

# 12501

Diag. Cht. Nos. 1209-2 & 1210-2.

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY  <b>DESCRIPTIVE REPORT</b>
Type of Survey <u>Chart 348</u>
Field No. <u>Ph-6102</u> Office No. <u>T-12501</u>
<b>LOCALITY</b> State <u>Massachusetts</u> General locality <u>Vineyard Sound</u> Locality <u>Woods Hole</u>
<u>1961-62</u> <b>CHIEF OF PARTY</b> <u>W.E. Randall, Baltimore Dist. Office</u>
<b>LIBRARY &amp; ARCHIVES</b>  DATE <u>May 1964</u>

USCOMM-DC 5087

12501

DESCRIPTIVE REPORT - DATA RECORD

(CHART 348)

T-12501

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Project No. (II): Ph-6102

Quadrangle Name (IV):

Field Office (II):

Chief of Party:

Photogrammetric Office (III): Baltimore, Maryland

Officer-in-Charge: William E. Randall

Instructions dated (II) (III): May 10, 1961

Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): Kelsh Plotter

Manuscript Scale (III): 1:5,000

Stereoscopic Plotting Instrument Scale (III): 1:2,000  
(Pantographic ratio 2/5)

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):

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):

Lat.:

Long.:

Adjusted  
Unadjusted

Plane Coordinates (IV):

State:

Zone:

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.

DESCRIPTIVE REPORT - DATA RECORD

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[illegible]

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

DESCRIPTIVE REPORT - DATA RECORD

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Field Inspection by (II): Joseph K. Wilson

Date: August 1961

*Precompilation field inspection consisted of control recovery and identification, inspection of landmarks and aids to navigation, and inspection of landmark bluffs.*

Planetable contouring by (II):

Date:

Completion Surveys by (II):

*J. K. Wilson*

Date: *APRIL 1962*

Mean High Water Location (III) (State date and method of location): *Infrared photography at high water.*

Projection and Grids ruled by (IV): J. D. C.

Date: 7/17/61

Projection and Grids checked by (IV): G. H. Everett

Date: 8/11/61

Control plotted by (III): D. M. Brant

Date: 9/5/61

Control checked by (III): H. P. Eichert

Date: 9/5/61

~~Reduction Plot~~ Stereoscopic  
Control extension by (III):

R. Fuechsel

Date: October 1961

Stereoscopic Instrument compilation (III):

Planimetry D. M. Brant

Date: 11/30/61

~~Contours~~

Date:

Manuscript delineated by (III): D. M. Brant

Date: 11/30/61

Photogrammetric Office Review by (III): H. P. Eichert

Date: 12/1/61

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

Date:



DESCRIPTIVE REPORT - DATA RECORD

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Camera (kind or source) (III): C&GS L and S cameras (6" focal length)

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
<u>INFRARED</u>				
61-L-1479 thru 1482	4/9/61		1:30,000	0.0' M.H.W.
1496	"		"	0.0' M.H.W.
<u>COLOR</u>				
61-S-6543 thru 6547	"		1:15,000	+0.7' M.L.W.
6550 thru 6553	"		"	+0.4' M.L.W.
6561 thru 6563	"		"	+0.55' M.L.W.
7656 thru 7662	5/3/61		1:10,000	+0.4' M.L.W.
7826 thru 7832	5/5/61		1:15,000	0.0' M.L.W.

Tide (III)  
(Observed)

Reference Station: Woods Hole  
Subordinate Station:  
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV): S.G. BLANKENBAKER

Date: AUG. 29, 1962

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

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

Shoreline (More than 200 meters to opposite shore) (III): } 20 mi.

Shoreline (Less than 200 meters to opposite shore) (III): }

Control Leveling - Miles (II):

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

Recovered:

Identified:

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

Refer to Plot Report for control used in bridge

ALL FIELD EDIT AND FINAL REVIEW CORRECTIONS  
HAVE BEEN APPLIED TO THE ORIGINAL DRAWING









T-12501

Summary To Accompany Descriptive Report  
Chart Drawing 548  
Topography

This compilation is one of eleven similar chart drawings of topography ranging in scale from 1:5,000 to 1:80,000 in Project 6102. The project initiated to test the practicability of compiling nautical chart topography by photogrammetric methods, covers the south shore of Cape Cod, the Elizabeth Islands, Martha's Vineyard Island and Nantucket Island.

T-1250)

(CHART 348)

REPRODUCTION LOG

(9)

Compilation Record	Completion Date	Remarks
Incomplete manuscript (in part)	10/17/61	For field edit (superseded)
Incomplete manuscript Partial field edit applied	11/22/61	Superseded
Advance manuscript	11/30/61	<i>Superseded</i>
<i>Field edit corrections</i>	<i>6/14/62</i>	



PHOTOGRAMMETRIC PLOT REPORT  
CAPE COD, MASS.  
PH-6102  
OCT. 1961

21. Area Covered:

Shoreline areas of the following charts: 250, 257, 258, 259, 260, 263, 264, 348.

22. Method:

Ten stereoplanigraph bridges comprising a total of 60 models were run in order to determine positions of various landmark objects and photo-topo points, and to provide pass points for use in Kelsh compilation of the project. Adjustment of strips 1, 4, 5, 8, and 10 was done on a least-squares basis by the IBM 650 computer. Strips 2, 3, 6, 7, and 9 were given a linear adjustment on the Clary computer. The adjustments of all strips in the project were adequately checked by number and placement of extra control stations, and/or points common to other strips.

23. Adequacy of Control:

Horizontal control provided complied with project instructions, and was adequate. All control held in bridging, with the following two exceptions: (1)  $\Delta$  NAUSHON, 1844-R.M. 2 was 19 feet out in X and 36 feet out in Y. It is believed that the point was mis-identified in the field. This station may be disregarded inasmuch as its companion station ( $\Delta$  NAUSHON, 1844-S.S. 1) held well in bridging. (2)  $\Delta$  PASQUE, 1844-S.S. 2 was out 15 feet in X and 79 feet in Y. The adjustment, which was based on  $\Delta$  PASQUE, 1844-S.S. 1, gives a good closure on the home station. Therefore, S.S. 2 may be disregarded. A mis-identification of S.S. 2 in either office or field could account for the error.

$\Delta$  Nashawena Island, Gable of N. House, 1913 was identified by the field man as a landmark rather than as  $\Delta$  because no data could be found which stated whether the E. gable or the W. gable was the station. The results of bridging indicate that the E. gable is the station.

24. Supplemental Data:

None.

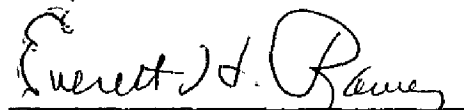
25: Photography:

Bridging was performed on both infrared photography and on black and white dianegatives made from color photos. The overall photographic quality of the black and white negatives was poor. There was a marked deficiency in tonal gradation and an extreme graininess, both of which contributed to a general lack of clarity. The quality of the infrared photography was better, although still inferior to panchromatic photography. These deficiencies probably can be overcome in the compilation phase by supplemental graphic compilation using the color photographs.

Submitted by:

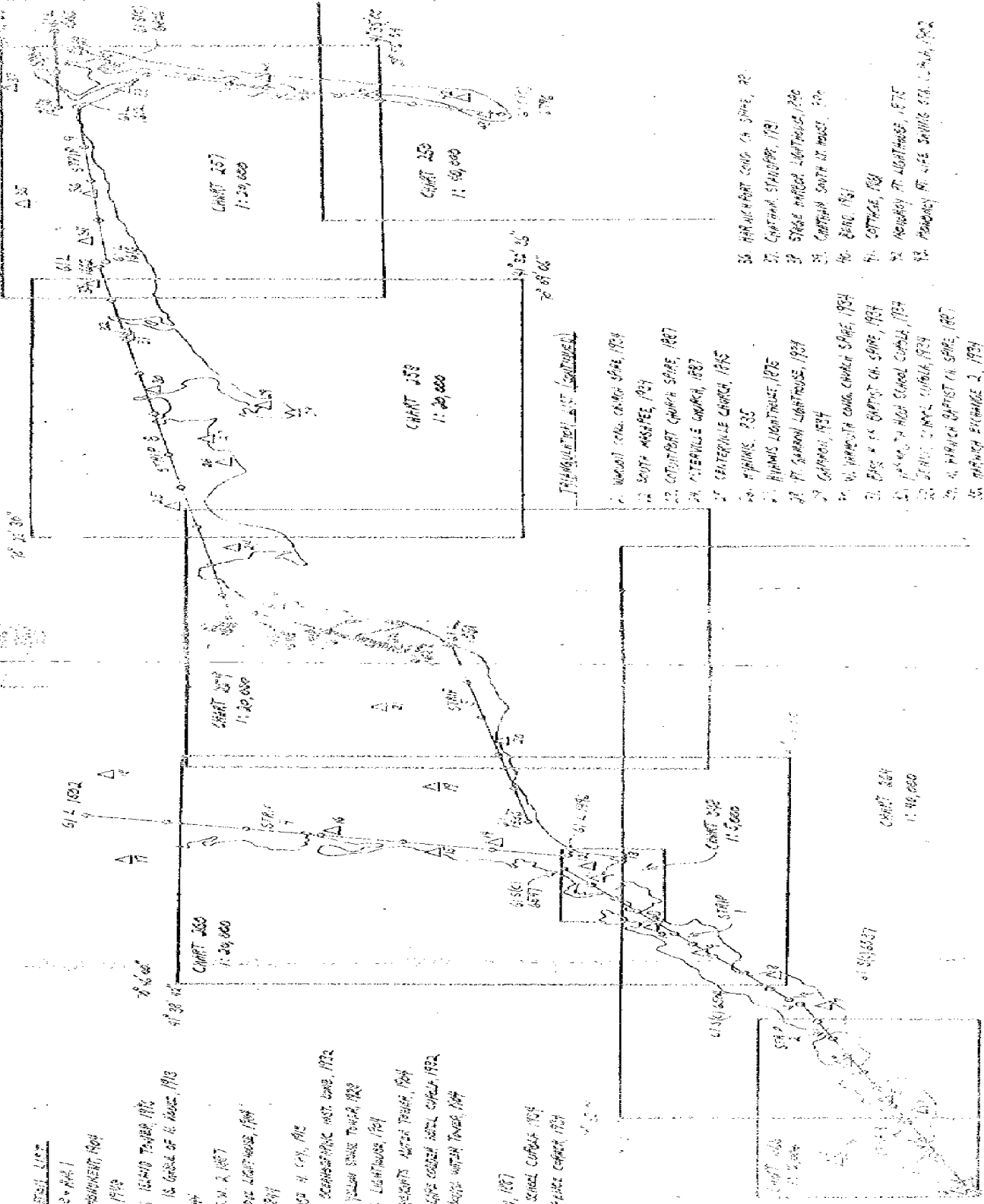
  
R. Fuechsel

Approved by:

  
E. H. Ramey, Chief  
Aerotriangulation Section

# TRANSMITTAL LIST

1. EXTRA 1712-1714
2. GEORGE HARRINGTON, 1904
3. BARNES, 1913
4. HARRINGTON, 1913
5. HARRINGTON, 1913
6. PROCTOR, 1914
7. HARRINGTON, 1914
8. HARRINGTON, 1914
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12. HARRINGTON, 1914
13. HARRINGTON, 1914
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19. HARRINGTON, 1914
20. HARRINGTON, 1914



## TRANSMITTAL LIST (CONTINUED)

21. HARRINGTON, 1914
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COMPILATION REPORT

T-12501  
(CHART 348)

Field Report: No field inspection report was submitted.

31. DELINEATION

The Kelsh plotter was used for delineation using dianegatives of the color photography. The color film and the infrared photography were used - as will be explained below. All delineation was on work sheets, the details from which were later transferred to the chart drawing.

32. CONTROL

Horizontal control from the stereo-planigraph bridging was adequate.

33. SUPPLEMENTAL DATA

The data used in the compilation is listed on the history form which is attached.

34. CONTOURS AND DRAINAGE

Contours are inapplicable. Drainage is sparse.

35. SHORELINE AND ALONGSHORE DETAILS

The mean high-water line was interpreted with the aid of the infrared photography. The vertical projector was utilized in enlarging the photographs to chart scale. This was done after compilation with the low water dianegatives.

The low-water and shallow lines were delineated during the Kelsh compilation.

There was no field inspection of map details, other than a partial field edit before compilation was completed. Corrections and additions have been applied.

36. OFFSHORE DETAILS

It was found that by using the color film positive (between two pieces of glass) in the Kelsh plotter, compilation of the very numerous offshore rocks was facilitated. These models set up very well. Most buoys and beacons could also be seen and were compiled.

37. LANDMARKS AND AIDS

The two (2) landmarks which appear in this chart are triangulation stations.

There are twelve (12) nonfloating aids in the area of the chart. Of these, only one (1) is triangulation. Ten (10) have been office identified and located from the color photography. One aid, DEVILS FOOT DAYBEACON, could not be office identified and was not located. None were identified on the photographs during field inspection.

Forms 567 are attached.

Numerous floating aids have also been located.

38. CONTROL FOR FUTURE SURVEYS

The numerous chart details will be sufficient for any chart corrections in the future using aerial photographs.

39. JUNCTIONS

Junctions have been made with smaller scale charts 260 at 1:20,000 and 264 at 1:40,000.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

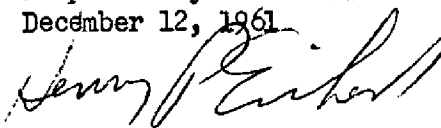
41. thru 47.

Inapplicable.

48. GEOGRAPHIC NAME LIST

Geographic names have been omitted at the request of Mr. Everett.

Respectfully submitted  
December 12, 1961



Henry P. Eichert  
Super Carto. (Photo.)

Approved and forwarded



William E. Randall  
CDR, C&GS  
Baltimore District Officer



T-12501

FIELD EDIT REPORT  
Project PH-6102  
Chart 348  
Woods Hole, Mass.

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GENERAL NOTES

The area was field-edited during the period of 23 April through 1 May 1962. Corrections and additions have been inked on the photographs in black and referenced on the discrepancy print in purple.

Special areas were investigated at or near low-water. Levels were run from Tidal Bench Mark 4 at Woods Hole to establish the stage of tide. Walkie-Talkie Radios were used to transmit the tidal data to the field inspector. Low tides were favorable for this work on 27 April through 1 May 1962.

The rock delineation by the compiler, as a whole, looked very good. His interpretation of the photographs was excellent.

All landmarks and fixed aids to navigation were visually checked and were verified except for DEVILS FOOT DAYBEACON. This daybeacon was destroyed during the fall of 1961 and replaced in a nearby position in April 1962. It was located by angle and distance from a photo point. See forms 152 and 567.

Your attention is invited to the floating piers in Eel Pond. These floats are attached to permanent piling and should be shown as chart features.

Bluff delineation was checked visually and in all cases appeared to be good.

Field Edit notations are inked on the following color photographs: 61-S-7828, 7829, 7830, 6544 and 6546.

2 May 1962

*Joseph K. Wilson*  
Joseph K. Wilson  
Chief Photo Party 720

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REVIEW REPORT  
TOPGRAPHY  
NAUTICAL CHART DRAWING 348  
September 12, 1962

(T-12501)

61. General Statement

The recompilation of the topography of chart 348 was not included in the original project plans. The compilation of an entirely new base was included as a part of PH-6102, because of difficulties with hydrographic and photogrammetric surveys of the chart and the existence of adequate photography and control to provide a strong bridge and to compile features. A copy of the memorandum (dated 19 July 1961), suggesting the recompilation, is included as a part of this Descriptive Report.

This recompilation was made contingent upon the availability of a hydrographic launch in the summer of 1962 to clear up difficulties resulting from anticipated changes in the positioning and selection of alongshore and offshore features (rocks in particular). No check by hydrographic launch has been made and differences exist between the published chart and the new compilation.

A joint detailed comparison was made prior to field edit by personnel in the Photogrammetry Review Unit and the Nautical Chart Division Hydrographic Review Section of the color photographs, new compilation and the published chart in the area seaward from the high water line for the purposes of (1) accomplishing the usual office examination prior to field edit and (2) as an aid in determining the extent of future hydrographic work required to correct the latest hydrographic survey. A thorough check was made to ensure that all features visible in the photographs were shown. Discrepancies considered practicable for field edit investigation were referred to the field editor and have since been resolved. Additional significant differences between the published chart and the new drawing and deficiencies in the latest hydrographic surveys requiring an investigation by launch were recorded by the Hydrographic Review Section for future use. The principal differences between the new drawing and prior surveys and deficiencies in the new compilation are discussed under items 62 and 65 of this report.

62. Comparison With Registered Topographic Surveys

1858	1888-89	1:5,000 scale
6621	1938	1:5,000 scale
6622	1938	1:5,000 scale
5744	1948	1:10,000 scale
11336	1953	1:5,000 scale

T-11336, the source of shoreline and of the majority of the bare and sunken rocks shown on the published chart, has local area errors in the positioning of common details of more than 2mm and other differences. The new compilation supersedes the prior topographic surveys for charting purposes.

63. Comparison with Maps of other Agencies

No significant differences were noted in comparing the new survey with the 1:24,000 scale USGS quadrangle Woods Hole - 1953.

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable

65. Comparison with Nautical Charts

348 14th Ed., March 20/61

*to the time of prior surveys that serve*

Numerous physical and cultural changes that occurred subsequent ~~as to~~ the basic source of details on the published chart, are included on the new drawing. Errors in the positioning of topographic features on the published chart are discussed in item 62 of this report. ✓

Many rocks "awash" shown on the published chart are not visible on the color photographs taken at low tide. They are believed to be sunken.

Discrepancies probably exist in the new compilation because of the difficulty in some instances in differentiating between "sunken" and "awash" rocks (rocks having their peaks near MLW) on the color photographs. In some instances "sunken" rocks shown on the new compilation may be bottom characteristics rather than a hazard to navigation. Depths indicated on the published chart and the apparent heights of the rocks relative to surrounding features were used as guides in delineating sunken features.

66. Adequacy of Results and Future Surveys

This compilation, based on a strong bridge, meets horizontal accuracy requirements; and all topographic features (visible on the "tide controlled" color and infra-red photographs or furnished through field edit) specified by the Nautical Chart Division have been shown.

Reviewed by:

S. G. Blankenbaker  
S. G. Blankenbaker

Approved by:

Charles Henry  
Chief, Cartographic Branch

J. E. Waugh 12/13/63  
Chief, Photogrammetry Division



CHART 348

DRAWING

SHEET 1

PROJECT Ph 6102

## HISTORY OF CARTOGRAPHIC WORK - NAUTICAL CHART BRANCH FILES

NC REC CORR FUTURE

TO REPRODUCTION

LITH. Rec'd.

I.O.

LITH. Ver.

PRINT DATE

DATE

APPLIED	SOURCE OF INFORMATION			Type of Information	LOCALITY	INFORMATION APPLIED
	File No.	Date	Authority			
1	Photos. (color)					
	615-6543-6547	April 1961	CEGS	Topo.	Entire Chart	Planimetric details and low water line were compiled with the Kalsh Plotter using low water diapositives.
	" 6550-6553	"	"			Offshore details and aids to navigation were located by using the color film positive in the Kalsh Plotter.
	" 6561-6563	"	"			
	" 7656-7662	May 1961	"			
	" 7826-7832	"	"			
2	Photos (In Fra Rod)					
	61-1479-1482	April 1961	CEGS	Topo	Entire Chart	The mean high water line was delineated from infra-red photography by the use of the vertical projector.
	61-1-1496	"	"			
3	Field Edit discrepancy work sheet	Oct 1961	CEGS	Topo	Entire Chart	Field edit corrections and additions were applied during compilation. The identification of bluffs was made by the field editor.
3A	FIELD EDIT APPLIED	JUNE 1962	CEGS	Topo	ENTIRE CHART	ALL CORRECTIONS APPLIED TO ORIGINAL DRAWING
1-3	D. M. Bryant (Kalsh copy)	9/6/61		Completed	11/30/61	Started 9/6/61 Completed 12/1/61
1-2	L. A. Sonasat (Drafting)	10/3/61		Completed	10/6/61	Time (hrs.) 70
3A	C. R. LIPSON MB	5/24/62		Completed	6/14/62	

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Projection Data

CHART NO. 348

20-

Chart No.

348

Location: Woods Hole Massachusetts

Projection: Mercator

Datum N.A. 1927

Scale 1:5,000 at Middle Latitude 41°31'

Projection interval 12" 30" Color black

Border 0.0-1.5-1.5-7.5

Material: Transparent vinylite

All figures in millimeters<sup>x</sup>

Limits Lat. 41°30'14" to 41°32'04"; Long. 70°38'41" to 70°42'36"

1' Long. at Middle Latitude 41°31' = 273.256 mm

FOR BALTIMORE

East to West <small>10.000 10.150 10.300 Machine Setting 800 bar scale</small>			South to North <small>11.000 11.150 11.300 Machine Setting 600 bar scale</small>		
Neatline 70°38'41"	11.0500	0.000	Neatline 41°30'14"	12.0500	0.00
39'00"	19.8614	38.114	30'30"	21.9212	98.712
39'30"	33.7742	139.128	31'00"	40.4297	185.085
40'00"	47.6870	"	31'30"	58.9429	185.132
40'30"	61.5998	"	32'00"	77.4561	185.132
41'00"	75.5126	"	Neatline 32'04"	79.9252	24.691
41'30"	89.4254	"			678.752 mm
42'00"	103.3382	"			
42'30"	117.2510	"			
Neatline 70°42'36"	120.0336	27.826			
		1089.836 mm			

Neatline dimensions 42" .9 x 26" .7

Computed by F.M.A. 11/23/54

Checked by Benson 12/6/54

120.0336 + .75 = 120.7836

120.7836 + .15 = 120.9336

120.9336 + .15 = 121.0836

Return to F.M.A. Chart

6301/Amk

19 July 1961

CAFT Dickette, Chief  
Program Planning Staff

10001 Chief, Nautical Charts Division  
Chief, Photogrammetry Division

Recompilation of Topography, Chart 348, (1:5,000),  
Woods Hole, Massachusetts

It is suggested that, as part of our Cape Cod project, the topography of Chart 348 be entirely recompiled from the new tide controlled low-water and high-water photography, thus providing an entirely new base. Because of difficulties with the last hydrographic and photogrammetric surveys of this chart, we must anticipate some changes in the positioning of alongshore and offshore features. CONSEQUENTLY, THIS RE-COMPILATION SHOULD BE MADE ONLY IF A HYDROGRAPHIC LAUNCH CAN BE MADE AVAILABLE IN THE SUMMER OF 1962 TO CLEAR UP ANY DIFFICULTIES RESULTING FROM THE NEW TOPOGRAPHIC BASE.

We have adequate photography and control to make a strong photogrammetric bridge or plot, to compile all features which are above mean-low water and, for that matter, somewhat below mean-low water, and to establish shoreline base points for control of hydrography. We can compile this chart and complete the initial field edit by our photogrammetric field party this fall so that it will be available in the spring.

This is going to be done sooner or later and it would seem economical and practical to do it now rather than to wait several years when we would determine to take new photography and make a new compilation.

In examining the photography at Cape Cod, we and the Nautical Chart Division find it desirable to reconstruct the 1:50,000 scale chart drawings in this area also (prior to redrawing the 1:50,000) because of numerous changes. The only question we have is in regards to Woods Hole because in this case, for reasons you will understand, some hydrographic investigation may be needed.

L. W. Swanson



## INFRA-RED PHOTOGRAPHY (HIGH WATER)

FLIGHT NO	PHOTO NOS	SCALE	STAGE OF TIDE
151A	GIL 1681 THRU 1695	1:15,000	CHAT 0.0
301	GIL - 1608 " 1619	1:30,000	CHAT - 0.1
302	" 1621 " 1633	"	CHAT - 0.4 PORT + 0
303	1625 " 1641	"	CHAT - 0.6 PORT - 0
304	1652 " 1662	"	PORT - 0.3
305	1644 " 1658	"	PORT - 0.1 YARD - 0
306	1530 " 1539	"	YARD - 0.1
307	1496 " 1502	"	WOOD 0.0 BART - 0
308	1479 " 1491	"	BART - 0.2 WOOD 0
309	1515 " 1528	"	GAY + 0.4
310	1504 " 1513	"	GAY + 0.4 WOOD 0
311	1547 " 1555	"	VINE - 0.2
312	1541 " 1545	"	VINE - 0.2
313	1557 " 1567	"	TUCK - 0.1
314	1589 " 1597	"	TUCK 0.0
315	1599 " 1607	"	TUCK + 0.2
1406	1378 " 1587	"	TUCK + 0.15
301	1664 " 1667	"	Chat - 1.0

## COLOR PHOTOGRAPHY (LOW WATER)

FLIGHT No.	PHOTO NOS.	SCALE	STAGE OF TIDE	
151	616-6534 THRU 6549	1:15,000	HOLE + 0.4	WOOD + 0.7
152	6502 " 6521	"	HOLE + 0.4	
153	6522 " 6533	"	HOLE + 0.4	
154	6550 " 6560	"	HOLE + 0.4	BART + 0.5
155	6781 " 6795	"	CHAT + 0.3	
156	6808 " 6824	"	CHAT + 0.5	PORT + 1.0
156	7634 " 7652	"	CHAT + 0.1	PORT + 0.2
157	6951 " 6964	"	PORT + 0.3	
158	6965 " 6981	"	PORT + 0.3	
159	6929 " 6944	"	PORT + 0.3	YARD + 0.2
1510	6907 " 6928	"	PORT + 0.4	YARD + 0.2
1511	6894 " 6906	"	YARD + 0.2	
1512	6561 " 6578	"	BART + 0.85	
1513	7778 " 7798	"	WOOD + 0.0	BITE + 0
1514	7676 " 7687	"	BITE + 0.3	
1515	6574 " 6582	"	GAY + 0.8	
1515	7667 " 7675	"	BITE + 0.2	
1516	7688 " 7713	"	BITE + 0.4	
1516	7799 " 7824	"	BITE + 0.15	
1517	6698 " 6706	"	VINE + 0.4	
1518	6625 " 6633	"	TUCK - 0.1	
103	7826 " 7834	"	WOOD 0.0	
1519	6707 " 6715	"	VINE + 0.4	
101	6729 " 6740	1:10,000	CHAT + 0.1	
101	6762 " 6770	"	CHAT + 0.1	
102	6782 " 6790	"	CHAT + 0.2	
103	7658 " 7666	"	WOOD + 0.4	
104	6675 " 6683	"	VINE + 0.4	
105	6667 " 6674	"	VINE + 0.4	
106	6685 " 6697	"	VINE + 0.4	
107	6656 " 6663	"	TUCK - 0.1	
108	6634 " 6655	"	TUCK - 0.1	
109	6584 " 6590	"	GAY + 0.8	
201	6607 " 6634	1:2,000	TUCK - 0.1	
202	6856 " 6870	"	YARD + 0.4	WOOD + 0.7





U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

TO BE CHARTED

TO BE CHARTED  
TO BE REVISED  
TO BE DELETED

STRIKE OUT TWO

## NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Baltimore, Maryland

November 30, 1961

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

The positions given have been checked after listing by

Henry P. Eichert

William F. Randall

Chief of Party.

MASSACHUSETTS				POSITION						METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION VERIFICATION	CHARTS AFFECTED		
STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE		LONGITUDE		N.A. DATUM	HARBOR CHART			INSHORE CHART	OFFSHORE CHART	
				°	'	°	'			D.P. METERS	D.P. METERS			
LT	( $\Delta$ ) Nobeska Point L.H., 1904)	Nobeska Point Light		41	30	56.423	70	39	20.291	61-L	Triang.	4/27/62	348, 260, 264	
LT		Great Harbor Range Front Light		41	31	1710.7	70	40	170.5	1538	Photo.	8/15/61	1209, 249	
LT		Great Harbor Range Rear Light		41	31	28.29	70	40	30.88	61-S-6546		4/27/62	348, 249, 260, 1210	
LT		Juniper Point Light		41	31	873	70	40	716	61-S-6546		4/27/62	348, 249, 260, 1210	
BN		Great Ledge Daybeacon		41	31	38.60	70	40	34.85	61-S-6546		"	348, 249, 260, 1210	
LT		Grassy Island Ledge Light		41	31	1197	70	40	808	61-S-7828		"	348, 249, 260, 1210	
BN		Middle Ledge East Daybeacon		41	31	02.14	70	40	07.42	"		"	348, 249, 260, 1210	
BN		Middle Ledge West Daybeacon		41	31	66	70	40	05.78	"		"	348, 249, 260, 1210	
BN		Devils Foot Daybeacon		41	31	44.54	70	40	134	61-S-6546		"	348, 249, 260, 1210	
LT		Woods Hole Passage Light 5		41	31	15.24	70	40	35.28	"		"	348, 249, 260, 1210	
BN		Hadley Harbor Entrance Daybeacon		41	31	192	70	40	818	61-S-6546		"	348, 249, 260, 1210	
BN		Forbes Daybeacon		41	31	07.97	70	40	49.85	"		"	348, 249, 260, 1210	
BN				41	31	216	70	40	1156	61-S-6546		"	348, 249, 260, 1210	
BN				41	31	07.42	70	40	53.43	"		"	348, 249, 260, 1210	
BN				41	31	229	70	40	1239	"		"	348, 249, 260, 1210	
BN				NOT VISIBLE ON PHOTOS.					New Form					
LT				41	31	06.79	70	41	02.76	61-S-6546		4/27/62	348, 249, 260, 1210	
BN				41	31	209	70	41	64	61-S-6546		"	348, 249, 260, 1210	
BN				41	30	54.88	70	41	56.84	61-S-6546		"	348, 249, 260, 1210	
BN				41	30	1693	70	41	1318	"		"	348, 249, 260, 1210	
BN				41	30	38.90	70	42	05.69	"		"	348, 249, 260, 1210	
				41	30	1200	70	42	132	"		"	348, 249, 260, 1210	

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. Revisions shall show both the old and new positions. 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

USCOMM-DC 27126

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