ensure repeatability, response not to exceed 500 units, or optionally use the Geonics calibration coil. Duration of data collection needed TBD by the contractor. Must compare to original to ensure instrument is consistent throughout the project. It is recognized that this QC requirement may be redundant and could contradict results from seeding QC, however, in the event of seed failure, information from this test may aid in determining cause of failure, i.e. instrument or processing.

⁴ 25cm based on institutional knowledge and common instrument physical dimensions. Assumes speed used achieves detection. This requirement can be relaxed if supporting documentation is provided to the Government for concurrence.

⁵ Recommended default line spacing is 0.6m for items of interest the size of 40mm grenades and smaller, else 0.8m.

⁶ The terms "grid" and "dataset" refer here to logical groupings of data or data collection event. Logical groupings of data are contiguous areas mapped by the same instrument and in the same relative time-frame. These can be grids, acres, or some other unit of area. A data collection event is similar to logical groupings of data but refers to data collected over a contiguous time frame, such as "morning", "afternoon", "battery life", or some other measure of contiguous time. It is recognized that physical marking of corners on the ground is not always beneficial to the government. Additionally, size and shape of the grid is not specified.

⁷ Coverage seeds are small pieces of metal that will produce relatively large amplitude anomalies over small areas, such as small nails or ball bearings. They shall be placed beneath the ground surface so as not to be visible to the operator.

⁸ A standard test item shall be placed within the grid (i.e. a small pipe or flat plate with a small area response. Item can be placed flush with the surface or buried at a standard depth and standard orientation). This test does not demonstrate the detection capabilities of the MEC of interest. The standard response to this test item must be defined prior to the start of production field activities. Response repeatability to this standard test item in the mapping data will indicate data quality is consistent and sufficient for detection of the MEC items of interest.

⁹ For 0.8m line spacing, this would be a 0.75m allowable error radius.

¹⁰ Resolved is defined as 1) there is no geophysical signal remaining at the interpreted location, or 2) a signal remains but it is too low or too small to be associated with UXO/DMM, or 3) a signal remains but is associated with surface material which when moved results in low, or no signal at the interpreted location, or 4) a signal remains and a complete rationale for its presence exists.

¹¹ Mapping shall cover the required number of anomaly locations. This is used in-lieu of checking individual anomalies for those instances where it is quicker to re-map sections of land rather than return to individual anomalies. Only the data at the anomaly locations is reviewed for resolution.

¹² This may require leaving flags at excavated locations until QC is complete. It is up to the contractor to indicate which holes knowingly have metal left in them where the PDT has agreed such is acceptable. It is the contractor's responsibility to not put hot material back in the hole before QC is complete. As part of this requirement location accuracy must also be demonstrated (i.e. cleared location is within dynamic positioning error radius as described above). Contractor SOPs that incorporate post-excavation inspections using digital geophysical instruments can be used to meet the excavation verification need of this requirement provided appropriate QC protocols are in place to monitor and document the SOPs are followed. Acceptance sampling or alternative QC protocols to monitor and document the reacquisition SOP would be required to demonstrate the correct locations are excavated.

¹³ This is a statistical test number. It does not imply there are 1% bad units. It tests there are fewer than 1% bad units, including zero bad units. Values for confidence levels will be determined by the PDT and are dependent on the information needed.

¹⁴ For example, if lot size is 500 anomalies, to achieve a 90% confidence that there are less than 5% unresolved anomalies, 44 anomalies must be re-checked. If any one of the 44 is unresolved, then the confidence level has not been met, the lot submittal fails and all anomalies in that lot must be re-checked or some other action or actions performed. The contractor shall propose the lot size for government concurrence (i.e. The contractor determines the amount of risk they are willing to take. The larger the lot, the less sampling needs to be done, but the larger the risk of increased costs/rework if failure occurs.) For anomaly resolution, in order to use statistics/confidence levels, numbers of anomalies is used and not numbers of grids.

¹⁵ Most high-accuracy systems should demonstrate repeatability between 5cm and 10cm. Typical accuracies achievable for some high-accuracy systems are: 2cm to sub-centimeter for RTK DGPS and RTS units depending on manufacturer and site conditions. Less accurate systems should demonstrate repeatability within manufacturer published ranges. Typical accuracies for less accurate systems are 5m to sub-meter for WAAS or satellite correction service DGPS units depending on manufacturer, correction service and site conditions, and 30m to 1m for USCG beacon corrected units depending on manufacturer.

¹⁶ The plan for tying the project network to a common reference network must be described in the approved work plan. If monumentation is part of the plan, specific monumentation procedures and data quality objectives will also need to be specified and installation of monumentation or network control points shall follow all guidance and accuracies specified in EC 1110-1-73 – "Standards and Specifications for Surveys, Maps, Engineering Drawings, and Related Spatial Data Products".

¹⁷ Repeat occupation means demonstrate the control points being used can be recovered and reoccupied and that they have not moved more than the requirement specification. This can be accomplished using the same methodology used to initially tie the local network to a HARN, CORS, OPUS, or other recognized network, or it can be accomplished by other means that achieve this requirement.

¹⁸ An example of frequently used control points would be points used as RTK DGPS base stations. Infrequently used points could be those used during RTS operations where the control point was used during mapping and then again at some later time for reacquisition and QC statistical sampling. Infrequently used points could also include grid corners they are used for line and fiducial positioning and then subsequently re-used for reacquisition or QC statistical sampling.

Table 7-2 Performance Requirements for RA using Analog Methods¹

| Requirement | Limited Applicability (Specific to Collection Method/Use) | Performance Standard | Frequency | Consequence of Failure ² |
|--|---|--|---|--|
| Repeatability (instrument functionality) | All | All items in test strip detected (trains ear daily to items of interest) ³ | Min 1 daily ⁴ | Remedial training and additional remedial measures as described in the approved work plan if due to operator error, or replacement of faulty equipment. ⁵ |
| Coverage(*) | All | All blind coverage seeds and blind detection seeds recovered ⁶ | Variable rate at 2, 3 or 4 times # operators, per lot. | Redo lot. |
| Detection & Recovery (*) | No DGM QC remapping | All blind detection seeds recovered | Per operator per lot: variable 1-2 large/deep and 1-3 small/shallow ⁷ | Redo lot |
| | With DGM QC remapping | 90% confidence <1% unresolved anomalies. Accept on zero. ⁸ | Rate varies depending on lot size. [Table showing acreage rates per lot size for varying confidence levels will be provided] ⁹ | Redo lot |
| Anomaly Resolution(*) ¹⁰ | Verification checking of excavated locations (analog or digital instrument) | 2 nd party checks open holes to determine: 90% confidence <1% ¹¹ unresolved anomalies. ¹² Accept on zero. | Rate varies depending on lot size. See Acceptance Sampling Table. ¹³ | Redo lot |
| | Verification checking by DGM remapping ¹⁴ | Same as Detection & Recovery | Rate varies depending on lot size. See Acceptance Sampling Table. | Redo lot |
| Geodetic Equipment Functionality(*) | All | Position offset of known/temporary control point within expected range as described in the approved work plan. ¹⁵ | Daily | Redo affected work |
| Geodetic Accuracy | Points used for RTK or RTS base stations | Project network must be tied to HARN, CORS, OPUS or other recognized network ¹⁶ . Project control points that are | For points used more than once, repeat occupation ¹⁷ of each point used, either monthly (for frequently used | Re-set points not located at original locations or resurvey point following approved work plan. |

| | | | |
|--|--|--|---|
| | | used more than once must be repeatable to within 5cm | points) or before re-use (if used infrequently ¹⁸). |
|--|--|--|---|

¹ These are the critical requirements for RA analog methods. Contractors shall use additional methods/frequencies that they deem beneficial and as required in their SOPs.

² All failures also require a Root Cause Analysis.

³ The requirement is that each operator demonstrates positive detection on a daily basis of the smallest and largest expected MEC of interest when it is placed at both its best and worst orientations and buried between 95% and 100% of their respective maximum consistent detection depth. Maximum consistent detection depth is defined as producing any above background response on a minimum of the first three time gates of the EM61MK2 optimized for site conditions and having a 0.9m² size or more as calculated using the Geosoft Oasis Montaj UCEAnalyseTarget.NET or equivalent routine.

⁴ Random blind reconfiguration of test strip is also required (i.e. moving/adding items) at a frequency determined by the contractor and approved in the work plan, to address the potential for simply memorizing seed locations.

⁵ Some examples of additional remedial measures are: removal of operator from mapping for one day, retesting on new blind strip meeting the same requirements for seed items (could move location of items in same area), 100% QC re-inspection of initial lanes by that operator, etc.

⁶ Coverage seeds are small pieces of metal that will produce relatively large amplitude anomalies over small areas, such as small nails or ball bearings. Known location accuracy of placement is not critical. See endnote #5 for description of blind detection seeds.

⁷ Detection and recovery must be consistently demonstrated for the hard to detect items; therefore, the largest expected MEC and the smallest expected MEC shall be placed between 95% and 100% of their respective maximum consistent detection depth

⁸ Unresolved anomaly for 'Detection & Recovery Testing' means a significant signal remains without a complete rationale for its presence. Default values for such a 'significant signal' are peak amplitude on sum channel $\geq 30\text{mv}$ & anomaly width $\geq 1.2\text{m}$ or anomaly size $\geq 0.9\text{m}^2$. This value may change but must be agreed upon by the PDT up front.

⁹ The statistical calculations for this test are in progress. This is different from sampling of excavated holes, in that a portion of the acreage is re-mapped, and the amount re-mapped must be statistically valid to show, to some confidence level, that anomalies did not go undetected.

¹⁰ This requires leaving flags at excavated locations until QC is complete. If shovel called to a flag during QC then the failure has already occurred—it is not important that something large or small comes out of the hole. Assumption here is "mapping coverage" is addressed through other means. It is up to the contractor to indicate which holes knowingly have metal left in them where the PDT has agreed such is acceptable. It is the contractor's responsibility to not put hot material back in the hole before QC is complete.

¹¹ This is a statistical test number. It does not imply there are 1% bad units. It tests there are fewer than 1% bad units, including zero bad units. Values for confidence levels will be determined by the PDT and are dependent on the information needed.

¹² Resolved is defined as 1) there is no geophysical signal remaining at the flagged/selected location, or 2) a signal remains but it is too low or too small to be associated with UXO/DMM, or 3) a signal remains but is associated with surface material which when moved results in low, or no signal at the interpreted location, or 4) a signal remains and a complete rationale for its presence exists.

¹³ For example, if lot size is 500 anomalies, to achieve a 90% confidence that there are less than 5% unresolved anomalies, 44 anomalies must be re-checked. If any one of the 44 is unresolved, then the confidence level has not been met, the lot submittal fails and all anomalies in that lot must be re-checked (i.e. accept on zero). The contractor shall propose the lot size for government concurrence (i.e. The contractor determines the amount of risk they are willing to take. The larger the lot, the less sampling needs to be done, but the larger the risk of increased costs/rework if failure occurs.) For anomaly resolution, in order to use statistics/confidence levels, it is based on number of anomalies, not grids.

¹⁴ Mapping shall cover the required number of anomaly locations. This is used in-lieu of checking individual anomalies for those instances where it is quicker to re-map sections of land rather than return to individual anomalies. Only the data at the anomaly locations is reviewed for resolution.

¹⁵ Most high-accuracy systems should demonstrate repeatability between 5cm and 10cm. Typical accuracies achievable for some high-accuracy systems are: 2cm

to sub-centimeter for RTK DGPS and RTS units depending on manufacturer and site conditions. Less accurate systems should demonstrate repeatability within manufacturer published ranges. Typical accuracies for less accurate systems are 5m to sub-meter for WAAS or satellite correction service DGPS units depending on manufacturer, correction service and site conditions, and 30m to 1m for USCG beacon corrected units depending on manufacturer.

¹⁶ The plan for tying the project network to a common reference network must be described in the approved work plan. If monumentation is part of the plan, specific monumentation procedures and data quality objectives will also need to be specified and installation of monumentation or network control points shall follow all guidance and accuracies specified in EC 1110-1-73 – “Standards and Specifications for Surveys, Maps, Engineering Drawings, and Related Spatial Data Products”.

¹⁷ Repeat occupation means demonstrate the control points being used can be recovered and reoccupied and that they have not moved more than the requirement specification. This can be accomplished using the same methodology used to initially tie the local network to a HARN, CORS, OPUS, or other recognized network, or it can be accomplished by other means that achieve this requirement.

¹⁸ An example of frequently used control points would be points used as RTK DGPS base stations. Infrequently used points could be those used during RTS operations where the control point was used during mapping and then again at some later time for reacquisition and QC statistical sampling. Infrequently used points could also include grid corners they are used for line and fiducial positioning and then subsequently re-used for reacquisition or QC statistical sampling.

Acceptance Sampling Table for Anomaly Resolution

| | Lot size = 50 anomalies | 100 | 200 | 500 | 1000 | 2000 | 5000 | 10,000 |
|---|-------------------------|-----|-----|-----|------|------|------|--------|
| 70% confidence <10% unresolved ¹ | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 12 |
| 80% confidence <10% unresolved | 14 | 15 | 15 | 16 | 16 | 16 | 16 | 16 |
| 90% confidence <10% unresolved | 18 | 20 | 21 | 22 | 22 | 22 | 22 | 22 |
| 95% confidence <10% unresolved | 22 | 25 | 27 | 28 | 29 | 29 | 29 | 29 |
| 70% confidence <5% unresolved | 17 | 21 | 23 | 23 | 24 | 24 | 24 | 24 |
| 80% confidence <5% unresolved | 21 | 27 | 30 | 31 | 31 | 32 | 32 | 32 |
| 85% confidence <5% unresolved | 23 | 31 | 34 | 36 | 37 | 37 | 37 | 37 |
| 90% confidence <5% unresolved ² | 27 | 37 | 41 | 43 | 44 | 45 | 45 | 45 |
| 95% confidence <5% unresolved | 31 | 45 | 51 | 56 | 57 | 58 | 59 | 59 |
| 80% confidence <1% unresolved | 40 | 80 | 111 | 138 | 144 | 154 | 158 | 159 |
| 85% confidence <1% unresolved | 43 | 85 | 123 | 158 | 172 | 181 | 186 | 187 |
| 90% confidence <1% unresolved ³ | 45 | 90 | 137 | 184 | 205 | 217 | 224 | 227 |
| 95% confidence <1% unresolved | 48 | 95 | 155 | 225 | 258 | 277 | 290 | 294 |

* Gray boxes show number of dug locations to check post-excitation. All must be shown to be resolved to meet confidence values (accept on zero).

¹ Default for RIFS where MEC has been recovered.

² Default for RIFS where no MEC has been recovered.

³ Default for Removal Action.

8.0 GENERAL CONDITIONS:

8.1 The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has assessed and satisfied itself as to the general and local conditions, which can affect the work or its cost, including but not limited to:

- conditions bearing upon transportation, disposal, handling, and storage of materials, explosives, or scrap;
- the availability of labor, facilities, water, electric power, communications, and roads;
- uncertainties of weather, river stages, tides, or similar physical conditions at the site;
- the conformation and conditions of the ground, soil, geology, and vegetation (type, height, density), the distribution of each, and the seasonal effects on each;
- the character of equipment and facilities needed preliminary to and during work performance;
- Personal Protective Equipment (PPE) requirements including all effects on cost or production due to the requirement to use PPE;
- exclusion zone requirements including all effects and costs of implementing and enforcing exclusion zones. The Contractor is responsible for evaluating, identifying the requirements of, and implementing/complying with all exclusion zones;
- responsibility for understanding and implementing the required safety and access control requirements and factoring them into its approach and price;
- the availability or cost of qualified labor, material, and/or equipment;
- the availability or cost of lodging for on-site personnel;
- the availability or location of explosives storage.

8.2 The Government has provided the Contractor with access to the site, which allowed the Contractor to become confident in its independent understanding of the site conditions. The Government strongly encourages prospective Contractors to use this time to perform the requisite site assessments necessary to ascertain the site conditions to a reasonable degree of accuracy. The Contractor attests that the quantity and distribution of hot rocks, vegetation, terrain, soil condition, weather and other similar cost drivers are reasonably ascertainable from the Contractor's research and assessment of the site in conjunction with the contractor verified data provided by the Government. Contractors are strongly encouraged to perform this site assessment and use their experienced judgment and reasoned interpolation and extrapolation of all the available site information to assess the general and local conditions, which can affect the work or its cost. Contractors who do not perform a site assessment assume the risks associated with the decision to forgo this important source of information about the site. The Contractor is expected to apply due diligence in the research and development of its proposal and to know or reasonably estimate the conditions to be encountered that will affect the cost, quality, or schedule of the work included in this task order. The Government expects the Contractor to assess the risk and factor this risk into its proposal. The act of signing this task order signifies that the Contractor has been given ample opportunity to assess the conditions under which the work will be performed and the Contractor fully understands those conditions. The Contractor accepts full and sole responsibility for identifying and considering all factors that may affect the cost to execute the work. The Contractor attests that it has been provided the opportunity to make an independent assessment of the site, has gathered the information necessary to fully understand the conditions it will encounter during execution of this task order, and has used any data provided by the Government at its own risk.

8.3 Government acceptance of the proposed technical approach and/or price does not relieve the Contractor from full responsibility for the viability, productivity, and efficiency of the approach used to perform the work and for meeting the performance requirements of the PWS at the price proposed.

8.4 Use of the data provided as the basis of estimate for an accurate price proposal requires an experienced understanding of how the data of this type is collected, analyzed, interpreted, and presented. The Contractor is responsible for interpreting the data provided in the context of the conditions under which the data was collected and analyzed. The Contractor is responsible for recognizing the limitations of the data provided for assessments of this type. The Contractor is strongly encouraged to use the pre-proposal site visit to field verify its interpretation of the data and assumptions made during preparation of the proposal. The Government expects that Contractors will promptly notify the Contracting Officer (KO) if they have not been given adequate opportunity to assess the site conditions.

8.5 The Contractor attests that it has had sufficient opportunity to assess the conditions of the work and has used its experienced judgment and reasoned interpolation and extrapolation of all the available site information to assess the general and local conditions, which can affect the work or its cost. The Contractor attests that any exceptions to any of the conditions of this PWS were clearly marked in the proposal in bold type as "Exception to the RFP". The Contractor certifies that its proposal is not qualified or contingent upon the site conditions.



Figure 1
 Former Cape Poge
 Little Neck Bomb Target Site
 FUDS Project No. D0MA0595
 and
 South Beach At Matha's Vineyard
 (Former Moving Target Machine Gun Range)
 FUDS Project No. D01MA0486



| | | | |
|--|-----------------|--|--|
| Environmental Protection & Assessment Group EPUS-GIS TEAM | | U.S. Army Engineering, And Support Center Huntsville, AL | |
| Source: DRW | Scale: 1:50,000 | Date: | |
| | | <small>THIS MAP AND ITS CONTENTS REPRESENT THE CURRENT STATE OF KNOWLEDGE AND INFORMATION AVAILABLE TO THE U.S. ARMY ENGINEERING AND SUPPORT CENTER AT THE TIME OF PUBLICATION. THE U.S. ARMY ENGINEERING AND SUPPORT CENTER AND ITS CONTRACTORS MAKE NO WARRANTY, REPRESENTATION, OR GUARANTEE OF ANY KIND, EXPRESS OR IMPLIED, REGARDING THE ACCURACY, COMPLETENESS, OR RELIABILITY OF THE INFORMATION CONTAINED HEREIN.</small> | |



Figure 2
Former Cape Poge
Little Neck Bomb Target Site
FUDS Project No. D0MA0595

— Creeks



| | | | |
|--|----------------|---|--|
| Environmental Protection & US Army Corps of Engineers EPUB-GIS TEAM | | U.S. Army Engineering And Support Center Huntsville, AL | |
| Project: CDW | Date: 05/20/08 | Revision: | |
| Author: | Date: | Date: | |
| | | This map was created by the use of data collected, analyzed, and processed by the U.S. Army Corps of Engineers and is intended for use only for the purposes of the project. It is not to be used for any other purpose without the express written permission of the U.S. Army Corps of Engineers. | |

Appendix B
Sample Sign Layout

US Army Corps of Engineers.

Fort Segarra

1947 Aerial Photo

Water Phillips Landing

Flamingo Bay Deep Water Dock

Fort Segarra

Fort Segarra: Observation post and bunker complex in 2007 (left) and one of two gun emplacement sites in 2000 (right).

The U.S. Government acquired Water Island in 1944 to serve as part of the coastal defense system for the U.S. Virgin Islands during World War II. The main fortification, Fort Segarra, located at the southern tip of the island, was constructed to protect the entrance to St. Thomas harbor. It consisted of two large gun emplacements, watchtowers, underground bunkers, and other military facilities. World War II ended before the two large guns could be installed.

Other U.S. military installations existed on the main island of St. Thomas, including the U.S. Navy Submarine Base at Crown Bay and the U.S. Marine Corps Base at Bourne Field, now Cyril E. King Airport and the University of the Virgin Islands.

From May 1948 to September 1950, the U.S. Army Chemical Corps occupied Water Island. Tests were conducted to evaluate various chemicals and their storage containers for use in tropical climates or jungle warfare missions.

In 1952, the U.S. Department of Defense transferred Water Island to the U.S. Department of the Interior. The transfer of Water Island from the U.S. Department of the Interior to the U.S. Virgin Islands began in 1992, transfer was completed in 2005.

Investigations by the U.S. Army Corps of Engineers concluded that all military munitions were removed from Water Island. However, should any suspected military munitions be discovered, please follow these directions:

DO NOT Touch! Call 911 immediately!
By cell phone, call 340-776-9110 or call U.S. Virgin Islands Emergency Management, 340-774-2244.

Recognize, Retreat, Report

For more information about Fort Segarra, please call: VI State Historic Preservation Office, 340-776-8605 or U.S. Army Corps of Engineers, Jacksonville District, 900-291-9405.

Military items found on Water Island: Empty chemical storage container — 2005 (left); bomb casing filled with concrete — 2009 (right).



**US Army Corps
of Engineers®
New England District**

**TIME CRITICAL REMOVAL ACTION (TCRA)
ACTION MEMORANDUM**

for

**Cape Poge Little Neck Bomb Target Site,
Chappaquiddick Island, Dukes County, Massachusetts,
Formerly Used Defense Site (FUDS)
Project Number D01MA0595
MRS Number: D01MA059501R01 - 1**

**Former Moving Target Machine Gun Range at
South Beach, Martha's Vineyard, Massachusetts
FUDS Project Number D01MA0486
MRS Number: D01MA048600R01 - 1**

24 November 2008

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

EXECUTIVE SUMMARY

ES.1 It has been determined that a Time Critical Removal Action (TCRA) is required for the Formerly Used Defense Sites (FUDS) Cape Poge Little Neck Bomb Target Site, Chappaquiddick, Massachusetts and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard., Massachusetts. This TCRA Action Memorandum has been prepared in accordance with Interim Guidance 06-04, dated 06 March 2006.

ES.2 Cape Poge Little Neck, FUDS D01MA0595, MRS Number: D01MA059501R01 - 1: Based on available historical information, the former Cape Poge Little Neck Bomb Target Site was used as a bombing target by the Department of the Navy. Munitions items found to date are the three-pound practice bomb, and the AN-MK 23, with a spotting charge. This FUDS is currently part of the Cape Poge Wildlife Refuge. The public has been observed digging for clams using their bare hands and/or hand tools such as pitchforks within the mudflats of the former bombing target site. The public is also known to remove the practice bombs from the site and take them home as souvenirs.

ES.3 Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, FUDS D01MA0486, MRS Number: D01MA048600R01 - 1: Based on available historical information, Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard was used as a gunnery target for aerial machine gun and rocket firing practice. The Former Moving Target Machine Gun Range at South Beach was built on the existing beach in the late 1940's. Due to the erosion of the beach the site is now approximately 200 to 400 feet of shore. A removal action was performed along the beach and the dunes in the late 1980's. In March 2008 a Navy 100-pound bomb suspected of being live (filled with High Explosives) was found on shore at Wasque Point and was disposed of by Massachusetts State Bomb Squad. The bomb was suspected of being live due to the crater that was created as a result of blowing the bomb in place.

Based on recent site visits and discussion with the Edgartown Beach Patrol and The Trustees of Reservations, 2.25" to 6" rocket motors with the warhead sheared off have been encountered in the water at South Beach and Norton Point with increasing frequency. South Beach is a public beach visited by 10,000-15,000 tourists per day during the peak summer season. Per the Edgartown Beach Patrol, when the public finds items in the water, they bring them up out of the water onto the beach, for the Beach Patrol to remove from the beach. Due to these findings, the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard Inventory Property Report was amended to extend the boundary of the munitions response site eastward to include Norton Point and Wasque Point.

ES.4 The selected response actions to be performed under this TCRA include surface to four inches below surface removal along the beach shoreline, dune face, creek bank, and shallow non-clamming water; subsurface removal in mudflats, ponds, creek bed and shallow bay waters subject to clamming; Unexploded Ordnance (UXO) support for newly discovered items; ocean bottom surface/subsurface removal in up to 100 feet off shore at South Beach; and installation of permanent warning signs. The above removal actions and educational awareness media will reduce the immediate time critical hazard associated with exposure until the Remedial Investigation/Feasibility Study process can be implemented.

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

ES.5 Based on the potential presence of additional MEC at these sites and the risk to the public, it is recommended that a Time Critical Removal Action (TCRA) be performed at the former Cape Poge Little Neck Bomb Target Site and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard. There is a significant probability that military munitions will continue to be exposed at these two FUDS properties that pose a safety hazard to individuals if not addressed through a response action. The U.S. Army Engineering and Support Center, Huntsville (USAESCH) TCRA Steering Group, comprised of the New England District PM, EM-CX, USAESCH MM-DC and the USAESCH Project Delivery Team, met and discussed the former Cape Poge Little Neck Bomb Target Site and Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard on 28 August 2008. The TCRA Steering Group concurred that this situation meets the criteria for a TCRA. The cost of this TCRA, to include contractor, New England District and USAESCH costs, is estimated at xx US Dollars. Both projects, Cape Poge Little Neck Bomb Target Site and Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, will be performed under this TCRA in order to take advantage of the economies of scale where cost will be reduced by eliminating duplicated effort. The cost of contractor fieldwork at Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA TCRA is estimated at \$xx. The cost of contractor fieldwork at Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, MA TCRA is estimated at \$xx. The remaining balance of \$xx, which is for contractor work other than field work, and \$xx, which is for government oversight, would be duplicated if the projects were performed separately.

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

TABLE OF CONTENTS

1 LOCATION AND DESCRIPTION OF SITE..... 5

2 DESCRIPTION OF HAZARDS..... 6

3 CURRENT LAND USE ACTIVITIES AND RISK OF EXPOSURE 6

4 PREVIOUS ACTIONS TO ADDRESS HAZARD..... 7

5 ENDANGERMENT DETERMINATION 7

6 PROPOSED ACTION..... 7

7 AUTHORIZING SIGNATURE 8

LIST OF FIGURES

**FIGURE 1 - FORMER CAPE POGUE LITTLE NECK BOMB TARGET SITE FUDS
PROJECT NO. D0MA0595 AND FORMER MOVING TARGET MACHINE GUN
RANGE AT SOUTH BEACH, MARTHA'S VINEYARD, FUDS PROJECT NO.
D01MA048610**

**FIGURE 2 - FORMER CAPE POGUE LITTLE NECK BOMB TARGET SITE FUDS
PROJECT NO. D0MA059511**

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

1 LOCATION AND DESCRIPTION OF SITE

1.1 CAPE POGE LITTLE NECK BOMB TARGET SITE, FUDS D01MA0595, MRS D01MA059501R01-1

1.1.1 Under the FUDS program, the New England District, United States Army Corps of Engineers (USACE) signed an Inventory Project Report (INPR) in May 2008 that identified the former Cape Poge Little Neck Bomb Target Site as a FUDS eligible site. The INPR was amended to include adjoining lands contaminated by potential Munitions and Explosives of Concern (MEC).

1.1.2 The former Cape Poge Little Neck Bomb Target Site consists of approximately 141 acres on Little Neck and Cape Poge on Chappaquiddick Island in the Town of Edgartown, Massachusetts on Martha's Vineyard. The former Cape Poge Little Neck Bomb Target Site is part of the Cape Poge Wildlife Refuge. The Department of the Navy acquired leases for the Bomb Target for use by the 1st Naval District flight training program at Naval Air Station Quonset Point, Rhode Island and Naval Auxiliary Air Station Martha's Vineyard, Massachusetts.

1.1.3 The Trustees of Reservations (TTOR), who provide oversight of the Cape Poge Wildlife Refuge, and Massachusetts Department of Environmental Protection, first informed New England District of the existence of practice bombs at Little Neck, Chappaquiddick on 2 August 2007. Since the initial notification, there have been 13 AN-MK 23 practice bombs reported with nine destroyed by the Massachusetts State Police and Navy EOD personnel and the remainder disappearing before they could be destroyed. The New England District and the U.S. Army Engineering and Support Center, Huntsville (USAESCH) performed a site visit the week of 4 August 2008 to determine if immediate action was needed for this site. The site visit team found an AN-MK23 practice bomb embedded in vegetation along the dune face. The AN-MK23 was identified by the attending USAESCH OE Safety Specialist. The public was also observed digging for clams using their bare hands and/or hand tools such as pitch forks. When questioned, the public were aware of the warning signs that had been placed by TTOR. The public were also observed trespassing beyond warning signs stating the area was closed. The approximate location of the Cape Poge Little Neck Bomb Target Site is shown on Figure 1.

1.2 SOUTH BEACH FORMER MOVING TARGET MACHINE GUN RANGE AT MARTHA'S VINEYARD, FUDS D01MA0486, MRS D01MA048600R01 - 1

1.2.1 The South Beach Former Moving Target Machine Gun Range at Martha's Vineyard INPR was amended in July 2008 to include adjoining lands east to Norton Point and Wasque Point, contaminated by potential Munitions and Explosives of Concern (MEC).

1.2.2 The Department of the Navy leased approximately 264.3 acres for military training at South Beach. The gunnery range was used by Naval Air Station Quonset Point, Rhode Island for aerial machine gun and rocket firing practice. An observation bunker, an oval shaped target and other support features were constructed within a few yards of the ocean. A large portion of the beach has eroded since 1947. The actual target area is now underwater, approximately 150 yards offshore. During 1988-1989, a removal of unexploded ordnance was performed on the beach and dunes of South Beach. No removal was performed in the water. On 29 March 2008, a 100-pound High Explosive (HE) bomb was found on the shore east of South Beach at Wasque Point. Massachusetts State Police destroyed the bomb.

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

1.2.3 During the Site Visit for the former Cape Poge Little Neck Bomb Target Site, the Project Delivery Team also visited South Beach. While the team was at South Beach, an employee of the Town of Edgartown Beach Patrol drove up on an ATV carrying a suspect rocket motor. The warhead had been sheared off. Since the site visit, several more of these type of items have been found on shore. The items have been found by members of the public while swimming in the waters at South Beach with increasing frequency. Swimmers see, step on or bump into the munitions, sometimes resulting in cuts and scrapes. They then bring the munitions items on shore. The Beach Patrol attend to and remove the munitions from the beach and have been known to improperly dispose of the items. The increase in incidents is possibly attributable to a 1 ½ mile breach in the barrier beach at Katama Bay, east of South Beach at Norton Point, that has increased the velocity and changed the direction of the currents in the area. The approximate location of the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard is shown on Figure 1.

2 DESCRIPTION OF HAZARDS

2.1 At the former Cape Poge Little Neck Bomb Target Site: The AN-MK23 three-pound practice bombs found contain a spotting charge of black powder and red phosphorous; while not life threatening, if discharged can cause serious injury.

2.2 At the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, swimmers have been exposed to numerous 2.25" to 6" rocket motors found in the water since June 2008 and a 100-pound HE bomb found on shore at Wasque Point in March 2008. Since rocket motors have been encountered by swimmers in the water, there is the potential that a MEC warhead may also be found in the water by the public, retrieved and brought on shore. A MEC warhead and the HE bomb are both considered life-threatening hazards.

3 CURRENT LAND USE ACTIVITIES AND RISK OF EXPOSURE

3.1 The overwhelming concern at Cape Poge Little Neck Bomb Target Site is that the public has been removing the practice bombs. This is evident in that one of the recovered practice bombs was located and recovered from a residence on Chappaquiddick Island. The homeowner reported it to the TTOR after reading one of the warning signs. Other bombs have disappeared between the time of reporting and the arrival of Naval EOD personnel due to either tidal wave action and/or members of the public picking them up and taking them home. An additional concern is that the public digs for clams within the area of the bombing target. Digging is performed using their bare hands and/or hand tools such as a pitchfork which could potentially provide sufficient energy to cause the spotting charge to discharge.

3.2 At the Former Moving Target Machine Gun Range at South Beach Martha's Vineyard, the increasing incidence of munitions items being found in the water and/or retrieved and left on the beach are of concern for three reasons: 1) swimmers may come in contact with a MEC warhead; 2) Edgartown city personnel were moving the items they found and disposing of them improperly; and 3) the high explosive 100-pound bomb that was found on the beach at Wasque Point was potentially life threatening had the public interacted with and detonated the bomb.

3.3 Based on this information, the current risk to human receptors at the site is considered significant due to the location of items (in the water and on the shoreline), on the surface or near surface and the potential for receptors to encounter MEC. Future risk to receptors is considered to be the same as the current risk, provided site usage does not change.

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

4 PREVIOUS ACTIONS TO ADDRESS HAZARD

4.1 No action has been taken to address the hazard at the former Cape Poge Little Neck Bomb Target Site. To date the only activity conducted at the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard was the removal action on the beach and the dunes. No action has been taken to remove the suspect source of the contamination in the water. Munitions items remain in the water at the Former Moving Target Machine Gun Range.

5 ENDANGERMENT DETERMINATION

5.1 The USAESCH Product Delivery Team conducted an endangerment determination for the former Cape Poge Little Neck Bomb Target Site. Each distinct type of area (marshes, beaches, dunes, dense vegetation, creeks, etc.) was analyzed for accessibility, type of ordnance, potential energy input by receptors and effectiveness of existing controls. Several areas were eliminated from the TCRA due to the unlikely occurrence of interaction with munition items or intrusive activities, such as areas of dense vegetation and marshes. It has been demonstrated that military munitions exist at these two FUDS properties that pose a potential safety hazard to individuals if not addressed through the response action described in this Action Memorandum.

6 PROPOSED ACTION

6.1 The recommended action for the former Cape Poge Little Neck Bomb Target Site is as follows:

- Removal at surface to 4 inches below surface along beaches starting at 1000' north of Shear Pen Pond, around Shear Pen Pond and Little Neck down to Simmons Point (See Figure 2)
- Removal at surface to 4 inches below surface along dune face at Little Neck
- Removal at surface to 4 inches below surface along face of creek bank at Little Neck and Drunkard's Cove
- Removal at surface to 4 inches below surface in water to maximum water depth of 2 foot where clamming does not take place (Shoreline from 1000' north of Shear Pen Pond, around Shear Pen Pond and Little Neck down to Simmons Point)
- Subsurface removal up to 18 inches in depth in the mudflats, creek beds and ponds where clamming using bare hands or with hand tools takes place by the public (around Little Neck to include Drunkard's Cove)
- Provide UXO support for clearing items that are discovered at the former Cape Poge Little Neck Bomb Target Site on shore or that are exposed through erosion, during the period of performance of field activities.
- Place larger semi-permanent/permanent warning signs at public and vehicle access points for TTOR managed lands (Little Neck)

6.2 The recommended action for Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard is as follows:

- Surface/Subsurface Removal to depth of detection up to 100 feet off shore measured from the mid-summer waterline at mean low tide.
- Provide UXO support for clearing items that are discovered at the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard on shore or that are exposed through erosion, during the period of performance of field activities.
- Place larger permanent warning signs at public and vehicle access points for TTOR managed lands (Wasque Point and Norton Point) and South Beach Five additional signs.

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

6.3 The primary objective of the TCRA at the former Cape Poge Little Neck Bomb Target Site is to remove and dispose of MEC within the area to detectible depths where the public is actively clamming and to clear MEC from the surface to prevent the public from removing the MEC. The primary objective of the TCRA at Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard is to remove potential MEC from a 1 mile section off the beach in the water to prevent the public from coming in direct contact with MEC while swimming, from moving/removing items from the water and to ensure proper disposal of items recovered. The secondary objective for both FUDSs is to provide warning to the public through more distinctive signage and more expeditious UXO support. The proposed actions will significantly reduce the potential risk to human health and the environment based on the current site usage. The TCRA work to be completed is consistent with the CERCLA and National Contingency Plan process and complements additional future actions that shall be undertaken to address public and environmental exposure concerns.

6.4 The USAESCH TCRA Steering Group, comprised of the New England District PM, EM-CX, USAESCH MM DC and the USAESCH PDT, met and evaluated the former Cape Poge Little Neck Bomb Target Site and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard on 28 August 2008. The Steering Group concurred that this situation meets the criteria for a TCRA since there is a significant possibility that military munitions exist at these FUDS properties that pose an imminent hazard to individuals if not addressed through the Response Action described in this Action Memorandum. The cost of this TCRA, to include contractor, New England District and U.S. Army Engineering and Support Center, Huntsville cost, is estimated at \$xx US Dollars. Both projects, Cape Poge Little Neck Bomb Target Site and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, will be performed under this TCRA in order to take advantage of the economies of scale where cost will be reduced by eliminating duplicated effort. The cost of contractor fieldwork at Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, TCRA is estimated at \$xx. The cost of contractor fieldwork at South Beach Former Moving Target Machine Gun Range at Martha's Vineyard, TCRA is estimated at \$xx. The remaining balance of \$xx, which is for contractor work other than field work, and \$xx, which is for government oversight, would be duplicated if the projects were performed separately.

7 AUTHORIZING SIGNATURE

This Action Memorandum presents the selected response action at the former Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard. The U.S. Army Corps of Engineers is the lead agency under the Defense Environmental Restoration Program (DERP) at the former Cape Poge Little Neck Bomb Target Site and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard Formerly Used Defense Sites, and has developed this Action Memorandum consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This action memorandum will be incorporated into the larger Administrative Record file for the former Cape Poge Little Neck Bomb Target Site and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, which will be established during this TCRA and will be available for public view at a local library on Martha's Vineyard and/or Chappaquiddick Island.

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

APPROVED: _____ Date _____

PHILIP T. FEIR
COL, EN
Commanding

DRAFT

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

DRAFT

APPENDIX G-3

**U.S. Army Corps of Engineers,
New England District**

**Memorandum, Subj: Time Critical Removal
Action (TCRA) Memorandum for Cape Poge
Little Neck Bomb Target Site, Chappaquiddick
Island, Massachusetts and Former Moving
Target Machine Gun Range at South Beach,
Martha's Vineyard, Massachusetts, 3 December
2008.**

**Backup Files, U.S. Army Corps of Engineers,
New England District**

C. C. H. G.



REPLY TO
ATTENTION OF
CENAE-PP-M

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

3 December 2008

MEMORANDUM FOR Commander, North Atlantic Division, ATTN: CENAD-PD-IIS-P
(Mr. Alan Koppel), Fort Hamilton Military Community, Bldg 301, 302 General Lee Avenue,
Brooklyn, New York 11252

SUBJECT: Time Critical Removal Action (TCRA) Memorandum for Cape Poge Little Neck
Bomb Target Site, Chappaquiddick Island, Massachusetts and Former Moving Target
Machine Gun Range at South Beach, Martha's Vineyard, Massachusetts.

1. References:

- a. ER200-3-1, Formerly Used Defense Site Regulation
- b. EP1110-1-18, Engineering and Design-Ordnance and Explosives Response

2. The attached documentation is forwarded for your information.

- a. Worksheet C-1, Staffing Matrix for Records of Decision/Decision Documents/Action Memoranda
- b. TCRA Executive Summary
- c. Signed TCRA Action Memo

3. This TCRA has been reviewed/approved by our District Office of Counsel and Public Affairs Office.

4. If you should have any questions or need additional information, please contact the Project Manager, Carol Ann Charette at 978-318-8605.

ENCL

A handwritten signature in black ink, appearing to read "Philip T. Feir".

PHILIP T. FEIR
COL. EN
Commanding

**Worksheet C-1
Staffing Matrix for Records of Decision/Decision Documents/Action Memoranda¹**

Decision Document Title:
TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM for Cape Pogue Little Neck Bomb Target Site, Chappaquiddick Island, Dukess County, Massachusetts. Formerly Used Defense Site (FUDS) Project Number D01MA0595 and South Beach at Martha's Vineyard (Former Moving Target Machine Gun Range) Edgartown, Massachusetts. FUDS Project Number D01MA0486

| Organization | Staff Activity | POC Name | Office Symbol | Phone Number | Fax Number | Email Address |
|--|---------------------------------|--------------------------------|---------------|--------------|--------------|-------------------------------------|
| Geographic Military District | FUDS Program Mgr. | GARY MURIN | GENAE-PP | 978-318-8232 | 978-318-8232 | GARY.MURIN@USACE.ARMY.MIL |
| | Counsel | J. McINERNEY | GENAE-DC | 978-318-8247 | 978-318-8251 | JOSEPH.P.MCINERNEY@USACE.ARMY.MIL |
| | PAO | LARRY ROSENZWEIG | GENAE-PA | 978-318-8257 | 978-318-8257 | LARRY.B.ROSENZWEIG@USACE.ARMY.MIL |
| HTRW Design District/ MM Design Center/Centers of Expertise | Technical/Environmental HTRW CX | Kim Meacham | GENHX-EP/CSA | 256-895-1667 | 256-895-1802 | Kim.Meacham@us.army.mil |
| | MM CX | Suzanne G. Mendenhall | CY-MM | 256-895-1795 | 256-895-1799 | Suzanne.g.mendenhall@usace.army.mil |
| | USATCES ² | CLIFFORD DOYLE H.1230381662 | SJMACE-ESM | 918-420-8741 | 8503 | clifford.doyle@us.army.mil |
| | USACHPPM ³ | | | | | |
| Geographic Military Division | FUDS Program Mgr. | | | | | |
| HQUSACE | CEMP-DE | | | | | |
| | Counsel | | | | | |
| | PAO | | | | | |
| HQDA | ODEP | | | | | |
| | TJAG | | | | | |
| | Army Public Affairs | | | | | |
| | OTSG | | | | | |
| | ODASA (ESOH) | | | | | |
| | Army Safety Office | | | | | |

- To be completed and forwarded with ROD/DD/AM where the present cost of the selected remedy (RA-C and RA-O phases) exceeds \$2 million.
- For MMRP projects with explosives risk, USATCES coordination requirement is satisfied by providing opportunity for review and comment of the draft EE/CA or draft Proposed Plan.
- For HTRW projects, USACHPPM coordination requirement is satisfied by providing opportunity for approval of human health risk assessments and review of ecological risk assessments developed during the RIFS [AR 200-1, 1-18 a (3)] USACHPPM coordination not required for removal responses

Appendix G - Textual References
Page G - 58

Cape Pogue Little Neck Bomb Target Site
Chappaquiddick Island, MA
Preliminary Assessment



**US Army Corps
of Engineers®
New England District**

**TIME CRITICAL REMOVAL ACTION (TCRA)
ACTION MEMORANDUM**

for

**Cape Poge Little Neck Bomb Target Site,
Chappaquiddick Island, Dukes County, Massachusetts,
Formerly Used Defense Site (FUDS)
Project Number D01MA0595
MRS Number: D01MA059501R01 - 1**

**Former Moving Target Machine Gun Range at
South Beach, Martha's Vineyard, Massachusetts
FUDS Project Number D01MA0486
MRS Number: D01MA048600R01 - 1**

24 November 2008

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

EXECUTIVE SUMMARY

ES.1 It has been determined that a Time Critical Removal Action (TCRA) is required for the Formerly Used Defense Sites (FUDS) Cape Poge Little Neck Bomb Target Site, Chappaquiddick, Massachusetts and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, Massachusetts. This TCRA Action Memorandum has been prepared in accordance with Interim Guidance 06-04, dated 06 March 2006.

ES.2 Cape Poge Little Neck, FUDS D01MA0595, MRS Number: D01MA059501R01 - 1: Based on available historical information, the former Cape Poge Little Neck Bomb Target Site was used as a bombing target by the Department of the Navy. Munitions items found to date are the three-pound practice bomb, and the AN-MK 23, with a spotting charge. This FUDS is currently part of the Cape Poge Wildlife Refuge. The public has been observed digging for clams using their bare hands and/or hand tools such as pitchforks within the mudflats of the former bombing target site. The public is also known to remove the practice bombs from the site and take them home as souvenirs.

ES.3 Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, FUDS D01MA0486, MRS Number: D01MA048600R01 - 1: Based on available historical information, Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard was used as a gunnery target for aerial machine gun and rocket firing practice. The Former Moving Target Machine Gun Range at South Beach was built on the existing beach in the late 1940's. Due to the erosion of the beach the site is now approximately 200 to 400 feet off shore. A removal action was performed along the beach and the dunes in the late 1980's. In March 2008 a Navy 100-pound bomb suspected of being live (filled with High Explosives) was found on shore at Wasque Point and was disposed of by Massachusetts State Bomb Squad. The bomb was suspected of being live due to the crater that was created as a result of blowing the bomb in place.

Based on recent site visits and discussion with the Edgartown Beach Patrol and The Trustees of Reservations, 2.25" to 6" rocket motors with the warhead sheared off have been encountered in the water at South Beach and Norton Point with increasing frequency. South Beach is a public beach visited by 10,000-15,000 tourists per day during the peak summer season. Per the Edgartown Beach Patrol, when the public finds items in the water, they bring them up out of the water onto the beach, for the Beach Patrol to remove from the beach. Due to these findings, the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard Inventory Property Report was amended to extend the boundary of the munitions response site eastward to include Norton Point and Wasque Point.

ES.4 The selected response actions to be performed under this TCRA include surface to four inches below surface removal along the beach shoreline, dune face, creek bank, and shallow non-clamming water; subsurface removal in mudflats, ponds, creek bed and shallow bay waters subject to clamming; Unexploded Ordnance (UXO) support for newly discovered items; ocean bottom surface/subsurface removal in up to 100 feet off shore at South Beach; and installation of permanent warning signs. The above removal actions and educational awareness media will reduce the immediate time critical hazard associated with exposure until the Remedial Investigation/Feasibility Study process can be implemented.

**TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595**

ES.5 Based on the potential presence of additional MEC at these sites and the risk to the public, it is recommended that a Time Critical Removal Action (TCRA) be performed at the former Cape Poge Little Neck Bomb Target Site and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard. There is a significant probability that military munitions will continue to be exposed at these two FUDS properties that pose a safety hazard to individuals if not addressed through a response action. The U.S. Army Engineering and Support Center, Huntsville (USAESCH) TCRA Steering Group, comprised of the New England District PM, EM-CX, USAESCH MM-DC and the USAESCH Project Delivery Team, met and discussed the former Cape Poge Little Neck Bomb Target Site and Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard on 28 August 2008. The TCRA Steering Group concurred that this situation meets the criteria for a TCRA. The cost of this TCRA, to include contractor, New England District and USAESCH costs, is estimated at \$\$1,958,00 US Dollars. Both projects, Cape Poge Little Neck Bomb Target Site and Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, will be performed under this TCRA in order to take advantage of the economies of scale where cost will be reduced by eliminating duplicated effort. The cost of contractor fieldwork at Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA TCRA is estimated at \$843,000. The cost of contractor fieldwork at Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, MA TCRA is estimated at \$605,000. The remaining balance of \$197,000, which is for contractor work other than field work, and \$313,000, which is for government oversight, would be duplicated if the projects were performed separately.

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

TABLE OF CONTENTS

1 LOCATION AND DESCRIPTION OF SITE..... 5

2 DESCRIPTION OF HAZARDS..... 6

3 CURRENT LAND USE ACTIVITIES AND RISK OF EXPOSURE..... 6

4 PREVIOUS ACTIONS TO ADDRESS HAZARD 7

5 ENDANGERMENT DETERMINATION..... 7

6 PROPOSED ACTION 7

7 AUTHORIZING SIGNATURE..... 8

LIST OF FIGURES

**FIGURE 1 - FORMER CAPE POGE LITTLE NECK BOMB TARGET SITE FUDS
PROJECT NO. D0MA0595 AND FORMER MOVING TARGET MACHINE GUN
RANGE AT SOUTH BEACH, MARTHA'S VINEYARD, FUDS PROJECT NO.
D01MA048610**

**FIGURE 2 - FORMER CAPE POGE LITTLE NECK BOMB TARGET SITE FUDS
PROJECT NO. D0MA0595
.....11**

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

1 LOCATION AND DESCRIPTION OF SITE

1.1 CAPE POGUE LITTLE NECK BOMB TARGET SITE, FUDS D01MA0595, MRS D01MA059501R01-1

1.1.1 Under the FUDS program, the New England District, United States Army Corps of Engineers (USACE) signed an Inventory Project Report (INPR) in May 2008 that identified the former Cape Poge Little Neck Bomb Target Site as a FUDS eligible site. The INPR was amended to include adjoining lands contaminated by potential Munitions and Explosives of Concern (MEC).

1.1.2 The former Cape Poge Little Neck Bomb Target Site consists of approximately 141 acres on Little Neck and Cape Poge on Chappaquiddick Island in the Town of Edgartown, Massachusetts on Martha's Vineyard. The former Cape Poge Little Neck Bomb Target Site is part of the Cape Poge Wildlife Refuge. The Department of the Navy acquired leases for the Bomb Target for use by the 1st Naval District flight training program at Naval Air Station Quonset Point, Rhode Island and Naval Auxiliary Air Station Martha's Vineyard, Massachusetts.

1.1.3 The Trustees of Reservations (TTOR), who provide oversight of the Cape Poge Wildlife Refuge, and Massachusetts Department of Environmental Protection, first informed New England District of the existence of practice bombs at Little Neck, Chappaquiddick on 2 August 2007. Since the initial notification, there have been 13 AN-MK 23 practice bombs reported with nine destroyed by the Massachusetts State Police and Navy EOD personnel and the remainder disappearing before they could be destroyed. The New England District and the U.S. Army Engineering and Support Center, Huntsville (USAESCH) performed a site visit the week of 4 August 2008 to determine if immediate action was needed for this site. The site visit team found an AN-MK23 practice bomb embedded in vegetation along the dune face. The AN-MK23 was identified by the attending USAESCH OE Safety Specialist. The public was also observed digging for clams using their bare hands and/or hand tools such as pitch forks. When questioned, the public were aware of the warning signs that had been placed by TTOR. The public were also observed trespassing beyond warning signs stating the area was closed. The approximate location of the Cape Poge Little Neck Bomb Target Site is shown on Figure 1.

1.2 SOUTH BEACH FORMER MOVING TARGET MACHINE GUN RANGE AT MARTHA'S VINEYARD, FUDS D01MA0486, MRS D01MA048600R01 - 1

1.2.1 The South Beach Former Moving Target Machine Gun Range at Martha's Vineyard INPR was amended in July 2008 to include adjoining lands east to Norton Point and Wasque Point, contaminated by potential Munitions and Explosives of Concern (MEC).

1.2.2 The Department of the Navy leased approximately 264.3 acres for military training at South Beach. The gunnery range was used by Naval Air Station Quonset Point, Rhode Island for aerial machine gun and rocket firing practice. An observation bunker, an oval shaped target and other support features were constructed within a few yards of the ocean. A large portion of the beach has eroded since 1947. The actual target area is now underwater, approximately 150 yards offshore. During 1988-1989, a removal of unexploded ordnance was performed on the beach and dunes of South Beach. No removal was performed in the water. On 29 March 2008, a 100-pound High Explosive (HE) bomb was found on the shore east of South Beach at Wasque Point. Massachusetts State Police destroyed the bomb.

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

1.2.3 During the Site Visit for the former Cape Poge Little Neck Bomb Target Site, the Project Delivery Team also visited South Beach. While the team was at South Beach, an employee of the Town of Edgartown Beach Patrol drove up on an ATV carrying a suspect rocket motor. The warhead had been sheared off. Since the site visit, several more of these type of items have been found on shore. The items have been found by members of the public while swimming in the waters at South Beach with increasing frequency. Swimmers see, step on or bump into the munitions, sometimes resulting in cuts and scrapes. They then bring the munitions items on shore. The Beach Patrol attend to and remove the munitions from the beach and have been known to improperly dispose of the items. The increase in incidents is possibly attributable to a 1/2 mile breach in the barrier beach at Katama Bay, east of South Beach at Norton Point, that has increased the velocity and changed the direction of the currents in the area. The approximate location of the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard is shown on Figure 1.

2 DESCRIPTION OF HAZARDS

2.1 At the former Cape Poge Little Neck Bomb Target Site: The AN-MK23 three-pound practice bombs found contain a spotting charge of black powder and red phosphorous; while not life threatening, if discharged can cause serious injury.

2.2 At the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, swimmers have been exposed to numerous 2.25" to 6" rocket motors found in the water since June 2008 and a 100-pound HE bomb found on shore at Wasque Point in March 2008. Since rocket motors have been encountered by swimmers in the water, there is the potential that a MEC warhead may also be found in the water by the public, retrieved and brought on shore. A MEC warhead and the HE bomb are both considered life-threatening hazards.

3 CURRENT LAND USE ACTIVITIES AND RISK OF EXPOSURE

3.1 The overwhelming concern at Cape Poge Little Neck Bomb Target Site is that the public has been removing the practice bombs. This is evident in that one of the recovered practice bombs was located and recovered from a residence on Chappaquiddick Island. The homeowner reported it to the TTOR after reading one of the warning signs. Other bombs have disappeared between the time of reporting and the arrival of Naval EOD personnel due to either tidal wave action and/or members of the public picking them up and taking them home. An additional concern is that the public digs for clams within the area of the bombing target. Digging is performed using their bare hands and/or hand tools such as a pitchfork which could potentially provide sufficient energy to cause the spotting charge to discharge.

3.2 At the Former Moving Target Machine Gun Range at South Beach Martha's Vineyard, the increasing incidence of munitions items being found in the water and/or retrieved and left on the beach are of concern for three reasons: 1) swimmers may come in contact with a MEC warhead; 2) Edgartown city personnel were moving the items they found and disposing of them improperly; and 3) the high explosive 100-pound bomb that was found on the beach at Wasque Point was potentially life threatening had the public interacted with and detonated the bomb.

3.3 Based on this information, the current risk to human receptors at the site is considered significant due to the location of items (in the water and on the shoreline), on the surface or near surface and the potential for receptors to encounter MEC. Future risk to receptors is considered to be the same as the current risk, provided site usage does not change.

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

4 PREVIOUS ACTIONS TO ADDRESS HAZARD

4.1 No action has been taken to address the hazard at the former Cape Poge Little Neck Bomb Target Site. To date the only activity conducted at the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard was the removal action on the beach and the dunes. No action has been taken to remove the suspect source of the contamination in the water. Munitions items remain in the water at the Former Moving Target Machine Gun Range.

5 ENDANGERMENT DETERMINATION

5.1 The USAESCH Product Delivery Team conducted an endangerment determination for the former Cape Poge Little Neck Bomb Target Site. Each distinct type of area (marshes, beaches, dunes, dense vegetation, creeks, etc.) was analyzed for accessibility, type of ordnance, potential energy input by receptors and effectiveness of existing controls. Several areas were eliminated from the TCRA due to the unlikely occurrence of interaction with munition items or intrusive activities, such as areas of dense vegetation and marshes. It has been demonstrated that military munitions exist at these two FUDS properties that pose a potential safety hazard to individuals if not addressed through the response action described in this Action Memorandum.

6 PROPOSED ACTION

6.1 The recommended action for the former Cape Poge Little Neck Bomb Target Site is as follows:

- Removal at surface to 4 inches below surface along beaches starting at 1000' north of Shear Pen Pond, around Shear Pen Pond and Little Neck down to Simmons Point (See Figure 2)
- Removal at surface to 4 inches below surface along dune face at Little Neck
- Removal at surface to 4 inches below surface along face of creek bank at Little Neck and Drunkard's Cove
- Removal at surface to 4 inches below surface in water to maximum water depth of 2 foot where clamming does not take place (Shoreline from 1000' north of Shear Pen Pond, around Shear Pen Pond and Little Neck down to Simmons Point)
- Subsurface removal up to 18 inches in depth in the mudflats, creek beds and ponds where clamming using bare hands or with hand tools takes place by the public (around Little Neck to include Drunkard's Cove)
- Provide UXO support for clearing items that are discovered at the former Cape Poge Little Neck Bomb Target Site on shore or that are exposed through erosion, during the period of performance of field activities.
- Place larger semi-permanent/permanent warning signs at public and vehicle access points for TTOR managed lands (Little Neck)

6.2 The recommended action for Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard is as follows:

- Surface/Subsurface Removal to depth of detection up to 100 feet off shore measured from the mid-summer waterline at mean low tide.
- Provide UXO support for clearing items that are discovered at the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard on shore or that are exposed through erosion, during the period of performance of field activities.
- Place larger permanent warning signs at public and vehicle access points for TTOR managed lands (Wasque Point and Norton Point) and South Beach Five additional signs.

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

6.3 The primary objective of the TCRA at the former Cape Poge Little Neck Bomb Target Site is to remove and dispose of MEC within the area to detectible depths where the public is actively clamming and to clear MEC from the surface to prevent the public from removing the MEC. The primary objective of the TCRA at Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard is to remove potential MEC from a 1 mile section off the beach in the water to prevent the public from coming in direct contact with MEC while swimming, from moving/removing items from the water and to ensure proper disposal of items recovered. The secondary objective for both FUDSs is to provide warning to the public through more distinctive signage and more expeditious UXO support. The proposed actions will significantly reduce the potential risk to human health and the environment based on the current site usage. The TCRA work to be completed is consistent with the CERCLA and National Contingency Plan process and complements additional future actions that shall be undertaken to address public and environmental exposure concerns.


6.4 The USAESCH TCRA Steering Group, comprised of the New England District PM, EM-CX, USAESCH MM DC and the USAESCH PDT, met and evaluated the former Cape Poge Little Neck Bomb Target Site and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard on 28 August 2008. The Steering Group concurred that this situation meets the criteria for a TCRA since there is a significant possibility that military munitions exist at these FUDS properties that pose an imminent hazard to individuals if not addressed through the Response Action described in this Action Memorandum. The cost of this TCRA, to include contractor, New England District and U.S. Army Engineering and Support Center, Huntsville cost, is estimated at \$1,823,000 US Dollars. Both projects, Cape Poge Little Neck Bomb Target Site and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, will be performed under this TCRA in order to take advantage of the economies of scale where cost will be reduced by eliminating duplicated effort. The cost of contractor fieldwork at Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, TCRA is estimated at \$843,000. The cost of contractor fieldwork at South Beach Former Moving Target Machine Gun Range at Martha's Vineyard, TCRA is estimated at \$470,000. The remaining balance of \$197,000, which is for contractor work other than field work, and \$313,000, which is for government oversight, would be duplicated if the projects were performed separately.

7 AUTHORIZING SIGNATURE

This Action Memorandum presents the selected response action at the former Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard. The U.S. Army Corps of Engineers is the lead agency under the Defense Environmental Restoration Program (DERP) at the former Cape Poge Little Neck Bomb Target Site and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard Formerly Used Defense Sites, and has developed this Action Memorandum consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This action memorandum will be incorporated into the larger Administrative Record file for the former Cape Poge Little Neck Bomb Target Site and the Former Moving Target Machine Gun Range at South Beach, Martha's Vineyard, which will be established during this TCRA and will be available for public view at a local library on Martha's Vineyard and/or Chappaquiddick Island.

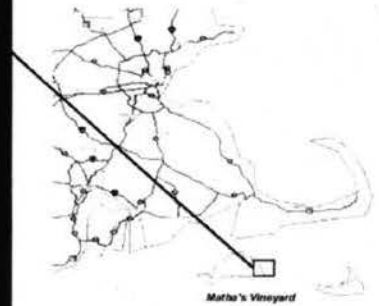
TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
Cape Poge Little Neck Bomb Target Site, Chappaquiddick, MA, D01MA0595
Former Moving Target Machine Gun Range at South Beach,
Martha's Vineyard, MAD01MA0595

This document, presenting a selected remedy with a present worth cost estimate of \$1,958,000, is approved by the undersigned, pursuant to Memorandum, DAIM-ZA, September 9, 2003, subject: Policies for Staffing and Approving Decision Documents (DDs), and to Engineer Regulation 200-3-1, Formerly Used Defense Sites (FUDS) Program Policy.”

APPROVED:  Date 4 Dec 08
PHILIP T. FEIR
COL, EN
Commanding

TIME CRITICAL REMOVAL ACTION (TCRA) ACTION MEMORANDUM
 Cape Pogue Little Neck Target Site, Chappaquiddick, MA, D01MA0595
 South Beach at Martha's Vineyard (Former Moving Target Machine Gun Range),
 Edgartown, MA, D01MA0486

Figure 1
Former Cape Pogue
Little Neck Bomb Target Site
FUDS Project No. D0MA0595
and
South Beach At Martha's Vineyard
(Former Moving Target Machine Gun Range)
FUDS Project No. D01MA0486




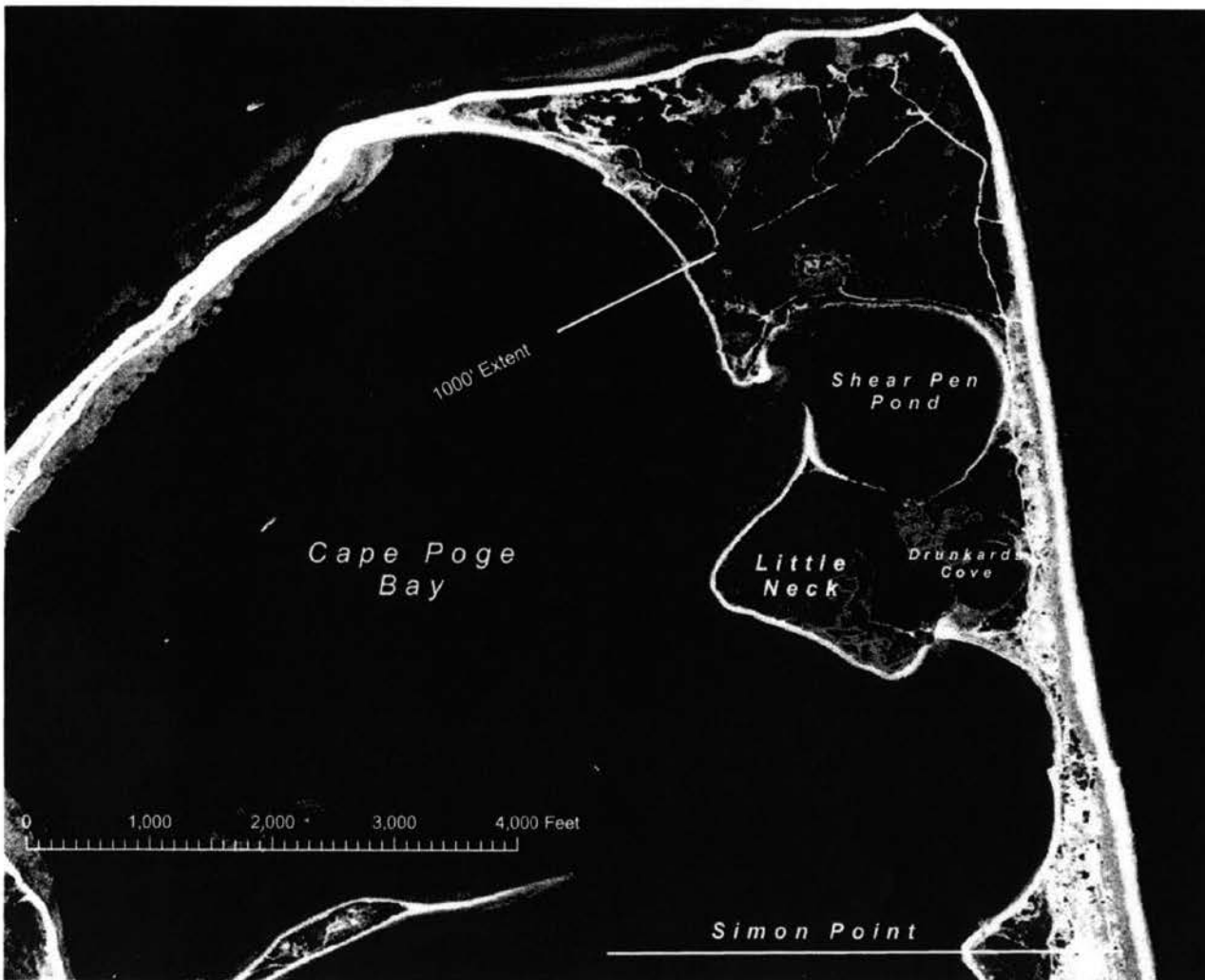
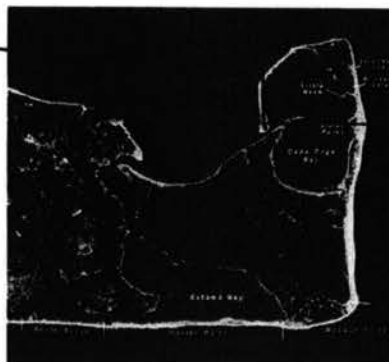
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|---|------------------------|--|--|
| Environmental Protection & Utilities Branch EPUB-GIS TEAM | | U.S. Army Engineering And Support Center Huntsville, AL | |
| Drawn by: GDW | Date Drawn: 09/30/2008 | Project No: | |
| Title: A-gisweb\PROJECTS\data\MA\Martha'sVineyard\FCHU\quest.mxd | | Title: A-gisweb\PROJECTS\data\MA\Martha'sVineyard\FCHU\quest.pdf | |
|  <small>DISCLAIMER: The data represent the results of data collection processing for a specific U.S. Army Corps of Engineers activity and indicate the general existing conditions. An audit, if it exists, is not for the original data, method, date and accuracy specifications. The user is responsible for the results of its evaluation of the data for other than its intended purpose.</small> | | | |

Figure 2
Former Cape Poge
Little Neck Bomb Target Site
FUDS Project No. D0MA0595



— Creeks



| | | | |
|---|------------------------|--|--|
| Environmental Protection & Mission Branch EPUB-GIS TEAM | | U.S. Army Engineering And Support Center Huntsville, AL | |
| Client No: GDW | Date Drawn: 09/30/2008 | Project No: | |
| Title: A-9464949PROJECT08093008 M:\A-9464949\epub\fig2.dwg | | Title: A-9464949PROJECT08093008 M:\A-9464949\epub\fig2.dwg | |
| | | <small>DISCLAIMER: This data was developed from the results of a site visit conducted for a specific U.S. Army Corps of Engineers activity and is not intended for general use. The data is not intended for use in any other project, program, or activity. The user is responsible for the results of any application of the data for other than its intended purpose.</small> | |

APPENDIX G-4

**U.S. Navy, Naval Air Bases First Naval District,
Quonset Point, RI**

**Letters to the War Assets Administration Re:
Decontamination of Naval Facilities declared
surplus to WAA, 4 December 1946 and 12
November 1946.**

**RG 72, Entry 62B, Box 506.
NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

NA(124)/L11-3/(95)am

NAVAL AIR BASES
FIRST NAVAL DISTRICT
QUONSET POINT, RHODE ISLAND
(HEADQUARTERS)

DEC 4 1946

Mr. A. J. Wilson
Deputy Director
Property Management Division
Office of Real Property Disposal
War Assets Administration
Washington 25, D. C.

Re: Rockland Naval Auxiliary Air Station
Rockland, Maine N-Me-7
Trumbull Field, N-Comm-18
Naval Auxiliary Air Station N-Comm-20
Poquonock Road and High Rock Road
Groton, Conn.

63A100026

Dear Mr. Wilson:

In reply to your letter to Admiral Ring dated 25 October 1946, concerning the decontamination of Rockland Naval Auxiliary Air Station and Groton Naval Auxiliary Air Station, Enclosure (1), a copy of a letter submitted to the Deputy Regional Director, War Assets Administration, Boston, Mass., is forwarded herewith.

An additional inspection has been made since the submission of the above stated letter. It was found that the fields in question are decontaminated.

Very truly yours,

D. L. SCHOONOVER
Lieut. Comdr., USNR
Operations Officer

Encl.
cc:AsstSecNav (Material Div.)
BuAer (Aer-SE-22)

NA116

(SE 2)

ND 1

⊖

REPRODUCED AT THE NATIONAL ARCHIVES

C O P Y

File No.

NA(124)/L11-3/(95)am

NAVAL AIR BASES
FIRST NAVAL DISTRICT
QUONSET POINT, RHODE ISLAND
(HEADQUARTERS)

November 12, 1946

2518

Deputy Regional Director
War Assets Administration
Office of Real Property Disposal
600 Washington Street
Boston 11, Mass.

Re: Decontamination of Naval Facilities declared
surplus to WAA

Gentlemen:

The activities listed in Enclosure (1) have been inspected for the presence of explosive ammunition and components. This survey has resulted in the determination that decontamination of the areas has been effected, or is not otherwise required.

2. This statement is made in accordance with all data presently available and is correct to the best knowledge of this command.

Very truly yours,

D. L. SCHOONOVER
Lt. Comdr., USNR
Operations Officer

cc:
ComONE

REPRODUCED AT THE NATIONAL ARCHIVES

NAVAL AIR BASES, FIRST NAVAL DISTRICT

| <u>Field</u> | <u>Declared Surplus to WAA</u> | <u>Area Decontaminated</u> |
|--------------------|------------------------------------|--------------------------------|
| Augusta, Maine | 5/7/46 | 5/15/46 |
| Bar Harbor, Maine | 2/4/46 | 7/1/46 |
| Lewiston, Maine | 9/2/46 | 2/7/46 |
| Portsmouth, N.H. | 1/30/46 | 1/9/46 |
| Rockland, Maine | 5/7/46 | 8/1/46 |
| Sanford, Maine | 3/21/46 | 2/1/46 |
| Beverly, Mass. | 9/15/45 | |
| Groton, Conn. | 6/11/46 | 7/8/46 |
| Hyannis, Mass. | 2/7/46 | 7/11/46 |
| Mansfield, Mass. | 7/19/46 | 7/19/46 |
| Nantucket, Mass. | 4/17/46 | 6/20/46 |
| New Bedford, Mass. | 3/11/46 | 10/28/46 |
| Norwood, Mass. | 1/31/46 | 3/6/46 |
| Westerly, R. I. | 3/7/46 | 11/5/46 |
| Plymouth, Mass. | 6/28/46 | 9/4/46 |

BRUNSWICK AREA

**TARGET AREAS
NAVAL AIR BASES, FIRST NAVAL DISTRICT**

REPRODUCED FROM THE NATIONAL ARCHIVES

| Target | Location | Geographic Location | Established Use | Cancellation Requested | Type of Missile | Area Policed | Area Decontam'd | Final Disposition |
|---------|----------------------|-------------------------------|-------------------|------------------------|-----------------------------|--------------|-----------------|-------------------|
| MIKE | 43-18 N 70-48 W | No. Berwick, Me. | Dive | 12/28/45 | 100 lb. Waterfill | Not Required | Not Required | Disestablished |
| QUEEN | 43-33 N 70-15/5W | Richmond Island Breakwater | Masthead | 8/16/46 | 100 lb. Waterfill | Not Required | Not Required | Disestablished |
| ROGER | 43-42 N 70-38 W | Hollis, Maine | Dive | | 100 lb. Waterfill | | Not Required | Disestablished |
| UNCLE | 43-49 N 70-05 W | Wolf's Neck & Flying Pt., Me. | Dive | 8/16/46 | 100 lb. Waterfill | Not Required | Not Required | Disestablished |
| WILLIAM | 43-47 N 69-44 W | Georgetown Is. Maine | Rocket Projectile | 8/16/46 | R. P. | Is Necessary | Not Required | Disestablished |
| X-RAY | 43-47 N 69-35. 5W | Danariscove Is. Maine | Dive | | 100# Waterfill & Miniatures | Is Necessary | Is Necessary | Disestablished |
| ZEBRA | 43-53 N 68-45 W | Seal Is., Maine | Dive | Still in Use | Live Charges | Is Necessary | Is Necessary | |
| VICTOR | 43-51 N 70-02 W | Maquoit Bay | | 1/5/46 | | Not Required | Not Required | Disestablished |
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Appendix G - Textual References
Page G - 74

Cape Poge Little Neck Bomb Target Site
Chappaquiddick Island, MA
Preliminary Assessment

CAPE COD AREA

TARGET AREAS

NAVAL AIR BASES, FIRST NAVAL DISTRICT

| Target | Location | Geographic Location | Established Use | Cancellation Requested | Type of Missile | Area Policed | Area Decontam'd | Final Dispos |
|--------|----------------------|------------------------------------|----------------------|------------------------|-----------------------------------|-----------------|-----------------|--------------|
| W-6-C | 41-38.3N 70-10.6W | Bass River Jetty Hyannis, Mass. | Dive | In Use | 100# Water Fill & Miniature | Is Necessary | Is Necessary | |
| LR-1-C | 41-43.5N 70-32.5W | Camp Edwards, Mass. | Rocket Projectile | In Use | R.P. | Not Required | Not Required | |
| W-7-C | 41-50.1N 70-02.5W | Cape Cod Bay (Stony Bar) | Anti-Sub. | 12/17/45 | | Not Required | Not Required | Destroyed |
| WX-8-C | 41-50 N 70-10 W | Cape Cod Bay | Radar | In Use | Miniatures | Not Required | Not Required | |
| L-4-C | 41.33.2N 70-30.2W | Great Neck Nashpee, Mass. | Dive | 12/17/45 | 100# Waterfill | Is Necessary | Not Required | |
| W-1-C | 41-26.8N 70-54.4W | Gull Island Buzzards Bay | Dive & Glide | In Use | 100# Waterfill Miniature | Is Necessary | Is Necessary | |
| L-2-C | 41-26 N 70-51 W | Neshawana, Elizabeth Is. | Head | In Use | 100# Waterfill Miniature | Is Necessary | Is Necessary | |
| L-5-C | 41-44 N 70-19.2W | Sandy Neck | Dive | In Use | 100# Waterfill Miniature | Is Necessary | Is Necessary | |
| W-3-C | 41-31.1N 70-44.1W | Wespecket | Dive & Glide | In Use | 100# Waterfill Miniature | Is Necessary | Is Necessary | |
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GROTON AREA

TARGET AREAS

NAVAL AIR BASES, FIRST NAVAL DISTRICT

| Target | Location | Geographic Location | Established Use | Cancellation Requested | Type of Missile | Area Policed | Area Decontam'd | Final Disposal |
|--------|--------------------|---------------------|-----------------|------------------------|--------------------------------|--------------|-----------------|----------------|
| L-2-G | 41-02 N 70-06 W | Cartwright Is. | Dive | In Use | 100% Waterfill Miniature | Is Necessary | Is Necessary | |
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Cape Poge Little Neck Bomb Target Site
Chappaquiddick Island, MA
Preliminary Assessment

MARTHA'S VINEYARD AREA

TARGET AREAS
NAVAL AIR BASES, FIRST NAVAL DISTRICT

| Target | Location | Geographic Location | Established Use | Cancellation Requested | Type of Missile | Area Policed | Area Decontam'd | Final Disposition |
|--------|----------------------|-------------------------|----------------------|------------------------|---------------------------------|--------------|-----------------|---------------------------|
| L-4-V | 41-23.6N 70-27 W | Cape Poge Beach | Calibration | 12/7/45 | | 3/1/46 | Not Required | |
| W-6-V | 41-25.5N 70-50.7W | Gay Head | Mast Head | In Use | 100# Water Fill Miniature | Not Required | Not Required | |
| L-5-V | 41-24.5N 70-27.3W | Little Neck | Dive | In Use | 100# Waterfill Miniature | Is Necessary | Is Necessary | |
| LR-1-V | 40-20.8N 70-32 W | South Beach (Katama) | Rocket Projectile | 9/3/46 | R.P. | Not Required | Not Required | Disestablished 10/1/46 |
| LR-2-V | 40-20.8N 70-32 W | South Beach (Katama) | Rocket Projectile | 9/3/46 | R.P. | Not Required | Not Required | Disestablished 10/1/46 |
| | | South Beach (Katama) | Fixed M.G. Range | 9/3/46 | Machine Gun | Is Necessary | Is Necessary | Disestablished 10/1/46 |
| L-3-V | 41-20.8N 70-39 W | Tisbury Pond | Mast Head | In Use | 100# Waterfill Miniatures | Is Necessary | Is Necessary | |
| W-1-V | 41-19.1N 70-47.2W | Squibnocket Pond | Dive | In Use | Miniature | Not Required | Not Required | |
| W-2-V | 41-18.9N 70-47.5W | Squibnocket Pond | Anti-Sub | In Use | Miniature | Not Required | Not Required | |
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Appendix G - Textual References
Page G - 77

Cape Poge Little Neck Bomb Target Site
Chappaquiddick Island, MA
Preliminary Assessment

NANTUCKET AREA

TARGET AREAS

NAVAL AIR BASES, FIRST NAVAL DISTRICT

| Target | Location | Geographic Location | Established Use | Cancellation Requested | Type of Missile | Area Policed | Area Decontam'd | Final Disposit |
|----------------|--|----------------------|----------------------|------------------------|-----------------------|----------------|-----------------------|----------------|
| L-2-T | 41-20 N 69-59 W | Great Point | Calibration | | ALL | | | |
| L | 41-15.3N 70-10.2W | Hancock Pond | Strafing | 4/26/46 | AREAS HAVE BEEN | | | |
| LR-1T LR2-T | 41-14 N 70-02 W 41-14.4N | Tom Nevers Area | Rocket Projectile | 12/17/45 | | | | |
| | 70-01.5W 41-13.7N 70-06.5W 41-18.7N 70-16.5W | Surfside Mixes | Calibration | | | DECONTAMINATED | | |
| | | Tuckermuch Island | Rocket Projectile | | | | AND DISESTABLISHED | |
| LR-3-T | 41-15.6N 70-11.1W | Sheep Pond | Rocket Projectile | 12/17/45 | | | | |
| | 41-23.3N 70-13W | Nantucket Sound | Radar | 12/17/45 | | | | |
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Appendix G - Textual References
Page G - 78

Cape Poge Little Neck Bomb Target Site
Chappaquiddick Island, MA
Preliminary Assessment

TARGET AREAS
 NAVAL AIR BASES, FIRST NAVAL DISTRICT

| Target | Location | Geographic Location | Established Use | Cancellation Requested | Type of Missile | Area Policed | Area Decontam'd | Final Disposition |
|--------|----------|---------------------|-------------------------------------|------------------------|-----------------|---------------|----------------------|-------------------|
| IR-1-N | | | Still in use as a live bombing area | | Rocket | No Man's Land | 61-15-58 70-49-58 | |
| IR-2-N | | | Still in use as a live bombing area | | Rocket | No Man's Land | 61-15/2N 70-48.3N | |
| IS-3-N | | | Still in use as live bombing area | | Stratling | No Man's Land | 61-15/5N 70-50 N | |
| I-5-N | | | Still in use as a live bombing area | | Dive | No Man's Land | 61-15-58 70-48 N | |
| IS-4-N | | | Still in use as a live bombing area | | Stratling | No Man's Land | 61-15/1N 70-48.2N | |
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NO MAN'S LAND AREA

REPRODUCED AT THE NATIONAL ARCHIVES

REPRODUCED AT THE NATIONAL ARCHIVES

Cape Poqe Little Neck Bomb Target Site
 Chappaquiddick Island, MA
 Preliminary Assessment

| Target | QUONSET AREA | | TARGET AREAS | | | | | Final Disposit |
|--------|----------------------|--|--|---------------------------------------|--------------------------------|-----------------|-----------------|----------------|
| | Location | Geographic Location | NAVAL AIR BASES, FIRST Established Use | NAVAL DISTRICT Cancellation Requested | Type of Missile | Area Policed | Area Decontam'd | |
| L-1-Q | 41-18.4N 71-53.1W | Napatree Point Watch Hill, R.I. | Dive | 12/17/45 | 100# Waterfill Miniature | 3/1/46 | Is Necessary | Disestablished |
| L-2-Q | 41-19.8N 71-52.1W | Barn Island Stonington, Conn. | Dive | 12/17/45 | 100# Waterfill Miniature | 3/1/46 | Is Necessary | Disestablished |
| W-3-Q | 41-26.7N 71-35 W | Worden Pond S. Kingstown, R.I. | Dive | In Use | 100# Waterfill Miniature | Not Required | Not Required | |
| W-4-Q | 41-26.5N 71-34.5W | Worden Pond S. Kingstown, R.I. | Dive | In Use | Miniature | Not Required | Not Required | |
| W-5-Q | 41-41 N 71-19.5W | Ohio Ledge Narr. Bay, R.I. | Dive | In Use | Miniature | Not Required | Not Required | |
| L-6-Q | 41-38.6N 71-20.1W | Gull Point Prudence Island, R.I. | Dive | In Use | Miniature | Is Necessary | Is Necessary | |
| W-7-Q | 41-46.5N 70-51.5W | Shipatuit Pond Rochester, Mass. | Dive | In Use | 100# Waterfill Miniature | Not Required | Not Required | |
| | 41-28.5N 71-14.7W | Sachusset Point | Moving Target Range | 1/29/46 | | Not Required | Not Required | Disestablished |
| | 41-35.4N 71-13/3W | Sakonnet River | Tow Target | In Use | Live Ammunition | Not Required | Not Required | |
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SQUANTON AREA

TARGET AREAS

NAVAL AIR BASES, FIRST NAVAL DISTRICT

| Target | Location | Geographic Location | Established Use | Cancellation Requested | Type of Missile | Area Policed | Area Decontam'd | Final Disposit |
|--------|-------------------------------|---------------------------------|-------------------------|------------------------|--------------------------------|-----------------|-----------------|----------------|
| ABLE | 43-00.2N 70-36.2W | Duck Island (Isle of Shoals) | Dive and Strafe | In Use | 100# Waterfill Miniature | Is Necessary | Is Necessary | |
| BAKER | 42-16.3N 70-45.4W | Minot's Light | Dive | In Use | 100# Waterfill | Not Required | Not Required | |
| | 7 mi. NE Cape Ann Mass. | Cape Ann Gunnery Range | Aerial Gunnery Range | In Use | Air to Air Gunnery | Not Required | Not Required | |
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APPENDIX G-5

U.S. Navy, Navy Department, Washington, DC

**Memorandum, Subj: Lease NOy(R) -36842 with
Alice Rankin Lee, et al. covering land at Little
Neck, Cape Poge, Chappaquiddick Island,
Martha's Vineyard to be used for a Bomb Target
Site, 28 February 1945.**

**RG 72, Entry 62B 1943-45, Box 2839.
NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

ADDRESS REPLY TO
THE BUREAU OF YARDS AND DOCKS

AND REFER TO

NAVY DEPARTMENT

WASHINGTON 25, D. C.



L22-7-ED-3
NDL/M1-13
F-5-5/HET/ebw

50610137

February 28, 1945

To: Officer-in-Charge, Regional Real Estate
Office, 305 Washington St., Brooklyn, N.Y.

Subj: Lease NOy(R)-36842 with Alice Rankin Lee,
et al., covering land at Little Neck, Cape
Poge, Chappaquiddick Island, Martha's
Vineyard, Edgartown, Mass., to be used for
a Bomb Target Site; rental, \$100.00 per
annum.

Ref: (a) CinC ltr, RHG:hm NJ/52h, to BuDocks
dated February 20, 1945.

1. Enclosure (1) is forwarded for delivery to Lessor and
Enclosure (2) is furnished for the files of the Officer-in-
Charge.

By direction of Chief, BuDocks:

JOHN J. COURTNEY

Encl. HW

- (1) Triplicate original of subject lease.
- (2) Copy of Enclosure (1).

CC - GAO (Audit) (Form 1036)
BuSandA
BuAero
ComOne
SO, NAS, Quonset Point, R.I.
DO " "

N1-9 / NA 43
N12 / NA 43
NA 43
MA

REPRODUCED AT THE NATIONAL ARCHIVES

Appropriation Navy, 1946.

U. S. Standard Form No. 2 (L. 3)
Approved by the Secretary of the Treasury
May 6, 1935

Subhead 5

All public bills for payment
under this contract should
include a reference to
No. NOV(R)-56942

LEASE

~~XXXXXXXXXX~~

BETWEEN

Alice Rankin Lee, Helen G. Lee and Charles Edward Lee

AND

THE UNITED STATES OF AMERICA

1. THIS LEASE, made and entered into this **1st** day of **July**,
in the year one thousand nine hundred and **forty-four** by and between
Alice Rankin Lee, Helen Charlotte Lee, 7 Parry Street, Morristown,
N.J., and Charles Edward Lee, 47 Lenox Ave., East Orange, N.J.
whose address is
~~XXXXXXXXXX~~

for ~~themselves~~ **their** heirs, executors, administrators, successors, and assigns, hereinafter called
the Lessor, and ~~the~~ **THE UNITED STATES OF AMERICA**, hereinafter called the Government:

WITNESSETH: The parties hereto for the considerations hereinafter mentioned covenant and
agree as follows:

2. The Lessor hereby leases to the Government the following described premises, viz:

**All that certain parcel of land lying and being at Little
Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard,
Town of Edgartown, County of Dukes County, Commonwealth
of Massachusetts which is more particularly described in
Schedule "A" annexed hereto.**

to be used exclusively for the following purposes (see instruction No. 3):

Bomb target site.

3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning

1 July 1944
and ending with **30 June 1946**

10-1980

REPRODUCED AT THE NATIONAL ARCHIVES

4. The Government shall not assign this lease in any event, and shall not sublet the demised premises except to a desirable tenant, and for a similar purpose, and will not permit the use of said premises by anyone other than the Government, such sublessee, and the agents and servants of the Government, or of such sublessee.

5. This lease may, at the option of the Government, be renewed from year to year at a rental of

~~One hundred dollars (\$100.00) per annum~~
and otherwise upon the terms and conditions herein specified, provided notice be given in writing to the Lessor at least ~~thirty (30)~~ **thirty (30)** days before this lease or any renewal thereof would otherwise expire: Provided that ~~any~~ **any** renewal thereof shall extend the period of occupancy of the premises beyond the ~~term of this lease~~ **six months** ^{day of} ~~the term of this lease~~ **after the termination of the present** ~~term of this lease~~ **states of war**

6. The Lessor shall furnish to the Government, during the occupancy of said premises, under the terms of this lease, as part of the rental consideration, the following:

~~nothing~~ **NOTHING**

7. The Government shall pay the Lessor for the premises rent at the following rate:

One hundred (\$100.00) per annum

Payment shall be made at the end of each

8. The Government shall have the right, during the existence of this lease, to make alterations, attach fixtures, and erect additions, structures, or signs, in or upon the premises hereby leased (provided such alterations, additions, structures, or signs shall not be detrimental to or inconsistent with the rights granted to other tenants on the property or in the building in which said premises are located) and all such alterations, additions, structures, or signs shall be and remain the property of the Government and may be removed therefrom by the Government prior to the termination of this lease, and the Government, if required by the Lessor, shall, before the expiration of this lease or renewal thereof, restore the premises to the same condition as that existing at the time of entering upon the same under this lease, reasonable and ordinary wear and tear and damages by the elements or by circumstances over which the Government has no control, excepted: Provided, however, that if the Lessor requires such restoration, the Lessor shall give written notice thereof to the Government **Fifteen (15)** days before the termination of the lease.

10-1860

REPRODUCED AT THE NATIONAL ARCHIVES

Form No. 2
(Revised May 6, 1935)
(Sheet 2)

[LEASE]

XXXXXX
9. The Lessor shall, unless herein specified to the contrary, maintain the said premises in good repair and tenantable condition during the continuance of this lease, except in case of damage arising from the act or the negligence of the Government's agents or employees. For the purpose of so maintaining the premises, the Lessor reserves the right at reasonable times to enter and inspect the premises and to make any necessary repairs thereto.

XX
10. If the said premises be destroyed by fire or other casualty this lease shall immediately terminate. In case of partial destruction or damage, so as to render the premises untenable, either party may terminate the lease by giving written notice to the other within fifteen days after, and if so terminated no rent shall accrue to the Lessor after such partial destruction or damage.

11. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this lease or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company, if the lease be for the general benefit of such corporation or company.

12. This lease or any renewal thereof may be terminated by the Government upon thirty (30) days written notice to the lessor.

13. Paragraphs 9 and 10 and part of paragraph 8 have been deleted and paragraph twelve has been added prior to the execution of this lease.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

Alice Rankin Lee

Helen Charlotte Lee

Charles Edward Lee.

In presence of:

Sarah L. Tunis

7 Perry Street, Morristown, N.J.

Lessor.

DAISY COMBES, (Address)

7 Perry Street, Morristown, N.J

UNITED STATES OF AMERICA,

John J. Courtney

By direction of Chief of the Bureau of Yards
and Docks, acting under direction of the
Secretary of the Navy.

(Official title)

(If Lessor is a corporation, the following certificate shall be executed by the secretary or assistant secretary.)

I, _____, certify that I am the _____

Secretary of the corporation named as Lessor in the attached lease; that _____

_____, who signed said lease on behalf of the Lessor, was then

_____ of said corporation; that said lease was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

PAYMENT TO BE MADE BY DO, NAS,
Quonset Point, R.I.

10-1260

[CORPORATE
SEAL]

REPRODUCED AT THE NATIONAL ARCHIVES

Part of Share 1

Beginning at a point at the low water mark of the Atlantic Ocean, 2250 feet Southerly from the most Easterly corner of the United States Government property on which the Cape Poge Lighthouse stands, said point of beginning being the Southeasterly corner of land now or formerly of Kathrina G. Baldwin, et al; thence Westerly at right angle to the low water mark, by said Baldwin, et al land, to the high water mark of the Atlantic Ocean; thence continuing Westerly by said Baldwin, et al land, 320 feet, more or less, to the high water mark of Sheep Shear Pond; thence Southwesterly by the high water mark of Sheep Shear Pond, 1050 feet, more or less, to the Northeasterly corner of Share 6; thence S 8° 20' E. by Share 6, 600.0 feet, more or less, to the high water mark of Drunken Cove; thence Southerly by the meanders of the high water mark of Drunken Cove and Cape Poge Bay, 1460 feet, more or less, to the Northwesterly corner of land belonging to Howard S. Hart, Estate; said point being 500 feet Northerly from the Northerly line of land taken by the Town of Edgartown; thence Easterly by said land of Hart Estate, 350 feet, more or less, to the high water mark of the Atlantic Ocean; thence Northerly by the high water mark of the Atlantic Ocean, 2850 feet more or less, to said Baldwin et al land; thence Easterly to the low water mark of the Atlantic Ocean and point of Beginning.

Meaning and intending to include all of the land, above and below high water mark, riparian rights, easements and/or ways appurtenant thereto. Said land being part of the 2nd parcel conveyed to Charlotte C. Lee by deed dated March 3, 1914, and recorded in Dukes County Land Evidence Records in Book 134 Page 484. Said parcel being a part of Share 1, now or formerly belonging to the Estate of Charlotte C. Lee.

Containing 25.8 acres of land more or less.

The above mentioned property is shown as part 1 on Naval Air Station, Quonset Point, Rhode Island Public Works Drawing No. 2314 entitled "Little Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts."

APPENDIX G-6

U.S. Navy, Navy Department, Washington, DC

**Memorandum, Subj: Lease NOy(R) -36801 with
Doris Huxford Chouinard, and Lease NOy(R) –
36802 with the same Lessor, covering land on
“Little Neck” at Martha’s Vineyard, Mass., for
use as a bomb target site, 27 November 1944.**

**RG 72, Entry 62B, Box 2839.
NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

ADDRESS REPLY TO
THE BUREAU OF YARDS AND DOCKS

AND REFER TO

ND1/N1-13
F-5-5/HET/ebw

NAVY DEPARTMENT

WASHINGTON 25, D. C.

November 27, 1944



To: Officer-in-Charge, Regional Real Estate
Office, 305 Washington St., Brooklyn, N.Y.

Subj: Lease NOy(R)-36801 with Doris Huxford ⁴³³⁶⁰¹⁷²
Chouinard, and Lease NOy(R)-36802 with the
same Lessor, covering land on "Little Neck",
at Martha's Vineyard, Mass., for use as a
bomb target site, for a total consideration
of \$400.00 per annum.

Refs: (a) CinC ltrs RHG:hm Mass/52h and RHG:hm
Mass/52i, dated Nov. 15, 1944.

1. Enclosure (1) is forwarded for delivery to Lessor and
Enclosure (2) is furnished for the files of the Officer-in-
Charge.

By direction of Chief, BuDocks:

JOHN J. COURTNEY

Encl. HW
(1) Triplicate original of each lease.
(2) Copies of Enclosure (1)

CC - GAO (Audit) (Forms 1036)
BuSanda
BuAero
ComOne
SO, NAS, Quonset Point, R.I.
DO " "

ma
ma 43
11-9/ma 43

REPRODUCED AT THE NATIONAL ARCHIVES

on Navy, 1945, Subhead 3.
in No. 2
Approved by the Secretary of the
May 6, 1955

All public bills for payment
und this contract should
include a reference to
No. Noy(R)-36801

LEASE

BETWEEN

DORIS HUXFORD CHOQUINARD
AND
THE UNITED STATES OF AMERICA

1. THIS LEASE, made and entered into this **1st** day of **July**,
in the year one thousand nine hundred and **forty-four** by and between

whose address is **DORIS HUXFORD CHOQUINARD**
87 Alhembra Circle
Edgewood, Rhode Island

for ~~herself, her~~ heirs, executors, administrators, successors, and assigns, hereinafter called
the Lessor, and THE UNITED STATES OF AMERICA, hereinafter called the Government:

WITNESSETH: The parties hereto for the considerations hereinafter mentioned covenant and
agree as follows:

2. The Lessor hereby leases to the Government the following described premises, viz:

**All that certain land lying and being on "Little Neck", at
Cape Poge, Chappaquiddick Island, Martha's Vineyard, situate
in the Town of Edgartown, County of Dukes County, Commonwealth
of Massachusetts which is more particularly described in
Schedule "A" annexed hereto.**

to be used exclusively for the following purposes (see instruction No. 3):

Bomb target site

3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning

and ending with **1 July 1944**
30 June 1945

10-1860

REPRODUCED AT THE NATIONAL ARCHIVES

4. The Government shall not assign this lease in any event, and shall not sublet the demised premises except to a desirable tenant, and for a similar purpose, and will not permit the use of said premises by anyone other than the Government, such sublessee, and the agents and servants of the Government, or of such sublessee.

5. This lease may, at the option of the Government, be renewed from year to year at a rental of **One hundred Eight dollars (\$180.00) per annum** and otherwise upon the terms and conditions herein specified, provided notice be given in writing to the Lessor at least **thirty (30)** days before this lease or any renewal thereof would otherwise expire: Provided that no renewal thereof shall extend the period of occupancy of the premises beyond ~~the~~ **six months** ~~half~~ **after the termination of the present states of war.**

6. The Lessor shall furnish to the Government, during the occupancy of said premises, under the terms of this lease, as part of the rental consideration, the following:

NOTHING

7. The Government shall pay the Lessor for the premises rent at the following rate:

ONE HUNDRED EIGHTY DOLLARS (\$180.00) PER ANNUM PAYABLE IN EQUAL MONTHLY INSTALLMENTS OF \$15.00 EACH.

Payment shall be made at the end of each **month.**

8. The Government shall have the right, during the existence of this lease, to make alterations, attach fixtures, and erect additions, structures, or signs, in or upon the premises hereby leased (provided such alterations, additions, structures, or signs shall not be detrimental to or inconsistent with the rights granted to other tenants on the property or in the building in which said premises are located); which fixtures, additions, or structures so placed in or upon or attached to the said premises shall be and remain the property of the Government and may be removed therefrom by the Government prior to the termination of this lease, and the Government, if required by the Lessor, shall, before the expiration of this lease or renewal thereof, restore the premises to the same condition as that existing at the time of entering upon the same under this lease, reasonable and ordinary wear and tear and damages by the elements or by circumstances over which the Government has no control, excepted: Provided, however, that if the Lessor requires such restoration, the Lessor shall give written notice thereof to the Government **fifteen (15)** days before the termination of the lease.

10-1880

REPRODUCED AT THE NATIONAL ARCHIVES No. 2

[LEASE]

9. The Lessor shall, unless herein specified to the contrary, maintain the said premises in good repair and tenable condition during the continuance of this lease, except in case of damage arising from the act or the negligence of the Government's agents or employees. For the purpose of so maintaining the premises, the Lessor reserves the right at reasonable times to enter and inspect the premises and to make any necessary repairs thereto.

10. If the said premises be destroyed by fire or other casualty this lease shall immediately terminate. In case of partial destruction or damage, so as to render the premises untenable, either party may terminate the lease by giving written notice to the other within fifteen days thereafter, and if so terminated no rent shall accrue to the Lessor after such partial destruction or damage.

11. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this lease or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company, if the lease be for the general benefit of such corporation or company.

12. This lease or any renewal thereof may be terminated by the Government upon thirty (30) days written notice to the Lessor.

13. Paragraphs 9 and 10 and a part of paragraph 8 has been deleted and paragraph twelve has been added prior to the execution of this lease.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

In presence of:

JOHN J. PENZ

DORIS HUXFORD CHOUINARD, /s/

Lessor.

(Address)

UNITED STATES OF AMERICA,

Comdr. Andrew J. Murphy, Jr., USNB

By Room 8823

By Direction of the Chief of the Bureau
of Yards and Docks, acting under the
direction of the Secretary of the Navy.
(Official title)

(If Lessor is a corporation, the following certificate shall be executed by the secretary or assistant secretary.)

I, _____, certify that I am the _____

Secretary of the corporation named as Lessor in the attached lease; that _____

_____, who signed said lease on behalf of the Lessor, was then

_____ of said corporation; that said lease was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

PAYMENT TO BE MADE BY D.O.,
IAS, Quonset Point, R.I.

10-1800

[CORPORATE SEAL]

REPRODUCED AT THE NATIONAL ARCHIVES

SCHEDULE "A"

Beginning at the Westernmost corner of Share 7, as indicated on Naval Air Station, Quonset Point, Rhode Island, Public Works Department Drawing No. 2314, at the high water mark of Cape Poge Bay; thence by the various meanders of Cape Poge Bay and Drunken Cove, in a general Southwesterly, Southeasterly and Northeasterly direction, approximately 4540 feet to the division line between Shares 6 and 1 at the high water mark of Drunken Cove; thence N 8° 20' W, by said division line 600.0 feet, more or less, to the high water mark of Sheep Shear Pond; thence in a Westerly direction by the high water mark of Sheep Shear Pond, 650 feet, more or less, to the Easternmost corner of Share 7 before mentioned; thence S 38° 50' W, by said Share 7, 755 feet, more or less, to the Southernmost corner of Share 7; thence N 51° 10' W, by said Share 7, 656.10 feet more or less, to the point of beginning.

Meaning and intending to include any and all land appurtenant thereto lying below high water mark as well as all riparian rights, easement and/ or ways.

Containing 42.59 acres of land, more or less.

The above described parcel of land is more fully shown as Share 6 and Share 8 on the Naval Air Station, Quonset Point, Rhode Island, Public Works Department Drawing No. 2314 entitled "Little Neck - Cape Poge, Chappaquiddick Island, Martha's Vineyard, Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts.

REPRODUCED AT THE NATIONAL ARCHIVES

Aviation Navy, 1945, Subhead 3.

Form No. 2
Secretary of the Army
May 6, 1945

All public bills for payment under this contract should include a reference to No. NOY(R)-36802

LEASE

BETWEEN

DORIS HUXFORD CHOQUINARD

AND

THE UNITED STATES OF AMERICA

1. THIS LEASE, made and entered into this **1st** day of **July**,
in the year one thousand nine hundred and **forty-four** by and between
DORIS HUXFORD CHOQUINARD
87 Alhambra Circle
Edgewood, Rhode Island
whose address is

for **herself, her** heirs, executors, administrators, successors, and assigns, hereinafter called the Lessor, and THE UNITED STATES OF AMERICA, hereinafter called the Government:

WITNESSETH: The parties hereto for the considerations hereinafter mentioned covenant and agree as follows:

2. The Lessor hereby leases to the Government the following described premises, viz:

All that certain land lying and being at "Cape Poge Beach", Chappaquiddick Island, Martha's Vineyard, situate in the Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts which is more particularly described in Schedule "A" annexed hereto.

to be used exclusively for the following purposes (see instruction No. 3):

BOMB TARGET SITE

3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning **1 July 1944**
and ending with **30 June 1945**

REPRODUCED AT THE NATIONAL ARCHIVES

4. The Government shall not assign this lease in any event, and shall not sublet the demised premises except to a desirable tenant, and for a similar purpose, and will not permit the use of said premises by anyone other than the Government, such sublessee, and the agents and servants of the Government, or of such sublessee.

5. This lease may, at the option of the Government, be renewed from year to year at a rental of **Two hundred twenty dollars (\$220.00) per annum** and otherwise upon the terms and conditions herein specified, provided notice be given in writing to the Lessor at least **thirty (30)** days before this lease or any renewal thereof would otherwise expire: Provided that no renewal thereof shall extend the period of occupancy of the premises beyond ~~the~~ **six months** ~~day~~ **after the termination of the existing states of war.**

6. The Lessor shall furnish to the Government, during the occupancy of said premises, under the terms of this lease, as part of the rental consideration, the following:

NOTHING

7. The Government shall pay the Lessor for the premises rent at the following rate:

Two hundred and twenty dollars (\$220.00) per annum payable in eleven equal monthal installments of \$18.35 and one installment of \$18.37.

Payment shall be made at the end of each **month.**

8. The Government shall have the right, during the existence of this lease, to make alterations, attach fixtures, and erect additions, structures, or signs, in or upon the premises hereby leased (provided such alterations, additions, structures, or signs shall not be detrimental to or inconsistent with the rights granted to other tenants of the property or in the building in which said premises are located); which fixtures, additions, or structures so placed in or upon or attached to the said premises shall be and remain the property of the Government and may be removed therefrom by the Government prior to the termination of this lease, and the Government, if required by the Lessor, shall, before the expiration of this lease or renewal thereof, restore the premises to the same condition as that existing at the time of entering upon the same under this lease, reasonable and ordinary wear and tear and damages by the elements or by circumstances over which the Government has no control, excepted: Provided, however, that if the Lessor requires such restoration, the Lessor shall give written notice thereof to the Government **fifteen (15)** days before the termination of the lease.

10-1860

REPRODUCED AT THE NATIONAL ARCHIVES

Form No. 2
1935
(Sheet 2)

[LEASE]

9. The Lessor shall, unless herein specified to the contrary, maintain the said premises in good repair and tenantable condition during the continuance of this lease, except in case of damage arising from the act or the negligence of the Government's agents or employees. For the purpose of so maintaining the premises, the Lessor reserves the right at reasonable times to enter and inspect the premises and to make any necessary repairs thereto.

10. If the said premises be destroyed by fire or other casualty this lease shall immediately terminate. In case of partial destruction or damage, so as to render the premises untenable, either party may terminate the lease by giving written notice to the other within fifteen days thereafter, and if so terminated no rent shall accrue to the Lessor after such partial destruction or damage.

11. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this lease or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company, if the lease be for the general benefit of such corporation or company.

12. This lease or any renewal thereof may be terminated by the Government upon thirty (30) days written notice to the Lessor.

13. Paragraphs 9 and 10 and a part of paragraph 8 has been deleted and paragraph twelve has been added prior to the execution of this lease.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

In presence of:

JOHN J. PENZ

DORIS HUXFORD CHOUINARD, /s/

Lessor.

(Address)

UNITED STATES OF AMERICA,

Comdr. Andrew J. Murphy, Jr., USNE

By Room 8323

By Direction of the Chief of the Bureau
of Yards and Docks, acting under the
direction of the Secretary of the Navy.
(Official title)

(If Lessor is a corporation, the following certificate shall be executed by the secretary or assistant secretary.)

I, _____, certify that I am the _____

Secretary of the corporation named as Lessor in the attached lease; that _____

_____, who signed said lease on behalf of the Lessor, was then

_____ of said corporation; that said lease was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

PAYMENT TO BE MADE BY D.O., NAS,
QUONSET POINT, R. I.

10-1860

[CORPORATE SEAL]

REPRODUCED AT THE NATIONAL ARCHIVES

SCHEDULE "A"

Beginning at a point in the high water mark of the Atlantic Ocean at the Northeast corner of land belonging to Edmund F. Leland, Jr., et als, and known as the "Middle Share of the Cape Poge Beach and Meadows"; thence Northerly by the High water mark of the Atlantic Ocean, 4400 feet, more or less; thence due West, through land now or formerly of Joseph Huxford, et al, 1000 feet, more or less, to the high water mark of Cape Poge Bay; thence in a general Southerly direction, by the high water mark of Cape Poge Bay and the Canal or Lagoon, bu the dyke, and by the high water mark of Poucha Pond, 5160 feet, more or less, to the Northwesterly corner of the "Middle Share", before mentioned; thence Easterly by said "Middle Share", 640 feet, more or less, to the beginning. The above described parcel of land is claimed wholly or in part by Mrs. Doris Huxford Chouinard, and is the Southern part of the "North Share of the Cape Poge Beach and Meadows", formerly belonging to Joseph Huxford, one undivided half part, and Francis Smith, one undivided half part.

Meaning and intending to include any and all land appurtenant thereto lying below high water mark, together with all riparian rights, easements and/or ways.

Containing 58.5 acres of land, more or less.

The foregoing parcel of land is more fully shown as Parcel "D" on Naval Air Station Quonset Point, R.I., Public Works Drawing Number 2313 entitled "Cape Poge Beach, Chappaquiddick Island, Martha's Vineyard, Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts."

Subject to previously acquired rights of the Government to operate a telephone line and have ingress and egress over the above described target site.

APPENDIX G-7

U.S. Navy, Navy Department, Washington, DC

**Memorandum, Subj: Lease NOy(R) -36819 with
Luther M. Sibley, covering land on “Little Neck”,
Martha’s Vineyard, Mass., for use as a bomb
target site, 30 November 1944.**

**RG 72, Entry 62B 1943-1945, Box 2839.
NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

BU DOCKS

AND REFER TO

LEASE
NAVY DEPARTMENT

WASHINGTON 25, D. C.



L22-7-ED
NDL/NL-13
F-5-5/HET/ebw

November 30, 1944

To: Officer-in-Charge, Regional Real Estate
Office, 305 Washington St., Brooklyn, N.Y.

Subj: Lease NOy(R)-36819 with Luther M. Sibley,
covering land on "Little Neck", at Martha's
Vineyard, Mass., for use as a bomb target
site; rental, \$80.00 per annum.

Ref: (a) OinC ltr to BuDocks dated Nov.16,1944;
File REG:hm, Mass/52h.

1. Enclosure (1) is forwarded for delivery to Lessor and
Enclosure (2) is furnished for the files of the Officer-in-
Charge.

By direction of Chief, BuDocks:

JOHN J. COURTNEY

Encl. HW
(1) Triplicate original of subject lease.
(2) Copy of Enclosure (1).

CC - GAO(Audit) (Form 1036)
BuSanda
BuAero
ComOne
SO, NAS, Quonset Point, R.I.
DO "

ma
ma 43
ma 43
11-9/ma 43
43410521

13.5 acres

REPRODUCED AT THE NATIONAL ARCHIVES

WASHINGTON 25 D C
LEASE

Payment should in-
Reference to No.
ROY(R)-36819

BETWEEN
LUTHER M. SIDLEY
AND
THE UNITED STATES OF AMERICA

1. THIS LEASE, made and entered into this **1** day of **July**,
in the year one thousand nine hundred and **forty four** by and between

LUTHER M. SIDLEY
whose address is **Edgartown, Massachusetts**

for ~~himself, his~~ heirs, executors, administrators, successors, and assigns, hereinafter called
the Lessor, and THE UNITED STATES OF AMERICA, hereinafter called the Government:

WITNESSETH: The parties hereto for the considerations hereinafter mentioned covenant and
agree as follows:

2. The Lessor hereby leases to the Government the following described premises, viz:

**All that certain land lying and being on "Little Neck", at
Cape Poge, Chappaquiddick Island, Martha's Vineyard, situate
in the Town of Edgartown, County of Dukes County, Commonwealth
of Massachusetts which is more particularly described in
Schedule "A" annexed hereto.**

to be used exclusively for the following purposes (see instruction No. 3):

Bomb Target site

3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning
1 July 1944
and ending with **30 June 1945**

10-1880

REPRODUCED AT THE NATIONAL ARCHIVES
The Government shall not assign this lease in any way, and will not permit the use of said premises by anyone other than the Government, such sublessee, and the agents and servants of the Government, or of such sublessee.

5. This lease may, at the option of the Government, be renewed from year to year at a rental of **Eighty dollars (\$80.00) per annum** and otherwise upon the terms and conditions herein specified, provided notice be given in writing to the Lessor at least **thirty (30)** days before this lease or any renewal thereof would otherwise expire: Provided that no renewal thereof shall extend the period of occupancy of the premises beyond the ~~six months~~ **/// after the termination of the present states of war.**

6. The Lessor shall furnish to the Government, during the occupancy of said premises, under the terms of this lease, as part of the rental consideration, the following:

NOTHING

7. The Government shall pay the Lessor for the premises rent at the following rate:

Eighty dollars (\$80.00) per annum payable annually

Payment shall be made at the end of each **year.**

8. The Government shall have the right, during the existence of this lease, to make alterations, attach fixtures, and erect additions, structures, or signs, in or upon the premises hereby leased (provided such alterations, additions, structures, or signs shall not be detrimental to or inconsistent with the rights granted to other tenants of the property on which said premises are located), which fixtures, additions, or structures so placed in or upon or attached to the said premises shall be and remain the property of the Government and may be removed therefrom by the Government prior to the termination of this lease, and the Government, if required by the Lessor, shall, before the expiration of this lease or renewal thereof, restore the premises to the same condition as that existing at the time of entering upon the same under this lease, reasonable and ordinary wear and tear and damages by the elements or by circumstances over which the Government has no control, excepted: Provided, however, that if the Lessor requires such restoration, the Lessor shall give written notice thereof to the Government **15 (fifteen)** days before the termination of the lease.

10-1800

REPRODUCED AT THE NATIONAL ARCHIVES

9. The Lessor shall, unless herein specified to the contrary, maintain the premises in the same condition during the continuance of this lease, except in case of damage arising from the act of the negligence of the Government's agents or employees. For the purpose of so maintaining the premises, the Lessor reserves the right at reasonable times to enter and inspect the premises and to make any necessary repairs thereon.

10. If the said premises be destroyed by fire or other casualty this lease shall immediately terminate. In case of partial destruction or damage, so as to render the premises untenable, either party may terminate the lease by giving written notice to the other within fifteen days thereafter, and if so terminated the rental shall accrue to the Lessor after such partial destruction or damage.

11. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this lease or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company, if the lease be for the general benefit of such corporation or company.

12. This lease or any renewal thereof may be terminated by the Government upon thirty (30) days written notice to the lessor.

13. Paragraphs 9 and 10 and a part of paragraph 8 has been deleted and paragraph twelve has been added prior to the execution of this lease.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

In presence of:

P. O. Box 7, Luther M. Sibley
Lessor.

Edgartown, Mass.
(Address)

UNITED STATES OF AMERICA,

By John J. Courtney
By direction of Chief of Bureau of Yards
and Docks, acting under direction of
Secretary of the Navy.

(If Lessor is a corporation, the following certificate shall be executed by the secretary or assistant secretary.)

I, _____, certify that I am the _____
Secretary of the corporation named as Lessor in the attached lease; that _____

_____, who signed said lease on behalf of the Lessor, was then _____
of said corporation; that said lease was duly signed for and
in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Payment to be made by
D.C. # 000-NAS, Quonset, R. I.

[CORPORATE SEAL]

REPRODUCED AT THE NATIONAL ARCHIVES

SCHEDULE "A"

Beginning at the Northernmost corner of Share 8, as indicated on Naval Airstation, Quonset Point, Rhode Island, Public Works Department Drawing No. 2314, at the high water mark of Cape Poge Bay; thence Northeasterly and Southeasterly by the high water mark of Cape Poge Bay and Sheep Shear Pond, 1540 feet, more or less, to the division line of Share 6; thence S 38° 50' W, by share 6, 755 feet, more or less, to the division line of Share 8; thence N 51° 10' W, by Share 8, 656.10 feet, more or less, to the point of beginning,

The foregoing described parcel of land is shown as parcel number seven on Naval Air Station, Quonset Point, Rhode Island, Public Works drawing No. 2314, entitled "Little Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard, Town of Edgartown, County of Dukes County Commonwealth of Massachusetts."

APPENDIX G-8

**U.S. Navy. U.S. Naval Air Station,
Quonset Point, R.I.**

**Memorandum, Subj: Practice Bombing Target
Sites – Request for leasehold interests, 18 August
1944.**

**RG72, Entry 62B, Box 3071.
NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

F41-10/N1-13/NA43
(19462)(80-Ec)mmw

18 Aug 1944

U.S. Naval Air Station
Quonset Point, R.I.

AIR MAIL

To: Chief of the Bureau of Aeronautics.

Subj: Practice Bombing Target Sites - Request for leasehold interests.

Ref: (a) CO, NAS, Quonset Pt. ltr to BuAer, dated 26 May 1944, file
F41-10/N1-13/NA43(17267)(80-C)cwl, same subj.
(b) BuAer Dispatch 032143, August 1944, to CO, NAS, Quonset Pt.

1. Enclosures (1) through (6) comply with request of reference (b) on subject sites of reference (a).
2. The estimated land and rental values are an approximation based on assessed valuations and by comparison with earlier appraisals.
3. It is considered by this Command that if it is necessary to determine true valuations and rentals, a fully qualified appraiser should be retained. It is recommended by this Command that an opinion on this matter and final clearance of these valuations be obtained from RONY.
4. By copy of this letter, ComOne's attention is invited to the amount of taxes reported for Barn Island and Sandy Neck target sites. These amounts have been corrected by the enclosures.

/s/ BEN H. WYATT
CO, NAS, Quonset Point

Encls(HW)

- (1) Descriptive Data - Barn Island, Conn.
- (2) Descriptive Data - Napatree Point, Watch Hill, R.I.
- (3) Descriptive Data - Sandy Neck, Mass.
- (4) Descriptive Data - Great Neck, Mashpee, Mass.
- (5) Descriptive Data - Little Neck, Martha's Vineyard
- (6) Descriptive Data - Cape Poge Beach, Martha's Vineyard

cc: BuDocks
ComOne
RONY

COPY

REPRODUCED AT THE NATIONAL ARCHIVES

STATION NAS, Quonset Point, R.I. Property to be used for Practice
Bombing Target at Barn Island, Stonington, Connecticut.

1. Total acres of land 47.6.
2. The estimated fair market value of the property is \$3670.00
3. The basis upon which this fair market value was determined is by approximation:

| | |
|-------------------------------|---------------|
| 47.6 acres @ \$75.00 per acre | \$3570.00 |
| Buildings | <u>100.00</u> |
| Total | \$3670.00 |

4. The estimated annual fair rental value of the property is \$293.60.
5. The basis upon which this fair rental value was determined is: 8% of estimated value.
6. The assessed valuation of the land without improvements is \$ 238.00.
7. The improvements on the land are assessed at \$ 50.00
Total \$ 288.00
8. The taxes levied on this property during the past year amounted to \$6.05.
9. The number of buildings on the land is 2.
These buildings consist of: Barn (Poor cond.-90% Depreciated) \$50) By
10. House - No Value)Assessment
10. Nature of any improvements on property other than above mentioned buildings:
None
11. Number of persons owning the land 2*.
12. Number of people who will be dispossessed if the Navy uses the land None.
13. The property is now being used for: (Farming etc.) Not in use, except for
hunting in season.

* Mrs. Ida M. (Burdock) Barber, RFD #1, Hope Valley, R.I.

Franklin T. Saunders, No. Stonington, Connecticut.

Encl.(1)

REPRODUCED AT THE NATIONAL ARCHIVES

STATION NAS, Quonset Point, R.I. Property to be used for Practice
Bombing Target, at Napatree Point, Watch Hill, R.I.

1. Total acres of land 48.89.
2. The estimated fair market value of the property is \$10,000.
3. The basis upon which this fair market value was determined is by approximation:
48.89 acres @ \$200 per acre.
4. The estimated annual fair rental value of the property is \$800.00.
5. The basis upon which this fair market value was determined is: 8% of estimated value
6. The assessed valuation of the land without improvements is \$10,000
7. The improvements on the land are assessed at None
Total \$10,000
8. The taxes levied on this property during the year, 1943, amounted to \$243.00
9. The number of buildings on the land is None
These buildings consist of:
10. Nature of any improvements on property other than above mentioned buildings
None
11. Number of persons owning the land 1*
12. Number of people who will be dispossessed if the Navy uses the land None.
13. The property is now being used for: (Farming, etc.) Not in use, except for
bathing and hunting during appropriate seasons.

*The Washington Trust Building, Inc., Westerly, R.I.

Encl. (2)

REPRODUCED AT THE NATIONAL ARCHIVES

STATION MAS, Quonset Point, R.I. Property to be used for Practice
Bombing Target at Sandy Neck, Barnstable, Massachusetts.

1. Total acres of land 308.6 more or less.
2. The estimated fair market value of the property is \$7502.00.
3. The basis upon which this fair market value was determined is by approximation:

| | |
|---|----------------|
| 5.6 acres @ \$20 per acre for meadow land(Henders0n) | \$112.00 |
| 108 acres @ \$5 per acre for meadow land (Not assessed "Land of Low Value" - Howe) | 540.00 |
| 195 acres @ \$30 per acre for beach, dunes and cranberry bogs (Makepeace) | 5850.00 |
| Buildings | <u>1000.00</u> |
| Total | \$7502.00 |

4. The estimated annual fair rental value of the property is \$600.16.
5. The basis upon which this fair rental value was determined is: 8% of estimated value.
6. The assessed value of the land with improvements is \$2937.00.
7. The improvements on the land are assessed at \$ 100.00
Total \$3037.00
8. The taxes levied on this property during the past year amounted to \$63.77.
9. The number of buildings on the land is 4.
These buildings consist of: Camps and Sheds.
10. Nature of any improvements on property other than above mentioned buildings:
Small cranberry bog lots understood to be out of production.
11. Number of persons owning the land 3*.
12. Number of people who will be dispossessed if the Navy uses the land None.
13. The property is now being used for: (Farming, etc.) Cranberry culture and
camping sites.

* Makepeace Bros., Inc., Wareham, Massachusetts.
Marcus H. Howe, and/or others, Barnstable, Massachusetts.
William A. Henderson, 95 State Street, Springfield, Massachusetts.

Encl.(3)

REPRODUCED AT THE NATIONAL ARCHIVES

STATION NAS, Quonset Point, R.I. Property to be used for Practice Bombing Target Area at Great Neck, Mashpee, Massachusetts.

1. Total acres of land 115.1 more or less.
2. The estimated fair market value of the property is \$4823.00.
3. The basis upon which this fair market value was determined is by approximation:

| | |
|---|----------------|
| 17.0 acres @ \$100 per acre for shore front beach | \$1700.00 |
| 38.7 acres @ \$50 per acre for upland | 1935.00 |
| 59.4 acres @ \$20 per acre for meadow land | <u>1188.00</u> |
| Total | \$4823.00 |
4. The estimated annual fair rental value of the property is \$385.84.
5. The basis upon which this fair rental value was determined is: 8% of estimated value.
6. The assessed valuation of the land without improvements is \$3500.00.
7. The improvements on the land are assessed at

| | |
|-------|------------------|
| None | |
| Total | <u>\$3500.00</u> |
8. The taxes levied on this property during the past year amounted to \$105.00 more or less.
9. The number of buildings on the land is 1
These buildings consist of: Hunting shack - squatter.
10. Nature of any improvements on property other than above mentioned buildings
None
11. Number of persons owning the land 3*
12. Number of people who will be dispossessed if the Navy uses the land None.
13. The property is now being used for: (Farming, etc.) Seasonal recreation.

*Realty Operators Corporation (Parcels B and B1)
c/o Mr. Fred P. Abbott, Manager, Box 86, Waugoite, Massachusetts.

Nantucket Sound Associates (Parcel B2, in part)
Arthur E. Pope, et als, Trustees,
c/o Mr. Fred P. Abbott, Box 86, Waugoite, Massachusetts.

Frederick D. Jonas, Mashpee, Massachusetts (Part of Parcel B2, 1 acre)

Encl. (4)

REPRODUCED AT THE NATIONAL ARCHIVES

STATION NAS, Quonset Point, R.I., Property to be used for Practice
Bombing Target Area at Little Neck, Chappaquiddick Island, Martha's Vine-
yard, Massachusetts.

1. Total acres of land 82.89, more or less.
2. The estimated fair market value of the property is \$4548.00.
3. The basis upon which this fair market value was determined is by approxi-
mation:

| | |
|--|-----------|
| 26.8 acres @ \$50 per acre for shore frontage - beach | \$1340.00 |
| 13.5 acres @ \$75 per acre for upland - shore front on cove | 1013.00 |
| 22.59 acres @ \$75 per acre for meadow land - short front on cove | 1695.00 |
| 20.00 acres @ \$25 per acre for meadow land - shore front on cove | 500.00 |
| Total | 4548.00 |
4. The estimated annual fair rental value of the property is \$363.84.
5. The basis upon which this fair rental value was determined is: 8% of estimated
value.
6. The assessed valuation of the land without improvements is \$7 to \$45 per acre,
Not fully assessed.
7. The improvements on the land are assessed at None
8. The taxes levied on this property during the past year amounted to \$30.00
more or less.
9. The number of buildings on the land is None.
10. Nature of any improvements on property other than above mentioned buildings-
None
11. Number of persons owning the land 5*
12. Number of people who will be dispossessed if the Navy uses the land-None
13. The property is now being used for: (Farming, etc.) Not in use except for
occasional recreational purposes.

*Luther M. Sibley, Edgartown, Mass.

Doris Ruxford Chouinard, 87 Alhambra Circle, Edgewood, R.I.

Charlotte C. Lee, Est. c/o Alice R. Lee, 7 Perry St., Morristown, N.J.

(3 heirs)

Encl.(5)

REPRODUCED AT THE NATIONAL ARCHIVES

STATION NAS, Quonset Point, R.I. Property to be used for Practice
Bombing Target at Cape Poge Beach, Chappaquiddick Island, Martha's Vineyard,
Massachusetts.

1. Total acres of land 58.5.
2. The estimated fair market value of the property is \$2925.00
3. The basis upon which this fair market value was determined is by approxi-
mation:

| | |
|---|-----------|
| 58.5 acres @ \$50 per acre for shore frontage | \$2925.00 |
|---|-----------|
4. The estimated annual fair rental value of the property is \$234.00
5. The basis upon which this fair rental value was determined is: 8% of estimated
value
6. The assessed valuation of the land without improvements is \$20 per acre, not
fully assessed.
7. The improvements on the land are assessed at None
8. The taxes levied on this property during the past year amounted to \$1.60
more or less.
9. The number of buildings on the land is None
10. Nature of any improvements on property other than above mentioned buildings
None
11. Number of persons owning the land Unknown*
12. Number of people who will be dispossessed if the Navy uses the land-None
13. The property is now being used for: (Farming, etc.) Not in use except for
occasional recreational purposes.

*Doris Huxford Chouinard, 87 Alhambra Circle, Edgewood, R.I.
(only known apparent owner)

Encl. 6

APPENDIX G-9

Massachusetts Historical Commission

**Official Correspondence from the
Commonwealth of Massachusetts, Massachusetts
Historical Commission, entitled Cape Poge Little
Neck Chappaquiddick Island, Edgartown, MA,
by Edward L. Bell, Technical Services Division.
MHC #RC.45470,
dated 2 December 2008.**



December 2, 2008

The Commonwealth of Massachusetts
Harold W. Graef William Francis Galvin, Secretary of the Commonwealth
St. Louis District Massachusetts Historical Commission
US Army Corps of Engineers
1222 Spruce Street, Rm. 3.305
St. Louis, MO 63103-2833

ATTN: CEMVS-EC-P (Graef)

RE: Cape Pogue Little Neck Chappaquiddick Island, Edgartown, MA. MHC #RC.45470.

Dear Mr. Graef:

Thank you for your inquiry to the Massachusetts Historical Commission (MHC) about your research to prepare a preliminary assessment of former military uses of the general area referenced above.

MHC has been previously consulted about several projects involving the identification and evaluation of historic properties in areas of former military land in Massachusetts. In those projects, the Corps New England District's archaeologist, Marcos Paiva, has undertaken preliminary background research at the MHC for information about recorded historical and archaeological sites. You may wish to ask him to conduct the preliminary background research at the MHC on your behalf, which would be a benefit to you as he has regional expertise in the history and archaeology of New England. It is not possible for the MHC to research our files without a USGS locus map with the boundaries of the survey area clearly indicated.

The MHC maintains the Inventory of Historic and Archaeological Assets of the Commonwealth, but the specific information that you seek (such as current property owners, evaluation in accordance with 36 CFR Part 60, etc.) is typically not reflected in the MHC's files. The Inventory does not include all historical and archaeological sites, only those that have been recorded by the MHC. Most of the historical and archaeological sites in MHC's Inventory have not been formally evaluated. Current property owner information is available through the town assessor's office.

Instead, for undertakings that are subject to Section 106 of the National Historic Preservation Act of 1966 as amended, an adequate identification effort is conducted in accordance with 36 CFR Part 800.4, the Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation (48 Fed. Reg. 190 (1983)), and the State Archaeologist's permit regulations for field investigations (950 CMR 70). The identification effort would consider previously recorded historic properties as well as areas likely to contain as-yet-unidentified historic properties, would seek locate and identify those properties, and collect sufficient information to apply the Criteria for Evaluation (36 CFR Part 60). The MHC would be consulted in developing the scope of the

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.sec.state.ma.us/mhc

identification effort, and a State Archaeologist's permit (950 CMR 70) would be required for archaeological field investigation.

Chappaquiddick Island was occupied by Native American families into the modern period, and there may be important cultural properties in your survey area. The Tribal Historic Preservation Office of the Wampanoag Tribe of Gay Head (Aquinnah), and the Massachusetts Commission on Indian Affairs may be able to provide information about culturally significant properties with Native American associations that may be located in your survey area.

Please let me know if you have any immediate questions, or if may be of any further assistance to you at this time.

Sincerely,



Edward L. Bell
Technical Services Division
Massachusetts Historical Commission

APPENDIX G-10

**U.S. Army, Amphibious Training Command,
Camp Edwards, MA**

**Official correspondence, Memorandum for
General Anderson, Subj: Amphibious Exercise,
No. 2, 6 October 1942. Box 10 143.04-2 Sep-Oct
1942 to 143.04D 1944-1946, Folder 143.04-2 Sep-
Oct 1942. USAFHRA, Maxwell AFB,
Montgomery, AL.**

VII and IV CORPS MANEUVERS

| | |
|--|---|
| | 143,04-2 Sep. - Oct. 1942 |
| | REVENUE FOR |
| | Director Aerospace Studies Inst AFIT - Arnold - Dromoli Birmingham - Alabama |

TO BE RETURNED TO
HISTORICAL DIVISION
A-11

DECLASSIFIED
ROR DIB 5200.2, 27 Sep 83

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Maneuver Reports

*CO
P. 111.02*

October 6, 1942

MEMORANDUM FOR GENERAL ANDERSON:

Subject: Amphibious Exercise, No. 2.

The following is a report of Amphibious Exercise No. 2 in the Amphibious Training Command Area (Camp Edwards, Mass. and vicinity) 2-3 October, 1942, witnessed by the undersigned as representative of Plans Division.

1. Purpose.

a. The purpose of this exercise was a shore to shore operation supported by air and naval forces.

b. Briefly, the operation consisted of three phases as follows: (1) Movement of a reinforced infantry division by an Engr. Amphibian Brig. from New Bedford, Mass. to the Island of Martha's Vineyard, which lies approximately 5 miles south of the western extremity of Cape Cod and 15 miles southeast of New Bedford, Mass., during the night 30 Sept. - 1 Oct.

(2) Landings at three points and establishing beach heads as indicated on attached sketch (Incl. #1) beginning just before dawn, 1 Oct.

(3) Coordinated attack by landing forces at dawn 2, Oct.

2. Troops.

a. Friendly. The 36th Inf. Div. reinforced by 2d Engr. Amph. Brig., 636th TD Bn, 503d Tk Bn (M) (GHC), 506th CB Bn (AA), Co "A", 54th Chem Bn (Sep) (Assumed), Co "I", 503d Provt Inf, (Assumed), and 1st Prov. Chem Co (Smoke Generator) supported by I GASC and naval forces (assumed?)

b. Enemy. Represented by a few men to outline enemy positions and by blank ammunition, fireworks and mines to represent enemy fire.

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DOD 5200.9-27 Sep

3. Air Units.

a. Air units supporting the friendly or landing forces were assumed to be as follows:

I GASC
61st Bomb Gp (U)
71st Bomb Gp (L)
91st Bomb Gp (M)
31st Tr Car B.
101st Obsn Sq.
Fighter cover from 1st Fighter Command

b. Actually these units were represented by:

465th Bomb Gp (L) with 5 A-20's
152nd Obsn Sq. with 1 L-1A and 7 L-4A's
Fighter cover from 1st Fighter Command with
4 pursuit planes.

c. Enemy air force not represented.

4. Air-ground Operations.

a. Although no regular Air Support Command was assigned to support this operation, sufficient personnel and equipment were available to provide an AOC with the 36th Div and two ASP's, one with the L41 CT and one with the L42 CT. The AOC was equipped with two 188 radio sets mounted in 3/4 ton command trucks (geeps), one for communication with the airdrome at Hyannis on the mainland, 25 miles away, and one for communication with the ASP's. The latter were each equipped with an 84 radio set mounted in a 1/4 ton truck (bantam). The AOC and ASP's were transported in landing craft and accompanied the wave containing the headquarters of the supported unit. Radio contact was maintained throughout the shore to shore movement.

b. Air operations in support of landing forces were based upon prearranged missions, believed to have been modifications of the Air Support Plan to conform with the number of planes available. The initial attack took place at 0555, 1 Oct, by light bombardment planes (3 planes representing a squadron) against installations just in rear of beaches, Red and Yellow (see Sketch). This attack occurred just as it was getting daylight and followed the initial landings, but preceded the main landing force. Numerous missions were flown throughout the morning in accordance with the modified plan which was not made known to the observers. At 1300 an attack was made on a boat formation by light bombardment aviation to represent an attack by enemy aircraft on landing craft moving from shore to shore. This attack was witnessed by only a limited number of observers.

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g. Observation missions were similarly flown in accordance with a prearranged plan, although two request missions were noted.

5. Discussion.

a. Organization and Equipment.

(1) Although the ASC and ASP's were skeletonized installations, it is believed they were adequate in such an operation, where streamlining is essential, to perform their normal functions. Again in this exercise, as in previous maneuvers, the ASP's appeared superfluous with infantry. One request from an ASP, a "canned" request, is understood to have come through, others may have been received from this source later. However, in an operation of this nature, with limited objectives and reduced distances between combat teams, it is considered that an ASC alone would have been sufficient.

(2) Similarly with airplanes, while it would have been desirable to have had full complements and all units present, actually the purpose of the exercise was fulfilled by representing units with a reduced number of planes.

b. Communications.

(1) Due to the nature of the operations and the necessity for streamlining, no telephones or teletype communications were installed between the ASC and the airdrome. For the same reason, the radio net functioned in a dual capacity, i.e. as the bomber control net and the air-ground net. With prearranged missions for both observation and bombardment aviation, it is believed this would have been adequate to handle the traffic over these two nets. On the whole communications appeared to be very satisfactory.

(2) The short range radio equipment employed was satisfactory for operation under the conditions of this exercise, but would not have been adequate for operations such as those in the desert area. However, since communications squadrons never know where they will be employed and must be equipped to provide communications over maximum distances the 24 and 188 radio sets are not included in the TMA, of these units.

c. Designation of Targets.

The Navy grid and target designation system, known as the M-square system, was employed by all Army and Navy

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units participating in the operation. This method of designating targets will probably be employed wherever joint Army-Navy operations occur. It is similar in application to any type of grid and coordinate system and is easy to learn.

d. Employment of Observation and Bombardment Aviation.

(1) As previously stated, actual observation and bombardment missions were flown in accordance with modified plans. It is of interest to note the contemplated employment of the air units had all units been present and at full strength. Pertinent paragraphs of FO 2, Hq 36th Inf Div follow, with extracts of The Intelligence Annex (Observation aviation plan) and the Air Support Plan as inclosures #2 and #3 respectively. (For locations see sketch incl. #1, H hour 0600, D day 1 Oct.)

Hq 36th Inf Div
Camp Edwards, Mass
1200, 28 Sept 42

FO 2

XX

"2 g. Air and naval forces will execute a preliminary bombardment at H minus 15 minutes, naval fires available until H plus 60 min (See Naval Gunfire Support Plan, Annex #5). Light and dive bombardment aviation will be in support. (See Annex #9).

XX

"2 g. (1) 503rd front Inf lands NW of the airport on MARSH'S VINEYARD at H hour, attacks to the SE, captures and holds airport, and assist 36th Ranger Bn in securing line x---x.

XX

"g 101st Obsn Sq
(1) See Inc Annex #1.

XX

(2) It will be noted from the Observation and Air Support Plans that prearranged missions were ordered to cover all foreseen requirements. This is the most efficient and most economical manner of employing air units and should reduce the number of direct requests to

~~- 4 -~~

the mission. Prearranged missions for both observation and bombardment aviation, published in Annexes to the PO, were the rule in the 1 Armed Corps during the 1941 maneuvers and proved most satisfactory. The few prearranged missions noted in the 1942 maneuvers, so far, may possibly be due to the emphasis placed on the request mission in PW XI-35. This fact is realized by the Air Support Directorate and will be corrected in the revision of PW XI-35.

(3) The following analysis of the contemplated employment of the bombardment aviation (See Inal #3) and the availability of units should be of interest.

0545 71st Bomb Op (M) 4 sep Bq missions - then reverts
0545 71st Bomb Op (L) 2 sep Bq missions
0600 - 0800 61st Bomb Op (D) 1 Sq - Air Alert each 1/2 hr.
0700 - 0730 71st Bomb Op (L) 1 Sq - Air Alert
0730 - 0800 71st Bomb Op (L) rotate Sq - Ground. Alert -
missions on call.
After - 0800 61st Bomb Op (D) rotate Sq - Ground Alert -
missions on call.

6. Conclusions.

A. No deficiencies were noted in this exercise that have not come up in previous maneuvers.

B. Its chief value from the Air Support viewpoint, was in the plans for employing observation and bombardment aviation in an operation of this type.

7. Action Taken:

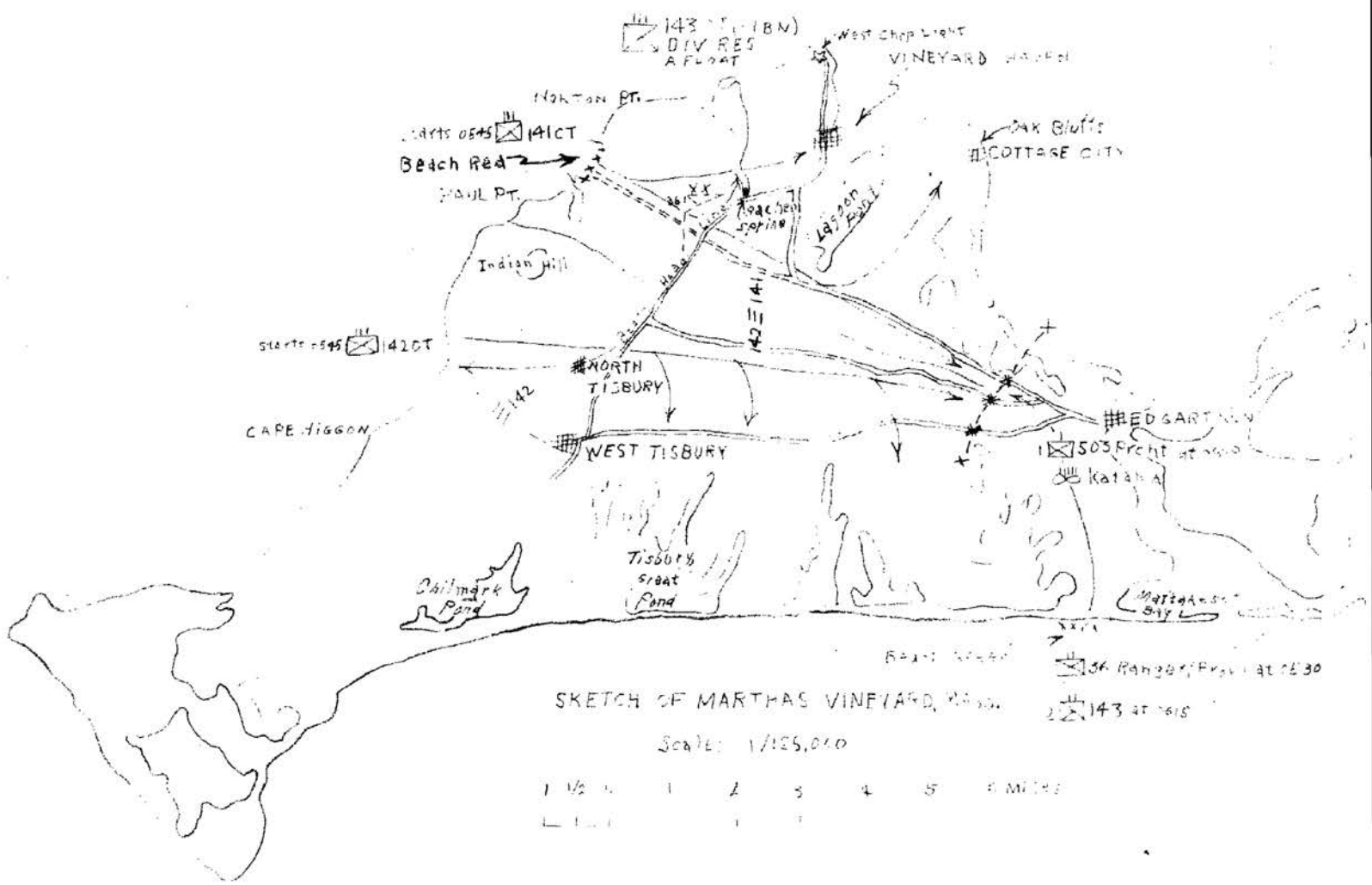
A copy of this report is being furnished the Director, Air Support for his information.

FREDERICK M. PITTS,
Colonel, G. S. C.
Plans Div., A.S.

3 Incls:

- #1 - Sketch of Martins Vineyard
- #2 - Network Annex #1 to PO #2 (Intelligence)
- #3 - Air Support Plan, Annex #9 to PO #2.

5 -



Appendix No. 1 to FO #2
 Maps: Same as FO #2

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~~OR UNCLASSIFIED~~

INTELLIGENCE

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3. ~~DISSEMINATED AND OBSERVATION Missions.~~

X X X X X X X X

4. Joint Observation Squadron.

(1) Reconnaissance Missions;

(2) Observe EDGARTON Harbor and VINEYARD BA EA HARBOR daily

beginning 26 September for:

1. Incoming transports;
2. Airborne activity;
3. Number of anchored transports or other troop carrying vessels;
4. Determination of German troops and supplies;
5. Naval gunboats or other naval gun support units.

Reports to division CP by wire at 1200 and 1800 daily.

(b) Observe the following areas daily beginning 26 Sept shore for artillery positions;

- NORTH TISBURY - WEST TISBURY.
- SACRED SPRING - GR 2 Miles E of INDIAN HILL.
- EDGARTON - OAK BLUFFS.
- KATAWA Airport.
- LAGOON FORD - Airport 2 miles S thereof.

Reports to division CP by marked map at 1000, 1400, 1800 daily.

(c) Observe the following roads daily beginning 26 September for troop and motor movements:

- EDGARTON - VINEYARD HAVEN.
- EDGARTON - NORTH TISBURY.
- EDGARTON - WEST TISBURY.
- VINEYARD HAVEN - NORTH TISBURY.

Report to division CP by wire every hour on the hour from 0800 to 1800 daily.

(d) Observe shore line from:

- WEST OROP LIGHT to CAPE HINGOON and CHILMARK POINT to MATYAKUSSET BAY daily beginning 26 September for installations of wire and construction of other obstacles, beach gun emplacements, and outposts.

Reports to division CP by marked map at 1000, 1400, 1800 daily.

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~~OR UNCLASSIFIED~~

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- (e) Beginning at daylight D-day observe the roads on the island with special attention to troop and motor movements on roads leading W and S from EDGARTOWN and VINEYARD HAVEN. Reports will include roads being used, direction of movements, rate of movement, location and time, strength and composition. Reports by radio to division CP and to Landing Group Commanders as observed by dropped message.
 - (f) Other missions after H-hour D-day on assignment this headquarters.
- (2) Photographic missions.
- (a) Photograph beach defenses daily from 26 September to D-1 day inclusive, scale 1:20,000, from MORTON POINT to CAPE HIGGON and TISBURY GREAT BOND to MATTAKESSET BAY; principal objectives - defenses between MORTON POINT and PAUL POINT, defenses 1/2 miles NE of CAPE HIGGON, defenses between EDGARTOWN GREAT POINT and MATTAKESSET BAY.

50 prints daily to division CP by 1400.
 - (b) Furnish photographs by noon 30 September as follows:
50 low obliques RED BEACH.
50 low obliques YELLOW BEACH.
50 low obliques GREEN BEACH.
100 wide angle photos scale 1:20,000 of areas:
MORTON POINT - CAPE HIGGON - WEST TISBURY
EDGARTOWN - VINEYARD HAVEN.
 - (c) Other missions after H-hour D-day on assignments this hdqtrs.

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AIR SUPPORT FILE, AREA #9 (TO ACCOMPANY FO #2)

1. g. See Annex #1 (Intelligence)
 - b. (1) Friendly ground situations: No change.
 - (2) Friendly air situations: The 1st Air Force has been conducting extensive operations against German forces and installations on all the DANGEROUS ISLANDS since their occupation. The 1st Bomber Command has conducted nightly raids on the various islands and will continue these raids to include attacks on MARTHA'S VINEYARD and NANTUCKET until D day. Beginning with D day the Bomber Command will intensify its counter-air force operations and attacks against port facilities and shipping on the far DANGEROUS ISLANDS. The 1st Fighter Command will furnish fighter cover for the landing operations of the assault division of the VI Corps, during daylight hours, beginning at H hour on D day. The I Air support Command will support the VI Corps.
2. g. Air Support Control No. 1 with the 71st Bomb Group (A); 61st Bomb Group (D); 31st Troop Carrier Squadron; 101st Observation Squadron and the 91st Bomb Group (A), (attached for one mission), will support the assault of the 36th Infantry Division and will report to division headquarters on D minus 5 days.
3. a. Air Support Parties will be provided at the headquarters of 141 GT, 142 GT, 143 GT and with the control will establish an air support control net. Parties will report to assigned headquarters by 12:00 noon on D minus 3 days.
 - b. The 91st Bomb Group (A) will at H minus 15 attack the following targets: BEACH YELLOW; BEACH RED; VINEYARD HAVEN; EDGARTON. One squadron will be employed on each target and at the completion of the mission the 91st Group will revert to control of 1st Bomber Command.
 - c. The 71st Bomb Group (A) will at H minus 15 employ two squadrons to deliver squadron attacks on WASHINGTON AIRPORT and CANTON CITY AIRPORT. Between H plus 60 and H plus 90 it will provide one squadron on air alert over WASHINGTON for missions on call. Between H plus 90 and H plus 120 it will rotate squadrons on ground alert for missions on call.
 - d. The 61st Bomb Group (D) will provide one squadron on air alert over WASHINGTON for each half hour period between H and H plus 120 for missions on call. After H plus 120, it will rotate squadrons on ground alert for missions on call.
 - e. The 31st Troop Carrier Squadron will transport I Co. 403rd Parachute Infantry, so as to permit the company to land one mile northwest of EDGARTON AIRPORT at H hour.

f. The 101st Observation Squadron will support the division by furnishing visual and photographic reconnaissance. For missions see Annex #1 to PG #2 Intelligence.

(1) Between H and H plus 120, requests for support bombers may be expected to be complied with within thirty minutes.

(2) After H plus 120 normal time between request and bomb mission 90 minutes.

(3) Location of all air targets will be designated by means of Navy M square grid system.

4. g. Annex #2, ADM Order.

5. a. Annex #8, MOI.

b. CP's (Located on mainland)

I A.F.C. PROVIDENCE

61st Bomb Group (D) HYANNIS

71st Bomb Group (I) STIE FIELD

91st Bomb Group (M) PROVIDENCE

11st Troop Carrier Squadron FALMOUTH

101st Obs Sq HYANNIS

APPENDIX G-11

U.S. Army, The Amphibious Training Center

**The Amphibious Training Center Study No. 22.
Subj: Studies in the History of Army Ground
Forces, 1 September 1946. Box 16, 172.1-9 1946
to 172.1-29 1946, Folder 172.1-15 1946. Section
VI, pages 49-56. USAFHRA, Maxwell AFB,
Montgomery, AL.**

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HISTORICAL SERVICES

Continental Air Command

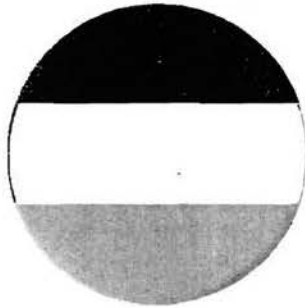
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**THE
AMPHIBIOUS TRAINING
CENTER**

No. 146

Study No. 22

1721-22
1946



P.D.

01:0605

Historical Section . Army Ground Forces

1946

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The Army Ground Forces

**THE AMPHIBIOUS TRAINING CENTER
Study No. 22**

By
Capt. Marshall O. Becker

**Historical Section . Army Ground Forces
1946**

[REDACTED]
HEADQUARTERS ARMY GROUND FORCES

WASHINGTON 25, D. C.

314.7(1 Sept 1946)GNHIS

1 September 1945

SUBJECT: Studies in the History of Army Ground Forces

TO: All Interested Agencies

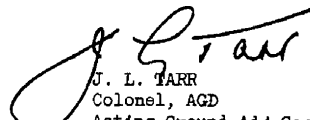
1. The history of the Army Ground Forces as a command was prepared during the course of the war and completed immediately thereafter. The studies prepared in Headquarters Army Ground Forces, were written by professional historians, three of whom served as commissioned officers, and one as a civilian. The histories of the subordinate commands were prepared by historical officers, who except in Second Army, acted as such in addition to other duties.

2. From the first, the history was designed primarily for the Army. Its object is to give an account of what was done from the point of view of the command preparing the history, including a candid, and factual account of difficulties, mistakes recognized as such, the means by which, in the opinion of those concerned, they might have been avoided, the measures used to overcome them, and the effectiveness of such measures. The history is not intended to be laudatory.

3. The history of the Army Ground Forces is composed of monographs on the subjects selected, and of two volumes in which an overall history is presented. A separate volume is devoted to the activities of each of the major subordinate commands.

4. In order that the studies may be made available to interested agencies at the earliest possible date, they are being reproduced and distributed in manuscript form. As such they must be regarded as drafts subject to final editing and revision. Persons finding errors of fact or important omissions are encouraged to communicate with the Commanding General, Army Ground Forces, Attention: Historical Section, in order that corrections may be made prior to publication in printed form by the War Department.

BY COMMAND OF GENERAL DEVERS:


J. L. TARR
Colonel, AGD
Acting Ground Adj General

1 Incl:
Historical Study

00130605

[REDACTED]

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PREFATORY NOTE

In compliance with 1st indorsement, Hq AGF, 210.4/2(AGF) GNAGS (15 Jul 42), 2 December 1942 to WD letter AG 210.31 (26 Jun 42) MR-F-PS-M, 15 July 1942, Subject: "Appointment of Historical Officers," and subsequent instructions, Capt. Marshall O. Becker, Publications and Photo Division, Amphibious Training Center, was designated as Historical Officer and the preparation of a history was begun. With the cooperation of Brig. Gen. Frank A. Keating, who, upon the disbandment of the Amphibious Training Center on 10 June 1943 became Commanding Officer of Force Headquarters Section (Army), Amphibious Training Command, U. S. Atlantic Fleet, Capt. Becker was detailed for temporary duty at Headquarters, Army Ground Forces from 23 December 1943 to 17 January 1944 and completed the history under the supervision of the Historical Section, Army Ground Forces.

9 March 1944

KENT ROBERTS GREENFIELD
Lt. Col., Inf.
Chief, Hist. Sect.

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TABLE OF CONTENTS

| | Page |
|--|------|
| PREFATORY NOTE | 1 |
| I BACKGROUND | 1 |
| II ACTIVATION AND MISSION | 5 |
| III FROM BIRTH TO DEATH | 10 |
| IV ORGANIZATION | 19 |
| V EXECUTION OF TRAINING MISSION | 31 |
| VI TRAINING AT CAMP EDWARDS | 49 |
| VII TRAINING AT CAMP GORDON JOHNSTON | 57 |
| VIII EPILOGUE | 71 |

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CHAPTER VI

TRAINING AT CAMP EDWARDS

The training program to be followed in the training of the 45th Infantry Division at Camp Edwards, Massachusetts, was published on 8 July 1942, and became effective 15 July when the first class started. The mission of the Center was "to train division staff officers, combat team staff officers, and elements of division and attached troops in independent and joint amphibious shore-to-shore and commando operations."¹

Each division trained was broken down into groupments and trained by echelons. Groupment "A" was composed of the division general and special staff; "B" was regimental combat team number one; "C" was combat team number two; "D" was combat team number three; "E" was all other division units not assigned to Groupments "B" to "D" inclusive; and "F" was the provisional commando task force to be organized from elements of each division.

Groupment "A" consisted of all officers assigned to G-2, G-3, and G-4, and the Division Automotive Officer, Engineer Officer, Ordnance Officer, Signal Officer, Surgeon, and Quartermaster. In addition to these a representative group of the Division Artillery Commander was attached. This Groupment in the 45th Division was trained under the direct supervision of the Administrative Section of the Amphibious Division of the Center and the objective assigned was the development of a highly efficient general and special staff trained in all matters pertaining to tactical, administrative, and logistical planning of shore-to-shore operations.

Groupments "B", "C", and "D" each were to consist of one infantry regiment, one field artillery battalion (105 mm how), one combat engineer company, one collecting company from the division medical battalion, and such armored, antiaircraft, signal, and tank destroyer units, etc., as might be attached. These groupments were trained under the direct supervision of the Tactical Section of the Amphibious Division, and the objective assigned was to develop in each division regimental combat teams which would be well coordinated, fast moving, and efficient in all phases of shore-to-shore and commando operations.

Groupment "E" consisted of the Headquarters and Military Police Company of the division; Signal Company; Headquarters Battery, Division Artillery; Medium Artillery Battalion; Engineer Battalion, less Companies A, B, and C; Quartermaster Battalion; Medical Battalion, less collecting companies; Reconnaissance Troop; and any attached units. The Basic Training Section of the Amphibious Division was given the responsibility of supervising the training of the groupment, and the objective assigned was the training of the above units to play their respective parts in shore-to-shore operations in a highly coordinated and efficient manner. This Groupment was broken down into three subgroupments, one each of which went through the training concurrently with Groupments "B", "C", and "D".

Groupment "F", the Provisional Commando Task Force, consisted of a group of selected individuals forming those combat and service elements usually found in a commando organization. Its composition consisted of a Commanding Officer and Staff; one infantry rifle company; a detachment from the intelligence and reconnaissance platoon of Regimental Headquarters Company; one infantry battalion medical section; one infantry antitank platoon; one 81 mm mortar platoon; one engineer platoon; one infantry

1. ATC Tng Memo 3, 8 Jul 42, sub: Tng Program effective 15 Jul 42. Hist Off files.

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battalion communication platoon; one infantry antitank mine platoon; and one infantry battalion ammunition and pioneer platoon. The Chief of the Commando Division was responsible for the training, and the objective assigned was to develop a highly efficient commando force in each infantry division, and to teach the division and subordinate unit staffs the principles, doctrine, and tactics applicable to commando operations.

A ten-day period of training was allotted to each combat team, ten days for the Provisional Commando Task Force, and ten days for the division general and special staff. The first three days of the training period for each combat team were devoted to a school for three selected officers and three noncommissioned officers from each company, battery, or similar organization; and all available regimental and battalion staff officers. In this three-day period the selected personnel were given a concentrated course of amphibious training to prepare them to conduct the training of their units for the remainder of the period. The last seven days consisted of training conducted by this group and directed and supervised by officers of the Amphibious Training Center. The first day of training for the division general and special staff was the same as that for the selected officers and noncoms, consisting mainly of an introduction to amphibious warfare, while the remainder of their training period was devoted to staff functions. The Commando Force trained separately since its subjects were more specialized and distinct in nature.

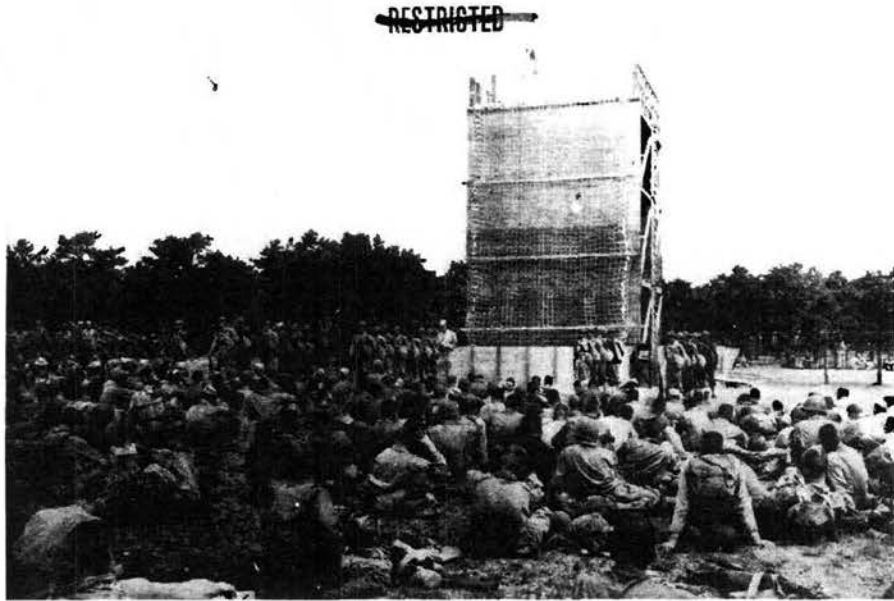
The Center began training of the first regimental combat team and the Provisional Commando Task Force of the 45th Division along the lines outlined above on 15 July 1942. The first period ran from that date until 25 July; the second from 28 July to 6 August; and the third from 10 August to 20 August. The staff course was held between 28 July and 7 August, running concurrently with the training of the second regimental combat team.

The subjects included in the training of the regimental combat teams were basic and were designed primarily to enable the students to handle themselves and their equipment in an amphibious operation and to acquaint them with the landing craft they would use and with the functions and operations of the Engineer Amphibian units which would transport them. Subjects covered in the first three-day school period for selected officers and noncommissioned officers were a general orientation; doctrine and principles of amphibious operations; compositions of boat teams and boat waves; proper method of wearing equipment; scaling of cargo nets; lowering of light organic equipment and weapons from piers into landing craft; methods of embarking into and debarking from landing craft; loading and unloading of trucks, artillery, and other heavy equipment; crossing barbed wire and clearing beaches of obstacles and mines; operation of boats; and practical work in day and night landing exercises. During the three-day period while the officers and noncoms were receiving their instruction, the remaining personnel of the combat team were undergoing rigorous physical training consisting primarily of road marches and swimming.

The officers and noncoms who were trained during those three days then took over their units and trained them in the subjects which they had learned. This training consisted almost entirely of practical work supervised by personnel of the Center and conducted in accordance with schedules published by the Center. Lengthy conferences were avoided because of the shortage of time for practice.

The training of the Commando Force was not periodized but ran continuously for ten days, all personnel being trained together. All instruction was given by personnel of the Commando Division, assisted upon request by the officers and noncoms of the student units in the conduct of the practical work. The Commando course was designed primarily to harden the students physically, perfect basic training so vital to the success of

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"Instruction in Cargo-Net Scaling"



"The Commandos Were Tough."

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raider operations, teach tactics and techniques of hand-to-hand combat and self defense, and teach the tactics of raiding forces. The subjects covered in the first school were conditioning exercises consisting of obstacle courses; bayonet, grenade, and hand-to-hand fighting methods; use of the compass; map reading; military sketching; message writing; aerial photograph reading; mine techniques, demolitions; knots and lashings; crossing barbed wire and beach obstacles; operating and disabling motor vehicles and weapons; preparation of personnel for commando raids; reconnaissance patrol techniques; booby traps; operation of personnel at night; technique of rubber boat operation; technique of embarking and debarking from landing craft; boat formations; interrogation of prisoners; planning for and conduct of raids; and practical work in the form of night raids to secure information and destroy "hostile" installations. The Commando Division was materially assisted in its training by Major Woodcock, a British officer who had been a member of the British No. 1 Commando force and had participated in several raids on the French coast.

The School for the division general and special staff, hurriedly prepared began on 28 July and terminated on 7 August. The course attempted to point out the peculiar staff problems raised in amphibious operations and to indicate a solution of them. Instruction was in the form of conferences, practical work on map exercises, and planning for the division maneuver which ended the training period for the 45th Division. Eighteen hours of conferences were held and one day was allotted for solution of the map exercise. School was restricted to four-hour sessions in the morning in order to give the division staff an opportunity to carry on administrative duties and supervise the training of the combat teams.

Conferences offered by the Center staff in the first school included a general orientation; theory of tactical amphibious shore-to-shore operations; doctrines and principles of amphibious operations; organization and functions of the Engineer Amphibian Brigade; detailed planning for commando raids, including the solution of a map problem; supply problems; operation of the Engineer shore regiment; medical evacuation system in amphibious operations; British combined operations; defenses on the French coast; function of division service elements in shore-to-shore operations; antiaircraft defense in amphibious warfare; role of British armored units; air operations; naval support; combat engineer missions; proposed smoke screening operations; British communication system; and amphibious training of the 1st Infantry Division (training film). In addition to the conferences a map exercise was prepared by the Center and solved by the students. The student solution and the Center solution were then compared and discussed.

Instructors for the staff school were provided from the personnel of the Center, officers of the Engineer Amphibian Command, and British officers on duty with the Center. Major Berald E. Woodcock (No. 1 Commando), Major Phillip R. Drew (Suffolk Regiment), Major Fleming (Royal Armoured Corps), Lt. P. R. G. Worth (Royal Navy), and Major H. T. Thompson (Royal Corps of Signals) were the British officers who lectured in the first school.

The training of the 45th Infantry Division was terminated with a three-day amphibious exercise which had been proposed by the Center and planned and executed by the division. The exercise involved a tactical situation concerned with the assumed occupation by German forces of Martha's Vineyard, and island in Vineyard Sound off the south shores of Cape Cod. The task of the division was to invade the island, drive out the German forces and secure the island with its airfield as a base for further operations against German forces occupying Nantucket Island. All planning for the execution of this mission was done by the division, regimental, and battalion staffs of the 45th Division. Special Staff officers of the Center were made available to the division staff for consultation in the solution of special problems.

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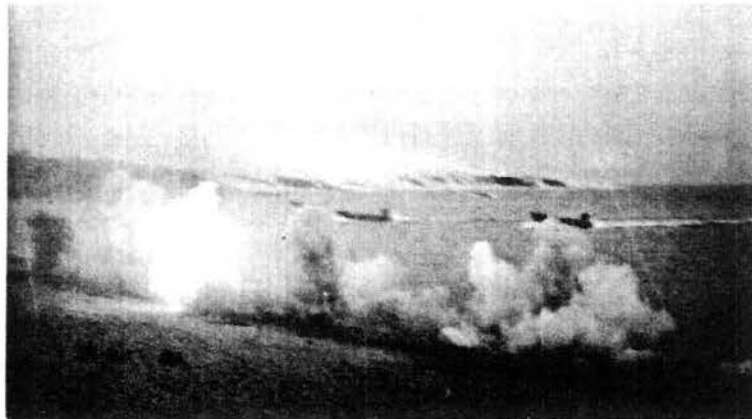
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The problem was as realistic as possible within the limitations imposed by safety requirements, availability of troops and equipment, and lack of sufficient boats. The beaches on Martha's Vineyard were extensively wired and covered with beach obstacles. Demolitions were planted on the beaches and inland to be exploded during the landing to simulate naval gunfire support, artillery fire, and land mines. The island was defended by the 75th Composite Infantry Training Battalion, but the number of troops available in that unit was small, which resulted in the use of flags and umpires to represent the enemy on a part of the island.

One company of parachute infantry from Fort Bragg took part in the exercise in conjunction with the division. Its mission was to jump at H-hour and capture the airfield, which it did in moderately good order.

The Provisional Commando Task Force was employed under direction of the division staff with the mission of landing by boat to assist the parachute infantry in the capture of the airfield. Actually the Commandos arrived first and had the situation fairly well in hand by the time the parachutists landed.



"Every Attempt Was Made Towards Realism"

Considerable realism in the problem was lost owing to scarcity of boats. Those available could carry only one full regimental combat team, the Commando Task Force, and token representations of the remaining two combat teams and the division rear echelon. This necessitated turning the exercise into a combined maneuver and command post exercise. The shortage of boats also seriously curtailed the play of the supply problem, which the personnel of the Center considered to be one of the most important points to be brought out by the maneuver.

Further realism was lost owing to the small maneuver area available on the island. The restrictions of space necessitated the imposition of arbitrary phase lines in order to prevent the troops from progressing too far in too short a time. The resultant arbitrary halting of the advance of the combat elements tended to make them lose interest in the problem.

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Despite the numerous handicaps the exercise was carried out successfully on 18, 19 and 20 August, amid loud explosions, smoke screens, dropping parachutists, and the roar of landing craft motors.

The lessons learned from the execution of the maneuver did not reflect unfavorably upon the Amphibious Training Center. Most of the mistakes made in the conduct of it resulted from ignoring the doctrines of the Center or from improper execution of them. The majority of the unfavorable comments of observers were directed toward irregularities caused by violation of basic training principles on the part of individuals of the Division - such things as using lights and smoking in the open at night, bunching of individuals, poor road discipline, improper camouflage, etc., which of course were not the responsibility of the Center.²

The Engineer boat and shore units came in for their share of unfavorable comment as well. Their failure to land units on the designated beaches in the prescribed formation at the proper time indicated a lack of thorough training on their part.³

The exercise was of great value to all participating units and to the Center as well. As a result of it, the Center resolved to place more emphasis on discipline and basic training of individuals; the necessity of thorough, intensive, and exhaustive planning for amphibious operations on the part of unit staffs; and the necessity for complete coordination and accurate timing among all elements of a combined assault force.

The brief period between the completion of training of the 45th Division and the start of the next school for the 36th Division was spent in improving the instruction offered by the Center, particularly in regard to the staff school. The map exercise was revised and additional conferences were scheduled, raising the total from eighteen hours to twenty-two hours, with one additional day provided for solution of the map exercise.

Conferences added to the staff curriculum included types and characteristics of small landing craft; functions and operations of the Engineer boat regiment; organization of boat teams, boat waves, and the battalion landing group; loading and unloading heavy equipment and vehicles; functions and operations of an Engineer shore company; wearing of equipment, scaling cargo nets, lashing and lowering equipment into boats; embarking and debarking boat teams; signal communication within regiment and battalion in shore-to-shore operations; battalion landing group in an assault on a hostile shore; British infantry battalion in combined operations; British Engineers in combined operations; use of field, antiaircraft, and antitank artillery in combined operations; effect of hydrographic and meteorological conditions on selection of D-day and H-hour; operation of Engineer boat battalion; naval gunfire support in shore-to-shore operations; organization of the air force (with reference to amphibious warfare); air-ground support in shore-to-shore operations; British air-ground support; use of paratroops; artillery and tank destroyer units in shore-to-shore operations; combat engineers in amphibious warfare; signal communications; and administrative planning.⁴ The field was considerably broadened by the addition of these subjects, and the new schedule included more extended consideration of amphibious warfare in its relation to arms, services, and staff sections. Basic subjects previously taught only to the troops (cargo-net scaling, lowering equipment, etc.) were included to resolve some of the difficulties observed in the 45th Division exercise with regard to the functions of individual soldiers. Additional training was given regimental and battalion staffs in

2. Rpts of Obsers, 45th Inf Div Maneuver. Cpy on file at Hq, Tng Cen, ATC, U S Atlantic Fleet, Norfolk, Va.

3. *Ibid.*

4. ATC Tng Memo 4, 3 Sep 42, sub: Tng Dir. Hist Off files.

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night classes in preparation of boat assignment tables and landing schedules for a battalion landing group, and preparation of regimental and battalion field orders for shore-to-shore operations.

In order to give the selected officers and noncommissioned officers a better picture of an amphibious operation and thus increase their interest in the instruction - thereby heightening the value of the training they would give their own troops - certain additions were made to the schedule of instruction for the regimental combat teams. The new subjects included: types and characteristics of small landing craft; organization of the Engineer Amphibian Brigade; functions and operations of Engineer boat and shore regiments; British combined operations; theory of shore-to-shore operations; methods of handling supplies; operations and functions of an Engineer shore company; system of medical evacuation in amphibious operations; and signal communications within the regiment and battalion. This revision was another indication of the trend toward improvement and extension of the training offered by the Center.

The changes in the curriculum of the Commando Division were more in the direction of extension of training than addition of new subjects. More practical work was undertaken, especially in the conduct of night problems involving use of maps and compasses, use of demolitions, techniques of employing and removing antitank and anti-personnel mines, etc. The conditioning courses were augmented by speed marches and instruction in the use of the toggle rope (a short rope with an eye-splice in one end and a wooden handle on the other, extensively used by the British Commandos for wall scaling, improvising bridges, garroting the enemy). A system of hardening (involving log exercises calisthenics with a log about ten feet long and eight inches in diameter) developed by the British was also added.

The training of the 36th Division was conducted in the same manner as that of the 45th except for the extensions and improvements listed. The period allotted to the first regimental combat team ran from 24 August to 13 September, the second from 5 September to 16 September, and the third from 18 September to 4 October. The Division staff school was in session from 5 September to 21 September, with the period from 23 September to 4 October allotted for the preparation and planning for, and the conduct of, the final division exercise. The Commando course ran from 5 September to 16 September.

The final exercise of the 36th Division was more satisfactory than that of the 45th Division. The problem and plan of execution were basically the same for both exercises, but the extensions in the training schedule were reflected in better performance of the maneuver by the 36th Division. More boats were available than previously, and by careful employment of them and shuttling them between assault and reserve battalions, the whole division was able to participate. The supply problem suffered this time, too, but not quite so badly as before.

The lessons learned from the execution of this second maneuver were the same as those learned from the 45th Division exercise - necessity for more accurate planning, better timing and coordination, more discipline on the part of troops, and the need for further training in navigation and boat operation on the part of the Engineer Amphibian units.⁵

All training at Camp Edwards was conducted at Washburn Island and on the beaches surrounding it, except for the staff school which was held on the post at Edwards and the final exercise which was held on Martha's Vineyard. All training aids were concentrated in that area in order to reduce the necessity of excessive travel by the students.

5. Rpts of Obsrs, 36th Inf Div Maneuver. Copy on file at Hq Tng Ctr, ATC, U S Atlantic Fleet, N.O.B., Norfolk 11, Va.

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Training aids for the basic amphibious subjects consisted of cargo-net towers, mock-up boats, outline boats, barbed wire entanglements, and actual landing craft furnished by the Engineers. The Cargo-net towers were structures forty feet high and twenty feet square which represented piers from which troops might load into landing craft when embarking on a shore-to-shore operation. Rope nets were suspended on two sides of these structures and were used to teach the technique of loading from piers into boats. In some cases a good deal of patient instruction was necessary to overcome acrophobia in some individuals. The mock-up and outline boats were dry-land representations of landing craft used to teach methods of embarking, loading, and debarking. The barbed wire entanglements were erected to teach methods of crossing obstacles of a type likely to be encountered on a hostile shore.

The Commando installations were located in a separate camp about eight hundred yards from the main installations on Washburn Island and were separated therefrom by the waters of Waquoit Bay. The Commando camp contained only the barest essentials for physical comfort, which was intended as a part of the hardening training but was also a matter of necessity owing to lack of time to construct housing facilities. Student units bivouacked in shelter tents, messed in the open, and used open-pit latrines.

Training aids available at the Commando camp included an obstacle course, grenade course, bayonet course, demolitions course, mines, booby-traps, a Commando Efficiency Course, and speed march courses. All the facilities, with the exception of prepared mines, booby-traps, and demolitions, were built by the Commando Division with the aid of the 75th Composite Infantry Training Battalion.

The Commando Efficiency Course, which is probably the only one of the aids listed which needs explanation, was a course designed to test the proficiency of the students in the type of warfare being taught them. Students were put through the test, graded, and rated according to their accomplishments. Briefly, the course was a circuitous route through the woods and underbrush on which the soldier being tested was confronted at unexpected turns in the trail with dummies representing the enemy in various conditions of activity and hostility. The aim was to test the reaction of the soldier, on the basis of the training he had received, to unexpected situations similar to those he might meet in combat. His intestinal fortitude was also tested by one of the situations put before him - at one turn in the trail the soldier met a realistic-looking dummy under circumstances that indicated the best method of disposing of this particular enemy was to bayonet him. If the soldier reacted properly and used his bayonet he got blood sprayed over him from a bladder in the dummy's stomach. The blood was real (pig blood secured from a slaughterhouse) and some soldiers were considerably shaken by the sight of it.

The training conducted at Camp Edwards was as thorough and complete as could be expected under the circumstances outlined in Chapter V, and the student divisions seemed to be fairly well satisfied with it. Everyone connected with the Amphibious Training Center freely admitted that there was room for improvement, and better things were expected when the Center moved to Carrabelle.

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APPENDIX G-12

U.S. Army Engineer Amphibian Command

Correspondence from Headquarters, Engineer Amphibian Command dated 7 August 1943.

**RG 77, Entry 1950 Engineer Amphibian Command Camp Edwards, MA 1942-1943, Folder HQ, EAC, General Orders 1943.
NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

HEADQUARTERS
ENGINEER AMPHIBIAN COMMAND
Camp Edwards, Massachusetts

GENERAL ORDER)
NUMBER 51)

7 August 1943

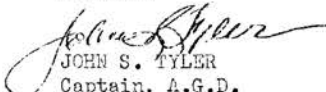
X 3 20 2 FAC

Provisional Tank Platoon, Hq. Company, Engineer Amphibian Command is attached to 4th Engineer Special Brigade for quarters, rations, and operations effective upon return from Martha's Vineyard, Massachusetts on or about 14 August 1943.

By order of Colonel HUTCHINGS:

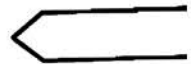
T. L. MULLIGAN
Colonel, Corps of Engineers
Acting Chief of Staff

OFFICIAL


JOHN S. TYLER
Captain, A.G.D.
Act'g Adjutant General

DISTRIBUTION "B"

51



APPENDIX G-13

Lee, Alice R.

Correspondence from Cape Poge property owner, Alice R. Lee, to the Navy Department of Yards and Docks – Real Estate Division – Regional Office, 25 Oct 1944. RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA, Northeast Region, Waltham, MA.

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DECLASSIFIED

Declassification Review Project INN-D-02-92

EO 12356, Sec. _____

DOD Directive 5200.30, Date _____

By JKO NARA, INN, Date 5/29/92

528

File
Oct 28 1944

MISS ALICE R. LEE
7 PERRY STREET
MORRISTOWN, N. J.

Navy Dept. Bureau of
Yards & Docks - Real Estate
Division - Regional Office
305 Washington St., Brooklyn, N. Y.

In reply to your letter of Sept. 26-1944-

Yes, we own the undeveloped property on Cape Poge, Estate of our Mother, Charlotte C. Lee, as described in your letter, but we are not familiar with "Little Neck".

My father, Joseph M. Lee, put up the money for the original purchase of Cape Poge. The title was in the name of Mother's brother, Jonathan P. Condict, who died years ago, his daughter Katherina Baldwin now holds the title for her father's share & for my other uncle, Henry V. Condict, deceased, then for Walter T. Condict, deceased.

Years ago we divided our interests, our share of the land was put in my Mother's name. now known as the Estate of Charlotte C. Lee.

Have we the right to grant you, The U.S. Navy, a lease on the same property we gave Camp Edwards, the U.S. Army, Trespass Rifles more than a year or so ago? Are their horses still using our beaches & drinking water?

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EO 12356, Sec. _____

DOD Directive 5200.30, Date _____

By JKO NARA, INN, Date 5/29/92

What rental would you offer us per your letter? and would you furnish the lease? We have had many proposed sales from prominent men and concerns for our property on Cape Poge. We would like to have the Navy purchase this our property. In some years now, I have corresponded about this & my letters are in the archives in Washington waiting for further developments.

Literature printed in the last century states that the Gulf Stream is nearer Cape Poge than any other shore on the U.S. Coast north of Florida. That is why the deep sea fishing off of Cape Poge, known as the Grogue Coast, where the Gloucester Mass. fishermen find so much profit, because the climate is much warmer and equable than the main land.

The bathing waters with medicinal qualities make it exceptionally fine.

Also it is stated that Cape Poge Light, blink light - I think it was, as of course

Reproduced at NARA-Northeast Reg

DECLASSIFIED

Declassification Review Project INN-D-02-92

EO 12356, Sec. _____

DOD Directive 5200.30, Date _____

By JiKO NARA, INN, Date 5/29/92

Miss Alice R. Lee
7 Perry Street
Morristown, N. J.

You know better than we do, was the
last light seen by boats going to
North Europe, and reversely the
first seen coming to our shores.
Is this true now?

These statements make our
property valuable.

We feel we should have a
good, fair price accordingly.

Yours truly

Alice R. Lee



APPENDIX G-14

U.S. Naval Air Station Quonset Point, Rhode Island

**Correspondence to Chief of the Bureau of
Aeronautics. Subj: Practice Bombing Target
Sites – Request for Leasehold Interests. RG72,
Entry 62B 1943-45, Box 2839, Folder N1-9/NA43.
NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

U. S. NAVAL AIR STATION
Quonset Point, R. I.

F41-10/N1-13/NA43
(17267)(80-c)cwl

26 May 1944

To: Chief of the Bureau of Aeronautics
Subj: Practice Bombing Target Sites - request for leasehold interests

Ref: (a) ComOne spdltr to BuDocks, ND1/NA43(DW), dated 14 Mar. 1944

1. Seven (7) additional practice bombing target sites, located as indicated on enclosures 1 through 5, are urgently needed for use by aircraft conducting advance training from this Station and its Auxiliary Air Facilities. The sites selected by the Commander, Fleet Air, Quonset, are readily accessible for construction and repair, and convenient to the several NAAF's, Westerly, R.I., Groton, Conn., Hyannis, Martha's Vineyard, Falmouth and New Bedford, Mass. Temporary permission has been obtained from the owners of the land on which the sites are located for immediate construction and erection of the targets. ComFair, Quonset, has initiated action in connection with obtaining the necessary clearance of the Interdepartment Air Traffic Control Board.

2. Proposed target sites are located as follows:

- a. Parcel (A) Sandy Neck, located north of Barnstable Harbor on Cape Cod at approximately 41-44 N 70-19.2 W.
- b. Parcel (B) Great Neck, located in the town of Mashpee on Cape Cod at approximately 41-33.2 N 70-30 W.
- c. Parcel (C) Little Neck, located on Cape Poge, Chappaquiddick Island, Martha's Vineyard, Mass., at approximately 41-24.5 N 70-27.2 W.
- d. Parcel (D) Cape Poge Beach, located on the east shore of Chappaquiddick Island, Martha's Vineyard, Mass., at approximately 41-22.8 N 70-27 W.
- e. Parcel (E) Snipatuit Pond, located in the town of Rochester, Mass., about 10 miles north of New Bedford, Mass., at approximately 41-46.5 N 70-51.5 W. Reference (a) requested authorization to negotiate with the Commonwealth of Massachusetts for written permission to enter the premises, pending formal execution of leasehold agreement in nominal amount.
- f. Parcel (F) Napatree Point, about one and one-half miles east of Watch Hill, R.I., at approximately 41-18.4 N 71-53.1 W.
- g. Parcel (G) Barn Island, about two miles east of Stonington, Conn., on northeast shore of Little Narragansett Bay at approximately 41-19.8 N 71-52.1 W.

REPRODUCED AT THE NATIONAL ARCHIVES

F41-10/N1-13/NA45
(17267)(80-C)cwl

26 May 1944

Subj: Practice Bombing Target Sites - request for leasehold interests.

3. Practice bombing only will be permitted on the above targets, and approaches to the target will be made in such directions as will preclude flying over heavily populated area. Aircraft units conducting their bombing exercises will be restricted to the use of non-live practice bombs.

4. Pending formal acquisition, it is recommended that this Command be authorized to exercise the right to use these sites as granted in the letters of permission appended to enclosures 1 through 5, in order to advance to the earliest date possible the training required in furtherance of the war effort. If this recommendation is approved, it is requested that the action required in obtaining the necessary leasehold interests be expedited in order that the authority to use these sites will be continuous. This would require formal acquisition of sites (c), (e), (f) and (g) by 15 June 1944; sites (a) and (d) by 30 June 1944, and site (b) by 5 July 1944.

BEN H. WYATT
CO, NAS, Quonset Point

APPENDIX G-15

Chouinard, Doris

Correspondence to the Navy Department, Bureau of Yards and Docks, 28 September 1944. RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA, Northeast Region, Waltham, MA.

Reproduced at NARA-Northeast Region--Boston

DECLASSIFIED

Declassification Review Project INN-D-02-92

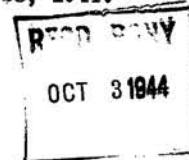
EO 12356, Sec. _____

DOD Directive 5200.30, Date _____

By JIKO NARA, INN, Date 5/29/92

87 Alhambra Circle,
Edgewood, 5, R.I.,
September 28, 1944.

shh
Navy Department,
Bureau of Yards & Docks,
Brooklyn, 1, N.Y.



Attention: Lieutenant R.H.Gallagher, U.S.N.R.

Sirs:

In reply to your communication of September 26th, concerning the Navy Department's use of my property at Little Neck and Cape Poge Beach, Chappaquiddick Island, Martha's Vineyard, Massachusetts, I am willing to lease the same to the Government, for the period mentioned.

I am not, however, interested in giving temporary permission again. I gave such permission on March 20th of this year; it was supposed to run for a period of three months only, with the understanding that a formal lease would be negotiated before the expiration of that period.

This agreement expired in June and although I have made several efforts to obtain action through the authorities at Quonset, nothing has been done about the renewal, hitherto. However, the property in question- although without my consent- has been in use by the Government ever since.

As to my opinion of the fair rental value of these two pieces of land; which together, total slightly more than 141 Acres ; it appears to me that a reasonable method of estimating the proper amount, would be to reckon it at \$ 10.00 per acre on the whole acreage, this to cover the entire term, requested: the duration of the War and Six Months thereafter; bearing in mind the fact that the Government has already been in possession for the past six months.

Very truly yours,

Donis P. Chouinard
(Mrs. C.P. Chouinard)

APPENDIX G-16

U.S. Navy, Naval Air Station Quonset Point

Memorandum, Subj: Practice Bombing Target Sites – Request for Leasehold Interests, 26 May 1944. RG72, Entry 62B, Box 3071. NARA II, College Park, MD.

REPRODUCED AT THE NATIONAL ARCHIVES

U. S. NAVAL AIR STATION
Quonset Point, R. I.

F41-10/N1-13/NA43
(17267)(80-c)cwl

26 May 1944

To: Chief of the Bureau of Aeronautics
Subj: Practice Bombing Target Sites - request for leasehold interests

Ref: (a) ComOne spdltr to BuDocks, ND1/NA43(DW), dated 14 Mar. 1944

1. Seven (7) additional practice bombing target sites, located as indicated on enclosures 1 through 5, are urgently needed for use by aircraft conducting advance training from this Station and its Auxiliary Air Facilities. The sites selected by the Commander, Fleet Air, Quonset, are readily accessible for construction and repair, and convenient to the several NAAF's, Westerly, R.I., Groton, Conn., Hyannis, Martha's Vineyard, Falmouth and New Bedford, Mass. Temporary permission has been obtained from the owners of the land on which the sites are located for immediate construction and erection of the targets. ComFair, Quonset, has initiated action in connection with obtaining the necessary clearance of the Interdepartment Air Traffic Control Board.

2. Proposed target sites are located as follows:

- a. Parcel (A) Sandy Neck, located north of Barnstable Harbor on Cape Cod at approximately 41-44 N 70-19.2 W.
- b. Parcel (B) Great Neck, located in the town of Mashpee on Cape Cod at approximately 41-33.2 N 70-30 W.
- c. Parcel (C) Little Neck, located on Cape Poge, Chappaquiddick Island, Martha's Vineyard, Mass., at approximately 41-24.5 N 70-27.2 W.
- d. Parcel (D) Cape Poge Beach, located on the east shore of Chappaquiddick Island, Martha's Vineyard, Mass., at approximately 41-22.8 N 70-27 W.
- e. Parcel (E) Snipatuit Pond, located in the town of Rochester, Mass., about 10 miles north of New Bedford, Mass., at approximately 41-46.5 N 70-51.5 W. Reference (a) requested authorization to negotiate with the Commonwealth of Massachusetts for written permission to enter the premises, pending formal execution of leasehold agreement in nominal amount.
- f. Parcel (F) Napatree Point, about one and one-half miles east of Watch Hill, R.I., at approximately 41-18.4 N 71-53.1 W.
- g. Parcel (G) Barn Island, about two miles east of Stonington, Conn., on northeast shore of Little Narragansett Bay at approximately 41-19.8 N 71-52.1 W.

REPRODUCED AT THE NATIONAL ARCHIVES

F41-10/N1-13/NA45
(17267)(80-C)cwl

26 May 1944

Subj: Practice Bombing Target Sites - request for leasehold interests.

3. Practice bombing only will be permitted on the above targets, and approaches to the target will be made in such directions as will preclude flying over heavily populated area. Aircraft units conducting their bombing exercises will be restricted to the use of non-live practice bombs.

4. Pending formal acquisition, it is recommended that this Command be authorized to exercise the right to use these sites as granted in the letters of permission appended to enclosures 1 through 5, in order to advance to the earliest date possible the training required in furtherance of the war effort. If this recommendation is approved, it is requested that the action required in obtaining the necessary leasehold interests be expedited in order that the authority to use these sites will be continuous. This would require formal acquisition of sites (c), (e), (f) and (g) by 15 June 1944; sites (a) and (d) by 30 June 1944, and site (b) by 5 July 1944.

BEN H. WYATT
CO, NAS, Quonset Point

APPENDIX G-17

Chief of Bureau of Aeronautics

Correspondence to Chief of Yards and Docks.
Subj: NAS Quonset Point, R.I. – Practice
Bombing Target Sites – Request for Leasehold
Interests, 19 August 1944. **RG72, Entry 62B**
General Correspondence 1943-45, Box 3071,
Folder N12/NA43 Vol 2. NARA II, College Park,
MD.

REPRODUCED AT THE NATIONAL ARCHIVES

Aer-44-S-RTB
NLR/NA43
PAL-10

Enc-5

19 AUG 1944

145198

From: Chief, Buser.
To: Chief, BuLocks.

Via: CNO

Subj: NLS, (Quonset Point, R. I. - Practice Bombing Target Sites - Request for Leasehold Interests. (NLS, Quonset Point ltr to Buser, PAL-10/NI-12/NA43, (17287)(80-C)owl, dated 28 May 44 with subsequent ams)

Refs: (g) Buser ltr to NLS, Quonset Point, Aer-44-S-RTB, NLR/NA43, Serial 90423, dated 27 May 1944.
(h) Buser ltr to BuLocks, Aer-44-S-RTB, NLR/NA43, Serial 118782, dated 30 June 1944.
(i) NLS, (Quonset Point ltr to COMCms, PAL-10/NI-12/NA43, (18000)(80-Bo)aw, dated 26 July 1944, with enc. thereto.
(j) NLS, (Quonset Point ltr to COMCms, PAL-10/NI-12/NA43, (18884)(80-Bo)aw, dated 14 August 1944, with enc. thereto.

1. Forwarded.

2. By references (g) and (h) this Bureau requested BuLocks to take appropriate action to acquire a lease-hold estate in the site known as Snipstuit Pond.

3. References (i) and (j) are being forwarded by separate endorsement as additional information to the basic letter and contain the necessary maps, land descriptions on all the sites, and assessed land values on the sites located at Great Neck, Little Neck and Cape Poge Beach, with the exception of Snipstuit Pond which has been handled as explained in paragraph 2 above. Buser has been advised by BuLocks informally that appropriate steps are being taken to acquire appraisals of the subject sites in order to derive at fair rental values.

4. Buser therefore concurs with the recommendation contained in the basic letter and it is accordingly requested that BuLocks take the necessary steps to:

- (a) Obtain appraisals and establish fair rental values on the sites proposed for acquisition.
- (b) Acquire a lease-hold estate on the sites described in the basic letter, except Snipstuit Pond, and more fully described in references (i) and (j), for the duration of the present National Emergency and six months thereafter, based on fair rental values obtained by the above appraisals.

REPRODUCED AT THE NATIONAL ARCHIVES

Maintenance Division
W12/NA-48
F41-10

145198
Subj: NAS, Quonset Point, R. I. - Practice Bombing Target
Sites - Request for Leasehold Interests. (NAS, Quonset
Point ltr to Baker, F41-10/W1-12/NA-48, (17287)(SC-C)owl,
dated 26 May 44 with subsequent ams)

5. It is noted that by reference (j) both land and water
targets have been installed and no money for construction is being
requested of this Bureau.

6. IATCS clearances were obtained at meetings No. 496, dated
8 May 1944, No. 478, dated 24 May 1944, and No. 492, dated 3 July 1944.

7. All costs and rent falling due under the proposed acqui-
sition of leasehold estates for the fiscal year 1945 is chargeable
to the appropriation "Aviation, Navy, 1945, Subfund B".

8. The subject project does not represent an increase in
scope of existing facilities or establish any new facilities for
which Naval personnel will be required other than that already assigned
to NAS, Quonset Point, R.I. This information is given in conformance
with Section confidential directive, (SC) P16-1/NA, dated 28 January 1944
re Employment of Personnel.

G. L. HUFF
Comdr, U.S.N.
By direction of Bureau

cc: C48200
NAS, Quonset Point

Lt. (jg) Butler
19 August 1944
MKDuffy

-8-

REPRODUCED AT THE NATIONAL ARCHIVES

Hdqtrs. FIRST Naval District, 150 Causeway St., Boston, Mass.
ND1/NA43/L4-3 (DW)

END--2 on CO, NAS, Quonset Point, R.I. ltr F41-10/N1-13/NA43 (17267)'80-C)cwl
to BuAer, dated 26 May 1944.

To: Chief of the Bureau of Aeronautics.

Subj: Naval Air Station, Quonset Point, R.I. - Practice Bombing
Target Sites - Request for Leasehold Interests.

Ref: (d) SecNav ltr Op-30-HS-ofs Serial 899330, to All Commandants
of Naval District, etc., dated 29 September 1943.
(e) CNO ltr Op-02-MD Serial 38502 to All Bureaus and Offices of
the Navy Dept., Commandants of all Naval Districts, dated
29 February 1944.
(f) ComOne 2nd End. ND1/NA43/L4-3 (DW) to BuDocks dated 15 May 44
on ComOne ltr ND1/NA43/L4-3 (DW) to CO, NAS, Quonset Pt., R.I.
dated 30 March 1944.

1. Returned, recommending that leasehold estates be acquired in the several
premises listed in the basic letter.

2. In accordance with reference (d), the Commandant, First Naval District,
certifies that no space suitable for the subject purpose is available in
the District under Navy lease or control.

3. The Commandant is uninformed as to the construction work contemplated but
considers that it will be very limited in amount. Nevertheless, liaison has
been maintained with the local Army representative, in accordance with refer-
ence (e), and the Commandant is informed that no facilities are being released
by the Army which are suitable for the purpose.

4. Attention is invited to the fact that preliminary negotiations have been
conducted with the Commonwealth of Massachusetts covering the use of Snipatuit
Pond, and information has been forwarded to the Bureau of Yards and Docks by
reference (f) for preparation of a lease. Attention is further invited to the
fact that while it is generally conceded that the Commonwealth owns islands
in all great ponds located in Massachusetts, nevertheless, the Commonwealth
is not desirous of asserting its title to the islands which are located in
Snipatuit Pond. In view of this, it is recommended that condemnation pro-
ceedings be instituted to acquire a leasehold estate in order that the Govern-
ment may be secured against parties in interest other than the Commonwealth.

5. By carbon copy of this endorsement, the Commanding Officer Naval Air
Station, Quonset Point, R.I. is requested to furnish the Commandant, First
Naval District, with the data required by Bureau of Yards and Docks Circular
Letter #281-43 for each piece of property and in addition indicate the nature,
cost and method of accomplishing improvements considered necessary to facilitate
use for practice bombing purposes.

cc: CO, NAS, Quonset Pt., R.I.

BuDocks

RONY

/s/ J. S. Barleon, Capt., USN
Chief of Staff

APPENDIX G-18

U.S. Naval Air Station Quonset Point, Rhode Island

**Correspondence to the Chief of the Bureau of
Yards and Docks. Subj: Practice Bombing
Target Sites, Request for Leasehold Interests, 25
September 1944. RG72, Entry 62B General
Correspondence 1943-45, Box 3071, Folder
N12/NA43 Vol 2. NARA II, College Park, MD.**

F41-10/W1-15/WA43(110)(80-8c)ms

U. S. NAVAL AIR STATION
QUONSET POINT, R. I.

25 SEP 1944

To: Chief of the Bureau of Yards and Docks

Subj: Practice Bombing Target Sites, request for leasehold interests.

Refs: (a) SO ltr to Buler dated 26 May 1944, file F41-10/W1-15/WA43 (17267)(80-C)owl, same subj.
(b) Realty Operators Corp. ltr to SO, dated 16 September 1944.
(c) SO ltr to Realty Operators Corp., dated 21 September 1944, file W1-15/F41-10/WA43(80-C)br.

1. Necessary Bureau action to secure formal leasehold rights for bombing target sites at the following locations was requested by reference (a):

- a. Parcel (A) SANDY BECK, located north of Barnstable Harbor on Cape Cod at approximately 41-44 N 70-19.2 W.
- b. Parcel (B) GREAT BECK, located in the town of Mashpee on Cape Cod at approximately 41-33.2 N 70-30 W.
- c. Parcel (C) LITTLE BECK, located on Cape Poge, Chappaquiddick Island, Martha's Vineyard, Mass., at approximately 41-24.5 N 70-27.2 W.
- d. Parcel (D) CAPE POGE BEACH, located on the east shore of Chappaquiddick Island, Martha's Vineyard, Mass., at approximately 41-22.6 N 70-27 W.
- e. Parcel (E) WATERBURY POINT, located about one and one half miles east of Watch Hill, N.I., at approximately 41-18.4 N 71-53.1 W.
- f. Parcel (F) BARN ISLAND, about two miles east of Stonington, Conn., on northeast shore of Little Narragansett Bay at approximately 41-15.6 N 71-52.1 W.

It was indicated in paragraph one, the same reference, that temporary permission limited to ninety days duration was granted by the owners of these properties.

2. These formal permits have expired, and one of the owners, by reference (b), has written to inform this Command that he is dissatisfied with the delay in negotiations as well as the posting of his land. By reference (c), this Command has transmitted a reply which is self-explanatory.

42700854

112-121-10
WA 43
41-10
(MA)

REPRODUCED AT THE NATIONAL ARCHIVES

F41-10/W1-13/MA43(110)(80-Ec)mw

Subj: Practice Bombing Target Sites, request for leasehold interests.

3. It is requested that the necessary action in the acquisition of the required leasehold interests in these properties be expedited in order to avoid future embarrassment on the part of this Commanding Officer. It is further requested that retroactive rental be included in the cases where immediate "right to use" was granted immediately by the owners.

BEN H. WYATT
Comdr., NAB, First ND

Encl. (HW)

- (1) Copy of reference (b).
- (2) Copy of reference (c).

cc: BuAcr (with encls.) ✓
ComOne (with encls.)
RCNY (with encls.)

APPENDIX G-19

U.S. Navy, Navy Department, Washington, DC

**Memorandum, Subj: Lease NOy(R) -36801 with
Doris Huxford Chouinard, and Lease NOy(R) –
36802 with the same Lessor, covering land on
“Little Neck” at Martha’s Vineyard, Mass., for
use as a bomb target site, 27 November 1944.**

**RG 72, Entry 62B, Box 2839. NARA II,
College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

ADDRESS REPLY TO
THE BUREAU OF YARDS AND DOCKS

AND REFER TO

NDL/N1-13
Y-5-5/HET/ebw

NAVY DEPARTMENT

WASHINGTON 25, D. C.

November 27, 1944



To: Officer-in-Charge, Regional Real Estate
Office, 305 Washington St., Brooklyn, N.Y.

Subj: Lease NOy(R)-36801 with Doris Huxford 43360172
Chouinard, and Lease NOy(R)-36802 with the
same Lessor, covering land on "Little Neck",
at Martha's Vineyard, Mass., for use as a
bomb target site, for a total consideration
of \$400.00 per annum.

Refs: (a) CinC ltrs RHG:hm Mass/52h and RHG:hm
Mass/521, dated Nov. 15, 1944.

1. Enclosure (1) is forwarded for delivery to Lessor and
Enclosure (2) is furnished for the files of the Officer-in-
Charge.

By direction of Chief, BuDocks:

JOHN J. COURTNEY

Encl. HW
(1) Triplicate original of each lease.
(2) Copies of Enclosure (1)

CC - GAO (Audit) (Forms 1036)
BuSanda
BuAero ✓
ComOne
SO, NAS, Quonset Point, R.I.
DO " "

ml
ml 43
11-9/ml 43

REPRODUCED AT THE NATIONAL ARCHIVES

War Navy, 1945, Subhead 3.
Approved by the Secretary of the Navy
May 6, 1955

All public bills for payment
under this contract should
include a reference to
No. Noy(R)-36801

LEASE

BETWEEN

DORIS HUXFORD CHOUINARD
AND
THE UNITED STATES OF AMERICA

1. THIS LEASE, made and entered into this **1st** day of **July**,
in the year one thousand nine hundred and **forty-four** by and between

whose address is **DORIS HUXFORD CHOUINARD**
87 Alhambra Circle
Edgewood, Rhode Island

for ~~herself, her~~ heirs, executors, administrators, successors, and assigns, hereinafter called
the Lessor, and THE UNITED STATES OF AMERICA, hereinafter called the Government:

WITNESSETH: The parties hereto for the considerations hereinafter mentioned covenant and
agree as follows:

2. The Lessor hereby leases to the Government the following described premises, viz:

**All that certain land lying and being on "Little Neck", at
Cape Poge, Chappaquiddick Island, Martha's Vineyard, situate
in the Town of Edgartown, County of Dukes County, Commonwealth
of Massachusetts which is more particularly described in
Schedule "A" annexed hereto.**

to be used exclusively for the following purposes (see instruction No. 3):

Bomb target site

3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning

and ending with **1 July 1944**
30 June 1945

10-1860

REPRODUCED AT THE NATIONAL ARCHIVES

4. The Government shall not assign this lease in any event, and shall not sublet the demised premises except to a desirable tenant, and for a similar purpose, and will not permit the use of said premises by anyone other than the Government, such sublessee, and the agents and servants of the Government, or of such sublessee.

5. This lease may, at the option of the Government, be renewed from year to year at a rental of **One hundred Eight dollars (\$180.00) per annum** and otherwise upon the terms and conditions herein specified, provided notice be given in writing to the Lessor at least **thirty (30)** days before this lease or any renewal thereof would otherwise expire: Provided that no renewal thereof shall extend the period of occupancy of the premises beyond ~~the~~ **six months** ~~day~~ **after the termination of the present states of war.**

6. The Lessor shall furnish to the Government, during the occupancy of said premises, under the terms of this lease, as part of the rental consideration, the following:

NOTHING

7. The Government shall pay the Lessor for the premises rent at the following rate:

ONE HUNDRED EIGHTY DOLLARS (\$180.00) PER ANNUM PAYABLE IN EQUAL MONTHLY INSTALLMENTS OF \$15.00 EACH.

Payment shall be made at the end of each **month.**

8. The Government shall have the right, during the existence of this lease, to make alterations, attach fixtures, and erect additions, structures, or signs, in or upon the premises hereby leased (provided such alterations, additions, structures, or signs shall not be detrimental to or inconsistent with the rights granted to other tenants on the property of which the building or buildings on said premises are located); which fixtures, additions, or structures so placed in or upon or attached to the said premises shall be and remain the property of the Government and may be removed therefrom by the Government prior to the termination of this lease, and the Government, if required by the Lessor, shall, before the expiration of this lease or renewal thereof, restore the premises to the same condition as that existing at the time of entering upon the same under this lease, reasonable and ordinary wear and tear and damages by the elements or by circumstances over which the Government has no control, excepted: Provided, however, that if the Lessor requires such restoration, the Lessor shall give written notice thereof to the Government **fifteen (15)** days before the termination of the lease.

10-1890

REPRODUCED AT THE NATIONAL ARCHIVES No. 2

[LEASE]

9. The Lessor shall, unless herein specified to the contrary, maintain the said premises in good repair and tenable condition during the continuance of this lease, except in case of damage arising from the act or the negligence of the Government's agents or employees. For the purpose of so maintaining the premises, the Lessor reserves the right at reasonable times to enter and inspect the premises and to make any necessary repairs thereto.

10. If the said premises be destroyed by fire or other casualty this lease shall immediately terminate. In case of partial destruction or damage, so as to render the premises untenable, either party may terminate the lease by giving written notice to the other within fifteen days thereafter, and if so terminated no rent shall accrue to the Lessor after such partial destruction or damage.

11. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this lease or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company, if the lease be for the general benefit of such corporation or company.

12. This lease or any renewal thereof may be terminated by the Government upon thirty (30) days written notice to the Lessor.

13. Paragraphs 9 and 10 and a part of paragraph 8 has been deleted and paragraph twelve has been added prior to the execution of this lease.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

In presence of:

JOHN J. PENZ

DORIS HUXFORD CHOUINARD, /s/

Lessor.

(Address)

UNITED STATES OF AMERICA,

Comdr. Andrew J. Murphy, Jr., USNB

By Room 8823

By Direction of the Chief of the Bureau
of Yards and Docks, acting under the
direction of the Secretary of the Navy.
(Official title)

(If Lessor is a corporation, the following certificate shall be executed by the secretary or assistant secretary.)

I, _____, certify that I am the _____

Secretary of the corporation named as Lessor in the attached lease; that _____

_____, who signed said lease on behalf of the Lessor, was then

_____ of said corporation; that said lease was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

PAYMENT TO BE MADE BY D.O.,
IAS, Quonset Point, R.I.

10-1860

[CORPORATE
SEAL]

REPRODUCED AT THE NATIONAL ARCHIVES

SCHEDULE "A"

Beginning at the Westernmost corner of Share 7, as indicated on Naval Air Station, Quonset Point, Rhode Island, Public Works Department Drawing No. 2314, at the high water mark of Cape Poge Bay; thence by the various meanders of Cape Poge Bay and Drunken Cove, in a general Southwesterly, Southeasterly and Northeasterly direction, approximately 4540 feet to the division line between Shares 6 and 1 at the high water mark of Drunken Cove; thence N 8° 20' W, by said division line 600.0 feet, more or less, to the high water mark of Sheep Shear Pond; thence in a Westerly direction by the high water mark of Sheep Shear Pond, 650 feet, more or less, to the Easternmost corner of Share 7 before mentioned; thence S 38° 50' W, by said Share 7, 755 feet, more or less, to the Southernmost corner of Share 7; thence N 51° 10' W, by said Share 7, 656.10 feet more or less, to the point of beginning.

Meaning and intending to include any and all land appurtenant thereto lying below high water mark as well as all riparian rights, easement and/ or ways.

Containing 42.59 acres of land, more or less.

The above described parcel of land is more fully shown as Share 6 and Share 8 on the Naval Air Station, Quonset Point, Rhode Island, Public Works Department Drawing No. 2314 entitled "Little Neck - Cape Poge, Chappaquiddick Island, Martha's Vineyard, Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts.

REPRODUCED AT THE NATIONAL ARCHIVES

Aviation Navy, 1945, Subhead 3.

FORM NO. 2 (Revised)
Secretary of the Army
May 6, 1946

All public bills for payment
under this contract should
include a reference to
No. NOY(R)-36802

LEASE

BETWEEN

DORIS HUXFORD CHOUINARD

AND

THE UNITED STATES OF AMERICA

1. THIS LEASE, made and entered into this **1st** day of **July**,
in the year one thousand nine hundred and **forty-four** by and between
DORIS HUXFORD CHOUINARD
87 Alhambra Circle
Edgewood, Rhode Island
whose address is

for **herself, her** heirs, executors, administrators, successors, and assigns, hereinafter called
the Lessor, and **THE UNITED STATES OF AMERICA**, hereinafter called the Government:

WITNESSETH: The parties hereto for the considerations hereinafter mentioned covenant and
agree as follows:

2. The Lessor hereby leases to the Government the following described premises, viz:

**All that certain land lying and being at "Cape Poge Beach",
Chappaquiddick Island, Martha's Vineyard, situate in the
Town of Edgartown, County of Dukes County, Commonwealth of
Massachusetts which is more particularly described in Schedule
"A" annexed hereto.**

to be used exclusively for the following purposes (see instruction No. 3):

BOMB TARGET SITE

3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning
1 July 1944
and ending with **30 June 1945**

REPRODUCED AT THE NATIONAL ARCHIVES

4. The Government shall not assign this lease in any event, and shall not sublet the demised premises except to a desirable tenant, and for a similar purpose, and will not permit the use of said premises by anyone other than the Government, such sublessee, and the agents and servants of the Government, or of such sublessee.

5. This lease may, at the option of the Government, be renewed from year to year at a rental of **Two hundred twenty dollars (\$220.00) per annum** and otherwise upon the terms and conditions herein specified, provided notice be given in writing to the Lessor at least **thirty (30)** days before this lease or any renewal thereof would otherwise expire: Provided that no renewal thereof shall extend the period of occupancy of the premises beyond ~~the~~ **six months** ~~day~~ **after the termination of the existing states of war.**

6. The Lessor shall furnish to the Government, during the occupancy of said premises, under the terms of this lease, as part of the rental consideration, the following:

NOTHING

7. The Government shall pay the Lessor for the premises rent at the following rate:

Two hundred and twenty dollars (\$220.00) per annum payable in eleven equal monthal installments of \$18.33 and one installment of \$18.37.

Payment shall be made at the end of each **month.**

8. The Government shall have the right, during the existence of this lease, to make alterations, attach fixtures, and erect additions, structures or signs, in or upon the premises hereby leased (provided such alterations, additions, structures, or signs shall not be detrimental to or inconsistent with the rights granted to other tenants on the property or in the building in which said premises are located); which fixtures, additions, or structures so placed in or upon or attached to the said premises shall be and remain the property of the Government and may be removed therefrom by the Government prior to the termination of this lease, and the Government, if required by the Lessor, shall, before the expiration of this lease or renewal thereof, restore the premises to the same condition as that existing at the time of entering upon the same under this lease, reasonable and ordinary wear and tear and damages by the elements or by circumstances over which the Government has no control, excepted: Provided, however, that if the Lessor requires such restoration, the Lessor shall give written notice thereof to the Government **fifteen (15)** days before the termination of the lease.

10-1860

REPRODUCED AT THE NATIONAL ARCHIVES

Form No. 2
1935
(Sheet 2)

[LEASE]

9. The Lessor shall, unless herein specified to the contrary, maintain the said premises in good repair and tenantable condition during the continuance of this lease, except in case of damage arising from the act or the negligence of the Government's agents or employees. For the purpose of so maintaining the premises, the Lessor reserves the right at reasonable times to enter and inspect the premises and to make any necessary repairs thereto.

10. If the said premises be destroyed by fire or other casualty this lease shall immediately terminate. In case of partial destruction or damage, so as to render the premises untenable, either party may terminate the lease by giving written notice to the other within fifteen days thereafter, and if so terminated no rent shall accrue to the Lessor after such partial destruction or damage.

11. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this lease or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company, if the lease be for the general benefit of such corporation or company.

12. This lease or any renewal thereof may be terminated by the Government upon thirty (30) days written notice to the Lessor.

13. Paragraphs 9 and 10 and a part of paragraph 8 has been deleted and paragraph twelve has been added prior to the execution of this lease.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

In presence of:

JOHN J. PENZ

DORIS HUXFORD CHOUINARD, /s/

Lessor.

(Address)

UNITED STATES OF AMERICA,

Comdr. Andrew J. Murphy, Jr., USNB
By Room 8323

By Direction of the Chief of the Bureau
of Yards and Docks, acting under the
direction of the Secretary of the Navy.
(Official title)

(If Lessor is a corporation, the following certificate shall be executed by the secretary or assistant secretary.)

I, _____, certify that I am the _____

Secretary of the corporation named as Lessor in the attached lease; that _____

_____, who signed said lease on behalf of the Lessor, was then

_____ of said corporation; that said lease was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

PAYMENT TO BE MADE BY D.O., NAS,
QUONSET POINT, R. I.

10-1800

[CORPORATE SEAL]

REPRODUCED AT THE NATIONAL ARCHIVES

SCHEDULE "A"

Beginning at a point in the high water mark of the Atlantic Ocean at the Northeast corner of land belonging to Edmund F. Leland, Jr., et als, and known as the "Middle Share of the Cape Poge Beach and Meadows"; thence Northerly by the High water mark of the Atlantic Ocean, 4400 feet, more or less; thence due West, through land now or formerly of Joseph Huxford, et al, 1000 feet, more or less, to the high water mark of Cape Poge Bay; thence in a general Southerly direction, by the high water mark of Cape Poge Bay and the Canal or Lagoon, bu the dyke, and by the high water mark of Poucha Pond, 5160 feet, more or less, to the Northwesterly corner of the "Middle Share", before mentioned; thence Easterly by said "Middle Share", 640 feet, more or less, to the beginning. The above described parcel of land is claimed wholly or in part by Mrs. Doris Huxford Chouinard, and is the Southern part of the "North Share of the Cape Poge Beach and Meadows", formerly belonging to Joseph Huxford, one undivided half part, and Francis Smith, one undivided half part.

Meaning and intending to include any and all land appurtenant thereto lying below high water mark, together with all riparian rights, easements and/or ways.

Containing 58.5 acres of land, more or less.

The foregoing parcel of land is more fully shown as Parcel "D" on Naval Air Station Quonset Point, R.I., Public Works Drawing Number 2313 entitled "Cape Poge Beach, Chappaquiddick Island, Martha's Vineyard, Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts."

Subject to previously acquired rights of the Government to operate a telephone line and have ingress and egress over the above described target site.

APPENDIX G-20

U.S. Navy, Navy Department, Washington, DC

**Memorandum, Subj: Lease NOy(R) -36819 with
Luther M. Sibley, covering land on “Little Neck”,
Martha’s Vineyard, Mass., for use as a bomb
target site, 30 November 1944. RG 72, Entry 62B
1943-1945, Box 2839. NARA II,
College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

BU DOCKS

AND REFER TO

LEASE
NAVY DEPARTMENT

WASHINGTON 25, D. C.



L22-7-ED
NDL/NL-13
F-5-5/HET/ebw

November 30, 1944

To: Officer-in-Charge, Regional Real Estate
Office, 305 Washington St., Brooklyn, N.Y.

Subj: Lease NOy(R)-36819 with Luther M. Sibley,
covering land on "Little Neck", at Martha's
Vineyard, Mass., for use as a bomb target
site; rental, \$80.00 per annum.

Ref: (a) OinC ltr to BuDocks dated Nov.16,1944;
File RHG:hm, Mass/52h.

1. Enclosure (1) is forwarded for delivery to Lessor and
Enclosure (2) is furnished for the files of the Officer-in-
Charge.

By direction of Chief, BuDocks:

JOHN J. COURTNEY

Encl. HW
(1) Triplicate original of subject lease.
(2) Copy of Enclosure (1).

CC - GAO(Audit) (Form 1036)
BuSanda
BuAero ✓
ComOne
SO, NAS, Quonset Point, R.I.
DO " "

Handwritten: m...
m...
m...
11/9/1944

43410521

13.5 acres

REPRODUCED AT THE NATIONAL ARCHIVES

МІНІСТЕРСТВО ЗА ДІ С'
 А ДІВІЛНЕНІА
 LEASE

Payment should in-
Reference to No.
807(R)-36819

BETWEEN
LUTHER M. SIBLEY
AND
THE UNITED STATES OF AMERICA

1. THIS LEASE, made and entered into this **1** day of **July**,
in the year one thousand nine hundred and **forty four** by and between

LUTHER M. SIBLEY

whose address is **Edgartown, Massachusetts**

for **himself, his** heirs, executors, administrators, successors, and assigns, hereinafter called
the Lessor, and THE UNITED STATES OF AMERICA, hereinafter called the Government:

WITNESSETH: The parties hereto for the considerations hereinafter mentioned covenant and
agree as follows:

2. The Lessor hereby leases to the Government the following described premises, viz:

**All that certain land lying and being on "Little Neck", at
Cape Poge, Chappaquiddick Island, Martha's Vineyard, situate
in the Town of Edgartown, County of Dukes County, Commonwealth
of Massachusetts which is more particularly described in
Schedule "A" annexed hereto.**

to be used exclusively for the following purposes (see instruction No. 3):

Bomb Target site

3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning

and ending with **1 July 1944**
30 June 1945

10-1890

REPRODUCED AT THE NATIONAL ARCHIVES
The Government shall not assign this lease to any other person, nor shall it be a desirable tenant, and for a similar purpose, and will not permit the use of said premises by anyone other than the Government, such sublessee, and the agents and servants of the Government, or of such sublessee.

5. This lease may, at the option of the Government, be renewed from year to year at a rental of **Eighty dollars (\$80.00) per annum** and otherwise upon the terms and conditions herein specified, provided notice be given in writing to the Lessor at least **thirty (30)** days before this lease or any renewal thereof would otherwise expire: Provided that no renewal thereof shall extend the period of occupancy of the premises beyond ~~the~~ **six months** ~~of the~~ **1971** after the termination of the present ~~lease~~ **status of war.**

6. The Lessor shall furnish to the Government, during the occupancy of said premises, under the terms of this lease, as part of the rental consideration, the following:

NOTHING

7. The Government shall pay the Lessor for the premises rent at the following rate:

Eighty dollars (\$80.00) per annum payable annually

Payment shall be made at the end of each **year.**

8. The Government shall have the right, during the existence of this lease, to make alterations, attach fixtures, and erect additions, structures, or signs, in or upon the premises hereby leased (provided such alterations, additions, structures, or signs shall not be detrimental to or inconsistent with the rights granted to other tenants on the property or the building in which said premises are located), and fixtures, additions, or structures so placed in or upon or attached to the said premises shall be and remain the property of the Government and may be removed therefrom by the Government prior to the termination of this lease, and the Government, if required by the Lessor, shall, before the expiration of this lease or renewal thereof, restore the premises to the same condition as that existing at the time of entering upon the same under this lease, reasonable and ordinary wear and tear and damages by the elements or by circumstances over which the Government has no control, excepted: Provided, however, that if the Lessor requires such restoration, the Lessor shall give written notice thereof to the Government **15 (fifteen)** days before the termination of the lease.

10-1860

REPRODUCED AT THE NATIONAL ARCHIVES

9. The Lessor shall, unless herein specified to the contrary, maintain the premises in the condition existing at the commencement of this lease, except in case of damage arising from the act or the negligence of the Government's agents or employees. For the purpose of so maintaining the premises, the Lessor reserves the right at reasonable times to enter and inspect the premises, and to make any necessary repairs thereon.

10. If the said premises be destroyed by fire or other casualty this lease shall immediately terminate. In case of partial destruction or damage, so as to render the premises untenable, either party may terminate the lease by giving written notice to the other within fifteen days thereafter; and if so terminated no rent shall accrue to the Lessor after such partial destruction or damage.

11. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this lease or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company, if the lease be for the general benefit of such corporation or company.

12. This lease or any renewal thereof may be terminated by the Government upon thirty (30) days written notice to the lessor.

13. Paragraphs 9 and 10 and a part of paragraph 8 has been deleted and paragraph twelve has been added prior to the execution of this lease.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

In presence of:

P. O. Box 1,

Luther E. Sibley

Lessor.

Edgartown, Mass.
(Address)

UNITED STATES OF AMERICA,

By John J. Courtney

By direction of Chief of Bureau of Yards
and Docks, acting under direction of
Secretary of the Navy.
(Official title)

(If Lessor is a corporation, the following certificate shall be executed by the secretary or assistant secretary.)

I, _____, certify that I am the _____

Secretary of the corporation named as Lessor in the attached lease; that _____

_____, who signed said lease on behalf of the Lessor, was then _____

_____ of said corporation; that said lease was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Payment to be made by
D.C., post, NAS, Quonset, R. I.

[CORPORATE
SEAL]

REPRODUCED AT THE NATIONAL ARCHIVES

SCHEDULE "A"

Beginning at the Northernmost corner of Share 8, as indicated on Naval Airstation, Quonset Point, Rhode Island, Public Works Department Drawing No. 2314, at the high water mark of Cape Poge Bay; thence Northeasterly and Southeasterly by the high water mark of Cape Poge Bay and Sheep Shear Pond, 1540 feet, more or less, to the division line of Share 6; thence S 38° 50' W, by share 6, 755 feet, more or less, to the division line of Share 8; thence N 51° 10' W, by Share 8, 656.10 feet, more or less, to the point of beginning,

The foregoing described parcel of land is shown as parcel number seven on Naval Air Station, Quonset Point, Rhode Island, Public Works drawing No. 2314, entitled "Little Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard, Town of Edgartown, County of Dukes County Commonwealth of Massachusetts."

APPENDIX G-21

U.S. Navy

**Correspondence to the Chief of the Bureau of
Yards and Docks. Subj: Request for
Cancellation of Leases for Land Used for Practice
Bombing Targets** dated 17 December 1945.
RG72, Entry 62B General Correspondence 1943-
1945, Box 2859, Folder N1-9/NDI. NARA II,
College Park, MD.

REPRODUCED AT THE NATIONAL ARCHIVES

(Do not write below this line.)

(8)

NA124/N1-13
(80-24)e1

Serial: 754-PW

17 DEC 1945

To: Chief of the Bureau of Yards and Docks
Via: Commandant, FIRST Naval District

Subj: Request for Cancellation of Leases for Land Used for Practice Bombing Targets

Ref: (a) BuDocks Spdltr to Commandants all Naval Districts and River Commands and all Bureaus of the Navy Dept. dated 14 August 1945, subj: Cancellation of WOY(R) Lease Agreements.
(b) CNO Dispatch to ComNAB, LND serial 22125, dated 5 September 1945.
(c) ComNAB, LND ltr to CNO, file NA124/A2-M/(85)lp, serial 0327, dated 12 October 1945, subj: Targets, Gunnery and Rocket Ranges, and Boat Facilities Excess to Postwar Aviation Requirements.
(d) ComNAB, LND ltr to BuDocks, file NA124/N1-13, (80-24)hn, serial 846-PW, dated 17 October 1945, subj: Request for Cancellation of Leases subsequent to Disestablishment of Torpedo Retrieving Facility at Provincetown, Mass. and End-1 thereto by ComOps, dated 1 November 1945.

1. In reference (b) it was requested that a descriptive list be submitted to the Chief of Naval Operations of all practice bombing target areas and boat facilities which would become excess to the needs of the Commander, Naval Air Bases, FIRST Naval District in the postwar period. In reference (c) a list of such target areas was submitted and it was also stated that the boat facilities used by the Torpedo Retrieving Unit at Provincetown, Massachusetts would be in excess and would be disestablished in accordance with current directives. In reference (d) and End.-1 thereto the Bureau of Yards and Docks was requested to cancel real estate used by the TRU, Provincetown. It is now considered appropriate to initiate action cancelling leases and permits for the real estate used for such practice bombing target sites as will be in excess on or before 1 January 1946 as set forth in reference (c).

2. For the sake of clearness, the target areas which are in excess at this time will be divided into geographical groups as follows:

QUONSET AREA

Napatree Pt., R. I.
Barn Island, Conn.

41-18.4N., 71-53.1W
41-19.8N., 71-52.1W

33330433
N1-9/N1-1
NO1
bma

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NR122/WI-13
(80-24)el

- 2 -

Serial: 754-PW

Subj: Request for Cancellation of Leases for Land Used for Practice
Bombing Targets

CAPE COD AREA

| | |
|-----------------------------------|---------------------|
| Mashpee Island, Great Neck, Mass. | 41-33.2N., 70-30.2W |
| Randy Neck, Barnstable, Mass. | 41-44.0N., 70-19.2W |
| Cape Cod Bay (Water Target) | 41-50.1N., 70-02.8W |

MARTHA'S VINEYARD AREA

| | |
|--|---------------------|
| Cape Poge Beach, Chappaquiddick Island, Mass. | 41-23.6N., 70-27.0W |
|--|---------------------|

NANTUCKET AREA

| | |
|----------------------------|---------------------|
| Tom Nevers Area | 41-14N., 70-02W |
| Nadaket Range (Sheep Pond) | 41-15.6N., 70-11.1W |
| Nantucket Sound | 41-23.3N., 70-13W |

BRUNSWICK AREA

| | |
|--------------------|----------------|
| North Berwick, Me. | 43-18N, 70-48W |
|--------------------|----------------|

SQUAMTON AREA

Dusk Island, Town of Kittery,
York County, Maine

3. Real Estate rights for target areas in the Quonset Area are described as follows:

A. Napatree Point, Watch Hill, R. I.

1. WOY(R)36843 with the Washington Trust Building Co., Inc., Westerly, R. I. This lease includes 48.89 acres of beach and brushland at \$60 per annum, has a restoration clause and requires 30 days notice for cancellation.

B. Barn Island, Connecticut

1. Lease WOY(R)38963 with the State of Connecticut, Board of Game and Fisheries, Hartford, Conn. This lease provides for the use of 40.2 acres of wooded uninhabited marsh land at \$180 per annum, has a restoration clause and requires 30 days notice for cancellation.
2. Revocable Permit, Lease WOY(R)37562, dated 23 February 1945 with Franklin T. Saunders, RFD, North Stonington, Conn. This permit provides for the use of 7.4 acres of wooded uninhabited marsh land

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(80-84)el

Serial: 754-PW

Subj: Request for Cancellation of Leases for Land Used for Practice
Bombing Targets

at no cost, has a restoration clause but does not have a cancellation clause.

4. Real Estate rights for target areas in the Cape Cod Area are described as follows:

A. Mashpee Island, Great Neck, Mass.

1. Massachusetts Miscellaneous Civil Suit No. 7024 for leasehold, dated 5 February 1945. The Realty Operators Corp., c/o Fred P. Abbot, Box 86, Wauquoit, Mass. is named in this suit as the owner of 114.1 acres of woodland. Fredrick D. Jonas, Barnstable, Mass. is listed as the owner of 1.0 acres. The total area acquired is 115.1 acres.

B. Sandy Neck, Barnstable, Mass.

1. Lease NOY(R)37118 with Marcus H. Howes, Barnstable, Mass. This lease provides for the use of 108 acres of woodland at \$216 per annum, contains a restoration clause and requires 30 days notice for cancellation.
2. Lease NOY(R)37119 with Wakepeace Brothers, Inc., Wareham, Mass. This lease provides for the use of 195 acres of woodland at \$500 per annum, contains a restoration clause and requires 30 days notice for cancellation.

C. Cape Cod Bay, Water Target

1. No real estate.

5. Real Estate rights for target areas in the Martha's Vineyard Area are described as follows:

A. Cape Poge Beach, Chappaquiddick Island

1. Lease NOY(R)36802 with Doris Huxford Cheuinard, 87 Alhambra Circle, Edgewood, R. I. This lease provides for the use of 58.5 acres of unimproved beach property at \$220 per annum, contains a restoration clause and requires 30 days notice for cancellation.

REPRODUCED AT THE NATIONAL ARCHIVES

NA124/11-13
(80-E4)el

- 4 -

Serial: 754-PW

Subj: Request for Cancellation of Leases for Land Used for Practice
Bombing Targets

6. Real Estate rights for the target areas in the Nantucket Area are described as follows:

A. Tom Nevers Area, so-called, Rocket Projectile Target

1. Lease NOy(R)35265 with the Curtiss-Wright Corp., 30 Rockefeller Plaza, New York. This lease provides for the use of 33 acres of scrub timber land at \$100 per annum. It does not contain a restoration clause and requires 30 days notice for cancellation.
2. Lease NOy(R)54128 with Louis J. Hunter of 35 Hyde Avenue, Newton, Mass. This lease provides for the use of 2125 acres of scrub timber land at \$2125 per annum, contains a restoration clause and requires 30 days notice for cancellation.
3. Lease NOy(R)35904 with Stanley T. Goss, New Britain, Conn. This lease provides for 8 acres of scrub timber land at \$100 per annum, contains a restoration clause and requires 30 days notice for cancellation.
4. Lease NOy(R)35829 with Agnes F. Coffin, 304 Park Avenue, Stratford, Conn. This lease provides for 22 acres of scrub timber land at \$50 per annum, contains no restoration clause and requires 30 days notice for cancellation.
5. Lease NOy(R)34845 with William C. Brook, 61 Main Street, Nantucket, Mass. This lease provides for the use of 80 acres of scrub timber land at \$14.58 per annum, contains no restoration clause and requires 30 days notice cancellation.
6. Miscellaneous Civil Suit No. 6810. This court action which originally included a leasehold interest in 2000 acres, more or less, has now been reduced by voluntary leases to 628 acres of scrub timber land.

B. Madaket Range, Sheep Pond Area, Rocket Projectile Target

1. Massachusetts Miscellaneous Civil Suit No. 6973 instituted to secure a leasehold interest in 852.6 acres of land in the Town of Nantucket County, Mass.

C. Nantucket Sound, Water-Radar Target

1. No real estate.

REPRODUCED AT THE NATIONAL ARCHIVES

- 5 -

Serial: 754-PW

Subj: Request for Cancellation of Leases for Land Used for Practice
Bombing Targets

7. It is requested that the above described leases and permits be cancelled effective 1 April 1946. It is further requested that the court actions for leasehold described above be dismissed on the same date. Removal of targets and policing of target areas to remove debris will be completed on all areas, with the exception of those on Nantucket, previous to the date requested for cancellation. This will essentially restore these properties to their original condition. Consequently, it is expected that cancellations can be completed and releases obtained without difficulty. Restoration of the rocket ranges on Nantucket Island will be made the subject of separate correspondence.

8. By carbon copy the Commanding Officer, NAS, Brunswick and the Commanding Officer, NAS, Squantum are requested to submit cancellation requests for the real estate occupied by targets itemized herein as being located in the Brunswick and Squantum areas, respectively. The cancellation requests are to be submitted to the Bureau of Yards and Docks via Commander, Naval Air Bases, FIRST Naval District and Commandant, FIRST Naval District and should contain the information required by reference (a).

By direction of Comdr., NAB, FIRST Naval District

F. M. EFFORDS

cc: BUASr
IATCB, East SeaFront
ComPair Quonset
NAS, Quonset
NAS, Squantum
NAS, Brunswick
OinG, NAAS, Martha's Vineyard

APPENDIX G-22

U.S. Navy, Chief of the Bureau of Aeronautics

**Correspondence to the Chief of the Bureau of
Yards and Docks. Subj: Targets, Gunnery and
Rocket Ranges, and Boat Facilities Excess to
Post-War Aviation Requirements dated 31
October 1945. RG72, Entry 67A, Box 287, Folder
NA43. NARA II, College Park, MD.**

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DECLASSIFIED
Authority *NND873088*
By *AL* NARA Date *09/18/08*

Maintenance Division
Aer-MA-3-RTB
MA43
A16(6)

Second Endorsement on COMAB 1RD
conf ltr MA(124)/A2-13/(95)1p
Ser 0327 to CNO dtd 12 Oct
1945 with CNO End-1 dtd 18
Oct 1945 thereto.

3136284

~~CONFIDENTIAL~~

From: Chief of the Bureau of Aeronautics.
To: Chief of the Bureau of Yards and Docks.

C28594

Subject: Targets, Gunnery and Rocket Ranges, and Boat Facilities
Excess to Post-War Aviation Requirements.

1. Forwarded requesting cancellation of the leases and permits for the target and range sites listed in the basic letter.
2. In addition to the lease numbers inserted in red on the margin of the basic letter for convenience, the following leases covering the boat facility located at Provincetown, Massachusetts are to be cancelled as of 15 November 1945: T-14-ag 4883, NOy(R)-35986, NOy(R)-37101, NOy(R)-37240. It is also requested that the revocable permit obtained from the Army for space at the east end of Cape Cod Canal adjacent to Coast Guard station Number 32 be cancelled at the same time.

3136285

CC:
Commandant, First Naval District
Commander, Naval Air Bases
First Naval District
Chief of Naval Operations
Lt. Butler - Rm S-1079

3136286

F. E. Fielding
Chief of Bureau

DECLASSIFIED
NND873088
R. H. 4/18/08

~~CONFIDENTIAL~~

Lt. Butler - 3003
30 Oct 1945
LHarrison

52955005

REPRODUCED AT THE NATIONAL ARCHIVES

DECLASSIFIED

Authority MND873088
By AL NARA Date 09/18/08

Op-515-L MW
(SC)A4-2/ND1
Doc. 188409
Serial: 03P515

First Endorsement
on ComNAB 1 ND ltr to CNO
Ser. 0327, NA(124)/A2-13/(95)lp
dated 12 October 1945.

CONFIDENTIAL

18 October 1945

From: Chief of Naval Operations.
To: Chief of the Bureau of Aeronautics.
Subject: Targets, Gunnery and Rocket Ranges, and Boat Facilities
Excess to Post-War Aviation Requirements.
1. BuAer is requested to take necessary action in accordance with basic correspondence.

/s/ J. H. Cassady
J. H. CASSADY
By Direction

C
O
P
Y

REPRODUCED AT THE NATIONAL ARCHIVES

DECLASSIFIED
Authority NND873088
By AL NARA Date 09/18/08

NA(124)/A2-13/(95)/1p
Serial: 0327

12 October 1945

~~C O N F I D E N T I A L~~

Subj: Targets, Gunnery and Rocket Ranges, and Boat Facilities Excess
to Post-war Aviation Requirements.

| <u>Target or Range</u> | <u>Geographical location</u> | <u>Recommended date of release</u> | <u>Status</u> |
|------------------------|------------------------------|------------------------------------|-----------------|
| NANTUCKET, MASS. AREA: | | | |
| LR-1-T | Nantucket | 15 Oct 1945 | Lease agreement |
| LR-2-T | Nantucket | 15 Oct 1945 | Lease agreement |
| LR-3-T | Nantucket | 15 Oct 1945 | Civil Suit |
| WX-5-T | Nantucket | 15 Oct 1945 | Civil Suit |

*Water Target

**It is to be noted that only one target in Wordens Pond is to be disestablished. Therefore, there will be no change in the real estate status.

2. Reference (c) gives the date of the closing of the boat facility located at Provincetown, Massachusetts as 15 November 1945. No other boat facilities in the Naval Air Bases, FIRST Naval District Command, other than those located at naval auxiliary air stations, will be considered surplus.

/s/ Dixie Kiefer
DIXIE KIEFER
Comdr., NAB, FIRST ND

CC:
ComOne
IATCB, EastSeaFront
ComFAir, Quonset
NAS, Quonset
NAS, Brunswick
NAS, Squantum

C
O
P
Y

REPRODUCED AT THE NATIONAL ARCHIVES

DECLASSIFIED
Authority *MND873088*
By *AC* NARA Date *09/18/08*

NA(124)/A2-13/(95)1p
Serial: 0327

NAVAL AIR BASES
FIRST NAVAL DISTRICT
Quonset Point, Rhode Island
(Headquarters)

AIRMAIL

12 October 1945

~~CONFIDENTIAL~~

To: Chief of Naval Operations

Subj: Targets, Gunnery and Rocket Ranges, and Boat Facilities Excess
to Post-war Aviation Requirements.

Refs: (a) CNO dispatch 221245.
(b) ComFAir conf ltr FF13-17/F41-10, 90/ig, Ser 0833 of 24 Sep 45.
(c) CNO conf ltr Op-35-21 AVG(SC)A4-2/ND1 Doc. 186956, Ser 022835
of 5 Oct 45.

1. Reference (a) requests schedule of aviation bombing targets, gunnery and rocket ranges, and boat facilities which are to be excess to post-war aviation requirements, coming under the cognizance of this command. The targets, gunnery and rocket ranges, status of ownership, and recommended date of release are listed below:

| <u>Target or Range</u> | <u>Geographical location</u> | <u>Recommended date of release</u> | <u>Status</u> |
|---------------------------------------|------------------------------|------------------------------------|--|
| <u>BRUNSWICK, ME. AREA:</u> | | | |
| Area "MIKE" | North Berwick | 1 Nov 1945 | License agreement |
| <u>SQUANTUM, MASS. AREA:</u> | | | |
| Able | Duck Island | 1 Oct 1945 | Lease agreement |
| Baker | Minot's Ledge* | 1 Oct 1945 | None |
| Cast | Dennis-So.Truro* | 1 Oct 1945 | None |
| <u>QUONSET PT., R.I. AREA:</u> | | | |
| L-2-Q | Barn Island | 1 Dec 1945 | Revocable permit |
| W-3-Q | Wordens Pond** | 1 Oct 1945 | Expropriation |
| <u>CAPE COD, MASS. AREA:</u> | | | |
| L-4-C | Mashpee Island | 15 Dec 1945 | Civil Suit |
| L-5-C | Sandy Neck | 15 Dec 1945 | Lease agreement |
| W-7-C | Cape Cod Bay* | 1 Oct 1945 | None |
| <u>MARTHA'S VINEYARD, MASS. AREA:</u> | | | |
| W-1-V | Squibnocket Pond | 1 Jun 1946 | Lease agreement |
| W-2-V | Squibnocket Pond | 1 Jun 1946 | Revocable permit |
| L-3-V | Tisbury Pond | 1 Jun 1946 | -(Part-Lease agreement (Part-Civil Suit |
| L-4-V | Cape Poge Beach | 1 Oct 1945 | Lease agreement |

C O P Y

- 1 -

APPENDIX G-23

U.S. Navy

**Special Release. Lease number NOy(R)-36802
between the United States and Doris Chouinard
effective 12 April 1946. RG72, Entry 62B
General Correspondence 1946, Box 396, Folder
N1-9/NA43 Vol 2. NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

5/21

NAVDOCKS 762
(Rev. 3-46)

SPECIAL RELEASE - Under Lease No. NOy(R)-36802

KNOW ALL MEN BY THESE PRESENTS, that:

WHEREAS, by lease dated July 1, 1944 ^{7/1/44}
and bearing number NOy(R)-36802, DORIS HUXFORD CHOUINARD

whose address is 87 Alhambra Circle, Edgewood, Rhode Island
as Lessor, leased to THE UNITED STATES OF AMERICA, as Lessee,
premises:

Land on "Cape Poge Beach" at Martha's Vineyard, Mass.
for bomb target site.

more particularly described in said lease, and

WHEREAS, the United States of America, no longer re-
quiring the use of said premises, has surrendered possession
thereof to the Lessor, and the Lessor has accepted such sur-
render on the 31st day of March 1946. ^{3/31/46}

The undersigned, the Lessor under said lease, for
and in consideration of the surrender of said premises, the
return of which in good condition is hereby acknowledged,
has remised, released and forever discharged, and by these
presents does for her self, her heirs, executors, adminis-
trators, successors, and assigns, remise, release and forever dis-
charge the United States of America, its officers, agents and
employees, of and from all manner of actions, claims or demands
(except for the payment of rent to the above referred to date of
surrender) which against the United States of America, its
officers, agents and employees, the undersigned ever had, now has,
or ever will have upon, or by reason of any matter, cause or thing
whatsoever arising out of said lease or the occupancy by the United
States of America of said premises or the use of any personal
property thereon.

IN WITNESS WHEREOF, the undersigned has signed and sealed
these presents or caused these presents to be executed by its
duly authorized officers and its seal to be affixed hereto this
12th day of April 1946. ^{4/12/46}

WITNESS:

NELLIE J. ANOLD

DORIS HUXFORD CHOUINARD, (L.S.)

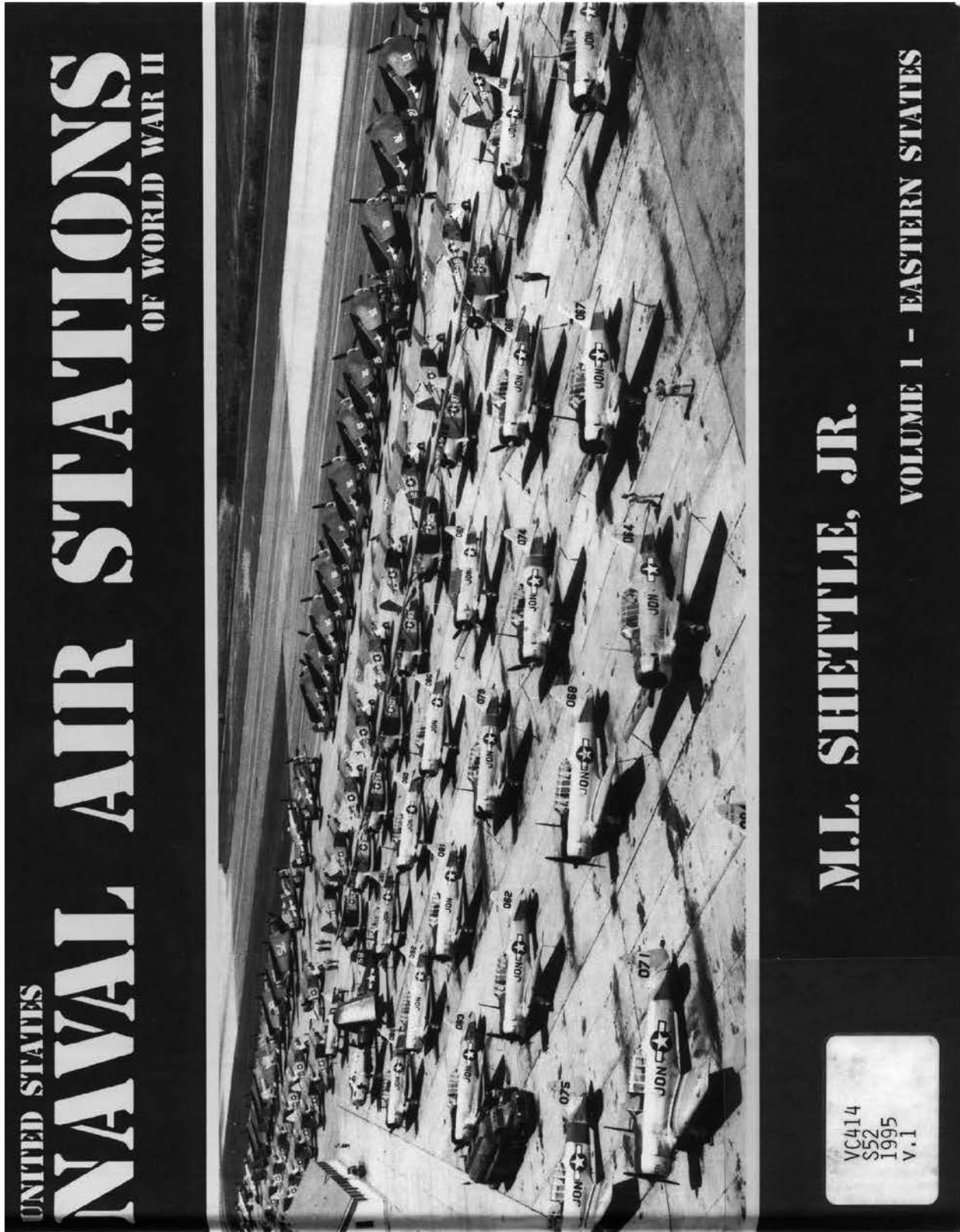
11-9/11443
11-2/11443

(R.L.)

APPENDIX G-24

Shettle, Jr., M.L.

United States Naval Air Stations of World War II,
Vol I – Eastern States, page 127. Schaertel
Publishing Co., Bowersville, Georgia.



UNITED STATES
NAVAL AIR STATIONS
OF WORLD WAR II

M.L. SHETTLE, JR.

VOLUME I - EASTERN STATES

VC414
S52
1995
V.1

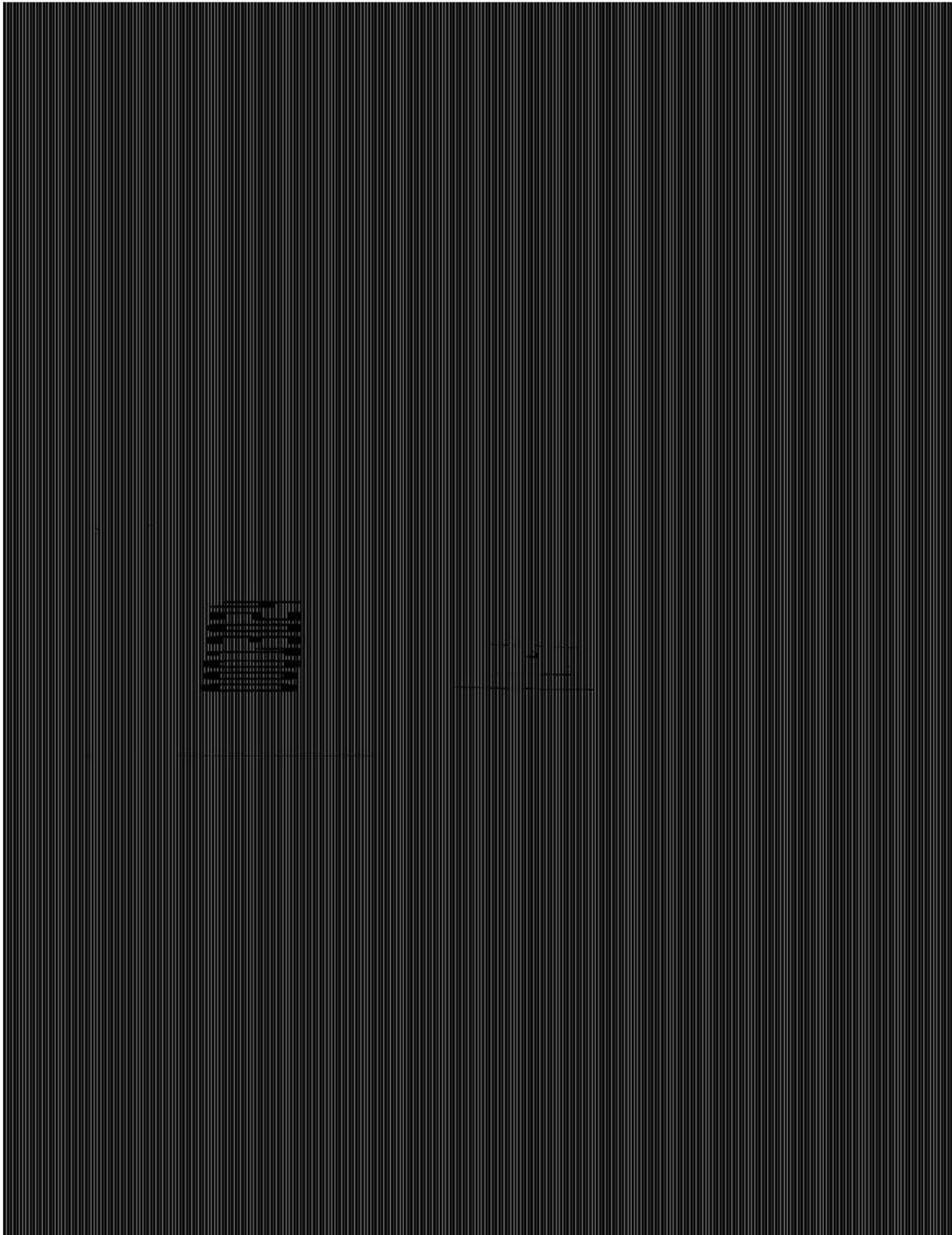


Table of Contents

| | |
|---|-----|
| Introduction | 7 |
| NAS Anacostia, District of Columbia | 10 |
| NAF Annapolis, Maryland | 12 |
| NAS Atlanta, Georgia | 14 |
| NAS Atlantic City, New Jersey | 18 |
| NAAS Ayer, Massachusetts | 20 |
| NAS Banana River, Florida | 22 |
| NAAS Bar Harbor, Maine | 24 |
| NAAS Barin Field, Alabama | 26 |
| NAS Beaufort, South Carolina | 32 |
| NAAF Beverly, Massachusetts | 34 |
| NAS Bronson Field, Florida | 36 |
| NAS Brunswick, Maine | 38 |
| NAS Bunker Hill, Indiana | 40 |
| NAS Cape May, New Jersey | 42 |
| NAAS Casco Bay, Maine | 44 |
| NAAS Cecil Field, Florida | 46 |
| NAS Charleston, South Carolina | 48 |
| NAAS Charlestown, Rhode Island | 50 |
| NAAS Chincoteague, Virginia | 52 |
| NAF Columbus, Ohio | 54 |
| NAAS Corry Field, Florida | 56 |
| NAAS Creeds, Virginia | 60 |
| NAF Dahlgren, Virginia | 62 |
| NAS Daytona Beach, Florida | 64 |
| NAS Deland, Florida | 66 |
| NAF Dinner Key, Florida | 68 |
| NAS Edenton, North Carolina | 70 |
| NAAS Elizabeth City, North Carolina | 72 |
| NAAS Ellyson Field, Florida | 74 |
| NAAS Fentress, Virginia | 76 |
| NAS Fort Lauderdale, Florida | 78 |
| NAAS Franklin, Virginia | 80 |
| NAF Gainesville, Georgia | 82 |
| NAS Glenview, Illinois | 84 |
| NAS Glynco, Georgia | 88 |
| NAAS Green Cove Springs, Florida | 90 |
| NAS Grosse Ile, Michigan | 92 |
| NAAS Groton, Connecticut | 96 |
| NAAS Harvey Point, North Carolina | 98 |
| NAAS Hyannis, Massachusetts | 100 |
| NAS Jacksonville, Florida | 102 |
| NAAS Jacksonville Municipal #1, Florida | 106 |
| NAMU Johnsville, Pennsylvania | 110 |
| NAS Key West, Florida | 112 |
| NAS Lake City, Florida | 116 |
| NAS Lakehurst, New Jersey | 118 |
| NAAS Lewiston, Maine | 122 |
| NAAS Manteo, North Carolina | 124 |
| NAAS Martha's Vineyard, Massachusetts | 126 |
| NAAS Mayport, Florida | 128 |
| NAS Melbourne, Florida | 130 |
| NAS Memphis, Tennessee | 134 |
| NAS Miami, Florida | 138 |
| NAF Middle River, Maryland | 144 |
| NAAS Monogram, Virginia | 148 |
| NTS Montauk, New York | 150 |
| NAAS Nantucket, Massachusetts | 152 |
| NAAS New Bedford, Massachusetts | 154 |
| NAF New Cumberland, Pennsylvania | 156 |
| NAF Newport, Rhode Island | 160 |
| NAS New York, New York | 162 |
| NAS Norfolk, Virginia | 164 |
| NAAS Oceana, Virginia | 168 |
| NAAS Otis Field, Massachusetts | 170 |
| NAS Patuxent River, Maryland | 172 |
| NAS Pensacola, Florida | 176 |
| NAMC Philadelphia, Pennsylvania | 182 |
| NAAS Pungo, Virginia | 184 |
| NAS Quonset Point, Rhode Island | 186 |
| NAS Richmond, Florida | 190 |
| NAAS Rockland, Maine | 192 |
| NAF Roosevelt Field, New York | 194 |
| NAS Sanford, Florida | 196 |
| NAAS Sanford, Maine | 198 |
| NAAS Saufley Field, Florida | 200 |
| NAS South Weymouth, Massachusetts | 202 |
| NAS Squantum, Massachusetts | 206 |
| NAS St. Simons Island, Georgia | 210 |
| NAS Traverse City, Michigan | 212 |
| NAF Trenton, New Jersey | 214 |
| NAS Vero Beach, Florida | 216 |
| NAS Weeksville, North Carolina | 218 |
| NAAS Westerly, Rhode Island | 220 |
| NAAS Whiting Field, Florida | 222 |
| NAS Wildwood, New Jersey | 226 |
| NAS Willow Grove, Pennsylvania | 228 |
| Appendix A: Miscellaneous Fields | 231 |
| Appendix B: Station Listing by State | 233 |
| Bibliography | 235 |
| Glossary | 237 |
| Index | 239 |

NAAS Martha's Vineyard, Massachusetts

Prior to the Navy's presence on the island of Martha's Vineyard, a small airport existed at Katama, south of Edgartown. Since the present airport was unsuitable for expansion, the Navy constructed a new airfield in the center of the island on a portion of the Martha's Vineyard State Forest. For \$1, the state of Massachusetts leased the land to the Navy for the duration of the war. Although the airfield and the buildings were only partially completed, the station's commissioning took place on March 26, 1943.

In spite of Martha's Vineyard remote location and the associated logistic problems with supply and personnel transportation, the station saw considerable activity. A total of 21 squadrons -- including torpedo, fighter, scouting, composite, and Marine fighter squadrons, plus two Carrier Air Groups -- passed through the station. These units were VS-33, VT-305, VT-45, VMF-351, VT-94, VC-43, VT-7, VT-83, VT-88, VT-92, VTN-53, VF-43, VT-301, VT-85, VT-16, VTN-91, VTN-90, VC-52, VT-81, VT-87, VT-10, CAG 55, and CAG 52. The aircraft of these units included the TBF Avenger, TBM Avenger, F4F Wildcat, F6F Hellcat, F4U Corsair, F7F Tigercat, SBD Dauntless, and OS2U Kingfisher. A detachment of CASU 22 supported these squadrons and operated the SNJ Texan, the TBM and the FM. The CASU maintained the squadron's aircraft, trained personnel, performed target towing, and supplied instrument proficiency aircraft (SNJs) for the squadrons' pilots.

In February 1945, a change of mission transpired as NACTULANT (Night Attack Combat Training Unit-Atlantic) came aboard the station and remained until the end of the war. NACTULANT's activity peaked with 68 aircraft that included the radar versions of the F6F, TBM, and F7F. The

Navy officially closed the field on May 27, 1946.

Martha's Vineyard had three asphalt runways of about 3700 ft. in length. Station complement numbered 104 officers and 678 enlisted men, with available billeting for 98 officers and 904 enlisted. Station aircraft consisted of an AE Piper Cub, a GB Staggerwing Beech, and a J4F Grumman Widgeon, utilized for search and rescue missions. At Vineyard Haven Harbor, the Navy stationed a crash boat and crew at the municipal dock and used the former Coast Guard quarters and dock as well. On the island of Noman's Land, southwest of Martha's Vineyard, the Navy maintained five targets. At Katama, the Navy established a rocket range that employed a novel moving target and also conducted

Avenger rear gunner training.

Duty at Martha's Vineyard must have been quite a pleasant experience in the summer, since the enlisted men stationed there referred to the base as the "Martha's Vineyard Rod and Gun Club." However, after numerous crashes and fatalities, they changed the nickname to the "Martha's Vineyard Blood and Guts Club."

In 1994, the airport is known as the Martha's Vineyard Airport and is served by several commuter type airlines. One runway has been extended to 5,500 ft. and can accommodate corporate jet aircraft. Several Navy buildings remain, including the operations/tower building.



Most remote air stations had one Piper AE-1 Grasshopper -- an ambulance conversion of Piper's civilian J5C Super-Cruiser. Originally the HE-1, the Navy redesignated its 100 HE-1s in 1943, when the "H" was reserved for helicopters. The AE-1 had a stretcher provisions in a compartment in the aft fuselage, clearly seen here, for transportation of ill or injured personnel. W. LARKINS

NAS Quonset Point, Rhode Island

Quonset Point's days of governmental service began in 1892, when the State of Rhode Island purchased a large portion of the future NAS and deeded it to the U.S. government. During the Spanish-American War, the Army located a recruiting depot at the site and trained the First Rhode Island Regiment here. In World War I, the Army activated Quonset Point again for the mobilization and training of Army units. Known as Camp Green, the base served as the headquarters of the Rhode Island National Guard during the 1920s and 1930s. A grass airfield at Camp Green was visited by Charles Lindbergh in 1927.

In 1939, the Navy selected Quonset Point to be the site of the largest Naval Air Station on the East Coast. Construction began in July 1940, and by October, a seaplane squadron began flying operational patrols from the base. Commissioned in July 1941, Quonset Pt. had been completed a year ahead of schedule at a cost of \$75 million by a peak construction force of 11,000 men. Quonset was the complete naval air base in many ways. With deep water berthing of aircraft carriers, the station provided shore facilities for basing and training of carrier and patrol squadrons -- land and sea. An Assembly and Repair Department, a Naval Training School for officers (90-day wonders), an Air Combat Information School, a Naval Aviation Intelligence School, an enlisted boot camp, and an Antiaircraft Training Center, were all established during the war. The Navy created Commander, Fleet Air, Quonset (COMFAIR-Quonset) in January 1943 and vested him with the command of all Naval air units from Cape May, New Jersey to Argentina, Newfoundland. Also based here was an Anti-Submarine Development Unit, that operated 40 miscellaneous aircraft and a ABATU (Advance Base Aviation Training Unit) that schooled men for ACORNs, AROUs, and CASUs.

Units of the British Fleet Air Arm (FAA) first arrived at Quonset in February 1943. The FAA's OTU, No. 738 Squadron, conducted advanced training of FAA maneuvers and flying methods in the Avenger, Corsair and Wildcat. From February to September 1943, a total of four Avenger and seven Corsair FAA squadrons formed at Quonset. In July, No. 738 Squadron transferred to Lewiston. After September, FAA activity moved to Brunswick and its auxiliaries.

The Navy conducted various projects at Quonset, including *Project Affirm*, a night fighter development unit that led to the Night Air Combat Training Unit (NACTU). Perhaps the most novel project was *Project Yehundi*. This consisted of installing sealed-beam lights down the leading edge and around the cowlings of an aircraft. The technique involved adjusting the intensity of the lights to the ambient brightness of the sky, thereby visually "washing out" the aircraft to a distant observer. Although reducing visual acquisition from 12 to two miles, this concept never went operational.

Quonset Point, 16 miles south of Providence, initially consisted of 750 acres. Dredging of ship channels in Narragansett Bay, provided an additional 270 acres of landfill on which the Navy built one 6000 ft. and three 4000 ft. asphalt runways. The station's mission involved the support of 180 carrier aircraft, 18 scout-observation aircraft that conducted the Inshore Patrol Mission, 48 patrol landplanes, 30 trainers, and 12 seaplanes. Landplanes assigned to the Newport Naval Torpedo Station on Goat Island, 8 miles away, were based at Quonset. In early 1944, personnel on board numbered 1721 officers, 8082 men, and 4173 civilians. Initially, Quonset had auxiliaries at Charlestown and Westerly in Rhode Island and Martha's Vineyard and Nantucket in Massachusetts.

During the latter part of 1943, the Army Air Corps began a substantial reduction in flying operations in New England. Starting then and continuing into 1944, Quonset commissioned new auxiliaries at the former Army fields located in Massachusetts at New Bedford, Otis (Camp Edwards), Hyannis, and Groton in Connecticut. A Navy Advance Base Depot and the Construction Battalion (Seabee) Center at Davisville were located adjacent to Quonset. Davisville, the home of the Quonset Hut, manufactured 32,000 huts here during the war. By VJ-Day, Quonset had suffered a total of 915 flight accidents and 34 fatalities on the station.

After the war, Quonset continued as a major base. By the early 1950s, the primary mission of the base became the support of the antisubmarine aircraft carriers and squadrons. Quonset was also home to the Navy's Antarctic support squadron, VX-6, that flew the ski-equipped Lockheed C-130s. The antisubmarine squadrons operated helicopters and Grumman S2F Tracker aircraft. In 1974, with the aging antisubmarine aircraft carriers facing retirement and the S2F being replaced with the jet-powered Lockheed S-3 Viking, the Navy deemed Quonset Point expendable and closed the base.

In 1994, as the Quonset State Airport, the former base is very active. Quonset serves general aviation as well as an Army National Guard helicopter unit and a Rhode Island Air National Guard C-130 squadron. Portions of the former base now house light and heavy industry. The former seaplane hangar area is now occupied by the Electric Boat Division of General Dynamics that manufactures submarine hull sub-assemblies. The Quonset Air Museum, located in a former hangar, is dedicated to the preservation of aviation history. The museum's address is 488 Eccleston Ave, P.O.Box 1571, North Kingstown, R.I. 02852.

APPENDIX G-25

U.S. Navy

Renewal of Government Lease, NOy(R)-36801
with Doris Chouinard, dated 31 May 1946.
RG181, Entry 1st Naval District, Real Estate
Disposal Files, 1940-1954, Box 44. NARA
Northeast Region, Waltham, MA.

BY ~~SECRETARY OF THE NAVY~~

copy

NavDocks-211

28 May 1946

Appropriation: 1771502.3 Aviation Navy, 1947, Expend. Acct. 45521
Obj Class. #051

Requisition: Aer EN11-24245-47

RENEWAL OF GOVERNMENT LEASE

You are hereby notified that under the provisions of
Paragraph 5 of Government lease:

NOy(R)-36801 with Doris Huxford Chouinard, Lessor,
d.7/1/44 covering land on "Little Neck" at Martha's
Vineyard, Mass. for Bomb Target Site.

L22-7-Ed-1

the United States of America elects to renew the said
lease, as the same may have been amended, for the period
of one year from and after June 30, 1946, and by these
presents does renew, extend, and adopt the said lease
and all the terms and conditions thereof for the period
beginning July 1, 1946, and ending June 30, 1947.

Dated at Washington, D. C., 31 May 1946.

Doris Huxford Chouinard
87 Alhembra Circle
Edgewood, Rhode Island

THE UNITED STATES OF AMERICA

By /s/ Andrew J. Murphy, Jr.
By direction of the Chief of the
Bureau of Yards and Docks, acting
under the direction of the Secretary
of the Navy.

CC-GAO

BuSandA
BuAer
ComOne
SO, NAS, Quonset Pt.
CNDO, 1st ND

NOTE: PLEASE ACKNOWLEDGE RECEIPT OF THIS NOTICE.

Reproduced at NARA-Northeast Region-Boston

APPENDIX G-26

U.S. Navy

Renewal of Government Lease, NOy(R)-36842 with Alice R. Lee, dated 31 May 1946. RG181, Entry 1st Naval District, Real Estate Disposal Files, 1940-1954, Box 44. NARA Northeast Region, Waltham, MA.

APPENDIX G-27

U.S. Navy

**Renewal of Government Lease, NOy(R)-36819
with Luther Sibley dated 31 May 1946. RG181,
Entry 1st Naval District, Real Estate Disposal
Files, 1940-1954, Box 44. NARA Northeast
Region, Waltham, MA.**

copy

NavDocks-211

28 May 1946

Appropriation: 1771502.3, Aviation Navy, 1947, Expend. Acct.
#45521, Object Classification #051

Requisition: Aer EN11-24245-47

SUBJECT TO AN APPROPRIATION BY THE CONGRESS

RENEWAL OF GOVERNMENT LEASE

You are hereby notified that under the provisions of
Paragraph 5 of Government lease:

NOY(R)-36819 with Luther M. Sibley,
Lessor, d. 7/1/44 covering land on
"Little Neck" at Martha's Vineyard,
Mass., for Bomb Target Site.

L22-7-Ed-2

the United States of America elects to renew the said
lease, as the same may have been amended, for the period
of one year from and after June 30, 1946, and by these
presents does renew, extend, and adopt the said lease
and all the terms and conditions thereof for the period
beginning July 1, 1946, and ending June 30, 1947.

Dated at Washington, D. C., 31 May 1946.

Luther M. Sibley
Edgartown
Massachusetts

THE UNITED STATES OF AMERICA

By /s/ Andrew J. Murphy, Jr.
By direction of the Chief of the
Bureau of Yards and Docks, acting
under the direction of the Secretary
of the Navy.

CC-GAO

BuSandA

BuAer

ComOne

SO, NAS, Quonset Pt.

CNDO, 1st ND

NOTE: PLEASE ACKNOWLEDGE RECEIPT OF THIS NOTICE.

Reproduced at NARA - Northeast Region - Boston

APPENDIX G-28

U.S. Navy, Chief of Naval Operations

**Correspondence to the Commander Naval Air
Bases, First Naval District. Subj: Cape Poge
Bombing Target – Civilian Protest To dated 19
August 1946. RG72, Entry 62B General
Correspondence 1946, Box 437. NARA II,
College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVE

Op-515-C5 JGK
Serial: 1289P515

AUG 19 1946

From: Chief of Naval Operations.
To: Commander Naval Air Bases, FIRST Naval District.
Subj: Cape Poge Bombing Target - Civilian Protest To.
Refs: (a) Telegram from Richard Parmenter and others
to Senator David I. Walsh, dated 23 July 1946.
(b) CNO ltr to Senator Walsh, serial 1271P515 un-
dated.
Encls: (A) Copy of reference (a).
(B) ~~Copy of reference (b).~~

1. Enclosure (A) is a copy of a telegram forwarded by Senator Walsh to the Navy Department, from Mr. Richard Parmenter and others relative to the Navy's plans concerning the future use of the bombing target at Cape Poge.
2. By reference (b) Senator Walsh was advised that a representative of the Commander Naval Air Bases, FIRST Naval District would contact the residents of the Cape Poge area and convey to them the Navy's position in this matter.
3. Commander Naval Air Bases, FIRST Naval District is directed to contact the residents of the area in question and convey the Navy's plans in this region regarding targets of vital importance of the Quonset Point area to the Aeronautical Program of the Naval Shore Establishment.

Copy to:
Com One
ComFair Quonset
BuAer

V. H. SCHAEFFER
By Direction

62350275

712 / 77443

(5E11)

REPRODUCED AT THE NATIONAL ARCHIVES

BB908 NL PD TDVH EDGARTOWN MASS 23

SENATOR DAVID I WALSH

CHAIRMAN SENATE NAVAL AFFAIRS COMMITTEE SENATE OFFICE
BLDG WASHDC

DESPITE THE ASSURANCES YOUR TELEGRAM 27 JUNE BOMBING TARGET
CAPE POGUE BAY MARTHAS VINEYARD BEING REPAIRED IN ANTICIPATION
IMMEDIATE RESUMPTION OF BOMBING PERIOD THE UNDERSIGNED VERY
STRONGLY PROTEST THIS WHOLLY UNNECESSARY INFRINGEMENT OF
PERSONAL RIGHTS! AND SAFETY PLEASE INSIST THAT A RESPONSIBLE
OFFICER BE SENT DOWN FROM QUONSET WITHOUT DELAY TO DISCUSS
MATTER IT IS INCOMPREHENSIBLE TO THOSE OF US WHOSE PROPERTY
IS REPEATEDLY THREATENED BY FIRES RESULTING FROM FLARES AND
EXPLOSIONS THAT NAVY DOES NOT USE ADJACENT MUSKEGET ISLAND
UNINHABITED AND GOVERNMENT OWNED KINDLY INFORM OF SPECIFIC
STEPS WHICH YOU AS CHAIRMAN SENATE NAVAL AFFAIRS COMMITTEE
HAVE TAKEN TO BRING THIS MATTER TO ATTENTION RESPONSIBLE NAVAL
AUTHORITY

RICHARD PARMENTER DAVID SEAGER ERIC HARTWELL GILBERT ROSS
MAUDE AVERILL EDWARD SELS ALLENS BARTLETT GEORGE HODDER

C O P Y

(Enclosure a)

APPENDIX G-29

U.S. Navy, Office of the Chief of Naval Operations

**Correspondence to Senator Walsh dated 26 and
28 August 1946 Concerning the bombing target
at Cape Poge. RG72, Entry 62B General
Correspondence 1946, Box 402, Folder N1-
9/ND4. NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

Serial: 1271P515

Op-515-X AVG

NAVY DEPARTMENT
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON 25, D. C.



26 AUG 1946

My dear Senator Walsh:

This is in reply to your letter of July 24, 1946, enclosing a telegram dated July 23, 1946 from Mr. Richard Parmenter and others of Edgartown, Massachusetts, in regard to the Navy's operations at the bombing target at Cape Poge, Martha's Vineyard, Massachusetts. It is regretted that, due to an office error, the answer to your letter has been unduly delayed.

For the present, the Cape Poge bombing target is being retained because of its close proximity to the Naval Air Station Quonset Point, Rhode Island, because it is several miles from residences and resorts on Martha's Vineyard, and because of its accessibility for target repairs.

The Commander, Naval Air Bases, First Naval District has been directed to delegate a responsible officer to communicate in person with the residents of the region surrounding the Cape Poge target area for the purpose of presenting the Navy's position in this matter and to obtain a mutually agreeable compromise. As a result of this course of action, it is sincerely believed that a mutual understanding can be reached to the present problem. Until a satisfactory solution has been reached, bombing operations at the subject target will be suspended.

Your interest in this matter is understood and if I may be of further assistance to you, please do not hesitate to call on me.

Mr. Parmenter's telegram is returned in accordance with your request.

Sincerely yours,

DeWITT C. RAMSEY
Admiral, U. S. Navy

Hon. David I. Walsh
United States Senate
Washington, D. C.

CC: BUAER
COMNAB-1ND
COMFAIR QWONSET

Handwritten notes:
7-19-1946
D. I. Walsh
D. I.

62390040

REPRODUCED AT THE NATIONAL ARCHIVES

and No.
Op-515-R1 RSK
Serial: 1355P515

NAVY DEPARTMENT
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON 25, D. C.



28 AUG

My dear Senator Walsh:

28 AUG 1946

This is in further reply to your letter of July 24, 1946 enclosing a telegram dated July 23, 1946 from Mr. Richard Parmenter and others of Edgartown, Massachusetts in regard to the Navy's operations at the bombing target at Cape Poge, Martha's Vineyard, Massachusetts.

As you were informed in a reply dated August 26, 1946, the Commander Naval Air Bases, First Naval District was directed to delegate a responsible officer to communicate in person with the residents of the region surrounding Cape Poge for the purpose of presenting the Navy's position in this matter and to attempt to obtain a mutually agreeable compromise regarding the use of the subject target.

Captain Lockhart visited the Cape Poge area on Saturday, August 24, 1946, and conferred with several of the signers of the telegram to you regarding the use of the bombing target at Cape Poge. The following information is presented to you in regard to the complaints:

- (a) Very limited use has been made of the bombing target this summer and one of the complainants, Mr. Bartell, stated that he had not seen a plane all summer.
- (b) The target is situated on an uninhabited island and, therefore, no fire hazard to improved property exists, except in the event of an inaccurate unintentional drop.
- (c) No flares have been dropped for over a year. The complainants were informed of the fact that the practice bombs in current use are of the miniature type and water filled type exclusively.
- (d) No complainant lives closer to the target than two (2) miles.
- (e) All complainants are summer residents; four are related. All will vacate their summer residences between Labor Day and October 1, 1946.

7/12/1946
D.M. (re: Walsh, Bartell & others)
Dand - SE 11

62410010

Op-515-RI RSR

Serial: 1552515

(F) Mr. Parmenter, formerly a Lieutenant Commander, USNR, objected to flying of any nature in the region.

The Commander Naval Air Bases, First Naval District is continuing investigation and study of areas suitable for the location of bombing targets. Buzzegut Island was suggested by Mr. Parmenter as a substitute target but it is unsuitable since it is completely surrounded by shoals, rendering servicing of any targets thereon impossible because of its inaccessibility by boat.

Bombing operations at the Cape Pose target are temporarily suspended. However, this target must be reactivated at a later date in order to support the activities at the Naval Air Station Quonset Point, Rhode Island. The Commander Naval Air Bases, First Naval District is investigating complaints regarding bombing targets in other areas in the vicinity of NAS Quonset Point. For the most part, these other targets are not as favorably located as the Cape Pose target from both the standpoint of a minimum interference with civilian interests and a maximum desirability for the Navy. The selection of new bombing sites would normally require expenditure of funds not considered prudent at the present time. Every effort will be made in the future to locate bombing targets which will cause the least amount of interference with civilian interests and, at the same time, comply with the National policy regarding development of new installations.

Your interest in this matter is understood and I trust that the above information will aid you in advising Mr. Parmenter.

Sincerely yours,

D. C. RAMSEY
VICER CHIEF OF NAVAL OPERATIONS

Hon. David I. Walsh
United States Senate
Washington, D. C.

CC: COMNAV-1ND
ComFtR Quonset
BuAer

APPENDIX G-30

U.S. Navy, Naval Air Bases First Naval District

**Correspondence to the Chief of Naval
Operations. Subj: Cape Poge Bombing Target
dated 5 September 1946. RG72 Entry 62B
General Correspondence 1946, Box 437, Folder
N12/NA43. NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

FILE NO. 124/CR/101 sm
NAVAL AIR BASES
FIRST NAVAL DISTRICT
QUONSET POINT, RHODE ISLAND
(HEADQUARTERS)

2108

5 SEP 1946

To: Chief of Naval Operations

Subj: Cape Pose Bombing Target

Re: (a) CMO Ltr Op-515-G5 JOR Ser. 1289P515 of 19 August 1946.
(b) CMO SpLtr Ser. 1340P015 of 22 August 1946.

1. In accordance with the directives contained in references (a) and (b), a representative of this command has twice visited Martha's Vineyard and contacted the available summer residents of areas in the vicinity of bombing target L-5-V on Little Neck, Cape Pose, Chappaquiddick Island, East of Martha's Vineyard. Complaints regarding the peace-time use of this target emanate from the summer inhabitants of half a dozen houses on Cape Pose and across Cape Pose Bay on North Neck, Chappaquiddick. The distances of these summer habitations from the target vary from a minimum of half a mile to something over one mile. The objections are based largely upon the existence of the established restricted area which restricts the operation of small sail boats between the North and South portions of Cape Pose Bay and restricts access along the beach to Cape Pose itself. Secondary objections are based upon the possibility of danger from wild drops and upon the annoyance due to the noise of aircraft in the vicinity. Interference with possible commercial fishing and normal crabbing and clam digging was also referred to.

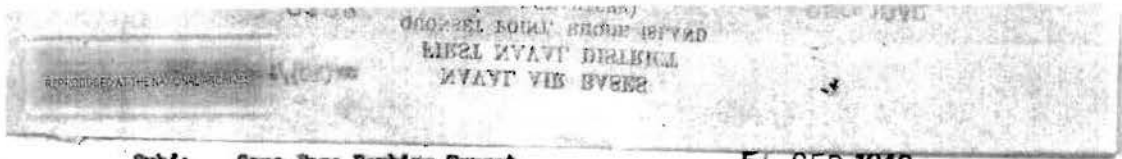
2. The following facts were established:

- (a) One or more brush fires were started in the area during the war when flares were used in connection with the training program of Night Fighters. These fires were extinguished without damage to property.
- (b) No damage has resulted from recent use of the target as a day dive bombing target.
- (c) Casual inquiry elicited no objection to the use of the target from the inhabitants of Edgartown nor from the occupants of summer cottages on Chappaquiddick Island at greater distance from the target.
- (d) No violent objection exists to the use of the target between 1 October and 1 June.

3. During the conferences the naval representative endeavored to explain the following:

NIA/NA43
5E11

62490748



Subj: Cape Poge Bombing Target

5 SEP 1946

- (a) The necessity for numerous target areas in the New England area for the syllabus training of four and possibly five carrier air groups.
 - (b) The restriction of the Cape Poge target to use of water filled and miniature bombs.
 - (c) The restriction on runs to North-South direction in order to avoid populated areas.
 - (d) The discontinuation many months ago of the night training program and the use of the flares.
 - (e) The intensive and comprehensive search during the past few months for substitute target sites which would interfere with various civilian interests to a minimum degree.
 - (f) The general desirability of the Cape Poge target from the viewpoint of the Navy because of its proximity to Quonset Point, the existence of the leases for the property involved in the immediate target area, the facility of access for target repair and the comparatively minor interferences with private interests.
4. After complete discussion of all phases of the subject, the following commitments were made:
- (a) That the present suspension of bombing operations at the subject target would be kept in effect for the immediate future.
 - (b) That should the training requirements of Fleet Air, Quonset Point necessitate, resumption of operation would be preceded by ample notification thereof.
 - (c) That in case of resumption of operations, the target would be restricted on Saturdays, Sundays, and legal holidays.
 - (d) That the target would be used from 1 October to 1 June.
 - (e) That every effort would be exerted to find a substitute target site prior to the next summer season.
5. The target requirements of Fleet Air, Quonset are at present temporarily somewhat below normal due to lack of personnel, resultant low plane availability and the ship's based status of one CV group. It is accordingly the intention of the Commander, Naval Air Bases to continue the present restriction on the use of the target in question until 1 October and to continue the search for and development of substitute target sites. It is anticipated that prior to the next summer season such arrangements can be completed and that target L-5-V can be abandoned, present leases cancelled, and the established restrictions on the area removed.

G. A. SEITZ
Comdr., MAB, FIRST ND

cc:ComFair, Quonset
Buler ✓

APPENDIX G-31

U.S. Navy, Chief of the Bureau of Aeronautics

**Correspondence to the Chief of the Bureau of
Yards and Docks. Subj: First Naval District –
Practice Target Area, Disestablishments of dated
11 April 1947. RG72, Entry 62B General
Correspondence 1947, Box 424, Folder NDI
Vol 2. NARA II, College Park, MD.**

REPRODUCED AT THE NATIONAL ARCHIVES

Aer-EE-11
ND1

Enc-1 on CGO ltr Op-58011-201 Ser.3782562
dtd 1 Apr 47 to BuDecks via Baker.

29395

11 APR 1947

From: The Chief of the Bureau of Aeronautics.
To: The Chief of the Bureau of Yards and Docks.
Subject: First Naval District - Practice Target Area, Disestablishment of.

1. Forwarded for appropriate action.
2. This target is known as the Little Neck Dive Bombing Target and consists of an area of 42.88 acres covered by the following leases:

Lease NCo(R)-38801
Lease NCo(R)-38818
Lease NCo(R)-38842

John Hulme
Capt., USN
By Direction C. of Bureau

cc:
CNO (Op-580)
ComBos
ComNAF-IND
ComPac Quonset

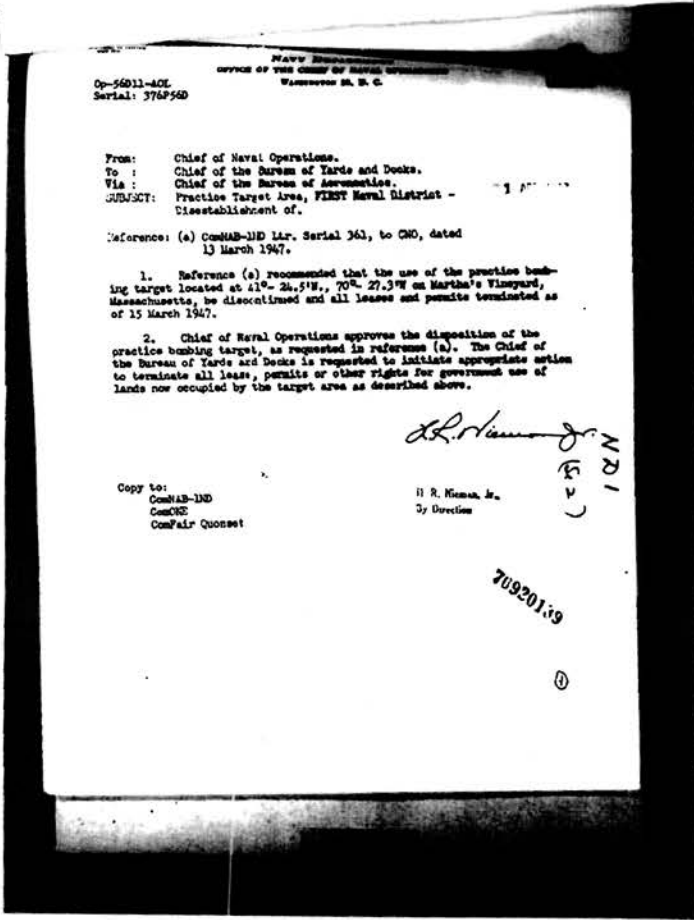
Lt. J. J. Penne-3003
8 Apr 47
R. Syvulich

70920159

DATE:
INDEX:
TO:
FROM:
SUMMARY:

4-11

FILED:
INDEXER:
REMARKS:



UNITED STATES NAVY DEPARTMENT
CORRESPONDENCE REFERENCE FORM

NAVEXOP-78

801650R

3

APPENDIX G-32

U.S. Navy, Navy Department, Washington, DC

**Correspondence to Alice R. Lee concerning lease
number NOy(R)-36842, dated 18 April 1947.**

**RG181, Entry 1st Naval District Real Estate
Disposal Files 1940-1954, Box 44. NARA
Northeast Region, Waltham, MA.**

Copy/pbe

NAVY DEPARTMENT
Washington 25, D.C.

ND1/W1-13
L22-7-ED-3
P-5-5/CS/hs

18 APR 1947

Alice Rankin Lee
Helen Charlotte Lee
7 Perry Street
Morristown, New Jersey

Dear Mesdames:

You are notified that the United States of America, under the terms of Lease NOy(R)-36842, dated 1 July 1944 and expiring the 30th day of June 1947, covering all that certain parcel of land lying and being at Little Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard, Town of Edgartown, County of Dukes, Commonwealth of Massachusetts, more particularly described in said lease, hereby elects to terminate said lease as of thirty (30) days from the date hereof.

UNITED STATES OF AMERICA

By s/ Wilfred P. Tiencken
By direction of the Chief of
the Bureau of Yards and
Docks, acting under the direction
of the Secretary of the Navy.

CG:
CNO (Op-56D)
BuAer
ComOne
NCDO 1ND
ComMAN 1ND
ComFair Quonset
BuSandA

Copy/pbs

NAVY DEPARTMENT
Washington 25, D.C.

ND1/H1-13
L22-7-ED-3
F-5-5/CS/mo

18 APR 1947

Mr. Charles Edward Lee
47 Lenox Avenue
East Orange, New Jersey

Dear Sir:

You are notified that the UNITED STATES OF AMERICA, under the terms of Lease NOY(R)-36842 dated 1 July 1944 and expiring the 30th day of June 1947, covering all that certain parcel of land lying and being at Little Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard, Town of Edgartown, County of Dukes, Commonwealth of Massachusetts, more particularly described in said lease, hereby elects to terminate said lease as of thirty (30) days from the date hereof.

UNITED STATES OF AMERICA

By s/ Wilfred P. Tienken
By direction of the Chief
of the Bureau of Yards and
Docks, acting under the
direction of the Secretary
of the Navy

CC:
CNO (Op-66D)
Bu Aer
ComOne
NCDO 1 ND
Com NAB 1ND
ComFair Quonset
BuSanda

Reproduced at NARA-Northeast Region

SPECIAL RELEASE - Under Lease No. NOY(R)-36842

KNOW ALL MEN BY THESE PRESENTS, that:

WHEREAS, by said Lease dated 1 July 1944, 97 Chestnut St, East Orange, N.J.
and bearing number NOY(R)-36842, Alice Rankin Lee, Charles Edward Lee
whose address is 97 Chestnut St, East Orange, N.J.,
New Jersey, as Lessor, leased to THE UNITED STATES OF AMERICA, as Lessee,
premises:

All that certain parcel of land lying and being at Little Neck,
Cape Poge, Chappaquiddick Island, Martha's Vineyard, Town of
Edgartown, County of Dukes County, Commonwealth of Massachusetts which is

more particularly described in said lease, and

WHEREAS, the United States of America, no longer requiring the
use of said premises, has surrendered possession thereof to the
Lessor on the 18th day of May 1947 and the
Lessor has accepted such surrender.

The undersigned, the Lessor under said Lease, for
and in consideration of the surrender of said premises, the return
of which in good condition is hereby acknowledged, has remised,
released and forever discharged, and by these presents does for
herself, her heirs, executors, administrators, successors,
and assigns, remise, release and forever discharge the United
States of America, its officers, agents and employees, of and from
all manner of actions, claims or demands which against the United
States of America, its officers, agents and employees, the under-
signed ever had, now has, or ever will have upon, or by reason of
any matter, cause, or thing whatsoever arising out of said Lease
or the occupancy by the United States of America of said premises
or the use of any personal property thereon,

IN WITNESS WHEREOF, the undersigned has signed and sealed these
presents on _____
auth-

APPENDIX G-33

U.S. Navy

**Special Release. Lease number NOy(R)-36819
between the United States and Luther Sibley
effective 1 July 1944. RG181, Entry 1st Naval
District Real Estate Disposal Files 1940-1954,
Box 44, Vol 2. NARA Northeast Region,
Waltham, MA.**

No. NOY(R)-56319

KNOW ALL MEN BY THESE PRESENTS, that:

WHEREAS, by said Lease dated 1 July 1944, and bearing number NOY(R)-56319, Luther M. Sibley whose address is Edgartown, Massachusetts, as Lessor, leased to THE UNITED STATES OF AMERICA, as Lessee, premises:

All that certain land lying and being on "Little Neck", at Cape Poge, Chappaquiddick Island, Martha's Vineyard, situate in the Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts which is

more particularly described in said Lease, and

WHEREAS, the United States of America, no longer requiring the use of said premises, has surrendered possession thereof to the Lessor on the 18th day of May 1947, and the Lessor has accepted such surrender.

The undersigned, the Lessor under said Lease, for and in consideration of the surrender of said premises, the return of which in good condition is hereby acknowledged, has remised, released and forever discharged, and by these presents ~~do~~ for himself, his heirs, executors, administrators, successors, and assigns, remise, release and forever discharge the United States of America, its officers, agents and employees, of and from all manner of actions, claims or demands which against the United States of America, its officers, agents and employees, the undersigned ever had, now has, or ever will have upon, or by reason of any matter, cause, or thing whatsoever arising out of said Lease or the occupancy by the United States of America of said premises or the use of any personal property thereon,

IN WITNESS WHEREOF, the undersigned has signed and sealed these presents or caused these presents to be executed by its duly authorized officers and its seal to be affixed hereto this 30th day of June 1947.

WITNESS:

Quenes R. Robinson

Luther M. Sibley

APPENDIX G-34

U.S. Navy

**Special Release. Lease number NOy(R)-36801
between the United States and Doris Chouinard**
effective 17 May 1948. RG181, Entry 1st Naval
District Real Estate Disposal Files 1940-1954,
Box 44, Vol 2. NARA Northeast Region,
Waltham, MA.

SPECIAL RELEASE - Under Lease No. NOy(R)-36801

XXXXXXXXXXXXXXXXXXXX

KNOW ALL MEN BY THESE PRESENTS, that:

said
WHEREAS, by lease dated 1 July 1944, and bearing number
NOy(R)-36801, Doris Huxford Chouinard, whose address is
87 Alhambra Circle, Edgewood, Rhode Island, as Lessor, leased to
THE UNITED STATES OF AMERICA, as Lessee, premises:

All that certain land lying and being on "Little Neck" at Cape
Poge, Chappaquiddick Island, Martha's Vineyard, situated in the
Town of Edgartown, County of Dukes County, Commonwealth of
Massachusetts, and

more particularly described in said lease, and

WHEREAS, the United States of America, no longer requiring the use of
said premises, has surrendered possession thereof to the Lessor, and the
Lessor has accepted such surrender on the 18th day of May, 1947

The undersigned, the Lessor under said lease, for and in consideration
of the surrender of said premises, the return of which in good condition is
hereby acknowledged, has remise, released and forever discharged, and by
these presents does for herself, her heirs, executors, administrators,
successors, and assigns, remise, release and forever discharge the United
States of America, its officers, agents and employees, of and from all manner
of actions, claims or demands (except for the payment of rent to the above-
referred to date of surrender) which against the United States of America,
its officers, agents and employees, the undersigned ever had, now has, or
ever will have upon, or by reason of any matter, cause or thing whatsoever
arising out of said lease or the occupancy by the United States of America
of said premises or the use of any personal property thereon.

IN WITNESS WHEREOF, the undersigned has signed and sealed these presents
or caused these presents to be executed by its duly authorized officers and
its seal to be affixed hereto this 17th day of May, 1948

WITNESS:

/s/ Fred L. Arnold

/s/ Doris H. Chouinard

/s/ Nellie J. Carroll

APPENDIX G-35

U.S. Navy, Naval Air Bases, First Naval District

Correspondence to the Commandant, First Naval District. Subj: Leases NOy(R)-36801, NOy(R)-36819, and NOy(R)-36842 – cancellation of dated 10 June 1947. RG181, Entry 1st Naval District Real Estate Disposal Files 1940-1954, Box 73. NARA Northeast Region, Waltham, MA.

Reproduced at NARA-Northeast Region--Boston

DECLASSIFIED

Declassification Review Project INN-D-02-92
EO 12356, Sec. _____
DOD Directive 5200.30, Date _____
By JKO NARA, INN, Date 5/29/92

File No.

NA124/N1-13(80-Er)cwl

NAVAL AIR BASES
FIRST NAVAL DISTRICT

Serial: 261-PW

U. S. NAVAL AIR STATION
QUONSET POINT, RHODE ISLAND
(HEADQUARTERS)

From: Commander, Naval Air Bases, FIRST Naval District
To: Commandant, FIRST Naval District

Subj: Leases NOy(R)-36801, NOy(R)-36819, NOy(R)-36842 -
cancellation of

Ref: (a) BuDocks ltr to ComONE, file N1/N1-13, L22-7-ED-1,
L22-7-ED-2, L22-7-ED-3 F-55/cs/hc, dtd 21 Apr. 1947.
(b) Navy PR&D Reg. 2.
(c) ComONE ltr to ComNAB, file ND1/14-3(445)NMJ:pbe, dtd
24 Apr. 1947.
(d) Doris Huxford Chouinard ltr to BuDocks, dtd 23 Apr.
1947.

1. Pursuant to the request contained in references (a) and (c), negotiations were entered into with the Lessors pertaining to desired restoration. It was determined that removal of all Navy installed improvements, together with the shattered water filled type bomb shell cases, would be required. Decontamination of the site has been conducted and the final removal of all said shell cases is awaiting the necessary vessel to accomplish this task. It is proposed to salvage all scrap metal.

2. Upon completion of this removal and restoration to the premises, Special Release forms will be transmitted to the Lessors, and upon completion thereof, will be forwarded to the Bureau of Yards and Docks, together with the data required by reference (b).

3. This information also concerns the requested restoration as described in reference (d).


H. W. JOHNSON
By direction

16862

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DECLASSIFIED

Declassification Review Project INN-D-02-92
EO 12356, Sec. _____
DOD Directive 5200.30, Date _____
By JKO NARA, INN, Date 5/29/92

NA124/NI-13(80-Ex)cwl

Serial: 261-PM

10 JUN 1947

From: Commander, Naval Air Base, FIRST Naval District
To: Commandant, FIRST Naval District

Subj: Leases Noy(R)-36801, Noy(R)-36819, Noy(R)-36842 -
cancellation of

Ref: (a) DuBocks ltr to ComCNE, file NA/NI-13, L22-7-SD-1,
L22-7-SD-2, L22-7-SD-3 P-55/co/nc, dtd 21 Apr. 1947.
(b) Navy PROG Rep. 2.
(c) ComCNE ltr to ComNAE, file NA/14-3(445)NW:psb, dtd
24 Apr. 1947.
(d) Doris Hanford Chevillard ltr to DuBocks, dtd 23 Apr.
1947.

1. Pursuant to the request contained in references (a) and (c), negotiations were entered into with the Lessors pertaining to desired restoration. It was determined that removal of all Navy installed improvements, together with the shattered water filled type bomb shell cases, would be required. Recontamination of the site has been conducted and the final removal of all said shell cases is awaiting the necessary vessel to accomplish this task. It is proposed to salvage all scrap metal.
2. Upon completion of this removal and restoration to the premises, Special Release forms will be transmitted to the Lessors, and upon completion thereof, will be forwarded to the Bureau of Yards and Docks, together with the data required by reference (b).
3. This information also concerns the requested restoration as described in reference (d).

H. W. JOHNSON
By direction

JUN 13 10:20

RECEIVED

16662

APPENDIX G-36

U.S. Navy, Commandant, First Naval District

**Memorandum, Subj: Cancellation of Leases
NOy(R)-36842, 36819, 36801, 35559, and 39456, 5
December 1947. RG181, Entry 1st Naval District,
Real Estate, Disposal Files, 1940-1954, Box 73.
NARA Northeast Region, Waltham, MA.**

DECLASSIFIED

Declassification Review Project INN-D-02-9c
EO 12356 Sec. _____
DOD Directive 5200.30, Date _____
By J/KO NARA, INN, Date 5/29/92

NDI/LA-3(445)
NMJ:ERC

5 December 1947

From: Commandant, First Naval District
To: Chief of the Bureau of Yards and Docks
Subj: Cancellation of Leases NQy(R)-36842, 36819, 36801, 35559 and 39456
Refs: (a) BuDocs ltr NDI/NI-13 022-4-QP-1 F-5-5/PB/vr to ComOne dtd
10 November 1947
(b) Comdr, HAF, ltr NA124/NI-13(GO-Ex)owl Ser. 451-PW to ComOne
dtd 17 November 1947
Encl: (A) Copy of reference (b)

1. Reference (a) requested that the Bureau be advised of the status of negotiations for restoration of property covered by subject leases.

(2) Accordingly, the status of negotiations is outlined below:

- (a) Leases NQy(R)-36842 and 36819 - Navy installations have been removed, and all debris cleared. Lessors have executed releases, which will be forwarded to the Bureau in the near future by the Commander, Naval Air Base, First Naval District.
- (b) Lease NQy(R)-36801 - Navy installations have been removed, and all debris and bomb cases collected and stacked, but Lessor will not execute release until the debris is removed from the island. A small boat will be required for this removal and due to inclement weather, it is considered more appropriate to postpone removal until spring of 1948. The Commandant has been advised that the Lessor will be approached relative to granting a grace period for this removal.
- (c) Lease NQy(R)-35559 - Restoration has been completed with the exception of the removal of a concrete simulated submarine casing tower. The removal of this tower will require demolition. Efforts to obtain an experienced Navy Demolition crew have failed, and authority will be requested in the near future to enter into an informal contract for completion of restoration of this property.
- (d) Lease NQy(R)-39456 - Although all visible bombcases have been removed from the property on several occasions, severe tide action during stormy weather causes more buried cases to be uncovered.

- 1 -

R
J/KO
12-5-47
FILE
DISTRICT PUBLIC WORKS

Reproduced at NARA-Northeast Region--Boston

DECLASSIFIED

Declassification Review Project INN-D-02-9c

EO 12356, Sec. _____

DOD Directive 5200.30, Date _____

By JVKO NARA, INN, Date 5/29/92

NDL/IA-5(445)
NMLJ:ERG

Subj: Cancellation of Leases NQy(N)-36842, 36816, 36801, 35589 and 36466

The Lessor refused to sign a release until such time as all cases are removed and the duck blind is repaired. As indicated in reference (b), copy of which is forwarded as Enclosure (A), a grace period has been requested until spring when the waters of the pond are released, which would allow for more thorough restoration. No reply to the enclosure to reference (b) has been received by the Commander, Naval Air Base, First Naval District.

W. A. Melanus
By direction

cc: Comdr, NAB, 1ND

APPENDIX G-37

U.S. Navy, Navy Department, Washington, DC

Memorandum, Subj: Lease NOy(R) -36842 with Alice Rankin Lee, et al. covering land at Little Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard to be used for a Bomb Target Site, 28 February 1945. RG 72, Entry 62B 1943-45, Box 2839. NARA II, College Park, MD.

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ADDRESS REPLY TO
THE BUREAU OF YARDS AND DOCKS

AND REFER TO

NAVY DEPARTMENT

WASHINGTON 25, D. C.



L22-7-ED-3
NDL/M1-13
F-5-5/HET/ebw

50610137

February 28, 1945

To: Officer-in-Charge, Regional Real Estate
Office, 305 Washington St., Brooklyn, N.Y.

Subj: Lease NOy(R)-36842 with Alice Rankin Lee,
et al., covering land at Little Neck, Cape
Poge, Chappaquiddick Island, Martha's
Vineyard, Edgartown, Mass., to be used for
a Bomb Target Site; rental, \$100.00 per
annum.

Ref: (a) CinC ltr, RHG:hm NJ/52h, to BuDocks
dated February 20, 1945.

1. Enclosure (1) is forwarded for delivery to Lessor and
Enclosure (2) is furnished for the files of the Officer-in-
Charge.

By direction of Chief, BuDocks:

JOHN J. COURTNEY

Encl. HW

- (1) Triplicate original of subject lease.
- (2) Copy of Enclosure (1).

CC - GAO (Audit) (Form 1036)
BuSanda
BuAero
ComOne
SO, NAS, Quonset Point, R.I.
DO " " "

N1-9 / N443
N12 / N443
N443

MA

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Appropriation Navy, 1945.

U. S. Standard Form No. 2 (1 d)
Approved by the Secretary of the Treasury
May 6, 1935

Subhead 3

All public bills for payment
under this contract should
include a reference to
No. NOV(R)-56942

LEASE

~~XXXXXXXXXX~~

BETWEEN

Alice Rankin Lee, Helen C. Lee and Charles Edward Lee

AND

THE UNITED STATES OF AMERICA

1. THIS LEASE, made and entered into this 1st day of July,
in the year one thousand nine hundred and forty-four by and between
Alice Rankin Lee, Helen Charlotte Lee, 7 Parry Street, Morristown,
N.J., and Charles Edward Lee, 47 Lenox Ave., East Orange, N.J.
whose address is
~~XXXXXXXXXX~~

for ~~themselves~~ ^{their} heirs, executors, administrators, successors, and assigns, hereinafter called
the Lessor, and ~~the~~ UNITED STATES OF AMERICA, hereinafter called the Government:

WITNESSETH: The parties hereto for the considerations hereinafter mentioned covenant and
agree as follows:

2. The Lessor hereby leases to the Government the following described premises, viz:

All that certain parcel of land lying and being at Little
Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard,
Town of Edgartown, County of Dukes County, Commonwealth
of Massachusetts which is more particularly described in
Schedule "A" annexed hereto.

to be used exclusively for the following purposes (see instruction No. 3):

Bomb target site.

3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning
1 July 1944
and ending with 30 June 1945

10-1980

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4. The Government shall not assign this lease in any event, and shall not sublet the demised premises except to a desirable tenant, and for a similar purpose, and will not permit the use of said premises by anyone other than the Government, such sublessee, and the agents and servants of the Government, or of such sublessee.

5. This lease may, at the option of the Government, be renewed from year to year at a rental of ~~one hundred dollars (\$100.00) per annum~~

and otherwise upon the terms and conditions herein specified, provided notice be given in writing to the Lessor at least ~~thirty (30)~~ days before this lease or any renewal thereof would otherwise expire: Provided that renewal thereof shall extend the period of occupancy of the premises beyond the ~~day of~~ **six months** after the termination of the present ~~states of war~~

6. The Lessor shall furnish to the Government, during the occupancy of said premises, under the terms of this lease, as part of the rental consideration, the following:

~~nothing~~

7. The Government shall pay the Lessor for the premises rent at the following rate:

One hundred (\$100.00) per annum

Payment shall be made at the end of each

8. The Government shall have the right, during the existence of this lease, to make alterations, attach fixtures, and erect additions, structures, or signs, in or upon the premises hereby leased (provided such alterations, additions, structures, or signs shall not be detrimental to or inconsistent with the rights granted to other tenants on the property or in the building in which said premises are located) and the same shall be and remain the property of the Government and may be removed therefrom by the Government prior to the termination of this lease, and the Government, if required by the Lessor, shall, before the expiration of this lease or renewal thereof, restore the premises to the same condition as that existing at the time of entering upon the same under this lease, reasonable and ordinary wear and tear and damages by the elements or by circumstances over which the Government has no control, excepted: Provided, however, that if the Lessor requires such restoration, the Lessor shall give written notice thereof to the Government **Fifteen (15)** days before the termination of the lease.

10-1860

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Form No. 2
(Revised May 6, 1935)
(Sheet 2)

[LEASE]

XXXXXX
9. The Lessor shall, unless herein specified to the contrary, maintain the said premises in good repair and tenantable condition during the continuance of this lease, except in case of damage arising from the act or the negligence of the Government's agents or employees. For the purpose of so maintaining the premises, the Lessor reserves the right at reasonable times to enter and inspect the premises and to make any necessary repairs thereto.

XX
10. If the said premises be destroyed by fire or other casualty, this lease shall immediately terminate. In case of partial destruction or damage, so as to render the premises untenable, either party may terminate the lease by giving written notice to the other within fifteen days thereafter, and if so terminated no rent shall accrue to the Lessor after such partial destruction or damage.

11. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this lease or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company, if the lease be for the general benefit of such corporation or company.

12. This lease or any renewal thereof may be terminated by the Government upon thirty (30) days written notice to the lessor.

13. Paragraphs 9 and 10 and part of paragraph 8 have been deleted and paragraph twelve has been added prior to the execution of this lease.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

Alice Rankin Lee

Helen Charlotte Lee

Charles Edward Lee.

In presence of:
Sarah L. Tunis

7 Perry Street, Morristown, N.J.

Lessor.

BAISY COMBES, (Address)

7 Perry Street, Morristown, N.J

UNITED STATES OF AMERICA,

John J. Courtney

By direction of ~~Chief of the Bureau of Yards and Docks, acting under direction of the Secretary of the Navy.~~

(Official title)

(If Lessor is a corporation, the following certificate shall be executed by the secretary or assistant secretary.)

I, _____, certify that I am the _____ Secretary of the corporation named as Lessor in the attached lease; that _____

_____, who signed said lease on behalf of the Lessor, was then

_____ of said corporation; that said lease was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

PAYMENT TO BE MADE BY DO, NAS,
Quonset Point, R.I.

10-2800

[CORPORATE SEAL]

REPRODUCED AT THE NATIONAL ARCHIVES

Part of Share 1

Beginning at a point at the low water mark of the Atlantic Ocean, 2250 feet Southerly from the most Easterly corner of the United States Government property on which the Cape Poge Lighthouse stands, said point of beginning being the Southeasterly corner of land now or formerly of Kathrina G. Baldwin, et al; thence Westerly at right angle to the low water mark, by said Baldwin, et al land, to the high water mark of the Atlantic Ocean; thence continuing Westerly by said Baldwin, et al land, 320 feet, more or less, to the high water mark of Sheep Shear Pond; thence Southwesterly by the high water mark of Sheep Shear Pond, 1050 feet, more or less, to the Northeasterly corner of Share 6; thence S 8° 20' E. by Share 6, 600.0 feet, more or less, to the high water mark of Drunken Cove; thence Southerly by the meanders of the high water mark of Drunken Cove and Cape Poge Bay, 1460 feet, more or less, to the Northwesterly corner of land belonging to Howard S. Hart, Estate; said point being 500 feet Northerly from the Northerly line of land taken by the Town of Edgartown; thence Easterly by said land of Hart Estate, 350 feet, more or less, to the high water mark of the Atlantic Ocean; thence Northerly by the high water mark of the Atlantic Ocean, 2850 feet more or less, to said Baldwin et al land; thence Easterly to the low water mark of the Atlantic Ocean and point of Beginning.

Meaning and intending to include all of the land, above and below high water mark, riparian rights, easements and/or ways appurtenant thereto. Said land being part of the 2nd parcel conveyed to Charlotte G. Lee by deed dated March 3, 1914, and recorded in Dukes County Land Evidence Records in Book 134 Page 484. Said parcel being a part of Share 1, now or formerly belonging to the Estate of Charlotte G. Lee.

Containing 26.8 acres of land more or less.

The above mentioned property is shown as part 1 on Naval Air Station, Quonset Point, Rhode Island Public Works Drawing No. 2314 entitled "Little Neck, Cape Poge, Chappaquiddick Island, Martha's Vineyard Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts."

APPENDIX H

STILL PHOTOGRAPH REFERENCES

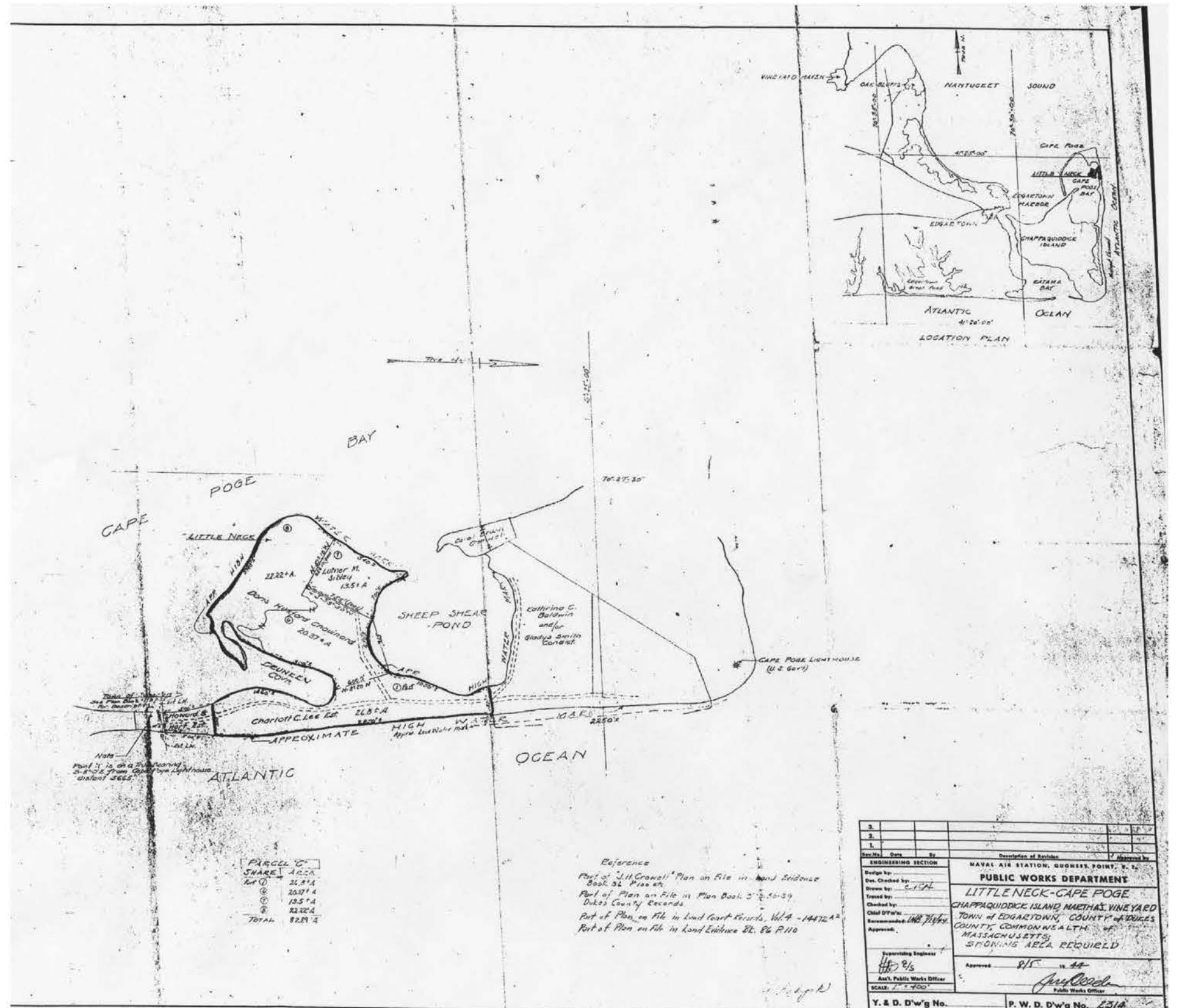
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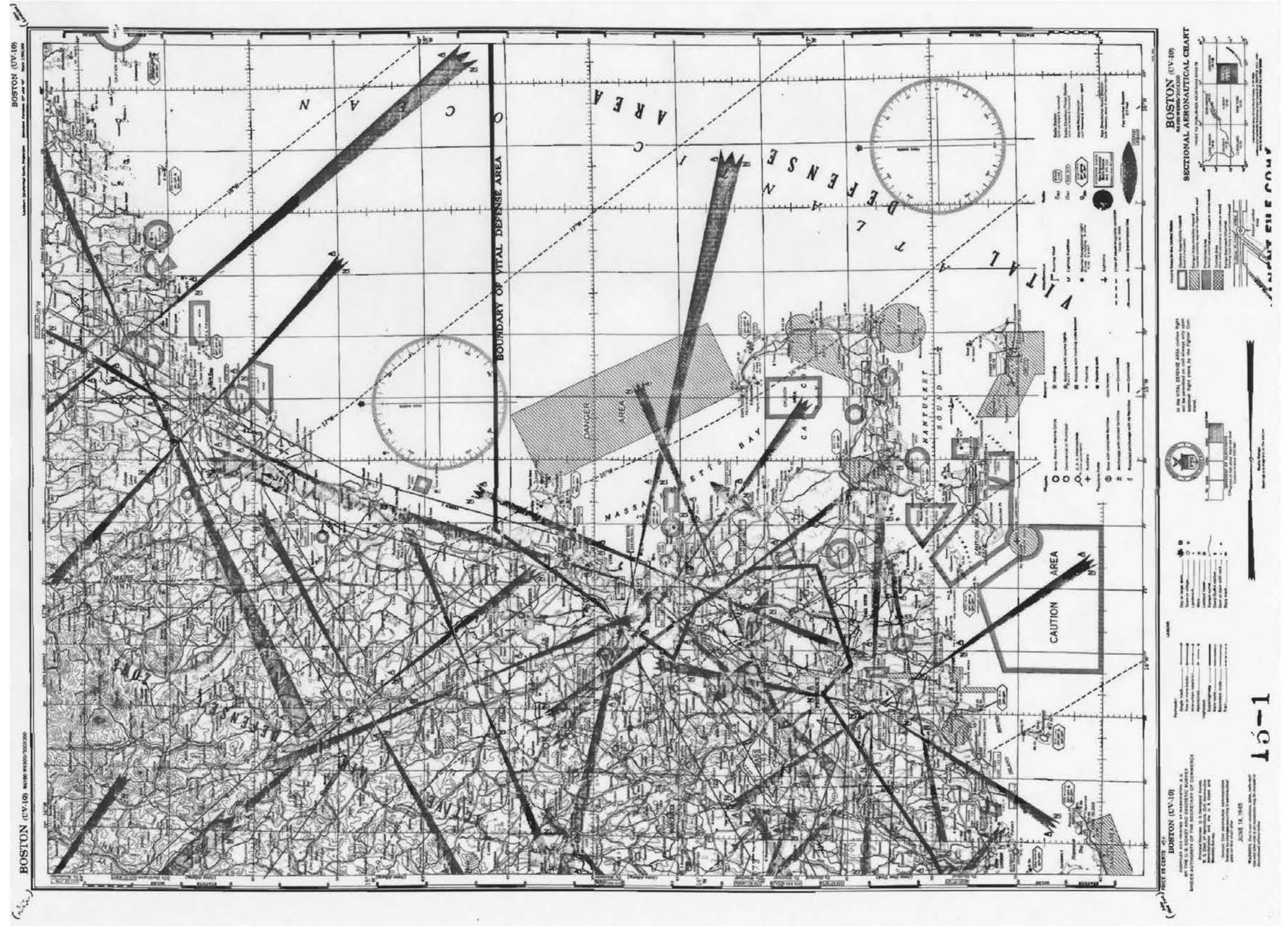
APPENDIX I

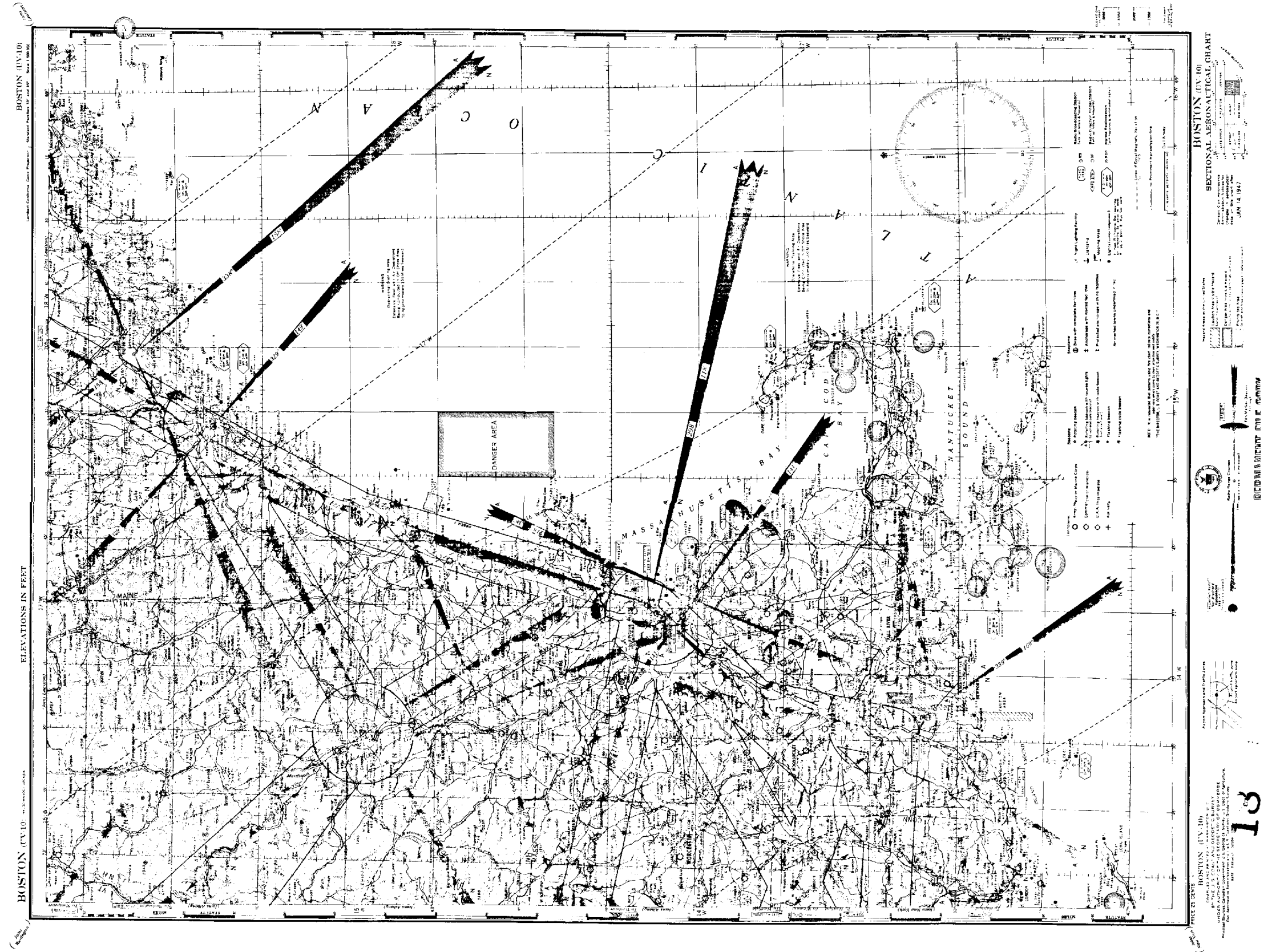
MAPS/DRAWINGS REFERENCES

MAPS/DRAWINGS REFERENCES

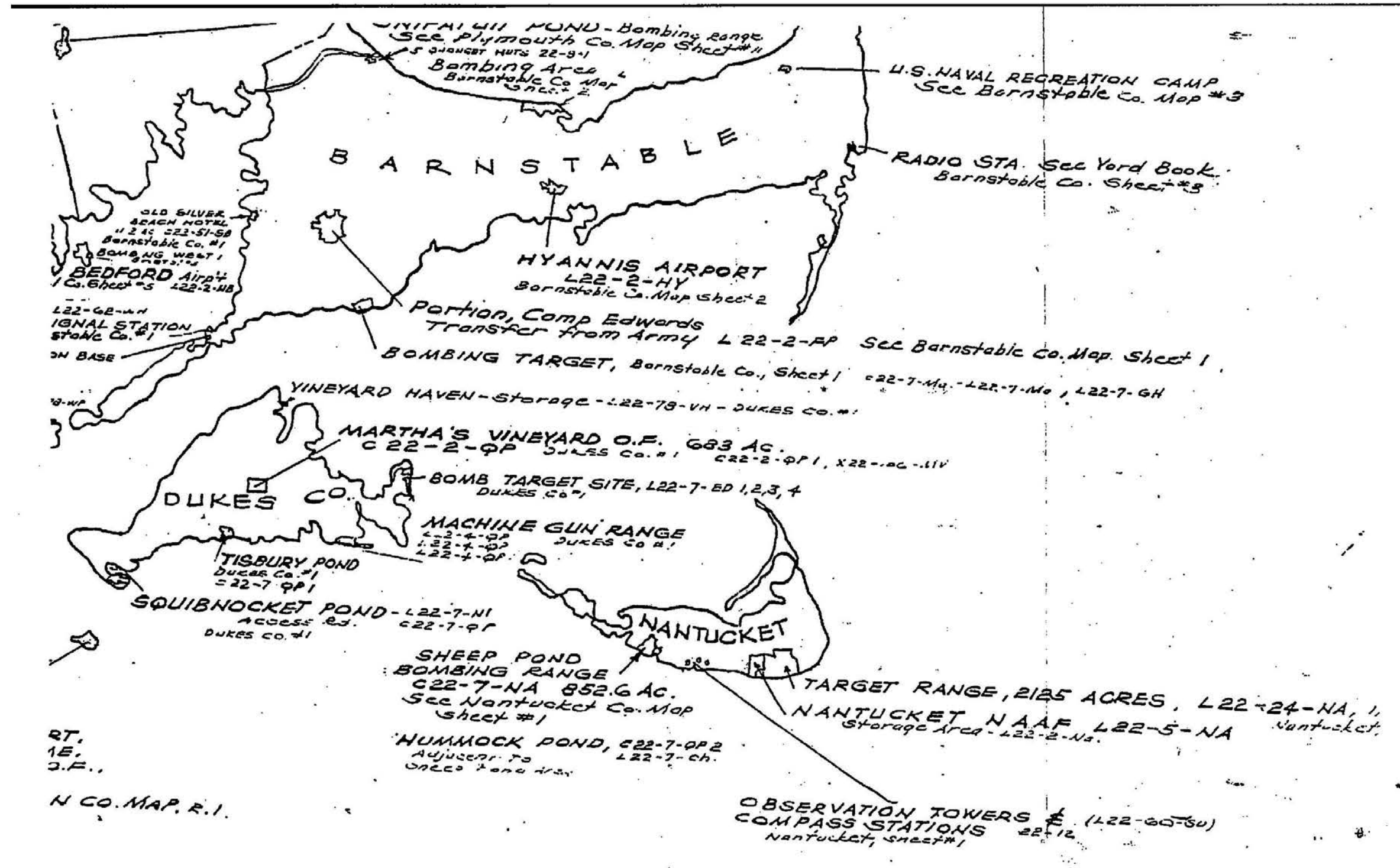
| <u>Map No.</u> | <u>Historical Maps/Drawings</u> |
|----------------|---|
| I-1 | U.S. Navy, NAS Quonset Point 1944 Plan of Cape Poge Chappaquiddick Island, Public Works Department, 14 March 1944, revised 30 March 1944. RG181, Entry 1 st Naval District, Real Estate Disposal Files, 1940-1954, Box 12/44. NARA Northeast Region, Waltham, MA. |
| I-2 | U.S. Navy, NAS Quonset Point 1944 Little Neck - Cape Poge Chappaquiddick Island, Public Works Department, approved 5 August 1944. RG181, Entry First Naval District Real Estate Disposal Files 1940-1954, Box 12. NARA Northeast Region, Waltham, MA. |
| I-3 | Department of Commerce 1943 Boston Sectional Aeronautical Chart (UV-10), 14 June 1945. RG 370, Entry Sectional Aeronautical Charts – Boston. NARA II, Cartographic and Architectural Branch, College Park, MD. |
| I-4 | U.S. Army Corps of Engineers, New England District 1947 Boston Sectional Aeronautical Chart (UV-10), 14 January 1947. RG 370, Entry Sectional Aeronautical Charts – Boston. NARA II, Cartographic and Architectural Branch, College Park, MD. |
| I-5 | U.S. Navy 1947 U.S. Navy Acquisition Map of Massachusetts/Rhode Island, dated 9 May 1947. Appendix L-4 of U.S. Army Corps of Engineers, Rock Island District, Tisbury Great Pond Archive Search Report, Project Number D01MA045301, dated 16 November 1999. |







13



RT.
 1E.
 3.F.,

N CO. MAP, R. 1.

L-4

Navy Acquisition 5191A7

APPENDIX J

INTERVIEWS

(NOT USED)

APPENDIX K

**ABBREVIATED SITE SAFETY AND HEALTH
PLAN (ASSHP)**

(NOT USED)

APPENDIX L

PROPERTY VISIT REPORT

Note: The 14 April 2008 property visit provided the information required to conduct this Preliminary Assessment.

A property visit was conducted on the Cape Poge Little Neck Bomb Target Site on 14 April 2008, to document and assess areas of past Department of Defense use, storage and disposal, and areas of potential release.

The 14 April 2008 property visit was conducted by:

- Carol Charette, U.S. Army Corps of Engineers (USACE) North Atlantic District
- Dave Larsen, U.S. Army Corps of Engineers (USACE) North Atlantic District
- Ralph Turner, U.S. Army Corps of Engineers (USACE) North Atlantic District
- Michael Moran, Massachusetts Department of Environmental Protection

CENAE-PPMD

25 APRIL 2008

Ms. Charette/x605

MEMORANDUM FOR THE FILE:

SUBJECT: Site Visit Trip Report - South Beach MMRP Assessment, Martha's Vineyard, Massachusetts

1. Summary. Personnel from the New England District Army Corps of Engineers, the MADEP, and the Trustees of the Reservation conducted a return visit to Chappaquiddick for the purpose of performing a visual inspection of South Beach on April 25th, 2008 for ordnance items, due to the fact that logistical problems which caused delays precluded visiting the site on 14 April. Pictures of the beach area/condition were taken. No ordnance was observed on the beach area during this site visit.

2. Purpose. The main purpose of the site visit was to conduct a visual and safety inspection of the South Beach area regarding ordnance items.

3. Participants. The following personnel attended the site visit to South Beach:

Carol Ann Charette, Project Manager US Army Corps of Engineers (978) 318-8603

Ralph Turner, Ordnance Safety Specialist

Michael Moran, MADEP (617) 348-4039

Chris Kennedy, Islands Regional Director, Trustees of Reservations (508) 693-7662

Sarah Trudel, Superintendant of Chappaquiddick Management Unit, Trustees of Reservations

4. Narrative. Personnel took the 09:30 Martha's Vineyard Ferry from Woods Hole and were greeted by Mr. Chris Kennedy, Islands Regional Director for the Trustees of Reservations at approximately 10:15 am at Vineyard Haven. The entire team proceeded to South Beach. Mr. Chris Kennedy, Carol Charette, Michael Moran, and Sarah Trudel, walked the Beach front looking for exposed ordnance items. Ms. Charette and Mr. Ralph Turner, used a hand held detector to screen for metal ordnance. The instrumentation used was highly sensitive and reacted to metallic substances either naturally occurring or iron/metal deposits in the sand and rocks and was not effective in locating potentially buried ordnance items/munitions. No ordnance items were visually observed on the surface either.

The team departed South Beach and returned to the Ferry for the return trip to Woodshole.

5. Additional Site Notes: South Beach was remediated by the U. S. Army Corps of Engineers in the 1989/1990 timeframe. A majority of the ordnance related items were removed from this area as part of the removal action. No ordnance has surfaced in the immediate vicinity of South Beach where the remediation has taken place. A supposedly live bomb was washed ashore at Wasque Point, which is west of the South Beach Site. The plan is to modify the Inventory Project Report to expand the South Beach project boundary to include the area west of South Beach all the way to Wasque Point and add a Long Term Monitoring Phase to the South Beach project.

6. Conclusion: Based on the site visit, the New England District Corps of Engineers will modify the INPR and add a Long Term Monitoring (LTM) Phase to the South Beach Project.

Carol Ann Charette
USACE, New England District
Project Manager, PMP

CENAE-PPMD

30 JUNE 2008

Ms. Charette/x605

MEMORANDUM FOR THE FILE:

SUBJECT: Site Visit Trip Report – Chappaquiddick Ordnance Training, Martha’s Vineyard, Massachusetts

1. Summary. Personnel from the New England District Army Corps of Engineers, the MADEP, and the Trustees of the Reservation attended Ordnance Training conducted by Mr. Ralph Turner of the U.S. Army Corps of Engineers.

2. Purpose. The main purpose of the site visit was to provide educational awareness training to the Rangers of the Trustees of the Reservation.

3. Participants. The following personnel attended the training:

Carol Ann Charette, Project Manager US Army Corps of Engineers (978) 318-8603

Ralph Turner, Ordnance Safety Specialist

Michael Moran, MADEP (617) 348-4039

Chris Kennedy, Islands Regional Director, Trustees of Reservations (508) 693-7662

Sarah Trudel, Superintendent of Chappaquidick Management Unit, Trustees of Reservations

Jennifer Roberge, MADEP

4. Narrative. Personnel took the 10:30 Martha’s Vineyard Ferry from Woods Hole and were greeted by Mr. Chris Kennedy, Islands Regional Director for the Trustees of Reservations at approximately 11:30 am at Vineyard Haven. The entire team proceeded to the Chappaquidick Community Center where both lunch and the training were held. Mr. Ralph Turner gave a power point presentation which covered pictures of ordnance items most likely to be found on Chappaquidick and actions to take should the Rangers encounter any suspect items they believe to be ordnance.

The team departed Chappaquidick and returned to the Ferry for the return trip to Woodshole around 2:30 pm.

5. Additional Site Notes: A meeting was held between the Trustee of the Reservation, MADEP and the Corps to discuss the overall status of the project. Discussion items included the following:

a. Ordnance removal response time: Chris Kennedy expressed his concern with the 5-6 hour response time from the State Bomb Squad and/or EOD due to the remote location of Chappaquidick and the dependency on the Martha’s Vineyard ferry schedule to get to the island. Chris stated that his preference would be to have a local contractor, Mr. Tom Rancich, President and CEO of Vrhabilis LLC, a Veteran Owned, Small Business, be contracted by the government to reduce the response time for removing ordnance items when found. Carol Charette (Corps)

acknowledged Chris' concerns, and stated the protocol is to notify the local police who then notify the State Bomb Squad and EOD. Ms. Charette also stated that the Corps does not respond to emergency notifications of ordnance items and the Corps cannot move forward with a Time Critical Removal Action before an official project had been approved, which included an approved Finding and Determination of Eligibility (FDE) which was sent forth to Division for approval on May 16, 2008 and an approved Inventory Project Report (INPR). Ms. Charette stated she would look into expediting the completion of an INPR to get an approved project as soon as possible.

b. Time Critical Removal Action versus Military Munitions Response Program (MMRP): Ann Malewitz, MADEP expressed that the Chappaquiddick sites, needed to be given immediate attention under a Time Critical Removal Action versus entering into the normal project process under the MMRP Program.

c. Signage was discussed. Both Chris Kennedy and Carol Charette were to explore the cost and timing of developing signage to be posted at the Chappaquiddick beaches and a pamphlet that could be handed out by the Trustees as part of their permitting process.

d. Conf Call scheduled for next day between Chris Kennedy(TTOR), Anne Malewitz and Mike Moran (MADEP); Carol Charette, Gary Morin, and Heather Sullivan (US Army Corps of Engineers) to discuss the concerns and urgency of the Chappaquiddick, Little Neck project. A conference call was scheduled for the next day at 1:15pm.

e. List of Ordnance Training Attendees: TTOR was to provide a list of Rangers attending the Ordnance Training. List of attendees is attached.

f. Chappaquiddick Island Association (CIA) Meeting: The CIA will be conducting meetings in July and August 2008. Chris Kennedy stated that this would be a good forum to inform the public of current situation regarding ordnance on Chappaquiddick Beaches and the need for the local fire marshal, police and EOD to develop a protocol to collect ordnance items that have been collected by the general public and placed on their property and/or in their homes as mantel pieces and door stops. Chris Kennedy was to notify the Corps of the dates, times and location of these two meetings and also coordinate with Paul Connolly of the Edgartown Police for developing the local protocol.

6. Conclusion: A conference call is scheduled for 12 June to further discuss the above.

Carol Ann Charette
USACE, New England District
Project Manager, PMP

APPENDIX M

PROPERTY VISIT PHOTOGRAPHS

PROPERTY VISIT PHOTOGRAPHS

| <u>Photo No.</u> | <u>Photograph Location</u> | <u>Page No.</u> |
|------------------|--|-----------------|
| 1 | General view of Bomb Target Site (Little Neck)..... | M-2 |
| 2 | UXO discovered in Little Neck area. | M-2 |
| 3 | Metal activity discovered in the bluff area of Little Neck. | M-3 |
| 4 | UXO discovered in shallow water (MK23). | M-3 |
| 5 | UXO discovered in Little Neck area. | M-4 |



Photo #1 – Cape Poge Little Neck Bomb Target Site – 14 April 2008.
General view of Bomb Target Site.



Photo #2 - Cape Poge Little Neck Bomb Target Site – 14 April 2008.
UXO (finned, approximately 9 inches in length) discovered in the Little Neck area.



Photo #3 Cape Poge Little Neck Bomb Target Site – 14 April 2008.
Metal activity discovered in the bluff area of Little Neck.



Photo #4 Cape Poge Little Neck Bomb Target Site – 14 April 2008.
UXO discovered in shallow water (MK23).



Photo #5 Cape Poge Little Neck Bomb Target Site – 14 April 2008.
UXO (finned, approximately 9 inches in length) discovered in the Little Neck area.

APPENDIX N

RISK ASSESSMENT CODE (RAC) WORKSHEET

The September 2005 USACE Formerly Used Defense Sites (FUDS) Program Guidance for Performing Preliminary Assessments under FUDS directed the inclusion of Appendix N as “Risk Assessment Code (RAC) Worksheet” for properties with potential MMRP projects. The MRS Prioritization Protocol will replace the RAC Worksheet in the PA when it has been issued for use by USACE.

NOTE: *The St. Louis District may provide a rough draft of this appendix as a courtesy starting point for the New England District, should an MMRP Project (MRS) be approved.*

APPENDIX O

TAG REVIEW FACT SHEET

NOT APPLICABLE

The September 2005 USACE Formerly Used Defense Sites (FUDS) Program Guidance for Performing Preliminary Assessments under FUDS directed the inclusion of Appendix O as “TAG Review Fact Sheet”. A Technical Advisory Group (TAG) no longer reviews the reports, thus, this appendix is obsolete.

APPENDIX P

RESPONSE TO COMMENTS

NOT APPLICABLE

This appendix is intentionally left blank in the DRAFT version of the PA.

APPENDIX Q

REPORT DISTRIBUTION

DRAFT REPORT DISTRIBUTION

| <u>Addressee</u> | <u>No. Copies</u> |
|--|-------------------|
| Commander, U.S. Army Engineering and Support Center, Huntsville Directorate of Environmental & Munitions Center of Expertise (CX), Military Munitions Division (CEHNC-CX-MM) 4820 University Square P. O. Box 1600 Huntsville, AL 35807-4301 Sent electronically to: Documentation, EMCX HNC@NWO using USACE ftp site ATTN: CEHNC-CX-EG (St. John) | 1 |
| Commander, U.S. Army Engineer District, New England ATTN: CENAE-PP-M 696 Virginia Road Concord, MA 01742-2751 | 1 (1 CD) |

FINAL REPORT DISTRIBUTION

| <u>Addressee</u> | <u>No. Copies</u> |
|---|-------------------|
| Commander, U.S. Army Engineering and Support Center, Huntsville Directorate of Environmental & Munitions Center of Expertise (CX) Military Munitions Division (CEHNC-CX-MM) 4820 University Square P. O Box 1600 Huntsville, AL 35807-4301 | 2 (2 CDs) |
| Sent electronically to: Documentation, EMCX HNC@NWO using USACE ftp site ATTN: CEHNC-CX-EG (St. John) | |
| Commander, U.S. Army Engineer District, New England ATTN: CENAE-PP-M 696 Virginia Road Concord, MA 01742-2751 | 2 (2 CDs) |

APPENDIX R

REPORT PLATES

REPORT PLATES

- 1 **Cape Poge Little Neck Bomb Target Site** – [Vicinity Map](#)
- 2 **Cape Poge Little Neck Bomb Target Site** – [1952 Aerial Photography](#)
- 3 **Cape Poge Little Neck Bomb Target Site** – [1952 Aerial Photography – Detail Little Neck](#)
- 4 **Cape Poge Little Neck Bomb Target Site** – [1952 Aerial Photography – Detail of Cape Poge Beach](#)
- 5 **Cape Poge Little Neck Bomb Target Site** – [Military Munitions Response Program Sites](#)

Thematic Computer-Aided Design and Drafting (CADD) map files completed in association with this Archives Search Report are based on historic cartographic, aerial and site visit data collected during this investigation. The thematic maps were created using Intergraph's Microstation.

The thematic maps were created by scanning and warping selected historic data to reference points collected from non-stable selected base maps such as U.S. Geological Survey (USGS) 7.5 minute, quadrangle sheets or National Imaging and Mapping Agency (NIMA) maps. The horizontal scale and horizontal datum of the base maps is generally known. In this case the datum used was 1983 North American Datum. Attempts have been made to rectify the data to the referenced base maps. However, distortions in scale and contortions of the features are present. These distortions are a result of inaccuracies in the source data, as well as the processes of scanning and rectifying the data. Much of the data on the maps lack sufficient information to support a determination of accuracy.

Many of the historic maps used were hand-drawn or built on locations that were inaccurate by modern standards. In general, historic map inaccuracies are unknown and not quantifiable. The unknown inaccuracies may then be magnified by the georeferencing process. Therefore, thematic maps generated from historic maps and drawings will have accuracy no greater than the least accurate source.

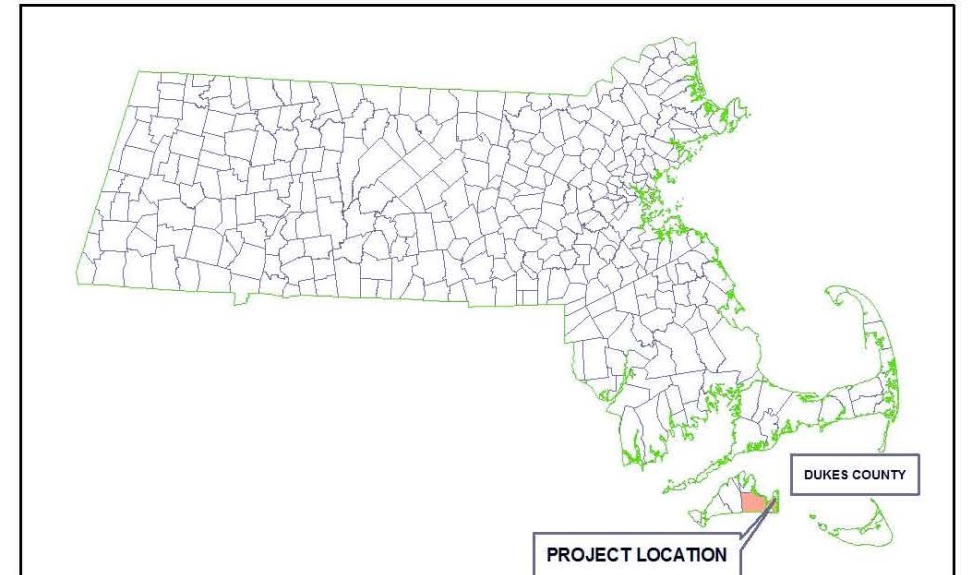
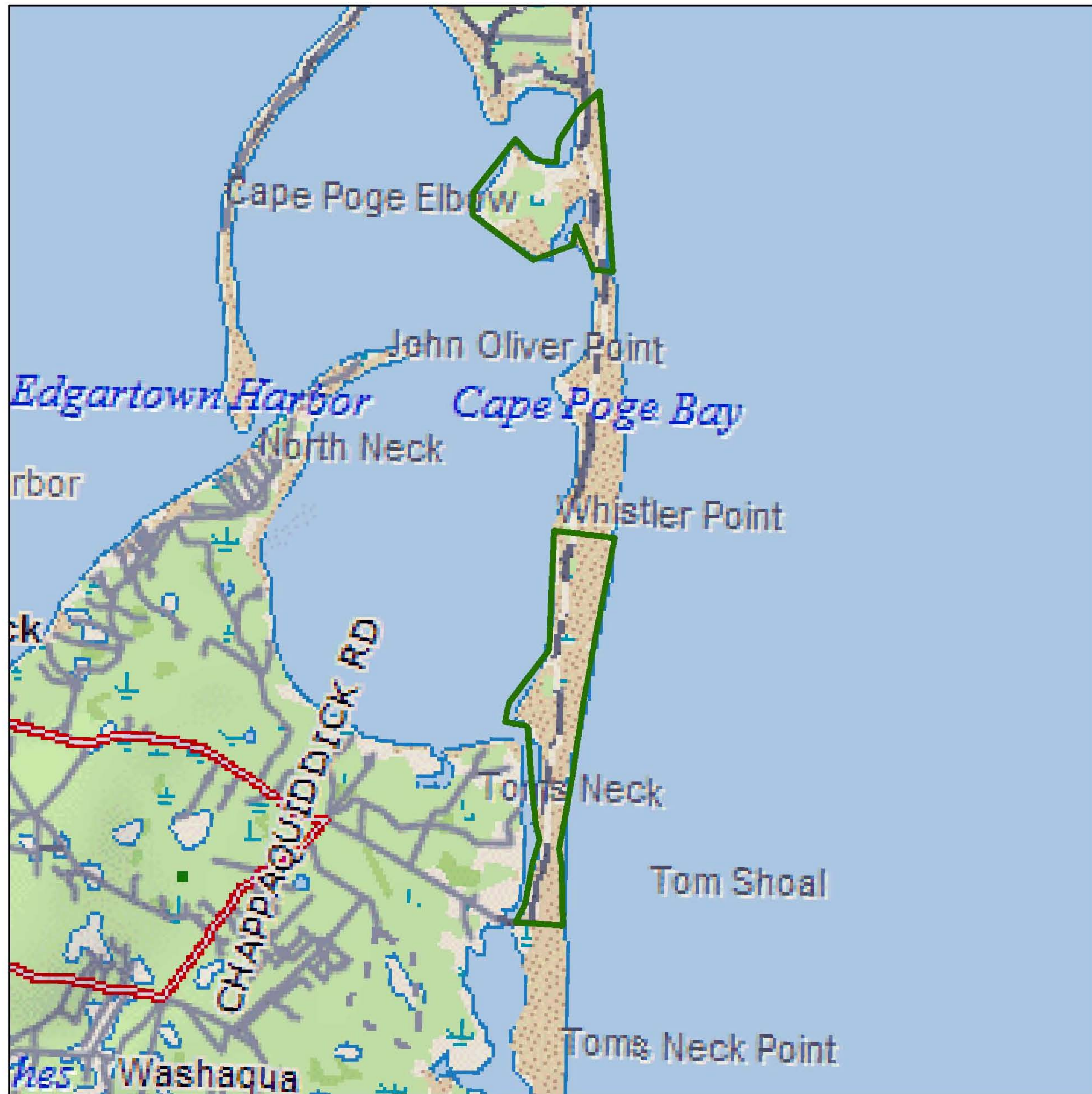
The historical aerial photography has been semi-rectified (georeferenced) to the base map; however, the photos have not been corrected for photogrammetric displacements such as those due to topography or the altitude of the aircraft at the time of imaging. They are not orthorectified images. Locations of features noted on aerial photography are not exact due to the rectifying of both the image and the base map.

The historical aerial photography is rectified (georeferenced) to the earth using 2D transformation methods. Individual images are scanned using a high-resolution scanner at a pixel resolution of between 600 and 1200 dpi. The ground control used for rectifying the imagery is acquired by selecting photo identifiable features from USGS 1:24,000 Quadrangle maps, and measuring the corresponding location on the photo. In some cases, the historical photography is far too outdated to identify corresponding features within the 1:24,000 quadrangle map, therefore, a more recent set of photos, or USGS

Digital Orthophoto Quarter Quadrangles (DOQQ) may be used as an alternate control source. Great care is taken during the selection and measurement of control data to ensure the resultant rectified imagery will tie as closely as possible to overlapping imagery. In areas of high relief, all attempts are made to reduce rectification error within the target site. The accuracy of feature locations measured from rectified photos may vary, and are dependent upon the location and accuracy of the USGS ground control used and the terrain type within the image area.

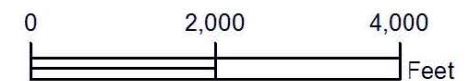
The horizontal and vertical locations of selected features noted in the ASR and located on the thematic maps have been established utilizing Global Positioning System (GPS) technology. These coordinates were acquired using the Federal Version PLGR96+ GPS receiver. Features located utilizing GPS techniques are so noted in the ASR. The PLGR+96 uses the Precise Positioning Service (16 m SEP) and Wide Area GPS Enhancement (WAGE) 4 m CEP.


The lineage and source of the historic data used to generate the thematic maps is unknown. The majority of Federal Geographic Data Committee (FGDC) Metadata fields are therefore unknown. A metadata file that gives all available pertinent information has been provided with this product. The statements above are inclusive of all available information regarding the historic data sources and the thematic maps generated. The thematic maps are not original digital mapping data; are scanned and warped data with selected unique feature annotation. The intended purpose of the mapping data is for photo-interpretation and not design. The vector data and associated symbology is unique to the intended purpose. The majority of the digitized features are not part of the current Tri-Service CADD Standards list of features and associated line types and symbology (ie. range fans, pits, disturbed land). The mapping data produced does comply with applicable Tri-Service Standards.

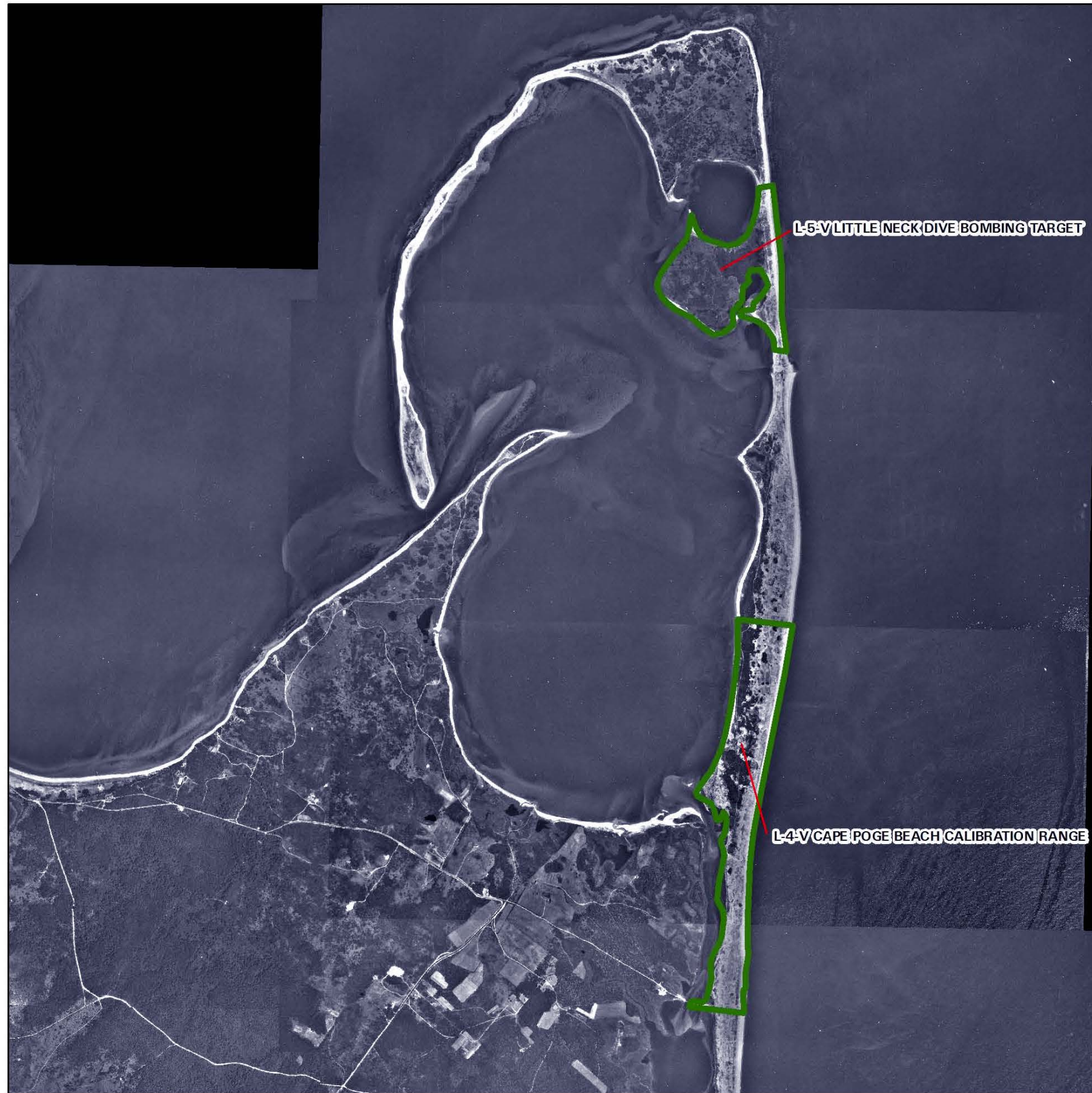


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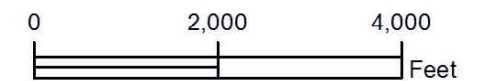



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| | CAPE POGE LITTLE NECK BOMB TARGET SITE FUDS PROPERTY NO. D01MA0595 EDGARTOWN, MASSACHUSETTS DUKES COUNTY | |
| VICINITY MAP | | |
| PROJ. DATE: FEB 2009 | DATE OF QUAD: 1998 | PLATE NO. 1 |

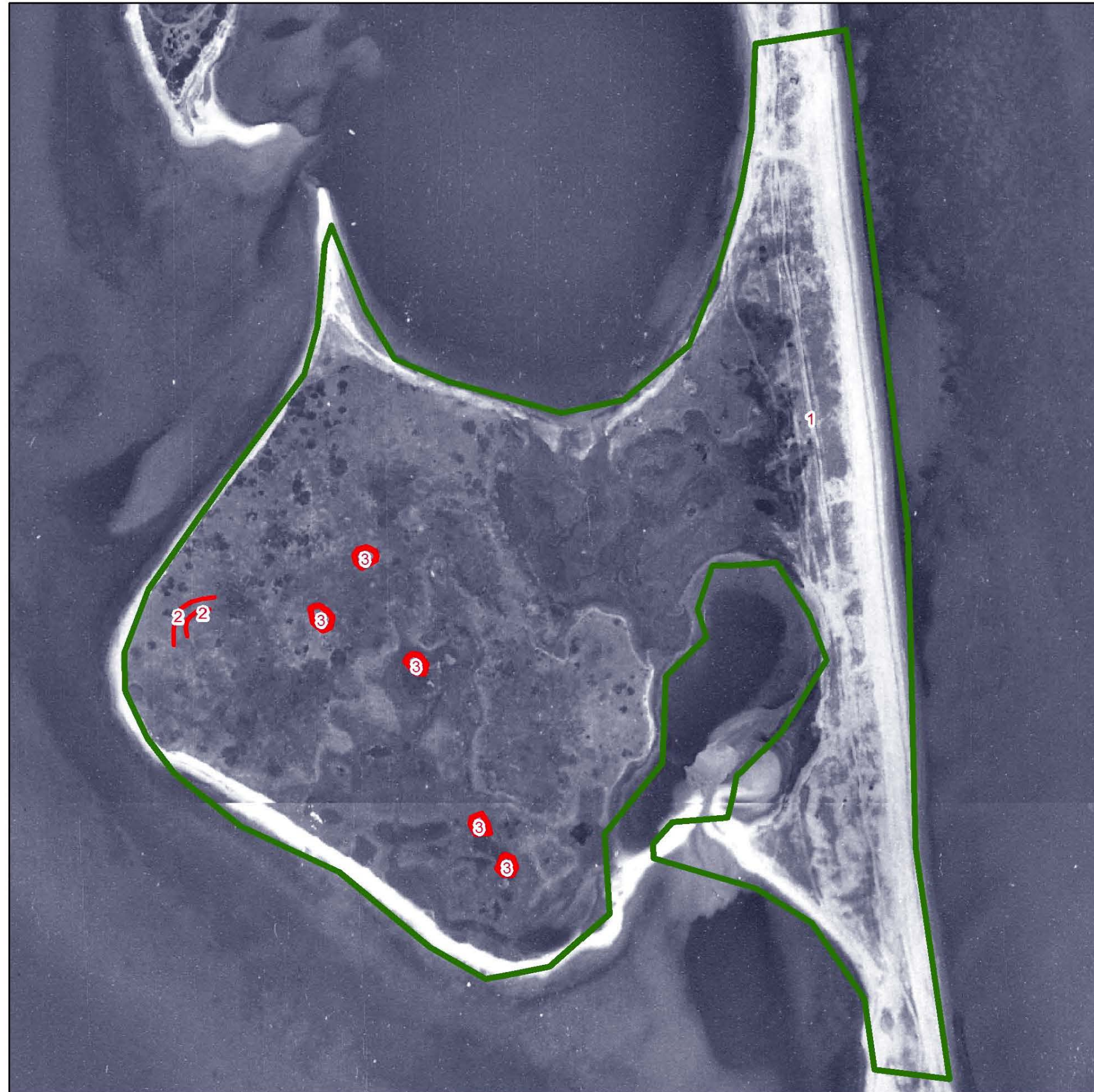


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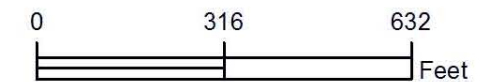
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| CAPE POGE LITTLE NECK BOMB TARGET SITE FUDS PROPERTY NO. D01MA0595 EDGARTOWN, MASSACHUSETTS DUKES COUNTY | |
| 1952 AERIAL PHOTOGRAPHY | |
| PROJ. DATE: FEB 2009 | DATE OF QUAD: 1998 |
| PLATE NO. | |
| 2 | |




- | FEATURE NUMBER | FEATURE DESCRIPTION |
|----------------|--|
| 1. | TRAIL ALONG CAPE POGUE WITH NO FORK VISIBLE TO LITTLE NECK. |
| 2. | PORTION OF A CIRCULAR ARC DISCERNIBLE, 200 FOOT IN DIAMETER, LESS DISCERNIBLE ARC 100 FOOT IN DIAMETER AND POSSIBLE TARGET CENTER. |
| 3. | DEVEGETATED GROUND/EXPOSED GROUND. |

Legend

- FEATURE
- PROPERTY BOUNDARY



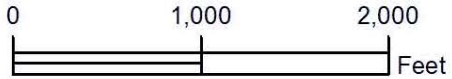
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|--|---|
|  | <i>U. S. ARMY CORPS OF ENGINEERS ST. LOUIS DISTRICT</i> |
| CAPE POGUE LITTLE NECK BOMB TARGET SITE FUDS PROPERTY NO. D01MA0595 EDGARTOWN, MASSACHUSETTS DUKES COUNTY 1952 AERIAL PHOTOGRAPHY DETAIL LITTLE NECK | |
| PROJ. DATE: FEB 2009 | DATE OF QUAD: 1998 |
| PLATE NO. 3 | |




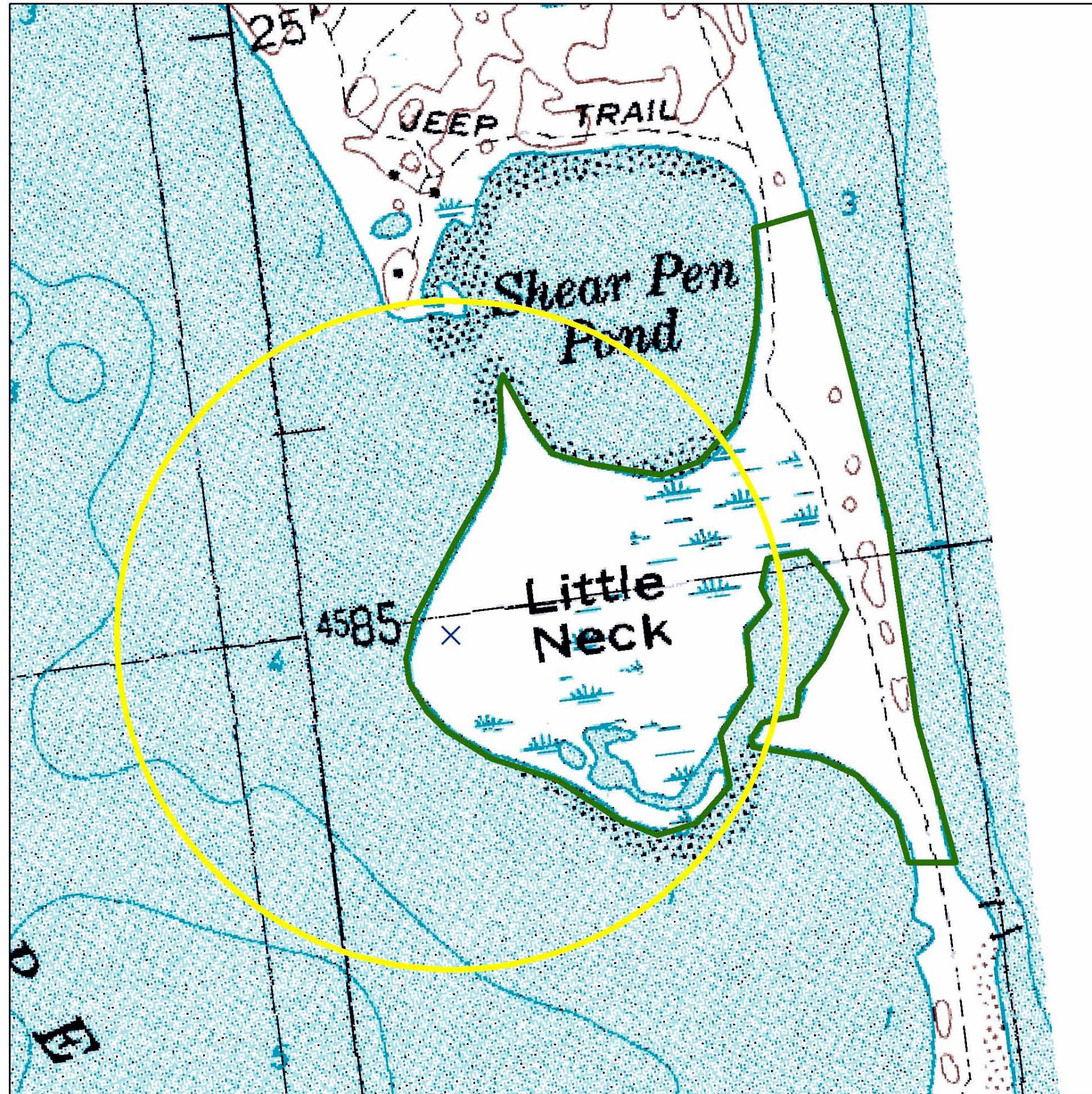
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 PROPERTY BOUNDARY



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|  | <p><i>U. S. ARMY CORPS OF ENGINEERS</i> <i>ST. LOUIS DISTRICT</i></p> | |
| <p>CAPE POGE LITTLE NECK BOMB TARGET SITE FUDS PROPERTY NO. D01MA0595 EDGARTOWN, MASSACHUSETTS DUKES COUNTY 1952 AERIAL PHOTOGRAPHY DETAIL OF CAPE POGE BEACH</p> | | |
| PROJ. DATE: FEB 2009 | DATE OF QUAD: 1998 | PLATE NO. |
| | | 4 |

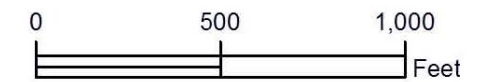



Legend

- X PROBABLE LOCATION OF TARGET CENTER
 41° 24' 32.6" N
 70° 27' 19.3" W
 ACRES=162.2 Ac

Legend

- BOMB TARGET
- PROPERTY BOUNDARY



| | |
|---|---|
|  | U. S. ARMY CORPS OF ENGINEERS ST. LOUIS DISTRICT |
| CAPE POGE LITTLE NECK BOMB TARGET SITE FUDS PROPERTY NO. D01MA0595 EDGARTOWN, MASSACHUSETTS DUKES COUNTY | |
| MILITARY MUNITIONS RESPONSE PROGRAM SITES | |
| PROJ. DATE: FEB 2009 | DATE OF QUAD: 1998 |
| PLATE NO. 5 | |