# 6707 WIRE DRAG

FORM 504 Rev. Dec. 1933  DEPARTMENT OF COMMERCE  U.S. COAST AND GEODETIC SURVEY  R. S. PATTON, DIRECTOR	
DESCRIPTIVE REPORT	
Nydrographic Sheet No. 67.07	
U.S. COAST & GEODETIC SUNVEY	
JUL 1 1942	
ACC. No.	
State New Hampshire	
LOCALITY	
Submarine Trial Course	-
10 Miles East of Isles of Shoals	.
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C.D. Meaney	t
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#### 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. W.D. 21 H6707 WIRE DRAG
REGISTER NO. H-6707
State NEW HAMPSHIRE , Maine
General locality of Isles of Shoals
Locality Submarine Triel Course 10 Miles East of Islas of Showle-
Scale 1:20,000 Date of survey SeptOct. , 19 41
Vessel LYDONIA & GILBERT
Chief of Party C. D. Meaney - H. C. Warwick
Surveyed by Ship's Officers
Protracted by L. L. Lawrence
Soundings penciled by
Soundings in fathers feet
Plane of reference M.L.W.
Subdivision of wire dragged areas by
Inked by Lt.Lawrence
Verified by 6.B. Littlepage
Instructions dated August 2, & Supplemental Inst.Oct.119
Remarks: This sheet was protracted at the Norfolk Processing
Office.
NWW 8/27/42 U. S. GOVERNMENT PRINTING OFFICE

### H6707

ADDENDA

WIRE DRAG

On these days Navy moorings

Wire Drag operations A to E days' inclusive were not plotted in accordance with authority contained in Director's letter reference 82-DRM dated June 26, 1942.

Norfolk Processing Office June 29, 1942

Respectfully forwarded:

Officer in Charge

Field Notes Outlined

for

DESCRIPTIVE REPORT

to accompany

WIRE DRAG SHEET WD - 6707

Field No. WD - 21

#### INSTRUCTIONS

This survey was executed in accordance with the Director's Instructions dated August 2, 1941 for Project CS-269 and supplemental instructions dated October 1, 1941.

#### CONTROL

The control consisted of a buoy traverse located by the value taut wire - sun azimuth method. This traverse was tied into triangulation on Boon Id., Isles of Shoals and Thacher Id. by sextant angle observations. Control computations filed with adapted of H-670

#### SURVEY METHODS

Dual control was used during all wire drag operations; the LYDONIA acted as guide vessel and the GILBERT as the end vessel. The LYDONIA's launch was used as the tender.

The drag was set out and picked up by the LYDONIA. The GILBERT set out and picked up her own towline.

The ship's position was determined almost entirely by three point visual fixes on buoys. Visual fixes were taken simultaneously by the LYDONIA and GILBERT. After sundown on the evening of Oct. 13, 1941, when the buoys were no longer visible, it was necessary to take a few three point fixes on Boon Id. Lt., Isles of Shoals and Thachers Id. Lt. to determine the positions of both vessels.

#### LIFT AND EFFECTIVE DEPTH

Lift, determined by pipe tester, varied from zero feet to fifteen feet. The maximum lift found in testing the strip was subtracted from all sections of a strip in determining depth of the groundwire. Tide reducers were added to lift to determine the effective drag depth. The lengths of uprights at every section of

the drag were the same and were not changed while dragging a strip. Effective depth diagrams have been made in the wire drag volumes.

#### DANGERS

The two moorings described in the instructions were recovered after many unsuccessful attempts. A report concerning the recovery of these moorings has been submitted.

Much of the area having depths of less than 300 feet was wire dragged.

The area near the position Lat. 42° 57.1° - Long. 70° 22.1° of the reported rock pinnacle was covered by wire dragging to an effective depth of 225 feet. No indications of the presence of the rock pinnacle were found.

#### COMPARISON: WITH PREVIOUS SURVEYS

No conflicts

This operation will be performed after the completion of smooth plotting.

#### GROUNDINGS

There were no groundings.

#### DISCREPANCIES

No discrepancies

These will be considered after the smooth sheet has been plotted.

#### TIDAL REDUCERS

Hourly heights have been scaled on the marigrams and have presented. They have been submitted with the other field data.

Respectfully submitted:

Wirman Pastos

Norman Porter, Aid, C&GS.

Approved and Forwarded:

C.D. Meaney, Chief of Party.

#### STATISTICS FOR SHEET, FIELD NO. WD - 21

DAY	DATE	STAT. MILES	SOUNDINGS	POSITIONS
A	Sept. 25	1.8		L 25 G 26
В	<b>"</b> 26	0.5		L 15 G 10
С	n 27	0.5		L 32 G 36
D	<b>"</b> 30	0.5		<b>L 33</b> G 13
E	Oct. 2	2.5		L 61 G 34
F	" 13	6.1		L 49 G 47
G	" 15	7.5		L 65 G 62
H	" 17	2.1		L 17 G 17
				<b>542</b> 257

Area - square statute miles - 16.0

L - LYDONIA G - GILBERT

POST-OFFICE ADDRESS: 600 Flatiron Bldg.,
Norfolk, Virginia

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

NORFOLK PROCESSING OFFICE

June 9, 1942.

To:

The Director,

U. S. Coast and Geodetic Survey

Washington, D. C.

From:

The Officer in Charge, Norfolk Processing Office, Norfolk Vincipie

Norfolk, Virginia.

Subject:

Sheet No. H-6707(wire drag) Project CS-269,LYDONIA-

GILBERT, 1941 Isles of Shoals, New Hampshire.

Wire drag operation on A to E days (inclusive) were prosecuted for the sole purpose of recovering sunken moorings in the area. The drag grounded on the moorings on each of these days. The last of the two moorings was recovered between E and F days. On E day the same area was dragged with a least effective depth of 338 feet with no grounding.

It is respectfully recommended that all wire drag work on A to E days (inclusive) be eliminated from the smooth wire drag sheet and the work on the smooth sheet be started with F day which shows the area in the vicinity of the sunken moorings clear to a depth of 338 feet.

. C. Warwick,

Officer in Charge,

Norfolk Processing Office.

HCW:H

#### TIDE NOTE FOR HYDROGRAPHIC SHEET

August 26, 1942

Division-of-Hydrography-and-Topography:

/ Division of Charts: Attention: Mr. H. R. Edmonston.

Plane of reference approved in drag 5 volumes of sounding/records for

HYDROGRAPHIC SHEET 6707

Locality Submarine Trial Course 10 miles east of Isles of Shoals

Chief of Party: C. D. Meaney in 1941
Plane of reference is mean low water reading
O.2 ft. on tide staff at Gosport Harbor
16.2 ft. below B. M. 2

Height of mean high water above plane of reference is 8.7 feet.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

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#### Surveys Section (Chart Division)

## HYDROGRAPHIC SURVEY NO. H 6707WIRE DRAG

Records accompanying survey:	
Boat sheets .two.; sounding vols(3); v	wire drag vols. (3);
bomb vols; graphic recorder rolls	s;
special reports, etc	• • • • • • • • • • • • • • • • • • • •
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The following statistics will be submitted rapher's report on the sheet:	with the cartog-
Number of positions on sheet	342
Number of positions checked	2.0
Number of positions revised	0
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Number of soundings revised (refers to depth only)	••••
Number of soundings erroneously spaced	• • • • •
Number of signals erroneously plotted or transferred	••••
Topographic details Time	••••
Junctions Time	• • • • •
Verification of soundings from graphic record Time	••••
Verification by Mulippens. Total time	12 h: 5 Date / 9/19/4. 2
Review by R.H. Carolino Time	6.4rs. Date Oct. 20,1942

# MEMORANDUM IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT PHOTOSKATXOR	No. HH 6707 WIRE DRAG	}	registere verified reviewed
	•	١.	approved

received July 1, 1942
registered August 17, 1942
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

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RETURN TO

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#### DIVISION OF CHARTS

#### SURVEYS SECTION

#### REVIEW OF HYDROGRAPHIC SURVEY

REGISTER NO. 6707 W. D. Field No. W. D. 21

New Hampshire, East of Isles of Shoals Surveyed September - October 1941; Scale 1:20,000 Instructions dated August 2, October 1, 1941

Soundings: None

Control: Visual Fixes on

Hydrographic Signals

Chief of Party - C. D. Meaney; H. C. Warwick Surveyed by - Ship's Officers Protracted by - L. L. Lawrence Inked by - L. L. Lawrence Verified by - G. B. Littlepage Reviewed by - R. H. Carstens Inspected by - H. R. Edmonston

#### 1. Purpose of Survey

The survey was accomplished for the purpose of locating certain moorings planted by the U. S. Navy; to investigate a 19-fm. pinnacle rock reported in Lat. 42°57.1', Long. 70°22.1'; and to drag the area, included in the original instructions, with depths less than 300 feet and the area, included in the supplemental instructions, with depths less than 200 ft.

#### 2. Shoreline and Signals

See page 1 of Descriptive Report for signals. No shoreline falls on this survey.

#### 3. Results of Survey

The moorings planted by the U. S. Navy in Lat. 42°59.8', Long. 70°20.45' were successfully located by means of the wire drag and were raised by Navy ships. The area was then dragged to an effective depth of 339 feet.

The area in which the pinnacle rock was reported was dragged to an effective depth of 225 feet. The existence of such a rock in the reported position should be regarded as disproved. Shoals with depths

less than 300 feet lying about one mile to the west and about one mile to the northwest of the reported position of the rock were dragged to effective depths of 225-227 feet.

In the areas included in the supplemental instructions the shoals with depths less than 200 feet were dragged to effective depths of 141-149 feet.

#### 4. Comparison with Chart 1206 (Latest print date 8-24-42)

There are no conflicts between the charted hydrography and the effective depths of the present survey.

Examined and approved:

Chief, Surveys Section

Chief, Division of Charts

Chief, Section of Hydrography Chief, Division of Coastal

y Chief, Division of Coastal Surveys Applied to Cht. 1206 11-18-42 K.P. applied to Chart Correction 50 March 8, 1943 Hiscu.