

6387a b

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. A-1, A-2 Office No. T6887 a, b

LOCALITY

State Massachusetts

General locality Nantucket Sound

Locality Bowen Pond to Poponesset Beach

(Supplements to descriptive report are
by W.F. Deane and were added to this report
on June 21, 1943 1942

CHIEF OF PARTY /

John Bowie

LIBRARY & ARCHIVES

DATE April 1, 1943

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. A-1 & A-2

REGISTER NO.

TC887 a-b

State Massachusetts

General locality Nantucket Sound

Locality Bowen Pond to Poponkesset Beach

Scale 1 : 10,000 Date of survey June, 1942

Vessel M. V. GILBERT

Chief of party John Bowie, Jr.

Surveyed by L. G. Taylor

Inked by (A-1) L. G. Taylor - (A-2) R. H. Randall

Heights in feet above MHT to ground ~~to tops of trees~~

Contour, Approximate contour, Form line interval _____ feet

Instructions dated Jan. 17, 1938, Supp. March 9, 1942, 19____

Remarks: _____

DESCRIPTIVE REPORT

to

Accompany Topographic Sheets A-1 and A-2

Nantucket Sound, Mass.

Motor Vessel GILBERT

John Bowie, Jr., Chief of Party

June 1942

AUTHORITY:

The work on these sheets was done in accordance with instructions dated January 17, 1938 and amended March 9, 1942.

LIMITS AND SCALE:

The area was surveyed on a scale of 1 : 10,000. Sheet A-1 extends from Bowen Pond Entrance at Lat. $41^{\circ} 32.9'$, Long. $70^{\circ} 33.7'$ to topographic station TIM at Lat. $41^{\circ} 33.5'$, Long. $70^{\circ} 28.6'$. Sheet A-2 extends from Lat. $41^{\circ} 33.5'$, Long. $70^{\circ} 28.65'$ to topographic station KID Lat. $41^{\circ} 35.1'$, Long. $70^{\circ} 27.95'$.

PURPOSE OF WORK:

The purpose of the survey was to locate control for hydrographic surveys and check the shoreline for changes caused by the 1938 hurricane. Break-throughs in the beach had been made at the entrance to Bowen Pond; the narrow strip of land between Bowen Pond and Waquoit Bay; and the sand spit at Poponneset Beach between Nantucket Sound and Poponneset Bay.

CONTROL:

The control consists of triangulation on N. A. 1927 datum. Three topographic stations MON, HIE, AND DIL were recovered. *- Stations located on T-5741, T-5742 & T-6624 of 1938*
Three triangulation stations BOWEN, 1934; SUCCONNESSET, 1934; and OYSTER HARBORS TANK, 1934 were recovered. Topographic stations MON and HIE were plotted from the positions given on boat sheet 6468. Topographic station DIL was plotted from position given by Advance Print, Topographic Map T-5742, 1938. Three recoverable topographic stations HIE, ED and MASS. TRAVERSE STATION, were established and are included with this report. *Filed under H-6468*

SURVEY METHODS:

Standard survey methods were followed. A topographic traverse, beginning at triangulation station BOWEN, was run along the beach to triangulation station SUCCONNESSET. Topographic station HIE (located by the previous survey and recovered intact) was used as the junction point between Sheets A-1 and A-2.

The ^{control} ~~topography~~ for Waquoit and Poponneset Bays was surveyed by a unit of the Launch FARIS and is covered by the attached supplemental report.

Both sides of the standard aluminum mounted sheet were used for economic purposes.

RESULTS OF SURVEY:

The shoreline at the entrance to Bowen Pond had changed a little and the new shore line rodged in.

The break-through between Bowen Pond and Waquoit Bay has filled in and agrees with the original shoreline. The same applies to the break-through in Poponneset Beach between Nantucket Sound and Poponneset Bay.

Sections of the traverse checked recovered stations as follows:

△ BOWEN to ○ MON: Check flat

○ MON to ○ HIE: 12 meters, dist. 3.0 miles
Error Adjusted.
Adjusted position of ○ DIL checked the previous location perfectly.

○ HIE to △ SUCCONNESSET: 6 meters, dist. 1.5 miles
Error adjusted.

The high and low water lines were located during the traverse. No attempt was made to carry the topography inshore as the area has been covered by air-photography.

CHARACTER OF THE COUNTRY:

The entire shoreline is sandy beach. The bluff shown on the sheet varies in height from 10 feet to 40 feet and since it is bare of vegetation, may be seen from a considerable distance offshore. The elevations taken are shown in red ink on the sheet and indicate the height in feet of the bluff above MHW.

T6887 a b

NEW FEATURES LOCATED:

The jetty on the west side of the entrance to Waquoit Bay has been extended as shown on the sheet.

A rock at Lat. $41^{\circ} 33.7'$, Long. $70^{\circ} 28.25'$, awash at MLW, was located. The location was verified by the hydrographer.

GEOGRAPHIC NAMES:

The names as given on Chart 1209 for this area agreed with those used by local residents. No new objects were named by the topographer.

STATISTICS:

Sheet No.	Stat. Miles of Shoreline
A - 1	7.1
A - 2	3.4

Respectfully submitted,

Lorne G. Taylor

Lorne G. Taylor,
Deck Officer,
U.S.C. & G.S. MV GILBERT

Approved and forwarded:

John Bowie, Jr.

John Bowie, Jr.
Commanding Officer,
U.S.C. & G.S. MV GILBERT

Supplement to DESCRIPTIVE REPORT
Accompanying Topographic Sheet A-1

Authority: The work on this sheet was done under authority of the Director's Instructions dated January 17, ¹⁹³⁸ amended March 9, 1942.

Scope: This work, carried out by a party from the Launch FARIS, consists of the graphic triangulation necessary for the ^hydrographic control in Waquoit Bay, Mass., within the approximate limits formed by parallels of Latitude $41^{\circ} 33'$ and $41^{\circ} 35'$ and meridians of Longitude $70^{\circ} 31'$ and $70^{\circ} 32'$.

Control: The controlling signals upon which the triangulation is based are the topographic stations MON, JET, BAN, and ABE, all stations on the planetable traverse between triangulation stations Bowen, 1934, and Successnet, 1934. (See Descriptive Report for Topographic Sheet A-1.) ^{T-6887}

General: The work was done in accordance with standard topographic procedure. The shoreline signals as plotted are in agreement with the shoreline traced from ^{Shoreline on boat sheet 6468 originates with T-5742 (1938)} beatsheet 6468, furnished by the Office, so that no further development of the shoreline was considered necessary.

Determination of station positions was, in all cases, by excellent intersections. The position of CHIM, the only recovered topographic signal in the bay, does not quite coincide with its plotted position on beatsheet 6468, due possibly to distortion of the latter. ^{Agreement satisfactory}

The topography of the bay seems substantially the same as that indicated on beatsheet 6468, except for five long piers, located as shown on the topographic sheet, on the western shore of the bay.

Statistics: Area in square statute miles: 1.0 (Signals only- no shoreline)
Number of stations located: 21

Respectfully submitted,

Robert H. Randall, Jr.

Robert H. Randall, Jr., Ensign,
U. S. Coast and Geodetic Survey

Approved and forwarded,

William F. Deane

William F. Deane
Lieutenant, C&GS
Commanding FARIS

T6887a-b

Supplement to DESCRIPTIVE REPORT
Accompanying Topographic Sheet A-2

Authority: The work on this sheet was done under authority of the Director's Instructions dated January 17, 1938, amended March 9, 1942. ✓

Scope: This work, done by a party from the Launch FARIS, comprises the graphic triangulation necessary for hydrographic control in Peponesset Bay, Mass., in the area roughly bounded by parallels of Latitude $41^{\circ} 35'$ and $41^{\circ} 36'$ and meridians of Longitude $70^{\circ} 27'$ and $70^{\circ} 28'$. ✓

Control: The control points for the graphic triangulation consisted of the three topographic stations, IN, HAP, and KID, as established by planetable traverse by a field party from the M. V. GILBERT. (See Descriptive Reports for Sheets A-1 and A-2, traverse from Succunnesset, 1934, to station KID, and Sheet B-1, traverse from station KID to station PAW.)
T-6887
T-6886 C (1942)

General: Standard procedure for planetable graphic triangulation was followed. The accepted stations are all the results of good intersections, and the position of the only recovered station in the area, station GAS, agreed exactly with its plotted position on beatsheet 6469, furnished by the Office. *H-6469 (1939-42)*
Topo. on boat sheet 6469 originates with T-5741 (1938) & T-5742 (1938)
The stations located near the HWL were in good agreement when transferred to the shoreline traced from beatsheet 6469 so that it was considered unnecessary to survey further the shoreline of Peponesset Bay. The topography seems to have changed little as the result of the 1938 hurricane and the tree line and marsh growth as represented by the symbols on Topographic Map *T-5741 (1938)* are still valid. ✓

Statistics: Area, in square statute miles: 0.6 (Signals only-no shoreline)
Number of stations located: 13

T6887a-b

Respectfully submitted,

Robert H. Randall, Jr.

Robert H. Randall, Jr., Ensign,
U.S. Coast and Geodetic Survey

Approved and forwarded,

William F. Deane

William F. Deane
Lieutenant, C&GS
Commanding FARIS

T6887 a-b

	Remarks	Decisions
1		
2		U.S.G.B
3		415705
4		415704 U.S.G.B
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6		415704 U.S.G.B
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GEOGRAPHIC NAMES

Survey No. **TC887 a-b**

GEOGRAPHIC NAMES		Survey No. T6887 a-b									
Name on Survey	<div>On Chart No.</div> <div>On previous survey No.</div> <div>On U. S. quadrangle Maps</div> <div>From local information</div> <div>On local Maps</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>U. S. Light List</div>										
	A,	B,	C,	D	E	F	G	H	K		
<u>Massachusetts</u>										1	
<u>Nantucket Sound</u>										2	
<u>Bowen Pond</u>										3	
<u>Poponnesset Beach</u>										4	
<u>Waquoit Bay</u>										5	
<u>Poponnesset Bay</u>										6	
<u>Succonnesset Pt.</u>										7	
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Names underlined in red approved

by **L. Heck** on **8/16/43**

M 234

Names underlined in red approved
by L. Heck on 8/16/43

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

No. H **T6887**
No. T 6887 A-B

received April 1, 1943
registered April 1, 1943
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
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RETURN TO

82	R.W.Knox
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NRWK

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. 6887a&b

Field No. A-1, A-2

Massachusetts, Nantucket Sound, Bowen Pond
to Ponponneset Beach

Surveyed June 1942; Scale 1:10,000

Instructions dated January 17, 1938, and March 9, 1942

Plane Table Survey

Aluminum Mounted

Chief of Party - John Bowie, Jr.

Surveyed by - L. G. Taylor, R. H. Randall

Inked by - L. G. Taylor, R. H. Randall

Reviewed by - R. H. Carstens

Inspected by - H. R. Edmonston, August 14, 1943

1. Junctions with Contemporary Surveys

A satisfactory junction was made with the high water line of T-5742 (1938) on the west and T-6886c (1942) on the northeast.

2. Comparison with Prior Surveys

- a. T- 289 (1846) 1:10,000
- T- 318 (1846) 1:10,000
- T-1997 (1890-91) 1:10,000
- T-1998 (1890-91) 1:10,000
- T-2039 (1890-91) 1:10,000

The shoreline of the present survey differs in places by as much as 50-80 meters with that of earlier surveys. Considerable change has taken place at the entrance to Waquoit Bay where jetties have been built. The present survey should supersede the older surveys within the common area.

- b. T-6624 (1938) 1:10,000
- T-5741 (1938) 1:10,000
- T-5742 (1938) 1:10,000

The shoreline of the present survey was run for the purpose of delineating any changes that have taken place since these prior surveys were made. Changes in the high water line have taken place

at the entrance to Bowen Pond, between Bowen Pond and Waquoit Bay, at Poponesset Beach and in Waquoit Bay in Lat. $41^{\circ}33.1'$, Long. $70^{\circ}31.6'$. At other places no changes were evident. New wharves have been located in Waquoit Bay and in Lat. $41^{\circ}33.0'$, Long. $70^{\circ}33.0'$. The present survey is adequate to supersede these prior surveys with respect to the shoreline within the common area. The wharves in Waquoit Bay should supplement the features on the prior surveys.

3. Comparison with Chart 1209 (Latest print date 5-8-43)

The charted topography within the limits of the present survey originates with the previously mentioned surveys which need no further consideration.

4. Condition of Survey

Satisfactory.

5. Compliance with Instructions for the Project

Satisfactory.

6. Additional Field Work Recommended

None.

7. Superseded Surveys

T- 289 in part
T- 318 " "
T-1997 " "
T-1998 " "
T-2039 " "
T-5741 " "
T-5742 " "
T-6624 " "

Examined and approved:

Robert W. King
Chief, Surveys Branch

J. S. Bordin
Chief, Division of Charts

Carl O. Heston
Chief, Section of Hydrography

G. H. Rude
Chief, Division of Coastal
Surveys