

6622

Form 504  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY  
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

*Topographic* } Sheet No. T - 6622  
~~*Hydrographic*~~

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

MAY 20 1940

Acc. No. ....

State Massachusetts

LOCALITY

WOODS HOLE

193 8

CHIEF OF PARTY

Chas. M. Thomas

U. S. GOVERNMENT PRINTING OFFICE: 1934

6622

Applied to Cht. 249 ..... Mar. 4, 1941 ..... K.P.

Only critical changes applied to ch 348. Mar. 8, 1941 J.H.S.  
→ Appellate & Cht. 1209 - (in part) Aug. 1941 - J.H.S.

Fully applied ch 348 Reconstruction D.H.B. 2-6-57

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. B

REGISTER NO. T - 6622

T6622

State Massachusetts

General locality Woods Hole  
Southern Coast of Massachusetts.

Locality Great Harbor and Vicinity  
Woods Hole

Scale 1 : 5,000 Date of survey June, 1938

Vessel M.V. GILBERT

Chief of party Chas. M. Thomas

Surveyed by Clarence A. George

Inked by Clarence A. George

Heights in feet above \_\_\_\_\_ to ground to tops of trees

Contour, Approximate contour, Form line interval \_\_\_\_\_ feet

Instructions dated January 17, 1938

Remarks: \_\_\_\_\_

DESCRIPTIVE REPORT TO ACCOMPANY  
TOPOGRAPHIC SHEET T-6622 - WOODS HOLE, MASS.

INSTRUCTIONS

This work was done in accordance with the  
Instructions for Project ET-217, dated January 17, 1938.

LIMITS

The sheet extends from Nobska Point on the east  
to Penzance Point on the west, including the shore line of Great  
Harbor, Little Harbor, and the north east portion of Nonamesset  
Island.

DESCRIPTION OF COAST.

The coast is hilly, partly wooded and the shores  
are in general, low bluffs.

LAND MARKS

Nobska Point, on the eastern side of the approach  
to Woods Hole is the most prominent headland. It is a low bluff  
marked by a light-house and radio tower.

The Bureau of Fisheries building, the Marine  
Biological Laboratory and the dome of the Woods Hole Oceanographic  
Institution are the most prominent buildings. A concrete water  
tower (triangulation) station - Woods Hole, 1934 located on a hill  
about one half mile east of the town is also very prominent.

CONTROL

A sufficient number of triangulation stations  
were located to furnish adequate control.

SURVEY METHODS

Due to the number and distribution of triangulation  
stations practically no plane-table traverse was necessary.



Locations were determined by three-point fixes on triangulation stations. From these positions the shore line was rodded. Due to the scale of this sheet rod readings of excessive distance were avoided.

When possible control stations were occupied and where three-point positions were particularly strong, cuts were taken to locate other signals. At most locations determined by three-point fixes, four or more triangulation stations were visible, providing an excellent check on these positions.

At the north tip of Penzance Point a short traverse was necessary to locate the high water line. This traverse was checked, with slight error, as soon as a position could be obtained and no adjustment was required.

At the north end of the sheet, on the Buzzards Bay side, control was somewhat weaker than in other areas.

#### OFF LYING FEATURES

A set up was made near triangulation station Red Beacon Light - 1938 (Grassy Island Ledge Light) and from this position Red Ledge and Grassy Island were located by red readings.

Topographic signal NAN is a rock, bare about 3-1/2 feet at low water, off Nobska Point. This rock was located by red readings from a position near the adjacent high water line. Labeled "Awash at MHW."

#### JUNCTIONS AND COMPARISONS

A satisfactory junction was made on Nonamesset Island with sheet T-6621 and with sheet T-6623 at Nobska Point. A comparison with previous surveys shows considerable change in buildings and wharves along the water front and some recession of the shore line, particularly at the southwestern end of Penzance Point. Differences appear to be <sup>more</sup> instrumental ~~more~~ rather than actual change.

#### LOW WATER LINE

Whenever possible the low water line was rodded in and has been shown in ink with the appropriate symbol. In most cases



it was not possible to locate the low water without loss of time and notes were made of the nature of the shore line. In such instances the symbol has been shown in pencil but does not indicate the actual location.

#### GEOGRAPHIC NAMES

The following names appear on Chart 348 and seem to be well established and in local use:

Nobska Point  
Juniper Point  
Little Harbor  
Great Harbor  
Grassy Island  
Eel Pond  
Ram Island (sometimes called Bush Island)  
Devils Foot Island  
Red Ledge  
Sheep Pen Harbor  
Nonamesset Island

The following names are shown on Chart 348 but are NOT used locally:

Mink Point, this is known mostly as Gunners Point.  
Long Neck, this is generally known as Penzance Point and according to the Harbor Master has gone by this name since about 1890. Many of the prominent summer residents have their homes on Penzance Point and it is strongly recommended that this name be adopted on the charts.

#### REMARKS

This area was hard hit by the hurricane of September, 1938 and several changes in the shore line resulted. No attempt was made to correct the sheet after the storm as the field season was closed shortly thereafter. The following known changes are worthy of mention.

The south western extremity of Devils Foot Island was cut away and considerable change occurred on the west side of Penzance Point near signal PEAK.

The narrow strip separating Great Harbor and Buzzards Bay was completely cut through and roads, houses and seawall were washed away. However it is probable that these will be rebuilt as they were originally. This is also true of the docks

and basin of the U S Bureau of Fisheries which was severely damaged. ✓

The drawbridge over the entrance to Eel Pond was badly damaged and will be closed for some time. ✓

*Clarence A. George*  
Clarence A George,  
Jr H & G Engr

Approved and Forwarded

*Charles M. Thomas*  
Charles M. Thomas, Chief of Party

	Remarks	Decisions
1	Do not ink pending U.S.G.B. decision (R* 7/14/40)	415706 U.S.G.B.
2	Decision 4/7/42 - Penzance for neck or peninsula; also Penzance Pt for its S.W. extremity.	"
3		"
4		"
5		" U.S.G.B.
6		"
7		"
8		"
9		"
10		" U.S.G.B.
11		"
12		" U.S.G.B.
13	See page 3.; Do not ink pending USB.B. decision (R* 7/14/40)	" "
14		"
15	See above	" USB.B.
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		



## GEOGRAPHIC NAMES

Survey No.

T6622

Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A,	B,	C,	D	E	F	G	H	K	
<del>Penzance Point</del>									1
<u>Great Harbor</u>									2
<u>Eel Pond</u>									3
<u>Red Ledge</u>									4
<u>Woods Hole</u>									5
<u>Devils Foot Island</u>									6
<u>Grassy Island</u>									7
<u>Ram Island</u>									8
<u>Little Harbor</u>									9
<u>Juniper Point</u>									10
<u>Nobska Point</u>									11
<sup>n m</sup> <u>Nomanasset Island</u>									12
<del>Gunners</del> <del>Mink Point</del>									13
<u>Sheep Pen Harbor</u>									14
<u>Penzance Pt.</u>									15
									16
									17
									18
									19
									20
									21
									22
									23
									24
									25
									26
									27

Mink Pt USG.B. Decision 4/7/42

L. Heck on 7/12/40

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
DESCRIPTIVE REPORT  
PHOTOSTAT OF

~~No. H~~

No. T **T6622**

{ received **May 20, 1940**  
registered **June 5, 1940**  
verified  
reviewed  
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	<b>T. B. Reed</b>
----	-------------------

*V JBR*

## SECTION OF FIELD RECORDS

### REVIEW OF TOPOGRAPHIC SURVEY NO. 6622 (1938) FIELD NO. B

Massachusetts; South Coast; Woods Hole  
Surveyed in June 1938, Scale 1:5,000  
Instructions dated January 17, 1938 (GILBERT)

#### Plane Table Survey

#### Aluminum Mounted

Chief of Party - C. M. Thomas  
Surveyed and inked by - C. A. George  
Reviewed by - J. A. McCormick, January 28, 1941  
Inspected by - H. R. Edmonston

#### 1. Junctions with Contemporary Surveys

Satisfactory junctions were effected with T-6623 (1938) on the southeast and with T-6621 (1938) on the west. Present project instructions do not cover new plane table surveys on the north but air photographic maps are now being compiled in that area.

#### 2. Comparison with Prior Surveys

T-191 (1845), 1:10,000; T-192 (1845), 1:10,000;  
T-1858 (1888-89), 1:5,000

Differences between present and prior surveys are confined mostly to pier and bulkhead detail and would indicate that the area is normally what would be considered relatively unchangeable. It is evident, however, from remarks in the descriptive report, pages 3 and 4, that the hurricane of September 1938 must have caused changes greater than the differences between surveys. Offshore rock detail of T-1858 is more comprehensive than that of the present survey and, high water detail of the two surveys being in good agreement, it is probable that T-1858 is fairly accurate as regards rocks. In view of the changes caused by the hurricane and because of the necessity of retaining considerable detail from T-1858, the present survey should be used only to supplement the topographic information now charted.

#### 3. Comparison with Chart 249 (New Print of Aug. 20, 1940) Chart 348 (New Print of Aug. 8, 1940)



a. Topography

Topographic information now charted in this area is almost entirely from T-1858 (1888-89), discussed in the preceding paragraph. Some minor pier detail is from U. S. Engineers' surveys.

b. Aids to Navigation

Great Harbor Range Lights were not located on the present survey and positions obtained on H-6348 (1938) were made obsolete by the hurricane. Charted positions of other fixed aids in the area are substantially as shown on the present survey.

4. Condition of Survey

Three inked dots in Lat.  $41^{\circ} 30.46'$ , Long.  $70^{\circ} 40.25'$  on the survey are assumed to represent fender piling for the drawbridge but it matters little because of the hurricane damage in this vicinity.

5. Compliance with Instructions for the Project

More low water and rock detail would have been desirable, particularly as the hydrographic survey of the area, H-6348 (1938), does not amplify, to any great extent, the detail obtained on the present survey.

6. Additional Field Work Recommended

Air photographs in this vicinity are usable only to about the eastern limits of the present survey. It is recommended that new air photographs be obtained for compilation of air topographic surveys to include the area covered by chart 348 and westward to Cuttyhunk Island. Resurvey of the water area covered by the present survey has been recommended in the review of H-6348 (1938).

7. Superseded Surveys

Only the following surveys are superseded in part:

T-191 (1845) and T-192 (1845)

Examined and approved:

*Thos O Reed*

Chief, Section of Field Records

*J. S. Borden*

Chief, Division of Charts

*C. H. Green*

Chief, Section of Hydrography

*J. W. de*

Chief, Division of  
Coastal Surveys