5022

5022

Diag. Cht. No. 1247

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L. & A.
JUL 30 19..
Acc. No.

State: Florida

11—5613

DESCRIPTIVE REPORT.

Field Hydrographic Sheet No. #1 5022

LOCALITY:

~~Jupiter Lighthouse~~

~~to~~ St. Lucie Inlet

to Jupiter Lighthouse

1930

CHIEF OF PARTY:

C.A. Egner,

5022

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L. & A.
JUL 26 1930
Acc. No.

REG. NO. 5022

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. 1 5022

REGISTER NO.

State Florida

General locality East Coast

Locality ~~Jupiter Light to~~ St. Lucie Inlet to Jupiter Lighthouse

Scale 1:20,000 Date of survey Apr. - May, 1930

Vessel Natoma

Chief of Party C.A. Egner, H & G Engr.,

Surveyed by Hubert A. Paton, Jr. H & G Engr.,

Protracted by C.A. Egner, and Hubert A. Paton

Soundings penciled by C.A. Egner

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low water

Subdivision of wire dragged areas by

Inked by Warren H Bamford

Verified by WHB

Instructions dated December 20, 1930

Remarks:

GPO

DESCRIPTIVE REPORT TO ACCOMPANY SHEET #1

JUPITER LIGHT TO ST. LUCIE INLET

(a) Instructions

The work on this sheet was done in accordance with Instructions dated December 20, 1929.

(b) Limits

The area covered by this sheet extends from Jupiter Lighthouse to within one mile of St. Lucie Inlet, and from the beach to a junction with Sheet #6, done by the ship. On the south it joins Sheet #4914, surveys of 1929, and on the north it joins Sheet 2 & 4.

(c) Survey Methods

All soundings were taken from the ship's launch with a hand lead. An eight pound lead was used together with mahogany lead line with bronze center. No corrections for lead line were necessary. Control was adequate. It consisted of numerous triangulation and topographic stations, located by standard survey methods.

TOWER was located by descriptive report of HILD.

In a few places the topographic signals had been destroyed before the hydrography could be done.

Lines were run out from shore to the area surveyed by the ship on Sheet #6. Where it was found necessary, lines were run between those of the ship, until a depth of five fathoms was reached in order that the spacing between lines would be less than 300 meters.

The topography along this shore was executed by a party of the M.V. Natoma in 1929. No topography, therefore, was done during this season farther than to locate the signals for the hydrography. For that reason, the shoreline was not available for the hydrographic sheet; this explains its omission from the smooth sheet.

(d) Discrepancies

In all places where bottom was smooth, the line crossed satisfactorily. In rough and rocky bottom, a few crossings differed by as much as four feet. No adjustments were thought necessary however.

(e) Dangers

The only danger in this area is a long bar, parallel to and about one-half mile from the shore, beginning at Latitude 27° 06'4, and extending beyond the northern limit of the sheet. The least depth, found in several places is 4 feet. One of these is in Latitude 27° 08'4, Longitude 80° 08'2, Position No. 87, "f" Day. This bar breaks in a moderate swell.

(f) Comparison with previous surveys

The results of this survey agree quite closely with the previous surveys.

(g) Geographic names

No new names are needed

Respectfully Submitted

Hubert A. Paton

Hubert A. Paton,
Jr. H & G Engr.,

Forwarded:

C.A. Egner

C.A. Egner,
Commanding - Natoma.

LIST OF SIGNALS, - SHEET #1

Name	Method of Locating
Gab	Topography
Jupiter LH 1929	Triangulation
Dub	Topography
Bow	"
Try	"
Ros	"
Dia	"
Shell 1929	Triangulation
Abe	Topography
Bed	"
Cat	"
Dog	"
End	"
Fen	"
Rock 1929	Triangulation
Geto	Topography
Hide	"
It	"
Kel	"
Let	"
Mim	"
Not	"
Pop	"
Qua	"
Rit	"
Selt	"
Top	"
Use	"
Tower	"
Vot	"
Wop	"
Xi	"
Til	"
Yea	"
Drop	"
Mile	"
Big	"
Wrap	"
Gros	"
Cat	"
Long 1930	Triangulation
Jetty 1930	"

LIST OF SIGNALS, SHEET #1

Name	Method of Locating
Red	Topography
Zip	"
We	"
Bove 1929	Triangulation
Are	Topography
All	"
Bush	"
Cos	"
Cab	"
Pot	"
Cup	"
Dor	"
Pil	"
Ban	"
Ged	"
Dip	"
Fad	"
Get	"
Hot	"
In	"
Flag	"
Sum	"
Chim	"
Jet	"
Kid	"
Lam	"
Mit	"
Out	"
Royal 1929	Triangulation
Pod	Topography
Sel	"
Rot	"
Ute	"
Vet	"
Wad	"
Sand 1929	Triangulation
Add	Topography
Cobb	"
Bet	"
Did	"
Eld	"
Walk 1929	Triangulation
Dole	Topography
Trit	"
Bite	"

Form 567

DIVISION OF CHARTS, FILE NO._____

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Norfolk, Virginia

July 23, 1930

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

H. 5022 C.A. Egner, Chief of Party.

DESCRIPTION (Name of Signal)		POSITION Latitude °	'	D. M. meters	Longitude °	'	D. P. Meters	Datum	METHOD OF DETERMINATION	CHARTS AFFECTED
Tower		27	00	324	80	05	378		Dist.& Az.from HHLD	163
Red House	Red	27	00	1653	80	05	1021		Topo	"
House, large	Pot	27	01	1411	80	05	1558		"	"
BathHouse, small	Cup	27	01	1628	80	05	1639		"	"
BathHouse, small	Dor	27	01	1828	80	06	60		"	"
House, small	Pil	27	02	270	80	06	149		"	"
House, green rf	In	27	02	1844	80	06	744		"	"
Summer House with (white roof	Sum	27	03	353	80	06	875		"	"
House, large	Chim	27	03	614	80	06	1037		"	"
Sign Post	Mile	27	08	409	80	08	659		"	"

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

GOVERNMENT PRINTING OFFICE

SECTION OF FIELD RECORDS

REPORT ON SHEET No. H-5022

DEC. 3-1930.

SURVEYED IN - APRIL - MAY - 1930

CHIEF OF PARTY - C. A. EGNER

SURVEYED BY - HUBERT. A. PATON

PROTRACTED BY - C. A. EGNER & HUBERT. A. PATON

SOUNDINGS PLOTTED BY - C. A. EGNER

VERIFIED & INKED BY - WARREN. H. BAMFORD

1./ The records were found to conform to the requirements of the General Instructions for Field Work.

2./ The protracting was fairly well done - 4.7% of the positions checked were found erroneously plotted.

3./ The spacing of soundings was fairly well done - although quite carelessly done in some places -

4./ The sounding line crossings were found to be adequate although occasionally a slight difference exists due in most cases to the lumpy bottom -

5./ The development on shoals was found to be sufficient although a survey on a scale of 1:10,000 would be very desirable north of Lat. 27°-06.

6./ It was possible to draw the usual depth curves.

7./ The sheet was fairly clean and the work was found to be legible.

8./ The field plotting was completed to the extent prescribed in the Hydrographic Manual.

9./ The soundings were fairly well plotted but carelessly spaced in some places. About 11.7 % of the soundings were changed by the office draftsman.

10./

10./ This sheet joins sheet number H-5023 and H-5031 on the north and sheet number H-4914 on the south - The junctions were found to be satisfactory.

11./ The only authority found for the sunken rocks at approximately LAT. 27°-04'-300 METERS and LONGITUDE 80°-06-1450M and the rocks awash at approximately LATITUDE 27°-04-560 METERS and LONGITUDE 80°-06'-1500M is the appearance of same on the boat sheet accompanying H-5022 and a note of "ROCKS TO STARBOARD" - in Volume I page 26 of the sounding records for H-5022.

Respectfully Submitted

Warren H Bamford

Form 537a
11—5813

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L. & A.
MAY 28 1930
Acc. No.

REG. NO.

TOPOGRAPHIC TITLE SHEET

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

Field No. "A"

REGISTER NO.

State Florida

General locality East Coast

Locality Palm Beach and Martin Counties

Scale 1:20,000 Date of survey January, 1930

Vessel Motor Vessel Natoma

Chief of Party C.A. Egner

Surveyed by F.A. Riddell

Inked by F.A. Riddell

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated December 20, 1929

Remarks:

GPO

This sheet contains only locations of plane-table stations for hyd. survey. It was temporarily filed with H. 5022 and will be destroyed when the latter sheet is completed.

E Ellis July 29, 1930

DESCRIPTIVE REPORT

to accompany Sheet

"A"

Jupiter Inlet Northward - East Coast

of Florida.

INSTRUCTIONS: The work was done in accordance with Instructions (Project 49) dated December 20, 1929.

PURPOSE: The only purpose of this sheet was to locate the small hydrographic signals between the traverse stations. The determination of the shoreline, land features and other topographic detail was accomplished last year.

ADJUSTMENTS: After the field work and inking of this sheet had been accomplished an error was found in the traverse computations between "Jupiter" and "Walk". This error caused a shift in longitude of 6 to 8 meters and a shift in latitude of about one meter to all the stations between "Jupiter" and "Walk". This error while not easily correctable, on the topographic sheet, was taken into consideration in scaling off the DM's and DP's for the smooth hydrographic sheet.

LIMITS: The limits are Jupiter Inlet and Triangulation Station WALK.

This sheet contains only locations of Plane table stations for hyd. survey
It is temporarily filed with H.5022 and will be destroyed when the Hyd. Sheet is completed per order
E P Ellis
July 29. 1930

Respectfully Submitted

Fred A. Riddell

F.A. Riddell
Aid

Respectfully forwarded

[illegible]
[illegible]

PLANE TABLE POSITIONS

	STATION	Latitude	D.P.	LONGITUDE:	D.P.	Height:	Remarks
1.	Dib	26° 57'	10(1837)	80° 04'	766(889)		Banner signal.
2.	Bow	26 57	302(1545)	80 04	872(783)		" "
3.	Try	26 57	648(1199)	80 04	965(690)		" "
4.	Ros	26 57	888(959)	80 04	1041(614)		" "
5.	Dia	26 57	1112(735)	80 04	1093 562		"
6.	Abe	26 57	1547(300)	80 04	1217 438		"
7.	Bed	26 57	1798(49)	80 04	1293 (362)		"
8.	Cat	26 58	160(1687)	80 04	1338(317)		"
9.	Dog	26 58	429(1418)	80 04	1412(243)		"
10.	End	26 58	593(1254)	80 04	1439(216)		"
11.	Fen	26 58	735(1112)	80 04	1468(187)		"
12.	Geto	26 58	1072(775)	80 04	1545(110)		"
13.	hide	26 58	1226(620)	80 04	1596(59)		"
14.	It	26 58	1494(353)	80 05	40(1615)		"
15.	Jid	26 58	1828(19)	80 05	183(1472)		"
16.	Kel	26 59	225(1622)	80 05	279(1376)		"
17.	let	26 59	405(1442)	80 05	345(1309)		"
18.	Mim	26 59	598(1249)	80 05	408(1246)		"
19.	Not	26 59	860(987)	80 05	497(1157)		"
20.	Ode	26 59	1069(778)	80 05	540(1114)		"
21.	Pop	26 59	1335(512)	80 05	585(1069)		"
22.	Qua	26 59	1456(391)	80 05	598(1056)		"
23.	Rit	26 59	1618(229)	80 05	608(1046)		"
24.	Selt	26 59	1795(52)	80 05	637(1017)		"
25.	Top	27 00	206(1641)	80 05	682(972)		"

PLANE TABLE POSITIONS (CONT'D)

STATIONS		LATITUDE	D.M.	LONGITUDE	D.P.	HEIGHT	REMARKS
26	Use	27° 00'	441(1406)	80 05	725(929)		Banner signal
27	Vot	27 00	853(994)	80 05	805(849)		" "
28	Wop	27 00	1005(842)	80 05	849(805)		"
29	Xi	27 00	1194(653)	80 05	870(784)		"
30	Tel	27 00	1312(535)	80 05	933(721)		"
31	Yea	27 00	1535(312)	80 05	980(674)		"
32	Red	27 00	1655(194)	80 05	1021(633)		SE Corner Beach house
33	Zip	27 00	16(1831)	80 05	1097(557)		Banner signal
34	We	27 00	73(1774)	80 05	1072(582)		N.E.Corner of Shack
35	Are	27 00	493(1354)	80 05	1258(396)		Banner signal
36	Ail	27 00	700(1147)	80 05	1306(348)		Banner signal
37	Pole	27 01	786(1061)	80 05	1290(364)		" "
38	Bush	27 01	879(968)	80 05	1374(280)		"
39	Cos	27 01	1045(802)	80 05	1393(261)		"
40	Cab	27 01	1162(685)	80 05	1475(179)		"
41	Pot	27 01	1411(436)	80 05	1558(96)		Flower-pot S of steps.
42	Cup	27 01	1625(219)	80 05	1639(15)		S.E.corner of shack
43	Dor	27 01	1828(19)	80 06	60(1594)		" " "
44	Pil	27 02	270(1577)	80 06	149(1505)		N.Pillar of Beach house.
45	Ban	27 02	438(1409)	80 06	217(1537)		Banner signal
46	Ced	27 02	632(1215)	80 06	284(1370)		" "
47	Dip	27 02	805(1042)	80 06	352(1302)		" "
48	Eat	27 02	1001(846)	80 06	421(1233)		" "
49	Fad	27 02	1103(744)	80 06	475(1179)		" "
50	Get	27 02	1353(494)	80 06	563(1091)		" "

PLANE TABLE POSITIONS (CONT'D)

STATION	LATITUDE	D.M.	LONGITUDE	D.P.	HEIGHT: REMARKS:
51 Hot	27° 02'	1621(226)	80° 06'	661(992)	Banner signal
52 In	27 02	1844(3)	80 06	744(909)	S.E. Corner Frame House.
53 Flag	27 03	206(141)	80 06	844(809)	Flag Pole
54 Sum	27 03	353(1494)	80 06	875(778)	Center of summerhouse.
55 Chim	27n 03	614(1233)	80 06	1037(618)	Center chimney of large house.
56 Jet	27 03	1020(824)	80 06	1162(491)	Banner signal
57 Kid	27 03	1362(485)	80 06	1329(324)	" "
58 Lem	27 03	1815(32)	80 06	1539(114)	"
59 Mit	27 04	462(1385)	80 07	13(1640)	"
60 Out	27 04	792(1055)	80 07	130(1523)	"
61 Pod	27 04	1466(381)	80 07	394(1259)	"
62 Sel	27 04	1840(7)	80 07	564(1089)	"
63 Rot	27 05	181(1666)	80 07	694(959)	S.E. Corner main bldg.
64 Ute	27 05	480(1367)	80 07	830(823)	Banner signal.
65 Tip	27 05	732(1115)	80m 07	966(687)	" "
66 Vet	27 05	1094(753)	80 07	1165(488)	" "
67 Wad	27 05	1521(1326)	80 07	1386(267)	" "
68 Yet	27 06	673(1174)	80 08	84(1569)	" "
69 Zib	27 06	973(874)	80 08	212(1441)	" "
70 Add	27 06	1294(553)	80 08	361(1292)	" "
71 Cob	27 06	1542(305)	80 08	470(1183)	"
72 Bet	27 06	1802(45)	80 08	516(1137)	"
73 Did	27 06	379(1468)	80 08	660(993)	"
74 Kid	27 06	800(1047)	80 08	734(918)	"
75 Fit	27 06	780(1067)	80 08	675(877)	"

TIDAL DATA

All soundings were reduced by St. Lucie Inlet tide gauge, located on a jetty, north side of the inlet, about 60 meters from the eastern end.

Mean Low Water	- - 0.97	on the staff.
Highest tide	--- 5.0	" " "
Lowest tide	- -0.0	" " "

-o-

Section of Field Records

Rcm

September 12, 1930

Division of Hydrography and Topography:

✓Division of Charts:

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 5022

Locality: Florida East Coast (Jupiter Inlet to St. Lucie Inlet)

Chief of Party: C. A. Egner, in 1930
Plane of reference is Mean low water, reading
1.0 ft. on tide staff at St. Lucie Jetty
7.0 ft. below B. M. 1

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

H A Marmer

Acting Chief, Division of Tides and Currents.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5022

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

Number of positions on sheet	917
Number of positions checked	148
Number of positions revised	7
Number of soundings recorded	4711
Number of soundings revised	552
Number of signals erroneously plotted or transferred	ZERO

Date: DECEMBER - 3 - 1930

Cartographer: L. Warren W. Bamford

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-WSW

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

March 20, 1931.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 5022

St. Lucie Inlet to Jupiter Lighthouse, Fla.

Hand lead soundings

Instructions dated December 20, 1929. (Natoma)

Chief of Party - C. A. Egner

Surveyed by - H. A. Paton

Protracted by - C. A. Egner, H. A. Paton

Soundings plotted by - C. A. Egner

Verified and inked by - W. H. Bamford

1. The records conform to the requirements.

2. The plan, character andextent of the survey satisfy the requirements of the General and Specific Instructions except that the distance between the off-shore ends of the lines exceeds 300 meters. Most of these gaps however are covered by lines on the adjoining sheet.

3. In general the sounding line crossings are satisfactory. The crossings are excellent where the bottom is smooth and sandy, but in the areas where the bottom is irregular and rocky the agreement is not as close.

4. The information is sufficient for completely drawing the usual depth curves except the low water curve.

5. The junction on the north with H. 5023 and H. 5031 is satisfactory.

   The junction with the off-shore sheet will be reported in the review of H. 5047, which has not yet been verified.

   The junction on the south with H. 4914 is satisfactory.

While this work agrees very well with the previous surveys shown on H. 1523b and H. 3522, the recent survey shown on this sheet, H. 5022, should supersede the old work.

6. The usual amount of field plotting was fairly well done by the field party.

7. Character and scope of surveying - good.

The ground is well covered and shoal development is considered sufficient. The field party should have furnished more definite locations and more detailed information concerning the rocks shown close to the shoreline in the vicinity of Lat. 27°04'. These rocks were placed on the sheet by the office draftsman. The only authority for them is one note in the sounding record at position 112 b, and the fact that they are shown in ink on the boatsheet. Breakers are frequently noted in this vicinity in the records. The old hydrographic and topographic surveys do not show any rocks, but the original aerial photograph shows some white spots at this ppint. In view of the prominence of these rocks on the boat sheet, it was decided to show them on the smooth sheet.

8. No additional leadline work is recommended but the ridges north of Lat. 27°06' may contain additional shoal depths, which could only be found by the use of the drag.

9. Reviewed by R. L. Johnston. December 13, 1930.

Approved:

A. M. Solienalski

Chief, Section of Field Records (CHARTS)

F. S. Borden

Chief, Section of Field Work (H.& T.)

Chart

140-2 - 11-19-60 - M. Rogers Hydro completely applied after V+R.

140-1 11-21-60 R. K. DeLaunch Hydro applied after V & R