

# FE 132

FE 132

Diagram No. 1209-3

NOAA FORM 76-35A	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT (HYDROGRAPHIC)	
Type of Survey	Field Examination
Field No.	
Office No.	FE-132
LOCALITY	
State	Massachusetts
General Locality	Martha's Vineyard
Locality	Vineyard Haven
1955	
CHIEF OF PARTY R.A. Marshall	
LIBRARY & ARCHIVES	
DATE	August 2, 1955

☆ U.S. GOV. PRINTING OFFICE: 1976-669-441

NOTE: A new system for registering Field Examinations (FE's) was established in 1980. All FE's are now consecutively numbered as shown hereon. The date shown in the new format is the actual date of survey. This material was previously registered as;

FE No.2 1955

FE - 132

Diag. Cht. No. 1209-3

<b>Form 504</b> U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY  <b>DESCRIPTIVE REPORT</b>	
Type of Survey	HYDROGRAPHIC (Special Investigation)
Field No.	Office No. F. E. 2 (1955)
<b>LOCALITY</b>	
State	MASSACHUSETTS
General locality	Martha's Vineyard
Locality	Vineyard Haven
<u>1955</u>	
<b>CHIEF OF PARTY</b> Robert A. Marshall	
<b>LIBRARY &amp; ARCHIVES</b>	
DATE	AUGUST 2, 1955

COMM-DC 61300

FE No. 2 1955

Note to Compiler —

See H.O. N.M. 23 (3356) of 1946  
when charting obstruction

Minimum buoy established in about 17 ft.  
of water 550 yds.  $14^{\circ}30'$  from Vineyard  
Haven breakwater light. Buoy is close  
to obstruction. approx pos.  $41^{\circ}27'42''$  N  
 $70^{\circ}35'45''$  W

DESCRIPTIVE REPORT

Special Investigation  
USC&GS Chart 347

VINEYARD HAVEN  
MARTHA'S VINEYARD  
MASSACHUSETTS

June 27 and July 6, 1955

COMMANDER Robert A. Marshall

COMMANDING SHIP GILBERT

## DESCRIPTIVE REPORT

### A. PROJECT

The authority for this investigation was outlined in the Director's letter of 9 June 1955, file No. 22-rs, S-1-GI, addressed to the Commanding Officer, Ship GILBERT. A copy of this letter is enclosed with this report.

### B. SURVEY LIMITS AND DATES

The investigation for a submerged object was conducted in the immediate vicinity of an obstruction buoy (Lat. 41 27 42 and Long. 70 35 43 W), located at Vineyard Haven, Martha's Vineyard Massachusetts on June 27 and July 6, 1955. The registry number of the previous survey of this area is 1829. This investigation was made during periods when the ship GILBERT was engaged in loading stores or enroute to the working grounds.

### C. VESSEL AND EQUIPMENT

Launch No. 175, basing out of Woods Hole, Mass., was used to conduct the survey. On 6 July 1955 a vertical hand lead sounding was taken on the submerged object when the launch was being transferred from Woods Hole to Chatham, Mass. (Stage Hbr.)

An 808-fathometer, No. 162 spx was used for this survey. The transducer and receiver units were placed in the bilges, next to the plywood bottom.

### D. TIDE STATION

Reducers for tide were provided by the Washington Office from data recorded on the standard gage at Woods Hole, Mass. (See the Director's letter of 14 July 1955, file No. 36-15-982g) The reducer for 6 July 1955 was not available at the time this report was prepared and submitted. This information should be added to the sounding volume when received from Woods Hole.

### E. SMOOTH SHEET

No smooth sheet was made in the field.

#### F. CONTROL STATIONS

Only three control stations were used in this survey, namely:

EAST CHOP L. H. 1904 (Triangulation)

TISOAK MGS 1936 ( " )

VINEYARD HAVEN BREAKWATER LIGHT 1949 (Topo.)

Signal "Soak" had to be constructed and dressed with signal cloth.

#### G. SHORELINE AND TOPOGRAPHY

None

#### H. SOUNDINGS

All depths except one were taken with the 808 Fathometer No. 162 spx. The usual corrections were computed and entered in the sounding volume.

One hand lead sounding was taken on the submerged object. It was difficult to get a good comparison of the hand lead sounding with the fathometer, as the lead repeatedly became fouled in the object. There is no doubt in the mind of the hydrographer that the object is still in the vicinity of the obstruction buoy. However, its location is towards the navigable channel from the buoy rather than inshore of it.

#### I. CONTROL OF HYDROGRAPHY

All fixes were visual 3-point sextant fixes, plotted with a three-arm protractor. The control was adequate and strong.

#### J. ADEQUACY OF SURVEY

The survey was complete enough to prove that the doubtful submerged object still exists. Several fixes on the object were all in good agreement.

#### K. CROSSLINES

Adequate crosslines were run and it was on one of these lines that the object was located. The fathometer operator had not noticed the trace near position 20a earlier, but it was found during the scanning.

L. COMPARISON WITH PRIOR SURVEYS

See "M" Below.

M. COMPARISON WITH CHARTS

The soundings in the area surveyed are in good agreement with the USC&GS published chart No. 347.

N. DANGERS AND SHOALS

The location of the submerged object is:

Lat. 41 27 42.4 N, Long. 70 35 42.4 W

O. COAST PILOT INFORMATION

No additions.

P. AIDS TO NAVIGATION

Obstruction buoy location:

Lat. 41 27 42 N, Long. 70 35 43 W

A trace of the buoy's anchor on the fathogram showed that the buoy was riding almost directly over its anchor. The launch passed over the anchor when within six feet of the buoy. Therefore the detached position 26a should be a fairly accurate determination of the buoy under all current conditions.

Q. LANDMARKS FOR CHARTS

No new landmarks were located

R. GEOGRAPHIC NAMES

No investigation was made.

S. SILTED AREAS

NONE

T. BY-PRODUCT INFORMATION

None

U. MISCELLANEOUSStatistics

Hand Lead Soundings	1
Positions	37
Sounding Line (n. miles)	1.9
" " s. "	2.2
To and From (n. miles)	47.3
Misc. " "	2.4
Total " "	51.6

V. TABULATION OF APPLICABLE DATA

The following data are forwarded with this report.

- 2 Fathograms (a and b day)
- 1 Boat Sheet (Chart C&GS 347)
- 1 Sounding Volume (Form 275)
- 1 Velocity Correction Abstract
- 1 Velocity Correction Curve
- 1 Tide Data Curve
- 1 Copy of Director's letter of instructions dated 9 June 1955, file No. 22-rs, S-1-GI
- 1 Copy of Director's Letter, Tide Data, file No. 36-15-982g, dated 14 July 1955
- 1 Descriptive Report
  - Triangulation sketch, descriptions, G. P. 's, etc.

Respectfully submitted,

*Eugene W. Richards*

Eugene W. Richards

Lieut., USC&GS

Executive Officer

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First Endorsement

25 July 1955

Approved and Forwarded:

*Robert A. Marshall*

Robert A. Marshall

CDR., USC&GS

Commanding Officer, Ship GILBERT

"Copy - Copy"

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

22-rs  
S-1-GI

POST OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

9 June 1955

To: Commanding Officer  
USC&GS Ship GILBERT  
P. O. Box 746  
Woods Hole, Mass.

Subject: Investigation of obstruction

Reference is made to a letter from the Supervisor of the Northeastern District dated 27 May 1955 relative to an investigation of an obstruction, a copy of which was forwarded to you.

At a convenient time during the summer of 1955, while running to and from your working grounds, an investigation shall be made to determine the existence or non-existence of the obstruction.

Chart 347, 1:10,000 scale, on which the control in the vicinity has been plotted will be furnished for use as a boat sheet. It may be necessary to put a small signal on triangulation station TISOAK. Additional control is not anticipated.

Tide reducers shall be referred to the standard gage at woods Hole. Hourly heights will be furnished by this office on request.

Your findings shall be reported to this office upon completion of the investigation.

/s/ Robert W. Knox  
Acting Director

Enclosure

cc Sup., SE Dist.  
" NE "  
First Coast Guard Dist.

"Copy - Copy"  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

36-15-982g

POST OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

14 July 1955

To: The Commanding Officer  
USC&GS Ship GILBERT  
P. O. Box 746  
Woods Hole, Mass.

Subject: Tide Data, Massachusetts

Hourly heights from the record of the control tide station at Woods Hole as requested in your letter of 7 July 1955 are as follows:

	Time	Height
June 27, 1955	1300	1.1 feet
	1400	1.8 feet
	1500	2.1 feet
	1600	2.1 feet

Heights refer to mean low water. Times are for meridian 60 West

The tide record for Woods Hole for July will not be available in this office until early in August.

/s/ Robert W Knox

Acting Director

VELOCITY CORRECTION

SPECIAL INVESTIGATION C&GS CHART 347

VINYARD HAVEN

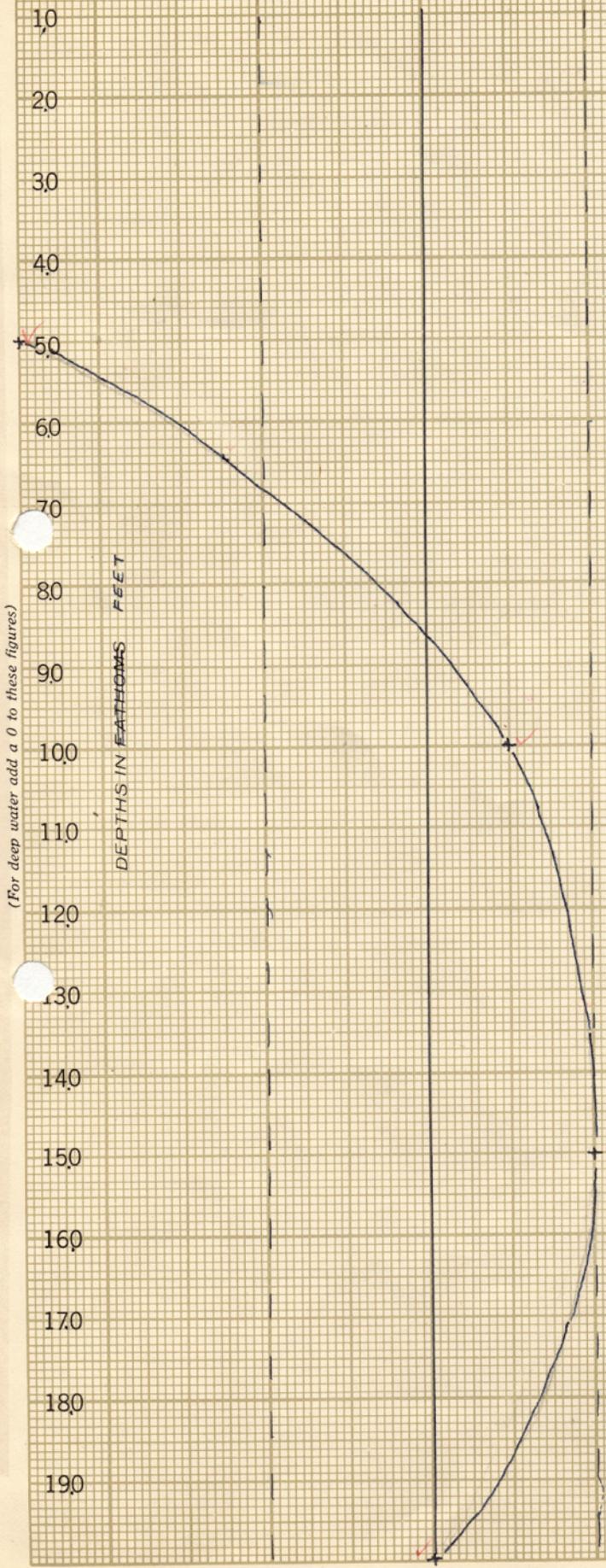
MARTHA'S VINEYARD, MASS.

Project CS-369  
 Launch No. 175  
 Fathometer 162 SPX (Ft. scale)

Date	Day Ltr.	Correction from bar check for true depth			
		5.0'	10.0'	15.0'	20.0'
6/27/55	a	-0.3 ✓	+0.1 ✓	+0.1 ✓	+0.0 ✓
		-0.2 ✓	+0.0 ✓	+0.1 ✓	00.0 ✓
	Mean	-0.25 ✓	+0.05 ✓	+0.1 ✓	+0.0 ✓

Comp. EWR  
 Ckd. *[Signature]*

-0.2      -0.1      0.0      +0.1      +0.2  
CORRECTIONS IN FEET, ~~FATHOMS~~



VELOCITY CORRECTIONS \*  
 U.S. Coast and Geodetic Survey  
 Ship SHIP GILBERT  
ROBERT A. MARSHALL Comdg.  
 These corrections are to be used  
 between 27 JUNE 1955 and 6 JULY 1955  
 in the locality VINEYARD, HAVEN  
MARTHA'S VINYARD, MASSACHUSETTS  
 for hydrographic surveys Nos.  
SPECIAL INVESTIGATION C&GS CHART 347  
 LAUNCH 175  
a & b day  
 FATHOMETER 162-SPX

(For deep water add a 0 to these figures)

DEPTHS IN FATHOMS FEET

CORRECTION IN FT.	FROM	TO
-0.2 ✓	0.0 ✓	6.7 ✓
0.0 ✓	6.8 ✓	20.0 ✓

\* OBTAINED FROM BAR CHECKS

COMP. EWR  
 C.K. 018  
 B-1736-5

RHC

# TIDE NOTE FOR HYDROGRAPHIC SHEET

~~DIVISION OF COASTAL SURVEYS~~

4 August 1955

Division of Charts: R. H. Carstens

Plane of reference approved in  
1 volume~~x~~ of sounding records for

HYDROGRAPHIC SHEET F.E. No. 2 1955

Locality Martha's Vineyard, Massachusetts

Chief of Party: R. A. Marshall in 1955  
Plane of reference is mean low water, reading  
2.2 ft. on tide staff at Woods Hole  
9.2 ft. below B. M. 11 (1932)

Height of mean high water above plane of reference  
at the working grounds is 1.7 feet.

Condition of records satisfactory except as noted below:

*E. C. McKay*  
Tides Branch

Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES

Survey No. F.E. 2 (1955)

Name on Survey	A	B	C	D	E	F	G	H	K	1
										2
										3
										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
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										19
										20
										21
										22
										23
										24
										25
										26
										27

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. F.E. 2. (1955)

Records accompanying survey:

Boat sheets .....; sounding vols. ...<sup>1</sup>...; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls <sup>1</sup>...;  
 special reports, etc. <sup>1</sup>-Descriptive Report, <sup>1</sup>-Velocity Correction Abstract,  
<sup>1</sup>-Velocity Correction Curve, <sup>1</sup>-Tide Data Curve.....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.....	38
Number of positions checked	.....	8
Number of positions revised	.....	0
Number of soundings revised (refers to depth only)	.....	0
Number of soundings erroneously spaced	.....	0
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	.....0
Junctions	Time	.....0
Verification of soundings from graphic record	Time	.....1
Verification by <i>[Signature]</i> .....	Total time	.....6 Date 6-29-56
Reviewed by <i>[Signature]</i> .....	Time	.....2 Date 7-2-56

Review of Field Examination 2, 1955

This field examination was made to investigate the existence of an obstruction in the vicinity of lat.  $41^{\circ}27.70'$ , long.  $70^{\circ}35.72'$ , which was reported in H. O. N. to M. 23, (1946).

This field examination revealed a least depth of 9 ft. about 20 meters east of the buoy marking the obstruction. The hydrographer states there is no doubt in his mind that the obstruction is still in the vicinity of the buoy. However, its location is towards the navigable channel from the buoy rather than inshore of it.

The field examination has been plotted on the attached section of Chart 347, dated 9-14-53.

A comparison with Chart 347 dated 7-25-55, shows depths on the field examination to be in harmony with the charted depths. However, the present 9-ft. depth on the obstruction has not been applied to the chart.

The Descriptive Report and the Instructions adequately cover all matters pertaining to the examination. No further discussion is considered necessary.

Reviewed by - I. M. Zeskind 7-2-56  
Inspected by - R. H. Carstens

TIDE DATA

SPECIAL INVESTIGATION C&GS CHART 347

VINYARD, HAVEN

MARTHA'S VINYARD, MASS.

LAUNCH NO. 175

June 27 and July 6, 1955

Time (60 th meridian) <sup>1300</sup> 00

1400

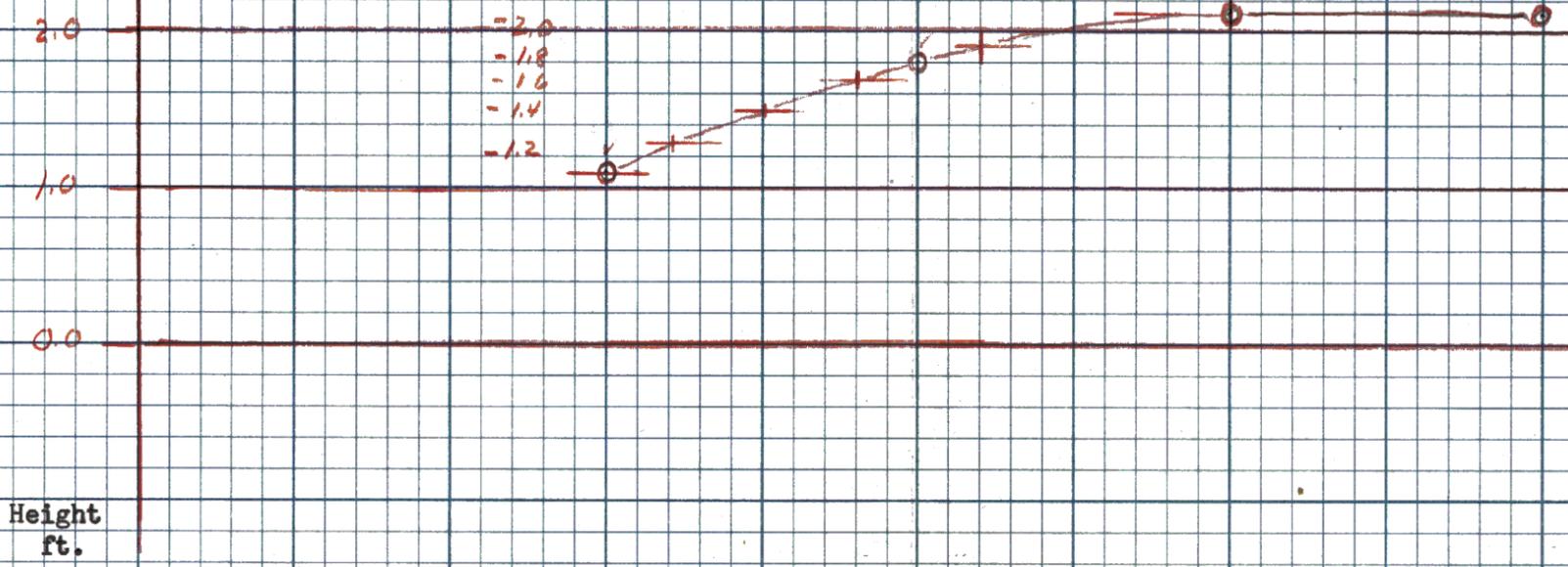
1500

1600

TIDE DATA

Vineyard Haven, Marthas Vineyard, Mass.  
(Referred to Woods Hole, Mass)

27 June 1955



Tide Correction	Time Applicable (60 W)
- 1.2 ✓	1300 - 1313 ✓
- 1.4 ✓	1313 - 1331 ✓
- 1.6 ✓	1331 - 1348 ✓
- 1.8 ✓	1348 - 1412 ✓
- 2.0 ✓	1412 - 1600 ✓

COMP EWR  
CK 027

Section of  
CHART 347 (9-14-53)  
Soundings in feet of MLW

70° 36'

21° 41' 28" stk

NG REF

VINEYARD HAVEN

VINEYARD HAVEN BREAKWATER LIGHT  
(1949)

VINEYARD HAVEN

VINEYARD HAVEN TOWN HALL SPIRE 1904

VINEYARD HAVEN WATER TOWER 1904

FIELD EXAMINATION NO. 2, 1955

Massachusetts  
Martha's Vineyard

VINEYARD HAVEN

Scale - 1:10,000

August, 1955 S.M.P. GILBERT

27

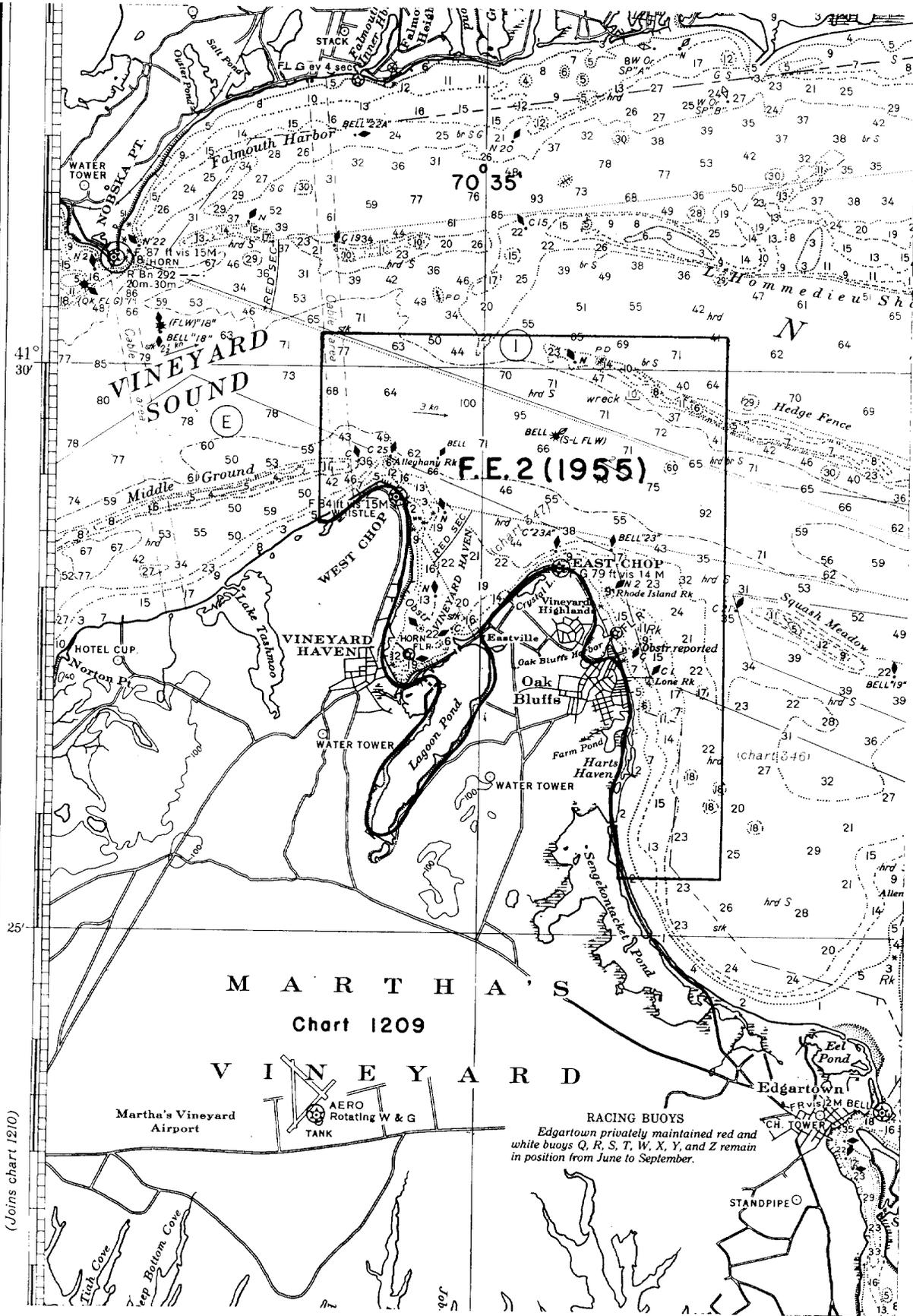
st

0

P

14

14



(Joins chart 1210)

**RACING BUOYS**  
 Edgartown privately maintained red and white buoys Q, R, S, T, W, X, Y, and Z remain in position from June to September.

