

11175

11176

Diag. Cht. No. 1207-2 & 1208-2

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline
Field No. Ph-116 Office No. T-11175 and T-11176

LOCALITY

State MassachusettsGeneral locality Cape Cod BayLocality Provincetown & North Truro19 52-54

CHIEF OF PARTY

L.F. Woodcock, Chief of Field Party
W.F. Deane, Balto. District Officer

LIBRARY & ARCHIVES

DATE January 2, 1966

USCOMM-DC 5087

11176

11175

DATA RECORD

T -11175 and T-11176

Project No. (II): **Ph-116**

Quadrangle Name (IV):

Field Office (II): **Plymouth, Mass.**

Chief of Party: **L. F. Woodcock**

Photogrammetric Office (III): **Baltimore, Md.**

Officer-in-Charge: **William F. Deane**

Instructions dated (II) (III):
 30 April 1953
 9 June 1953 (Supp.1)
 9 July 1953 (Supp.2)
 10 July 1953 (Letter 70-lmh)
 11 Aug 1953 (Supp.3)
 28 Aug 1953 (Letter-711-aal)

Copy filed in Division of
 Photogrammetry (IV)

Method of Compilation (III): **Graphic**

Manuscript Scale (III): **1:10,000**

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): **1.000**

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N.A. 1927**

Vertical Datum (III): **MHW**

Mean sea level except as follows:
 Elevations shown as (25) refer to mean high water
 Elevations shown as (5) refer to sounding datum
 i.e., mean low water or mean lower low water

Reference Station (III): **HIGH HEAD, 1933**

Lat.: **42° 03' 04.149" (128.0 m)** Long.: **70° 06' 44.956" (1033.8 m)**

Adjusted

Plane Coordinates (IV):

State: **Mass.**

Zone: **Mainland**

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,
 or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

(2)

SHORELINE

Areas contoured by various personnel
(Show name within area)
(II) (III)

DATA RECORD

(3)

Field Inspection by (II): **W. M. Reynolds**
B. F. Lampton, Jr.

Date: Oct. 1953

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location):

Oct. 1953 - Field inspection on 1952 and 1953 photography, supplemented by office interpretation of 1954 photography.

Projection and Grids ruled by (IV): **A. Riley**

Date: 2/17/54

Projection and Grids checked by (IV): **H. D. Wolfe**

Date: 3/1/54

Control plotted by (III): **D. Williams**

Date: 7/21/55

Control checked by (III): **H. R. Rudolph**

Date: 8/8/55

~~Radial Plot of Stereoscopic~~ **H. R. Rudolph**
~~Control extension by (III):~~

Date: 2/13/58

Planimetry
Stereoscopic Instrument compilation (III):
Contours

Date:

Date:

Manuscript delineated by (III): **J. Honick**

Date: 5/6/59

Photogrammetric Office Review by (III): **R. Glaser**

Date: 6/11/59

Elevations on Manuscript
checked by (II) (III):

Date:

Camera (kind or source) (III):

1. U.S.C. & G. S. "W" camera
2. U.S.C. & G. S. "J" camera
3. P.M.A. photographs

(4)

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
54-W-1282 - 83	4/24/54	1510	1:10,000	7.7' above MLW
54-W-1292 - 96	"	1510	"	7.7' " "
DPL-5K-23 - 27	7/25/52	1248	"	8.3' " "
DPL-4K-61	7/13/52	1000	"	-0.3' below MLW
DPL-4K-65 - 68	7/13/52	1005	"	-0.3' " "
DPL-5K-31 - 33	7/25/52	1257	"	8.5' above MLW
DPL-5K-41 - 44	"	1307	"	8.6' " "
DPL-5K-49	"	1312	"	8.6' " "
DPL-5K-57 - 59	"	1320	"	8.7' " "
53-J-448 & 450	4/29/53	0738	"	2.4' " "

Tide (III)

From predicted Tide Tables

Reference Station: **BOSTON**
 Subordinate Station: **Race Point**
 Subordinate Station: **Provincetown**

Ratio of Ranges	Mean Range	Spring Range
	9.0	10.4
	9.1	10.6

Washington Office Review by (IV): **S.G. Blankenbaker**

Date: **July 1965**

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **10**

Shoreline (More than 200 meters to opposite shore) (III): **18.5 mi.**

Shoreline (Less than 200 meters to opposite shore) (III): **5.3 mi.**

Control Leveling - Miles (II): **None**

Number of Triangulation Stations searched for (II): **22**

Number of BMs searched for (II): **22**

Number of Recoverable Photo Stations established (III): **none**

Number of Temporary Photo Hydro Stations established (III): **none**

Recovered: **43**

Recovered: **13**

Identified: **31**

Identified: **5**

Remarks:

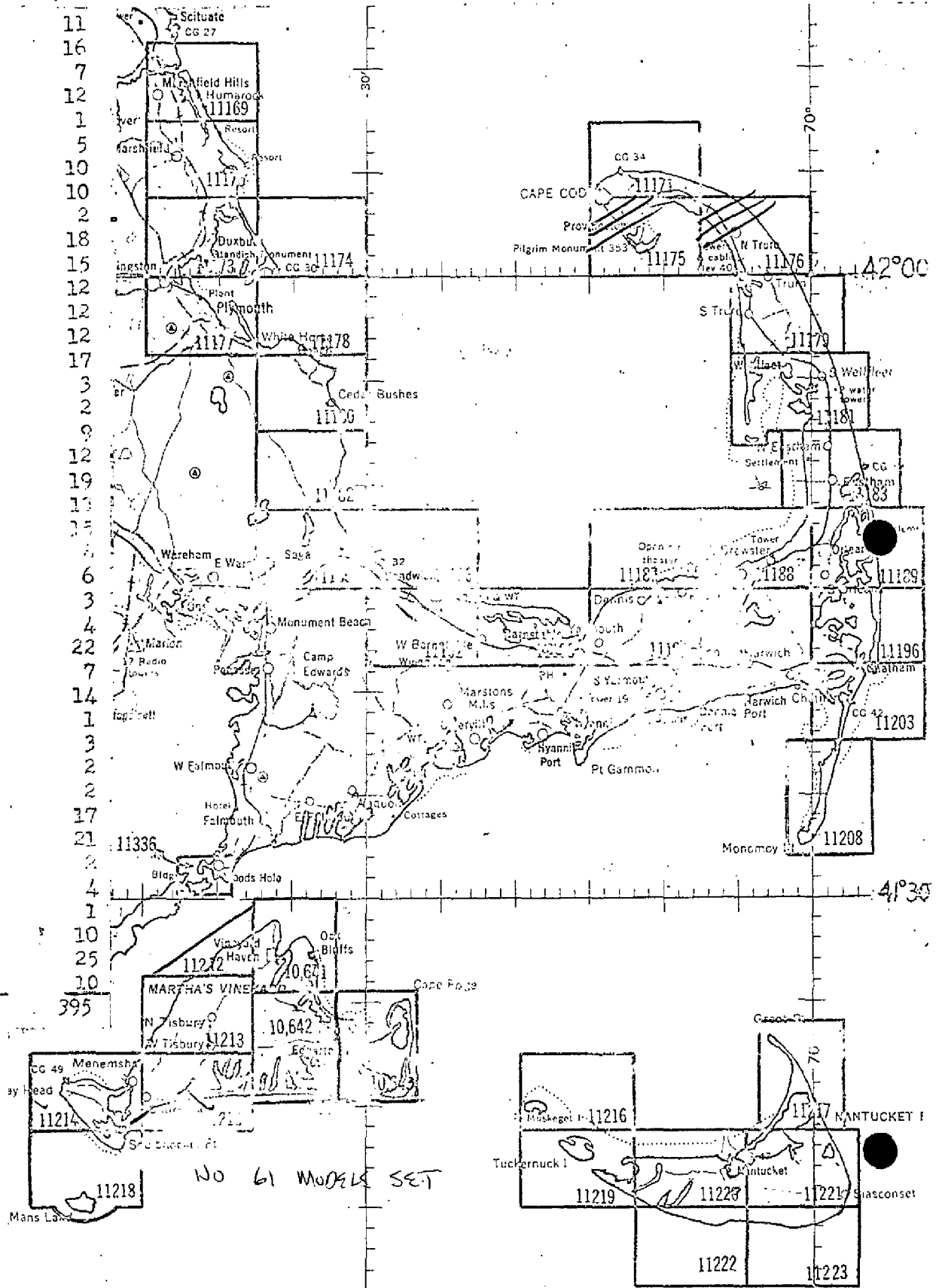
SHORELINE MAPPING PROJECT PH-116

CAPE COD, MASS.

(5)

File 1 Mileage for Cost Accounts
 Feet Lin. Mi. Area
 No. Shoreline Sq. Mi.

11169	24	11
11170	12	16
11171	10	7
11172	26	12
11174	6	1
11175	18	5
11176	12	10
11177	14	10
11178	4	2
11179	15	18
11180	9	15
11181	31	12
11182	7	12
11183	23	12
11185	8	17
11186	6	3
11187	5	2
11188	13	9
11189	20	12
11192	5	19
11193	32	13
11194	7	15
11197	14	4
11198	24	6
11199	14	3
11200	12	4
11201	7	22
11202	22	7
11203	25	14
11204	5	1
11205	22	3
11206	9	2
11207	12	2
11208	24	17
11209	20	21
11210	6	2
11211	7	4
11212	7	1
11213	18	10
11214	12	25
11215	40	10
11216	607	395



Summary to Accompany Descriptive Report
T-11175 & T-11176

The subject maps are two of 40 similar surveys comprising project PH-116. Project coverage includes: (1) Cape Cod Bay shoreline; (2) approximately $\frac{1}{2}$ of the east shore of Cape Cod; and (3) the islands of Martha's Vineyard and Nantucket. T-11175 covers Provincetown and vicinity at the extreme western end of Cape Cod; T-11176 covers a portion of Cape Cod immediately to the east of T-11175 and includes the town of N. Truro.

In accordance with instructions dated November 22, 1957, the ocean shoreline (east side of manuscript) was not compiled.

2. AREAL FIELD INSPECTION

This sheet is located at the extreme western end of Cape Cod and is composed of the town of Provincetown and Provincetown Harbor. Only a narrow strip along the northwest side of Provincetown Harbor has been developed. The remainder of the area is mostly bare sand dunes.

Provincetown is chiefly a summer resort and no industry of a sizeable nature is located there.

U. S. Highway 6 affords a good means for automobile traffic to and from the area. The New York, New Haven and Hartford Railroad affords freight service only.

Field inspection is believed complete and was performed on the following photographs: DPL-5K-33; DPL-5K-41 through 44; DPL-5K-49; DPL-5K-57 through DPL-5K-59. Photographs were of good quality and fairly recent date. No difficulty was encountered in their interpretation in the field.

3. HORIZONTAL CONTROL

All Coast and Geodetic Survey control was searched for. Stations in this area were so closely spaced that only certain selected stations were identified. Stations were identified at approx. one mile intervals. Also, stations which were located in the overlap area, between flight lines were identified where recovered.

In addition to the above, six third-order traverse stations, established by the Mass. Geodetic Survey were recovered and identified. These stations are 153D, 153F, 153G, 153T, 153U, and 153X.

The following stations were reported lost: PROVINCETOWN COLD STORAGE STACK 1933; PROVINCETOWN CAPE COD COLD STORAGE STACK 1933; PROVINCETOWN COLONIAL COLD STORAGE STACK 1933; PROVINCETOWN FISHERMAN'S COLD STORAGE STACK 1933; PROVINCETOWN ORTHODOX CHURCH 1847; WOOD END LIGHTHOUSE BELL TOWER 1902; HILL POINT 2 1906; HILL RANGE WEST 1902; PROVINCETOWN COURSE D REAR RANGE BEACON ECC. 1947; PROVINCETOWN COURSE D FRONT RANGE BEACON ECC 1947; PROVINCETOWN GOVERNOR BRADFORD SCHOOL CUPOLA 1933; FRONT RANGE ~~EAST~~ 1902; BACK RANGE EAST 1902; and 156C MASS.GEOD.SUR.1940.

4. VERTICAL CONTROL

Twelve tidal bench marks of this bureau were searched for and seven were recovered. The recovered bench marks are: NORTH TRURO TIDAL BM XVII (1889); NORTH TRURO TIDAL BM 1(1949); PROVINCETOWN TIDAL BM 7(1933); BM 8(1933); BM 9(1933); BM 10(1933); and PROVINCETOWN TIDAL BM 1 M.S.

No vertical control was established by the field party.

5. CONTOURS AND DRAINAGE

Contouring was not a part of the work requirements for this project.

There is no perennial drainage in the area.

6. WOODLAND COVER

Inapplicable.

7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line was inspected by driving and walking along the beach. It has been indicated by symbol at intervals on the photographs. It was impractical to visit the area during low water for inspection of the low water line.

The foreshore along the outside coast is in all cases relatively steep and the mean low water line is fairly close to the mean high water line.

The foreshore around Provincetown Harbor is more gradual and in some places there is a distance of several hundred feet between the two lines.

There are no bluffs or cliffs in the area.

All docks, wharves, piers, etc. are adequately covered by notes on the photographs.

There are no submarine cables in the area.

8. OFFSHORE FEATURES

Two wrecks charted on Chart 580, at approx. Lat. 42 02.2 and Long. 70 11.8 are no longer in existence.

9. LANDMARKS AND AIDS

All landmarks shown on Charts 580 and 1208 were inspected. Six landmarks were retained and five were recommended for deletion. No new landmarks were selected.

The targets, marking the measured nautical mile are all still in place. The targets were located previously by triangulation and have not been disturbed. Some of the targets were identified, in the overlap areas of the photographs for horizontal control. The targets, which were not identified, can be plotted from the geographic positions.

Three fixed aids to navigation, Long Point Light, Race Point Light, and Wood End Light, were all located previously by triangulation. There are no other fixed aids to navigation in the area.

10. BOUNDARIES, MONUMENTS AND LINES

Inapplicable.

11. OTHER CONTROL

None was established.

12. OTHER INTERIOR FEATURES

All roads have been classified in accordance with Chapter 3A1 of Geological Survey Topographic Instructions.

All buildings were inspected and classified in accordance with Paragraph 5446 of the Topographic Manual.

There are no bridges or cables over navigable waters.

There are no airports or landing fields.

The urban waterfront limits in Provincetown follow the first street parallel to the shoreline and has not been indicated on the field photographs. Only the largest, most prominent buildings are to be shown. Selection of these buildings can easily be done stereoscopically by the compiler.

13. GEOGRAPHIC NAMES

No discrepancies were noted in charted names and no new names were added.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Letter of Transmittal No. Ph-11642, Forms 567, to be forwarded to Washington Office at a later date.

Letter of Transmittal No. Ph-116-29, Data, Map T-11175, forwarded to Washington Office

OCT 26 1953

Submitted
26 October 1953

OCT 26 1953

Approved & Forwarded

Lorin F. Woodcock
by J. J. Fitzgerald
Lorin F. Woodcock
Chief of Party

William M. Reynolds
William M. Reynolds
Carto. Survey Aid

2. AREAL FIELD INSPECTION

The land area is a typical dune formation, interspersed with occasional marshes and bounded by sand beaches along the Cape Cod Bay and Atlantic Ocean shores. The dunes are mostly stable and covered with grass, brush or stunted trees. Near the northwest corner of the sheet the stable dunes come to an abrupt end at High Head, and north of this point are a marsh and shifting sand dunes along the Atlantic shore.

There is scattered population along the major roads, with the chief center at North Truro. There are a number of small buildings for accomodation of tourists from North Truro northwestward along U. S. Highway No. 6.

The sheet is crossed, northwest to southeast, by U. S. Highway No. 6 and a branch of the New York, New Haven and Hartford Railroad. The railroad is little used and carries only an occasional freight train.

U. S. Highway No. 6 has been rerouted from the south to a point just southeast of North Truro. At the time of field inspection, grading operations were being started to reroute the remainder of the highway into Provincetown.

The photographs are of adequate quality. The field inspection is believed to be complete. Field work has been done on photographs DPL-4K-61, DPL-4K-65 through 68; DPL-5K-24 through 27; DPL-5K-31 and 32; 53-J-446 through 53-J-448; 53-J-450; 53-J-451; and 53-J-461.

3. HORIZONTAL CONTROL

All U.S.C. & G.S. horizontal control was searched for. All recovered stations were identified with the exception of NORTH RADIO TOWER 1933 and SOUTH RADIO TOWER 1933, which were quite close to CAPE COD LIGHTHOUSE 1877.

Attention of the compiler is called to Form 526 being submitted for stations KNOWLES 1940, ALDRICH TOWER 1932 and ALDRICH TOWER FLAGPOLE 1933. The new position of station KNOWLES 1940 should be obtained from the Mass. Dept. of Public Works.

At station KNOWLES 1940, Reference Mark No. 1 was identified rather than the station, in the event that the new position is not obtained in time for the radial plot.

No control of other agencies was recovered within this sheet.

The following stations have been reported as lost on Form 526: ALDRICH TOWER FLAGPOLE 1933 and 153B MGS.

4. VERTICAL CONTROL

The following USC&GS tidal bench marks were recovered: Cape Cod Lighthouse, Cape Cod Tidal Bench Marks XIII, 14, 15, 16; Little America Cape Cod, Tidal Bench Marks 1, and 2. All have been identified except Cape Cod Lighthouse, Cape Cod, Tidal Bench Mark XIII. The following USC&GS Tidal bench marks have been reported as lost on Form 685: Cape Cod Lighthouse, Cape Cod, Tidal Bench Mark 64; Little America, Cape Cod, Tidal Bench Marks 3, XII; North Truro, Cape Cod, Tidal Bench Mark XVI.

5. CONTOURS AND DRAINAGE

Contours inapplicable. All drainage is tidal through marsh and clearly visible on the photographs. No perennial drainage above marsh level was observed during field work.

6. WOODLAND COVER

Inapplicable.

7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line throughout the sheet is along sand beaches and is uninterrupted by inlets or streams. It is visible throughout as a dark line, which has been indicated on the photographs. It is faint in some areas, but can easily be followed.

The photographs were taken at too high a stage of tide to permit identification of the mean low water line.

The foreshore is sand throughout.

There are extensive bluffs along the Atlantic shore from the abandoned Highland Coast Guard Station southeastward and along the Cape Cod Bay shore from the railroad crossing on U. S. Highway No. 6 southeastward. They are prominent landmark features. The bluffs are clearly visible on the photographs and are adequately portrayed by contours on the USGS North Truro Quadrangle. The bluffs are sand, and have a slope of approx. 45 degrees. Some are stable enough to support the growth of brush and grass.

There are no piers or similar shoreline structures within the sheet.

8. OFFSHORE FEATURES

There is a loading platform offshore from the fish freezing plant at Pond Village. It is clearly visible on the photographs. There is an overhead loading cable leading from the plant to the platform, the ends of which have been indicated.

9. LANDMARKS AND AIDS

Three landmarks and one aid to navigation have been recommended for charting on Form 567. Three landmarks have been recommended for deletion on Form 567. In addition to these, the radiobeacon antenna mast, storm signal tower and foghorns at Coast Guard Station No. 36 have been indicated on the photographs. The Fog horns are not in a building as shown on Chart 580, but are mounted on a concrete base.

10. BOUNDARIES, MONUMENTS AND LINES

Inapplicable.

11. OTHER CONTROL

None was established.

12. OTHER INTERIOR FEATURES

There is a military post on the Atlantic shore. According to the security officer of the post, all information concerning the post is classified, and no culture should be mapped within the limits. The limits have been indicated on the photographs.

Coast Guard Station No. 36, at Cape Cod Light, is within the sheet, and has been indicated on the photographs.

Roads have been classified in accordance with pages 5 through 7 of the U. S. Geological Survey Instructions "Mapping of Roads and Railroads."

13. GEOGRAPHIC NAMES

No discrepancies were noted during field work.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Letter of Transmittal No. Ph-116-2, Forms 567, to be forwarded to Washington Office at a later date.

Letter of Transmittal No. Ph-116-22, Data, Map T-11176, forwarded to Washington Office
OCT 26 1953

Submitted
23 October 1953

B. Frank Lampton, Jr.

B. Frank Lampton, Jr.
Cartographic Survey Aid

Approved & Forwarded
OCT 26 1953

Lorin F. Woodcock
by D. J. Fitzgerald
Lorin F. Woodcock
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT
Project No. Ph-116
Surveys Nos. T-11176, T-11179, T-11181 and T-11183

21. AREA COVERED

This photogrammetric plot covers the areas of Surveys Nos. T-11176, T-11179, T-11181 and T-11183. These are shoreline surveys located on Cape Cod, Massachusetts extending from Herring River northward to Pilgrim Beach and from the Atlantic Ocean westward to Cape Cod Bay.

22. METHOD-RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black and Massachusetts State Grids, Mainland Zone, in red at a scale of 1:10,000 were furnished by the Washington Office. Base sheets were prepared in this office.

The positions of all triangulation stations and most of the substitute stations were plotted using the meter bar and beam compass. Some of the substitute stations were plotted graphically with the steel protractor.

A sketch showing the layout of the surveys in this plot and the distribution of control and photograph centers is attached to this report. A list of control station names is also attached to this report.

Photographs:

The photographs used in the plot are as follows: Forty (40) single lens photographs taken by PMA in June and July 1952 at a scale of 1:20,000 and ratioed to a scale of 1:10,000:

DPL-3K-1 to DPL-3K-8 inclusive
DPL-4K-18 to DPL-4K-61 inclusive
DPL-4K-65 to DPL-4K-76 inclusive
DPL-5K-15 to DPL-5K-27 inclusive
DPL-5K-64 to DPL-5K-75 inclusive

Eight (8) single lens photographs taken with the C&GS "W" camera, 15 March 1955 at a scale of 1:24,000 and ratioed to a scale of 1:10,000:

W-4965 to W-4967 inclusive
W-4969 to W-4971 inclusive
W-5004 and W-5005

Photograph W-4968 was also available, but was not used in the plot because it was tilted too much.

Standard symbols were used on all photographs.

Templets:

Vinylite templets were made for all photographs. The master templet was used to correct for paper distortion in the PMA photographs taken in 1952. There was no master templet available for the "W" photographs taken in 1955.

Closure and Adjustment to Control:

Vinylite base sheets were prepared in this office. All identified control was transferred to the base sheets by matching common grid lines.

Several pass points and photograph centers located on surveys Nos. T-11172 and T-11189 by previous plots were also transferred to the base sheets.

The radial plot was then constructed on the base sheets.

The templets in the area of survey No. T-11176 were laid first and a good junction was made with the plot previously constructed to the north and west of survey T-11176. The plot was then extended southward, using the templets for the 1952 PMA photographs, across surveys Nos. T-11179 and T-11181 and extending into the northern part of survey No. T-11183.

The templets for the "W" photographs were then laid holding to pass points in the southern part of survey No. T-11183, which had been established by a previous plot. After some minor adjustments where the templets for the PMA photographs joined the templets for the "W" photographs a satisfactory plot was made.

Six (6) control stations identified by the field party could not be held in the plot. (See item 23).

Transfer of Points:

The positions of all pass points and photograph centers were pricked directly on the map manuscripts by superimposing the manuscripts on the plot and matching common grid lines.

23. ADEQUACY OF CONTROL

The control was adequate except for the southeastern part of survey No. T-11183. In this area the pass points established by the previous plot could be held in the plot.

As previously stated six control stations as identified by the field party could not be held in the plot.

Survey No. T-11176:

KNOWLES RM 1, MGS, 1940 - The radially plotted position of the sub. pt. for RM No. 1 falls 1.7 mm southwest of its computed position. This was probably misidentified. There is other control nearby which was held to obtain an accurate plot and a complete investigation of the reasons for the error was not considered necessary.

HIGHLAND COAST GUARD SIGNAL MAST, 1933 - The radially plotted position of the sub. pt. for this station falls about 2.6 mm southwest of its computed position. The tower, which is the station, was identified on the photographs and pricked direct in this office. The office identification of the station was held in the plot along with other control in the area.

ALDRICH TOWER FLAGPOLE, 1933 - The radially plotted position of the station falls 0.4 mm west of its geographic position. The station falls close to the flight line of the only flight of photographs covering the area in which it is located. The flagpole has been removed and the station is lost. The center of the tower was identified as the station, but the flagpole probably was not in the center.

Survey No. T-11179

CAHOONS HOLLOW COAST GUARD STATION FLAGPOLE, 1932 - The radially plotted position of the station falls about 3.7 mm north of its geographic position. This station is completely surrounded by other stations which were held in the plot. Its geographic position places it in an all white sand area on the photographs, and its identification is probably in error.

NORTH WELLFLEET METHODIST CHURCH BELFRY, 1847. The radially plotted position of this station falls about 0.6 mm north of its geographic position. This station could not be held with NORTH WELLFLEET CONGREGATIONAL CHURCH SPIRE, 1887 - which is only about 11.5 mm east of it, or the other control in the area.

Survey No. T-11181

SAND RM 1, 1932 - The radially plotted position of the sub. pt. falls about 4.5 mm west of its computed position. It could not be held with other stations north, south, and west of it. There is some doubt as to the recovery of this station. The recovery Form 526 states that the station and RM 1 were destroyed and RM 2 was recovered. The control station identification card indicates that RM 1 was used to locate the sub. pt. and the field report states that RM 1, was recovered. In cahier No. 513 supplement page 31, L.W.S., in 1941 states "The reference marks could not be found. It is thought that the shifting sand has uprooted them".

This station was also relocated by KTA with second order accuracy in 1933. See page 17, cahier No. 513.

24. SUPPLEMENTAL DATA

None used.

25. PHOTOGRAPHS

The overlap in the line of flight and between flights was adequate. Photographic coverage was adequate.

The position of many of the photograph centers should be considered weak as they fall in water areas.

No tilt determinations were made since there was very little tilt in evidence on any of the photographs except W-4968 which was not needed in

constructing the radial plot.

Respectfully submitted
13 February 1958

Harry R. Rudolph
Harry R. Rudolph
Cartographer (Photo.)

LIST OF CONTROL

No.	Name of Station	Identification
1	HIGH HEAD COAST GUARD SIGNAL MAST, 1933	Sub. Pt.
2	HIGH HEAD, 1933	" "
3	PROVINCETOWN PUMPING STATION STACK, 1933	Direct
4	KNOWLES, MGS, 1940	Sub. Pt.
5	HIGHLAND COAST GUARD SIGNAL MAST, 1933	" "
6	NORTH RADIO TOWER, 1933	None
7	SOUTH RADIO TOWER, 1933	"
8	CAPE COD LIGHTHOUSE, 1877	Direct
9	ALDRICH TOWER FLAGPOLE, 1933 (destroyed)	"
10	NORTH TRURO COLD STORAGE PLANT STACK, 1933	"
11	BALL (MGS), 1937	Sub. Pt.
12	BALL'S HOUSE FLAGPOLE, 1933	Direct
13	CORN HILL 2, 1933	RM 2 - Direct & Sub. Pt.
14	TRURO TOWN HALL, 1933	Direct
15	TRURO CONGREGATIONAL CHURCH SPIRE, 1933	"
16	TRURO (MGS), 1937	None
17	108C MGS, 1937	Sub. Pt.
18	108A MGS, 1937	Direct
19	PAMET, 1933	None
20	144V MGS, 1939	Sub. Pt.
21	144U MGS, 1939	None
22	TRURO CORNER 8, 1887	Sub. Pt.
23	144R MGS	" "
24	CAHOONS HOLLOW COAST GUARD STATION FLAGPOLE, 1932	Direct
25	NORTH WELFLEET CONGREGATIONAL CHURCH SPIRE, 1887	"
26	NORTH WELFLEET METHODIST CHURCH BELFRY, 1847	"
27	145 AJ MGS	Sub. Pt.
28	SNOWS POND RM NO. 2 MGS, 1940	" "
29	145AD MGS, 1939	" "
30	145AA MGS	" "
31	145Z MGS	None
32	TRURO WELFLEET 6(WM) (TRURO CORNER 1), 1887	Sub. Pt.
33	145W MGS	Sub. Pt.
34	GRIFFIN MGS, 1933	Direct
35	145U MGS, 1941	None
36	145T MGS	Direct
37	145S MGS	"
38	HAMBLIN MOUND, 1847	None
39	145N MGS	"
40	145M MGS	Direct

LIST OF CONTROL (cont'd)

No.	Name of Station	Identification
41	145L MGS	None
42	145K MGS	"
43	145J MGS	Sub. Pt.
44	WASH, 1953	" "
45	GREAT BEACH HILL MGS, 1933	" "
46	PEAK, 1953	Direct
47	145H MGS	None
48	145D MGS	Direct
49	EASTHAM CORNER 4, 1887	None
50	145E MGS	Sub. Pt.
51	145F MGS	Direct
52	145G MGS	None
53	WELLFLEET FIRE TOWER 1932	Direct
54	144 M MGS	Sub. Pt.
55	144L MGS	" "
56	SAND RM 1, 1932	" "
57	WELLFLEET NORTH BASE MGS, 1936	" "
58	EASTHAM CORNER 5, 1887	None
60	144G MGS	Direct
61	144F MGS	None
62	EASTHAM CORNER 6, 1887	"
63	144D MGS, 1941	Direct
64	NAUSET LIGHTHOUSE, 1932	"
65	NAUSET MOORS SILO, 1936	"
66	WELLFLEET SOUTH BASE, 1936	"
67	145C MGS	"
68	145B MGS	None
69	145A MGS	"
70	NORTH EASTHAM, 1933	"
71	HERRING, 1933	Sub. Pt.

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T. 11175 PROJECT NO. Ph-116 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
								FORWARD	(BACK)	FORWARD	(BACK)
WOOD END Lighthouse, 1877	G-3548 P. 129	N.A. 1927	42	01	16.022			494.3	1356.9		
			70	11	38.498			885.8	494.7		
WOOD END LIFE SAVING STATION CUPOLA, 1902	G-3723 P. 215	"	42	01	14.846			458.0	1393.1		
			70	11	31.084			715.2	665.3		
WOOD END COAST GUARD SIGNAL MAST, 1933	G-3711 P. 202	"	42	01	14.932			460.7	1390.5		
			70	11	32.139			739.5	641.0		
LONG POINT INNER RANGE BEACON 1, 1933	G-3711 P. 203	"	42	01	52.964			1634.1	217.1		
			70	10	15.143			348.3	1031.9		
LONG POINT OUTER RANGE BEACON 1, 1933	"	"	42	01	50.205			1549.0	302.2		
			70	10	11.550			265.7	1114.5		
LONG POINT INNER RANGE BEACON 2, 1933	"	"	42	01	30.627			944.9	906.2		
			70	10	42.190			970.6	409.7		
LONG POINT OUTER RANGE BEACON 2, 1933	"	"	42	01	26.686			823.3	1027.8		
			70	10	37.135			854.3	526.0		
LONG POINT INNER RANGE BEACON 3, 1933	"	"	42	01	17.920			552.9	1298.3		
			70	11	21.775			501.0	879.4		
LONG POINT OUTER RANGE BEACON 3, 1933	G-3711 204	"	42	01	12.673			391.0	1460.2		
			70	11	14.972			344.5	1036.0		
PILGRIM MONUMENT, 1909	G-3711 P. 200	"	42	03	07.574			233.7	1617.5		
			70	11	20.987			182.6	897.2		
PROVINCETOWN CENTER CHURCH SPIRE, 1933	G-3711 P. 211	"	42	03	11.966			369.2	1482.0		
			70	11	05.534			127.3	1252.5		
PROVINCETOWN TOWN HALL SPIRE, 1887	G-3711 P. 202	"	42	03	04.213			130.0	1721.2		
			70	11	17.404			400.2	979.6		

1 FT. = 3048006 METER

COMPUTED BY: J. Tolodziecki

DATE 7 July 1954

CHECKED BY: B. Kurs

DATE 27 July 1954

CONT. DC-57843

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T. 11175

PROJECT NO. Ph-116

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N. A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
						FORWARD	(BACK)	
PROVINCETOWN SOUTH EAST RANGE FRONT BEACON, 1906	G-3711 p. 204	N.A. 1927	42 01 55.995 70 12 33.818			1727.6	123.6	
PROVINCETOWN NORTH WEST RANGE FRONT BEACON, 1906	"	"	42 02 54.514 70 13 12.046			777.9	602.3	
PROVINCETOWN SOUTH EAST RANGE REAR BEACON, 1906	"	"	42 02 16.041 70 12 10.218			1682.0	169.3	
PROVINCETOWN STANDPIPE, 1933	G-3711 p. 201	"	42 03 09.074 70 11 34.934			277.0	1102.8	
PROVINCETOWN WEATHER SIGNAL MAST, 1933	"	"	42 03 08.959 70 11 18.867			494.9	1356.3	
PROVINCETOWN UNIVERSALIST CHURCH SPIRE, 1847	G-3711 p. 202	"	42 03 01.495 70 11 20.047			235.0	1145.0	
PROVINCETOWN NORTH WEST RANGE REAR BEACON, 1906	G-3711 p. 204	"	42 03 18.95 70 12 43.30			280.0	1571.3	
LONG POINT LIGHT HOUSE, 1877	G-3694 p. 155	"	42 01 58.860 70 10 09.058			803.3	576.4	
RACE POINT LIGHTHOUSE, 1877	G-3694 p. 155	"	42 03 43.966 70 14 37.034			276.4	1574.8	
PROVINCETOWN COURSE D FRONT RANGE BEACON, 1947	G-7301 p. 512	"	42 03 20.032 70 13 35.737			433.9	945.9	
PROVINCETOWN COURSE D REAR RANGE BEACON, 1947	"	"	42 03 34.316 70 13 18.934			46.1	1805.1	
153T MGS, 1940	M.G.S. p. 18	"	385.427.28 946.818.66	427.28 1818.66		461.0	918.8	
						584.7	1266.5	
						995.7	384.0	
						1816.0	35.2	
						208.4	1172.1	
						1356.5	494.7	
						851.5	528.1	
						618.1	1233.1	
						821.8	557.9	
						1058.8	792.4	
						435.4	944.3	
						130.2	1393.8	
						554.3	969.7	

1 FT. = 3048006 METER

COMPUTED BY: J. Tolodziecki

DATE 8 July 1954

CHECKED BY: B. Kurs

DATE 27 July 1954

COMM. DC-57843

SCALE FACTOR

1 FT. = 3048006 METER	COMPUTED BY: J. Tolodziech	DATE: 9 July 1954	CHECKED BY: B. Kurs	DATE: 21 July 1954	CONRAD-DC-57843
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COMPILATION REPORT
T-11175 & T-11176

The photogrammetric plot report for T-11176 is a part of this report. No photogrammetric plot was required for T-11175 since each photograph was fixed by identified control and no bridging needed.

31. DELINEATION

Graphic methods were used to delineate this manuscript.

The road under construction (U.S. No. 6) was delineated to the extent covered by latest photography (April 1954).

The interior limits of delineation were generally back to the main road (Gar Highway) paralleling the shoreline. (see revised project instructions dated 22 November 1957, paragraph 4)

32. CONTROL

The identification, density and placement of horizontal control was adequate.

33. SUPPLEMENTAL DATA

The U. S. G. S. Quadrangles Provincetown and North Truro, Massachusetts, were used for geographic names.

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.
Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline inspection was adequate.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

Forms 567 have been submitted for the following:

1. Nine landmarks to be charted.
2. Four aids to be charted.
3. Seven landmarks to be deleted.

Field report states that there are eight landmarks recommended for deletion, but forms 567 submitted by field party accounts for only seven.

38. CONTROL FOR FUTURE SURVEYS

None established.

39. JUNCTIONS

Junctions are in agreement with T-11171 to the north and T-11179 to the south. All water areas to the east and west.

40. HORIZONTAL AND VERTICAL CONTROL

Refer to Photogrammetric Plot Report.

41. - 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with the following:

1. U.S.G.S. Quadrangle, Provincetown, Mass., scale 1:31,680, edition of 1944, revised 1949.
2. U.S.G.S. Quadrangle, North Truro, Mass., scale 1:31,680, edition of 1944, revised 1948.
3. T-5731, Provincetown and vicinity, scale 1:10,000.
4. T-5732, Truro and vicinity, scale 1:10,000.


47. COMPARISON WITH NAUTICAL CHARTS

These manuscripts have been compared with Chart No. 580, scale 1:20,000, published December 1944 (2nd edition) corrected to 12/23/52.


Items to be applied to Nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
7 May 1959


Jack Honick
Carto. Photo. Aid

Approved and forwarded


William F. Deane,
CDR, C&GS
Baltimore District Officer

27
T-11175 & T-11176

NOTES TO REVIEWER

Refer to Item 3 of Field Inspection Report for T-11176.

The new geographic position for KNOWLES, MGS, 1940 (which was reset) was not obtained by the compilation office because it was not required to complete the radial plot.

The Sub. Pt. for KNOWLES RM 1 was misidentified and therefore the manuscript shows its computed position as well as its radially plotted position.

Review Report
T-11175
July 1965

62. Comparison with Registered Topographic Surveys

T-5731 (photogrammetric survey) 1:10,000 1943

In Provincetown Harbor some foreshore features (piers, groins, and ruins of groins and other features) mapped on prior survey T-5731 are not shown on T-11175. The photography is not sufficiently clear to verify through office inspection the non-existence of remains of these features that constitute hazards to navigation at tide stages above MLW. Except for this qualification T-11175 supersedes the prior survey for charting purposes in the common area.

63. Comparison with Maps of Other Agencies

USGS quadrangle Provincetown, Mass. 1:24,000 1958

No significant differences were noted.

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable

65. Comparison with Nautical Charts

580 1:20,000 Revised 1962

The form indicating application to nautical charts has not been inserted in the subject Descriptive Report. Sources of charted topographic information include: (1) T-5731 (side heading 62); (2) 1954 photography (applied in 1954 directly to the chart base); and (3) other more recent data.

66. Adequacy of Results and Future Surveys

This map meets the National Standards of Map Accuracy and Bureau requirements.

Reviewed by

S. G. Blankenbaker
S. G. Blankenbaker

Approved by:

Charles J. Shuman
Chief, Photogrammetric Branch

L. J. Woodcock
Chief, Photogrammetry Division

Chief, Nautical Chart
Division

(29)

6-11-59

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T-11175 & T-11176

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

CONTROL STATIONS

4a. Classification label ☒

5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒
9. Plotting of sextant fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours ☒ 23. Stereoscopic instrument contours ☒ 24. Contours in general ☒ 25. Spot elevations ☒ 26. Other physical features ☒

CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒

40. R. G. Sasser Joseph Steinberg
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:

M-2623-12

STRIKE OUT ONE

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Plymouth, Mass.

23 October 1953

I recommend that the following objects which have *(have-not)* been inspected from seaward to determine their value as landmarks be charted on *(deleted from)* the charts indicated.

The positions given have been checked after listing by

Isaiah Y. Fitzgerald

/s/ Lorin F. Woodcock

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TO BE CHARTED

STRIKE OUT ONE

NONFLUATING AIDS OR LANDMARKS FOR CHARTS

Plymouth, Massachusetts 23 October, 1953

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on (~~charts~~) the charts indicated.

The positions given have been checked after listing by Isaiah Y. Fitzgerald

/s/ Lorin F. Woodcock

Chief of Party.

MASSACHUSETTS				POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	NEARER CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE*		LONGITUDE*								DATUM
				°	'	D. M. METERS	°							
MASSACHUSETTS	PILGRIM MONUMENT	(Pilgrim Monument, 1909) 252 ft. high (342)		42	03	07.574 233.7	70	11	20.987 182.6	N.A. 1927	X X	X X		580, 1208
	STANDPIPE	(Provincetown Standpipe, 1933) 115 ft. high (180)		42	03	09.074 280.0	70	11	34.934 803.3	"	X X	X X		"
	CHURCH SPIRE	(Provincetown, Center Ch. Sp., 1933) 104 ft. high (120)		42	03	11.966 369.2	70	11	05.534 127.3	"	X X	X X		"
	SPIRE (TOWN HALL)	(Provincetown, Town Hall Spire, 1887) 115 ft. high (124)		42	03	04.213 130.0	70	11	17.404 400.2	"	X X	X X		"
	SPIRE	(Provincetown, Universalist Ch. Sp. 1847) 106 ft. high (116)		42	03	01.495 46.1	70	11	20.047 461.0	"	X X	X X		"
	SIGNAL MAST	(Wood End Coast Guard Signal Mast, 1933) 75 ft. high (90)		42	01	14.932 460.7	70	11	32.139 739.5	"	X X	X X		"
	STACK	(Provincetown Pumping Station Stack, 1933) 51 ft. high (70)		42	02	39.75 1226.4	70	06	18.68 429.6	T-11176 Triang.	X X	X X		"
	FLAGPOLE	(Ball's House, Flagpole, 1933) 61 ft. high (196)		42	00	52.586 1622.4	70	02	06.455 118.5	"				1208
	TOWER	(Aldrich Tower, Flagpole, 1933) 52 ft. high (207)		42	02	03.870 119.4	70	03	20.758 473.4	"	X X	X X		580, 1208
				</										

(31)

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

TO BE DELETED
1/6/87/CHANNED/

STRIKE OUT ONE

NON-FLLOATING AIDS/OR LANDMARKS FOR CHARTS

Plymouth, Massachusetts

1953

I recommend that the following objects which have ~~(not been)~~ been inspected from seaward to determine their value as landmarks be ~~deleted/old~~ (deleted from) the charts indicated.

The positions given have been checked after listing by

/s/ Lorin F. Woodcock

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

*** TABULATE SECONDS AND METERS**

48. GEOGRAPHIC NAME LIST

Cape Cod
Cape Cod Bay
Castle Road
Corn Hill
Corn Hill Road

Gar Highway
Great Hollow
Great Hollow Road
Great Swamp

Harbor Bar
High Head
Highland Road

Little Pamet River

Moon Pond

New York New Haven and Hartford (R.R.)
North Truro

Our Lady of Perpetual Help Church

Peters Hill
Pilgrim Beach
Pilgrim Heights
Pilgrim Lake
Pond Village

U. S. 6 (Hwy)
U. S. 6-A (Hwy.)

Village Pond

*Names checked
& approved
7-23-65
A. J. Wraight*

48. GEOGRAPHIC NAME LIST

Barnstable County
Beach Hwy
Bennett Pond
Bradford St.

Cape Cod
Cape Cod Bay
Center Church
Christian Science Church
Clapps Pond
Clapps Round Pond
Commercial St.

Duck Pond

Gar Hwy

Hatches Harbor
Herring Cove

Long Point

Municipal Wharf

New York New Haven and Hartford (R. R.)

Pasture Pond
Pilgrim Beach
Pilgrim Lake
Pilgrim Monument
Provincetown
Provincetown Beach
Provincetown Harbor

Race Point Rd.

- * Shank Painter Bar *OK a/w*
Shank Painter Cemetery
Shank Painter Pond
Snake Hills
St. Peter Church

Telegraph Hill
Town Hill

Universalist Church

U. S. 6 (Hwy.)
U. S. 6-A (Hwy.)

- * Wood End *OK a/w*
* Wood End Bar

*Names checked
+ approved
7-23-65
A. J. Wraight*

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-11175 & T-11176

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]