

6114

U.S. COAST AND GEODETIC SURVEY

NOV 5 1934

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

DESCRIPTIVE REPORT

Topographic Sheet No. E 6114
~~Hydrographic~~

State Massachusetts

LOCALITY

Cape Cod

Yarmouthport to NobsCUSset Pt.

1934

CHIEF OF PARTY

E.A. Daily

6114

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

U.S. COAST & GEODETIC SURVEY
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REG. NO. 3114
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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. T - E

REGISTER NO. 3114

State Massachusetts

General locality Cape Cod

Locality Yarmouthport to NobsCUSset Pt.

Scale 1:10,000 Date of survey August, 1934

Vessel Field Party No. 28

Chief of party Earle A. Deily, Lieutenant, U.S.C. & G. Survey.

Surveyed by Edwin A. Fowler

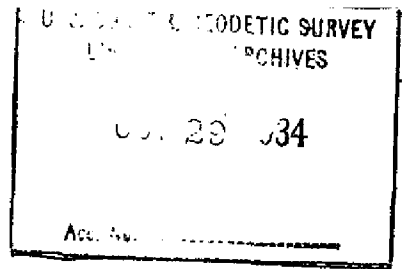
Inked by Earle A. Deily

Heights in feet above none to ground to tops of trees

Contour, Approximate contour, Form line interval none feet

Instructions dated April 29, 1933, Orders May 2, 1934

Remarks:



DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET E
CAPE COD, MASSACHUSETTS.

Project H.T. 145

1934

Earle A. Deily,
Lieutenant, U.S.C. & G. Survey,
Chief of Party.

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET E

Cape Cod, Massachusetts.

Project H.T. 145

1934.

a:- Authority:

The authority for the topographic work embraced by this is included in the "Orders and Instructions" to the Inspector, U.S. Coast and Geodetic Survey, Boston, Massachusetts, and "Orders" to Lieutenant Earle A. Deily, dated May 2, 1934.

b:- General Description of the Coast:

This sheet embraces part of the entrance to and eastern end of Barnstable Harbor.

From Nobscussett Harbor westward to Longitude 70 14 the shore line is characterized by a low bluff diminishing in height to the western end where it is lost among the sand dunes on the point northward of the mouth of Chase Gardner Creek.

The remainder of the shoreline to the western end of the sheet is fronted by a wide salt marsh which is cut up by numerous streams. These streams have no outlet at low water; the channels disappear into the sand flats which extend off shore to the channel into Barnstable. These extensive flats bare at low water.

Nobscussett Harbor, Latitude 41 45.1, Longitude 70 11.4 is now under developement but went dry at low water when the survey was made except for a very narrow channel in which there is insufficient water for any boat to ride. Stone breakwaters are under construction to the immediate westward.

Numerous scattered rocks, some of which are washed at low water, lie off the point at the western end of the harbor. A fringe of rocks lies along the shore from Nobscussett Harbor to Longitude 70 12.6

A dredged channel leads into Yarmouthport and is marked in part by a series of stakes which have been placed by local fishermen. The channel at its southern end is practically dry at low water. There is a dock at Yarmouthport with room for several small fishing boats to lie alongside at low water.

Chase Gardner Creek flows thru a large marsh which extends eastward to North Dennis.

c:- Landmarks:

There are four landmarks on the sheet, all of which were located by triangulation and used as control points.

✓ TOWER	Triangulation Station Scargo Tower 1933, stone tower on Scargo Hill.
	Latitude 41 44 688 m.
	Longitude 70 10 1152 m.
✓ TANK	Triangulation station Nobiscussett Water Tower 1887-1934, wooden tank at Nobiscussett Inn.
	Latitude 41 44 1284 m.
	Longitude 70 12 621 m.

✓ SPIRE , Triangulation station Yarmouth Congregational Church Spire 1887 -1934, tall grey spire.

Latitude 41 42 690 m. ✓

Longitude 70 14 501 m. ✓

concrete stack. ✓ STACK , Triangulation station Stack, Yarmouthport, tall

Latitude 41 42 1082 m. ✓

Longitude 70 15 728 m. ✓

d.- Character of Control Used:

The topography on this sheet was controlled entirely by the coordinating triangulation of 1933-34.

e- Closing Errors of Traverses:

The only traverse of any length on this sheet was run along the highway from North Dennis to Yarmouth and closed within the allowable error and was adjusted.

f.- Surveying Methods:

The usual topographic planetable methods were used throughout the work.

The main highway is the southern limit of the sheet. Only the main highways were run.

The low water line was only run westward to Bass Hole where it turns to a considerable distance offshore. Low water line is also delineated at the mouths of and in all channels and streams. ✓

g.- Changes in Shore Line and Prominent Features.

Considerable change is noted in the shore line since the survey of 1868.

The topographic features of Nobscussett Harbor have changed entirely.

The shoreline at Longitude 70 12 has receded 30 meters, and at Longitude 70 13 it has receded 10 meters. Two breakwaters have been constructed eastward of triangulation station Bass Hole 1934 in an attempt to stop further destruction of the beach.

The shore line at Longitude 70 14 has built up approximately 130 meters northward. The greatest change is noted from here to the westward where there is an area of sand dunes and the high water line is rapidly moving westward.

From Longitude 70 15 westward little change is noted in the position of the marsh edge.

Some changes have occurred in the mouths and courses of the streams that traverse the marsh areas. In particular, the old sheet shows 3 main arms of Chase Gardner Creek flowing into it from the northward. The middle one is no longer in existence. This immediate area has been ditched for mosquito control and stream courses changed.

Little change is noted in the main roads and such intersections as were on the old sheet check well.

h.- Junctions:

Satisfactory junctions were made with the adjoining sheets. Junction with sheet H - D was made at topographic station

See Review
Page 2 Tab. a.

station "JUN" and the road intersection to the southeastward. These points were located independently on both sheets.

Junction with sheet T - F was made on the shoreline at Latitude 41 42.8, Longitude 70 15.5.

i:- Magnetic Meridian:

The magnetic meridian was determined at triangulation station Bass Hole 1934 on August 27, 1934, 10:30 am and found to be 14 38 W.

j:- Inking:

The inking of the sheet was done by the Chief of Party. The outside edge of the heavy line delineating the high water line is the position of High Water. ✓
The line of firm ground was considered as the high water line in the marshes and was inked as such. ✓
Edges of channels thru the marsh are shown with a light solid line.

k:- Topographer:

Field work was done by Mr. Edwin A. Fowler under close supervision of the Chief of Party.

l:- Plane Table Positions:

JUN Std. hydro. disc set in a concrete pier.
Latitude 41 45 102 m.
Longitude 70 10 1205 m.

m:- Statistics:

Miles of shore line	22
Miles of Creeks	13
Miles of Roads	16
Area, square statute miles	7.5

Earle A. Deily
Earle A. Deily

Lieutenant, U. S. C. & G. Survey.

*No report on Geographic Names,
H.B.*

Character of Marsh line.

While the outer edge of the marsh as shown on this sheet is a definite line at about half tide the line of demarcation between marsh and water at high tide is in most cases considerably further inshore and not well defined.

Earle A. Dilly
Earle A. Dilly

Lieut., U.S.C. & G. Survey

Chief of Party

To: Mr. Bacon
From L. S. S.

Survey No. T 6114

GEOGRAPHIC NAMES

Chart No. 1208 + 339

Date Nov. 15, 1934

MASSACHUSETTS

Diagram No. 1208-2

Names underlined in red approved Dec 4, 1934

* Approved by the Division of Geographic Names, Department of Interior.

⊘ Not Approved by the Division of Geographic Names, Department of Interior.

R, Referred to the Division of Geographic Names, Department of Interior.

Inquiry being made. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Yarmouth</u> port <u>Port</u> ✓	Same <u>P.O.M.</u>	-----	-----	
	<u>Yarmouth</u> ✓	"	-----	-----	
	<u>Nobscusset</u> Point ✓	<u>Nobscusset Pt., Harbor and Water Tower</u> " (U.S.G.S) <u>Nobscusset Harbor, Nobscusset Water Tower.</u>			<i>A.B.</i>
	<u>North Dennis</u> ✓	Same	-----	-----	
	<u>Chase Gardner Creek</u> Q	Same <i>ditto for the present</i> <u>Chase Garden Creek</u> U.S.G.S. ✓ <i>USBGN, Feb 1936</i>			
	Note:				
	Names on Survey were inked on the sheet by the Field				
	<u>Bass Hole</u> ✓	Same			
	<u>Lone Tree Creek</u> ✓	Same Chart 339			41° 42.8 70° 15.2
	<u>Cape Cod Bay</u> ✓	Same			
	<u>Joyce Creek</u> Q ✓	U.S.G.S. Yarmouth Quad.			41° 43.1 70° 13.4
	<i>Joyce's on C+G.S. Chart 339, Follow C.G.S. usage till a decision is made</i> <i>A.B.</i>				
	<i>→ WHITES BROOK (U.S.G.B. decision)</i>				

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6114 (1934)

Yarmouthport to Nobscussett Pt., Cape Cod, Massachusetts

Surveyed August, 1934

Instructions dated: April 29, 1933, Inspector Boston Field Station

May 2, 1934, Orders to E. A. Deily.

Plane Table Survey - Aluminum Mounted

Chief of Party - E. A. Deily.

Surveyed by - E. A. Deily.

1. Condition of Records.

The records conform to the requirements of the Topographic Manual with the following exceptions:

a. Landmarks for Charts although described and listed in the Descriptive Report, were not submitted on Form 567.

b. The inner edge of marsh or line of firm ground is shown in a heavy full line. The topographic manual, (Par. 43) requires such line to be distinctly lighter than mean High Water line. A note regarding this has been added to the survey.

c. In one case, the date of location of the triangulation station was omitted. This has been added in the office.

d. The channel markers into Yarmouthport were shown with the buoy symbol. These have been changed and are now marked by small black circles because in both the Topographic and Hydrographic Descriptive Reports, these are described as stakes or pine saplings.

e. No report on Geographic Names was submitted.

2. Compliance with Instructions for the Project.

The survey complies with the instructions.

3. Junction with Contemporary Surveys.

Satisfactory junctions were made with T-6113 (1934) and with T-6122 (1934).

4. Comparison with Prior Surveys.

a. T-795 (1859).

The outer edge of marsh line has emerged about 30 meters in the vicinity of Yarmouthport and Lone Tree Creek. East of Chase Gardner Creek the shoreline has built out over 200 meters. This building

out decreases rapidly to the east and in Long. 70°13'.6 the beach has been eroded about 100 meters. Two small jetties are now built in an attempt to prevent further erosion. This erosion decreases to the east so that in Long. 70°13.0 the shoreline is in about the same location as formerly.

There is fair agreement in character of creeks and inside waters except where there has been filling in at the mouths and in places where some of the creeks have been altered by work done in connection with mosquito control. Roads, where they could be identified were found to check well with the old position.

b. T-1088 (1868)

There is good agreement in road intersection. The shoreline appears to have been eroded somewhat since the old survey. The new survey has a more careful location of offlying rocks particularly in the vicinity of Nobscuset Pt. where the outermost sunken rocks were not shown on the old survey.

5. Field Drafting.

The field inking of the survey is good.

6. Additional Field Work Recommended.

The survey is complete and no additional field work is necessary.

7. Note to Compiler.

Attention is called to the statement in the Descriptive Report, page 4 regarding the character of the outer edge of the marsh line. ✓

8. Superseding Old Surveys.

Insofar as the topography actually covered on the present survey is concerned, it supersedes the following surveys for charting purposes:

T-795 (1859) in part.

T-1088(1868) in part.

9. Reviewed by - A. F. Jankowski, January 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

A. Borden
Chief, Section of Field Work.

F. D. Gilbert
Chief, Div. of Charts.

G. W. de
Chief, Div. of H & T.