# 5314(W.D.)

U. S. COAST & GEODETÍC SURVI

OCT 24 .933

Form 504

#### DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY R.S. Patton..., Director

State: Massachusetts

## DESCRIPTIVE REPORT

**Tanagropusk** Hydrographic

Wire Drag

5314

LOCALITY

Nantucket Sound

Entrance to Edgartown Harbor

*19*.33

CHIEF OF PARTY

H. A. Cotton

#### DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

## HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No
REGISTER NO. 5314 W.D.
State Massachusetts
General locality Nantucket Sound
Locality Entrance to Edgartown Harbor
Scale 20,000 Date of survey 0ct. 12, 13 , 19233
Vessel
Chief of Party H. A. Cotton
Surveyed by W. F. Deane
Protracted by
Soundings penciled by
Soundings in fathous feet
Plane of reference
Subdivision of wire dragged areas by
Inked by
Verified by Warnen HBamphol.
Instructions dated Oct. 2, 1933 ,192
Remarks: Plotted on chart No. 346

#### DESCRIPTIVE REPORT TO ACCOMPANY WIRE DRAG SURVEY

ON CHART NO. 346

#### EDGARTOWN HARBOR.

Instructions: This survey was executed in compliance with the Director's Supplementary Instructions, Project HT-134, dated October 2, 1933. Reference should be made to Chart Letter No. 574.

Control: Landmarks and aids to navigation shown on Chart No. 346 were used for control.

Method: The usual wire drag survey was made and dual launch control was used for the drag strips. JOSEPHINE II, a hired motor boat, was used as tender to supplement the drag boats MARINDIN and OGDEN.

week.

Detailed Description: A drag of 20.5 feet effective depth was taken from east to Late. west with the intention of grounding on the shoal southwest of Ref. Bell Buoy "17". This drag grounded on charted 21 foot area and pulled off as the boats resumed towing after an extensive investigation to determine the least depth. The buoys tipped over in a manner indicating a shoal but the drag did not actually assume the "V" shape so familiar to the grounding on a pinnacle or wreck. The rise and fall of the sea caused by chop was responsible for the grounding on the 21 foot area.

A drag of 18 feet effective depth was then taken over the area and grounded on the shoal southwest of Ref. Bell Buoy "17" with no sign of a ground near the place where the 20.5 feet drag hung up.

A drag of 20.5 feet effective depth was taken from east to west and grounded on the shoal southwest of Buoy "17" with no tipping of drag buoys until the shoal was reached.

A drag of 21.0 feet effective depth was taken in the same manner as the above strip with no ground until the charted shoal was reached.

Interviews with flounder draggers, mackerel fishermen, and others revealed a unanimity of opinion that the NOURMAHAL actually was not in the fairway but in the rocky area to the westward. One fisherman was certain that the yacht passed on the wrong side of Ref. Bell Buoy "17". The ease with which inquiries were made and answered is best explained by the fact that the NOURMAHAL'S visit evinced considerable local interest because of her connection with President Roosevelt. An attached newspaper clipping states the consensus of opinion about Edgartown.

Tides: A tide staff was maintained at the Steamboat Wharf, Edgartown, during the period of operation. A reliable observer was hired to read the staff at hourly intervals.

The staff was connected by spirit levels to 3 established bench marks. Two level loops were run and closed within the allowable limit of error.

Location of Buoys: The positions on the chart of can buoy "1" and nun buoy "2"

checked closely with the fixes taken by the party.

The position obtained by the party of reflector bell buoy "17" plots 184 meters N 17° E True from the charted position. This latter discrepancy could account for the NOURMAHAL hitting the charted 11 feet sounding while attempting to pass the buoy to port enough to clear the spot.

Respectfully,

William J. Deane

William F. Deane Aid, Coast & Geodetic Survey.

#### DESCRIPTIVE REPORT TO ACCOMPANY WIRE DRAG SURVEY

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Respectfully,

William F. Deane

William F. Deans Aid, Coast & Geodetic Survey. 22-AHH 1865-1990

October 5, 1933.

Mr. Gustaf Klang, Master,
Yaoht Nourmahal,
o/o Vincent Astor,
23 West 26th Street,
New York, New York.

Dear Sir:

Referring to previous correspondence with you regarding the striking of a submerged object by the Yacht Nourmahal in approaching Edgartown Harbor, there is enclosed for your information, copy of recent instructions to one of our field parties to make a wire drag examination of this region.

This work is being done in accordance with the recommendation contained in the last paragraph of your letter of September 18, 1933 which was forwarded to this Bureau from the Hydrographic Office.

(Signed) PAUL C. WHITNEY

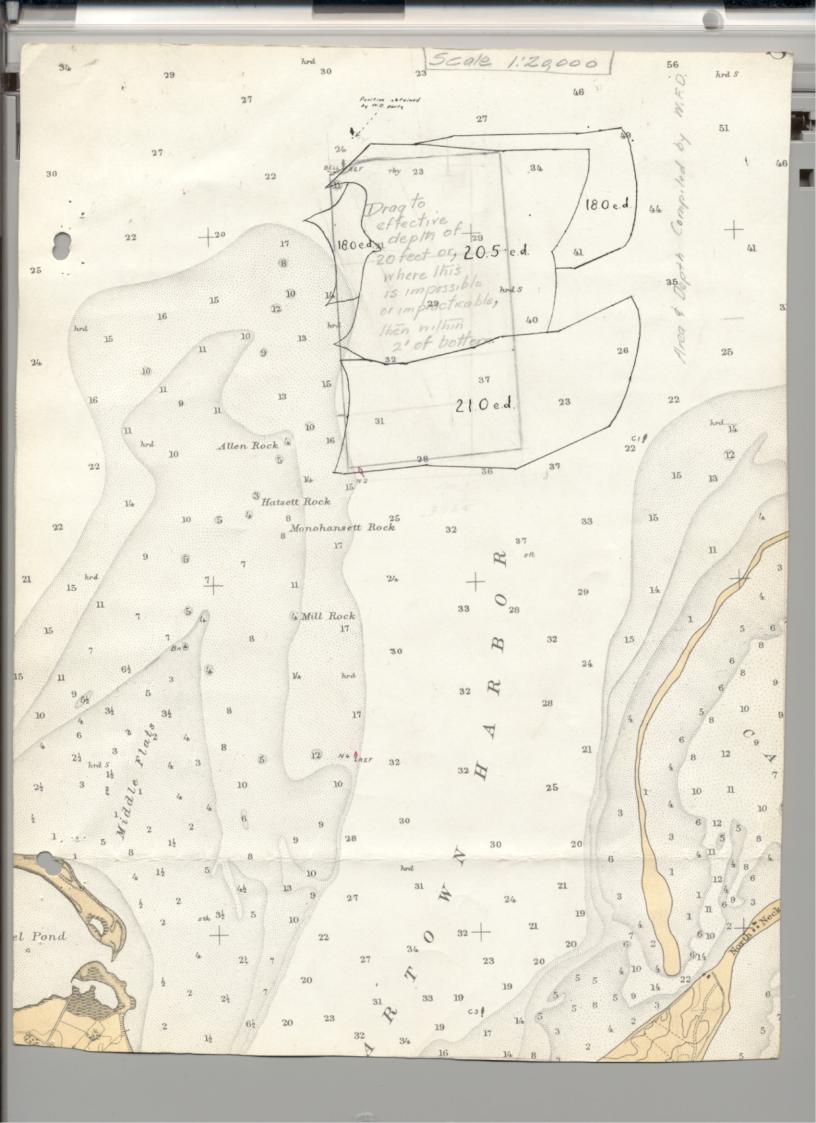
Acting Director.

Enclosure.

Inclosure "A"

is no admission fee. TO DRAG FOR OBSTRUCTION he Two government survey boats arrived at Edgartown yesterday to drag for an obstruction near the bell buoy. The boats have been sent here by the War Department as the aftermath of an accident to the Vincent Astor yacht Nourmahal last summer. The big craft ripped a place in her bottom forty feet long and lost 30,000 gallons of oil from a tank between the double bottom. According to the master of the yacht, his chart showed thirty feet of water where he struck. The Nourmahal draws eighteen feet.

Edgartown fishermen say, however, that the Nourmahal was out of the channel and in rocky territory where no boats of any size go. SURVEY



ADDRESS ALL COMMUNICATIONS TO SUPERINTENDENT OF LIGHTHOUSES CHELSEA, MASS.

#### DEPARTMENT OF COMMERCE

LIGHTHOUSE SERVICE

GEE+MEH

OFFICE OF SUPERINTENDENT, 2D DISTRICT
37 MARGINAL STREET
CHELSEA, MASS.

October 6, 1933

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U. S. Coast & Geodetic Survey, 107 Mamaroneck Avenue, Mamaroneck, New York.

Attention of Lieut. Commander H. A. Cotton.

Dear Sirs:

In answer to your letter of October 3 relative to the yacht MOURMAHAL reporting having struck a submerged object in Edgartown Harbor, Mass., about a quarter mile south southeast from Bell Buoy No. 17, you are advised that there have been no changes made in any of the positions of the buoys you refer to, which are Outer Flats Bell Buoy 17, Edgartown Channel Buoy 2, and Stony Point Flats Buoy 1.

A copy of this letter is being sent to the U.S.Coast & Geodetic Survey, General Delivery, Edgartown, Mass., marked Hold until called for, as you requested.

Very truly yours,

Superintendent.

Copy to U.S.Coast & Geodetic Survey, General Delivery, Edgartown, Massenvelope to be marked "Hold Until Called For".

November 2, 1933

Livision of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in

2 volumes of sounding records for

HYDROGRAPHIC SHELT

5314

Locality Entrance to Edgartown Harbor, Nantucket Sound, Massachusetts

Chief of Party: H. A. Cotton in 1933 Plane of reference is mean low water, reading 1.8 ft. on tide staff at Steambat Wharf, Edgartown, Mass. 12.7 ft. below B. M. 6

Height of mean high water above plane of reference is 2.0 feet.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents

# Section of Field Records Nov. 27, 1933

Report on W.D. Sheet No. 5314

SURVEYED ON OCT. 12 + 13, 1933.

CHIEF OF PARTY - H. A. COTTON.

SURVEYED BY - W. F. DEANE

PROTRACTED BY 
UNKED BY 
VERIFIED BY - W. H. BAMFORD.

1./ The records conform to the requirements.

of the Hydrographic Manual.

2/ Dt in thought that drag stops
numing worth + south (generally) would
numing worth + south (generally) would
have covered the area in question more
completely than the mes essented in a
completely east and west direction. However
generally soft drag strip 12a - 21a covered
the 18 foot drag strip 12a - 21a covered
the area in question. The 20 ft. drag
the area in question and with the
the area in did not estend quite
of the area of the
for enough westward to cover the
for enough westward to cover the
yout where the appropriate of the
worth where the commander of the
worth account the commander of the
york, Nourmanal.

3/ Signal TAN (Eart Chop hight) moted on page 2-Vol+2 as long the worth tangent Eart Chop, was found to be a light home 40 ft. high, constructed

### Price 2

in 1877, probably of stone or masning. It is believed that the "north Yangust referred to is the north tangent of the stone or masary structure. The light house Quice determent was med in plotting all positions be the taugust uning signal TAN de me of the objects. to ligh water live 1/ The only sheet submitted by the and the field party was a copy of chart #346 Drog was changed with the long work platted on it. The work was plotted in red ink, which is contrary to the instructions contained on pg. 40 Special Publication No. 118 5./ Soundings obtained by the field party who plotted, of the revision, on the sign on in some into, due to the sign on the clark leing in black inte.
The pointin numbers for the salgo were also plotted in blue inte by
the verifier. 6./ Several end buoy/Fpositions were found to be plotted erroneously. There position were replotted as the corrected positions kended to

decrease the effective width of the

drag stripe. 7/ There were several end buoy (F) positions plotted on the sheet, between Trecorded end brog positions. De no record could be found for these intermediale positione. it was considered advisable to eliminate them from the sheet and draw the drag strip boundaries between recorded

positions. 8.) It will be noted that on the drag strip 12a-21a the hight of the drag is drawn between the solg-pos. 4a. and end buoy (F) pos. 21a. The reason for this is that although the stop ignal was sent to klamel at 4:25 p.M. - the rdg. pos. 6a was not there as there taken until 4:30 p.M. Therefore as there is a difference of time of five minutes between the two - it was deemed adviseble to draw the hight between the position as mentioned .

THE BIGHT WAS EVENTUALLY DRAWN BETWEEN THE SDG. POS. 4a AND SDE, POS. GA \_ IT BEING ASSUMED THAT THE DRAG THOUGH GROUNDED ON ONE CHO WAS PULLED ARBUND 70 SDG POS GO - ON THE OTHER END

WD.5314 PAGE-4

9/ The title for this sheet was just on

by Mr Perkins.

10. Two green circles-indicating the spots
were where the groundings was deposted were

whome- me based on the charted position

of Bell Broy 17" - the other on the position

of Bell Broy 17" an defermined by the

of Bell Broy 17" an defermed by the

of Bell Broy 17" and defermed by the

field party pg. 2 vol I of the odg. volumes.

Field party Pg. 2 vol I of the odg. volumes.

Tile in discrepant report

POST-OFFICE ADDRESS: C/o Postmaster-Norfolk ... Virginia

TELEGRAPH ADDRESS:

EXPRESS ADDRESS

#### DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY Ship- OCEANOGRAPHER

December 20th 1933.

To:

The Director,

U. S. Coast & Geodetic Survey,

Washington, D. C.

From:

William F. Deane, Ensign,

U. S. C. & G. S. S. OCEANOGRAPHER

Norfolk, Virginia.

Subject:

Field Records Letter of December 8, 1933

Reference 80-DRM.

Reference is made to a letter from the Chief, Field Records to the Chief, Section of Field Work regarding the wire drag survey for an obstruction in Edgartown Harbor.

The tangent to the high water line was used for control. This was used only after extreme difficulty was experienced in maintaining the same fix as the guide launch. As the positions plotted satisfactorily in relation to those obtained from more rigid control, it was thought better to use the tangent than to trust to obscured signals. The lighthouse on East Chop was not used, as the bluff line prevented angles being taken.

Respectfully,

William F. Deane, Ensign, U. S. C. & G. Survey.

1)-c

# SECTION OF FIELD RECORDS Report on W. D. Survey No. 5314. Surveyed in 1933. Instructions dated October 2, 1933.

Chief of Party - H. A. Cotton. Surveyed by - W. F. Deane. Protracted and soundings plotted by - Field Party. Verified by - W. H. Bamford.

The purpose of this examination was to investigate the reported striking of the yacht "Nourmahal" in the vicinity of Bell buoy No. 17 at the entrance to Edgartown Harbor. (see letter attached to Descriptive Report.)

It is not considered that the area in the immediate vicinity of the reported striking has been adequately dragged to justify any statement that no shoaler depths exist here than shown on our present charts.

Considering the approximate position of the reported striking, the western limit of the drag should have been carried as close to the 18 foot curve as possible. In addition the split to the southward of the reported striking should have been covered. A part of this split may have actually been covered by the guide launch pulling the drag to the westward after the end launch sent "aground" at position 5b, but there is nothing in the records to indicate this.

In the case of the drag at position 21a it was assumed that the drag was pulled around by the end launch for five minutes after the N buoy was aground. The position of the "F" buoy at this time was taken from the tender record.

#### Results of Survey.

While the survey itself is not conclusive as to the existence or non-existence of an obstruction in the reported position, the fact that Bell buoy No. 17 was found to be considerably to the northward of its charted position may have thrown the "Nourmahal" much closer to the charted 11 foot spot than he thought he was. Some weight should also be given to the interviews had with local fishermen indicating a unanimity of opinion that the "Nourmahal" was not in the fairway but in the rocky area to the westward.

For these reasons it is not considered necessary that any further work be done here. It appears to the writer that the logical way to have executed this work would have been by running one or two drag strips in a north-south direction as close to the 18 foot curve as possible and to wrap the drag around the charted 11 foot spot near the bell buoy. No question would then have arisen regarding the actual limiting line of the drag, as is the case at present.

#### W. D. Survey No. 5314 - 2.

The effective depth of the drag over the reported striking is 18 feet.

Reviewed by - A. L. Shalowitz, Dec. 1933.

Examined and approved:

. O. Colbert,

Chief, Section of Field Records.

Chief, Section of Field Work.

Chief, Division of Charts.

Chief, Division of H. & T.