

5727

U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton., Director

State: FLORIDA

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 11
Hydrographic }

5727

LOCALITY

BISCAYNE BAY

MIAMI HARBOR AND VICINITY

~~OPEN COAST OFF~~

~~MIAMI HARBOR~~

1934

CHIEF OF PARTY

Lt. Comdr. H. A. Cotton

5727

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. 11

REGISTER NO. 5727

State FLORIDA

General locality BISCAYNE BAY //

Locality MIAMI HARBOR and VICINITY ²⁰ - ~~SOUTH COAST OF MIAMI HARBOR~~

Scale 1:10,000 Date of survey Sept. 22 - Nov. 3, 1934
and ~~the~~ Mar., 1935

Vessel Shore Party No. 3

Chief of Party H.A. Cotton & E.R. McCarthy

Surveyed by E.R. Cotton

Protracted by E.R. Cotton

Soundings penciled by P.M. Mealo

Soundings in ~~1000~~ feet

Plane of reference Mean Low Waterⁱ

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated November 17, 1933, 19

Remarks: Some additional work done March, 1935 by Party No. 14 (Vol. 10)

U. S. GOVERNMENT PRINTING OFFICE: 1933
applied to chart 547 1/10/35
[Signature]

applied to chart 1248 Mar. 19, 1937 g.K.S.

DEPARTMENT OF COMMERCE
U.S.COAST AND GEODETIC SURVEY
R.S.PATTON, DIRECTOR

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET NO. 11

BISCAYNE BAY
MIAMI HARBOR AND VICINITY
OPEN COAST OFF
MIAMI BEACH

Party No. 3

H.A.Cotton,
Lt.Comdr. C. & G.S.
Chief of Party.

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. 11

AUTHORITY:

Instructions from the Director to Lt. Comdr. H.A. Cotton, dated November 17, 1933.

LIMITS:

Miami Harbor and Biscayne Bay from Lat. 25 - 44.8 to Lat. 25 - 48.0. Includes the open coast between these two latitudes to the approximate 20' curve. It does not include channels sounded out by the U.S. Engineers.

METHODS:

Soundings were taken with a bronze centered lead line graduated in fathoms and feet in depths over 10 feet, and with a sounding pole graduated in feet and half feet in lesser depths.

Position was fixed by sextant angles on three known points except in narrow canals where it was fixed in relation to the topography.

EQUIPMENT:

A 22' power launch with a draft of one foot was leased for the greater part of the survey and was supplemented by a large shoal draft skiff equipped with an outboard motor.

DISCREPANCIES:

The soundings cross quite well as a rule on both the inside and outside work.

A sounding of $4\frac{1}{2}$ ' (18-19 p) was obtained in Lat. 25 - 46.9 / Long. 80 - 07.6 in general depths of 8 to 10 feet. It was invest-

DISCREPANCIES (Continued):

igated on 'y' day (21 - 24 y) and could not be checked. It was probably read one fathom out and it is recommended that it be rejected. *Recommendation corrected in 21. 42 ft. sounding rejected.*

COMPARISON WITH PREVIOUS SURVEYS:

There were no photostats of previous surveys with which to compare this survey. It checks chart 583 fairly well except the section between the causeways where the surveyed depths are greater than those charted.

The depth curves in the outside area north of the jetties differ considerably from those on chart 583.

The 7' spot shown in Lat. 25 - 48.0 / Long. 80 - 07.2 was not found. A long bar extending northeasterly from the shore with a least depth of 9' is in this area. It was not developed nor investigated.

The depths check fairly well with the U.S.N. work.

SHOALS AND DANGERS:

Lat. 25 - 47.9 / Long. 80 - 07.2

A long bar extending from shore northeasterly was found here. Least depth was 9' which was found in several places on the bar. Depths on either side are 15'. It was not developed.

Lat. 25 - 47.3 / Long. 80 - 07.6

A small shoal with a least depth of 11' (18 - 19x) was found here. It is in general depths of 14 and 15 feet and was not investigated.

^{45.9}
Lat. 25 - 44.9 / Long. 80 - 09.0

A wreck of an old sunken boat was found here (index Vol.10). It is visible at all stages of the tide and is on the edge of the bank. Several other wrecks - barges - lie 0.2 miles to the eastward but are on a flat and present no danger to navigation.

SHOALS AND DANGERS (Continued):

Lat. 25 - ^{45.5}~~44.5~~ / Long. 80 - 10.2

A wreck of an old barge lies here. It is out of water at all stages of the tide.

There are several wrecks on the shores of the islands south of the main channel and also a wreck area south of the county causeway on the west side of the channel at its east end.

CHANNELS:MAIN CHANNEL

The main channel was not sounded out as this has been done by the U.S. Engineers. A copy of the latest survey is forwarded with the sheet. Current dredging operations are increasing the depth from 26 feet to 32 feet outside the jetties and from 25 feet to 31 feet inside the jetties west to and including the turning basin. At the present time this project is about 80% completed.

The spoil is being deposited to build up the islands south of the channel and to fill a section of the bay NE of the county causeway as shown on the Engineers' blueprint filed with this sheet.

F.E.C. (P. & O) CHANNEL:

This is a channel for small craft which ^{leads}~~trade~~ from the sea to the Miami River. It is no longer maintained and is little used at present except by local interests. It is poorly marked. Controlling depth as found by the survey is eight feet. From this channel a natural channel with a controlling depth of seven feet leads to the southward. It also is little used and is not marked.

INTRACOASTAL CHANNEL:

This channel extends the entire width of the sheet. This channel north of the Venetian Causeway is in a new location and has been recently dredged to a project depth of ten feet. No soundings were taken in this section of the channel at the time of the survey as dredging was then in progress. The channel has a controlling depth of 10'. It is well marked.

Directions from northward are as follows: (above Collins Bridge will be described on Sheet No. 9)

Pass through the draw on the Collins (Venetian) Bridge and head

CHANNELS (Continued):INTRACOASTAL CHANNEL (Continued):DIRECTIONS (Continued):

southward to pass through the draw on the County Causeway Bridge. Continue on the Southerly course about 0.1 mile to pass west of Beacon 20 then turn west to piers and then follow along piers and bulkheads to the junction of the F.E.C.Channel, the Miami River Channel, and the Intracoastal Canal. If bound south turn SE and follow the marked channel, if bound up the Miami River turn SW and follow along the bulkhead on the north side of the river. A channel marked by a range follows the west bank of Burlingame Island and connects the River Channel and the Canal. (INTRACOASTAL)

MIAMI RIVER:

The river has been dredged to a project depth of 15' up to a point between the Seaboard Ry. Shops and the 36th. Street Bridge. It is well marked, is bulkheaded and is crossed by a number of drawbridges.

CHANNEL NEAR ENTRANCE:

There is a ship channel dredged on the north and west of Fisher (Terminal) Island. The north channel was dredged to the Belcher Oil Co. property and is maintained at 25 feet by the government. The channel west of this point and on the west side of the island was dredged and is maintained at 20 feet by private interests. The depths were obtained from the U.S.E. blueprints.

There are ship channels on either side of the east entrance to the upper part of the bay which were dredged by and are maintained by private interests (the oil companies). The present depths are 20 feet on the east channel and 18 feet on the west. These depths were obtained from the U.S.E. blueprints.

CITY CHANNELS AND BASINS:

The causeway slip is a dredged channel on the west end of the county causeway maintained by the city for yacht storage; the controlling depth (U.S.E. blueprints) is 15 feet.

CHANNELS (Continued):CITY CHANNELS AND BASINS (Continued):

The City Yacht Basin was dredged and is maintained by the city as an anchorage and mooring basin for yachts. The slips on the north end of Bay Front Park are used for storage and for tying up of smaller boats and charter fishing boats. The depths vary from 5 to 17 feet.

P.&O. BASIN:

The basin off the P&O wharf is used by commercial fishermen. But few soundings were obtained here as it was surveyed at a time when numerous boats were tied up there. It is owned by the Florida East Coast Ry. Controlling depth is 13 feet.

ROYAL PALM YACHT BASIN:

The Royal Palm Yacht Basin lies at the south end of Bay Front Park. It is used by small boats and yachts drawing not over six feet.

MISCELLANEOUS AND SMALL BOAT CHANNELS:

The area between the two causeways is used as an anchorage by yachts and small boats. There are numerous slips and wharfs on the made islands in this area. There are no marked channels but the depths are ample (9'-10') for the size of craft that use them.

A channel - marked with private temporary markers - follows the east shore of the bay. It is good for a draft of 9' to the Venetian Causeway and 8' beyond it and is used by the owners of the various estates in this section. It was formed when dredging for the made land along the shore.

DIRECTIONS:

From county causeway bridge follow midchannel course until Flagler Monument bears west, then head for drawbridge on Venetian Causeway. After passing through draw follow shore of Belle Isle about sixty meters off until north of northern point then head east until 100 meters offshore. Head north and follow about 100 meters off and parallel to shore. The turns are usually marked with a galvanized iron stake.

CHANNELS (Continued):MISCELLANEOUS (CONTinued):

A depth of 9 feet may be carried from the Intracoastal Canal to the channel described above by following parallel to the north points of the Venetian Islands and about 100 meters offshore. The chart is the best guide. The channel is not marked.

A depth of 5' may be carried (with local knowledge) to the bulkheads and landings NE of the west draw on the Venetian Causeway.

The Collins Canal leads northeasterly from Belle Isle to Indian Creek. It has a controlling depth of 4 feet but the size of boats is limited by the fixed bridges over it.

MISCELLANEOUS:

Landmarks and Geographic names are covered by the reports for the topographic sheets of this area.

The skiff and launch records were ^{KEPT} in the same volumes and the skiff days given the same letters as the launch days the launch being a capital and the skiff being a lower case letter.

Attempts to sound in the yacht basins were finally given up as these are always filled up with boats. The depths vary from 5 to 17 feet.

Some additional work in the channels was done by Party No. 14.

Respectfully submitted:

E. R. McCarthy
E.R. McCarthy,
Lieutenant (j.g.) C. & G.S.
Chief of Party.

MEMORANDUM BY CHIEF OF PARTY

The field work on this sheet was done under the direction and supervision of Lt.Comdr. H.A.Cotton by Ed. Cotton and was his first hydrographic sheet.

The smooth sheet plotting was done by Ed. Cotton and the soundings plotted and positions checked by P.M.Mealo.

The additional work was done by A.E.Durie and was patchwork.

E.R. McCarthy

E.R.McCarthy,
Lieutenant (j.g.) C. & G.S.
Chief of Party.

STATISTICS TO ACCOMPANY HYDROGRAPHIC SHEET NO. 11

LAUNCH

DAY	DATE	VOL.	MILES	SOUNDINGS	POSITIONS
A	9-22-34 ✓	1 ✓	5.5 ✓	453 ✓	54 ✓
B	9-24-34 ✓	1 ✓	15.0 ✓	1115 ✓	121 ✓
C	9-25-34 ✓	1 ✓	5.0 ✓	395 ✓	51 ✓
D	9-26-34 ✓	1 ✓	5.5 ✓	396 ✓	51 ✓
D	9-26-34 ✓	2 ✓	11.6 ✓	821 ✓	104 ✓
E	9-27-34 ✓	2 ✓	14.0 ✓	1062 ✓	141 ✓
F	9-28-34 ✓	2 ✓	3.5 ✓	350 ✓	46 ✓
F	9-28-34 ✓	3 ✓	6.5 ✓	510 ✓	78 ✓
G	10-2-34 ✓	3 ✓	10.5 ✓	744 ✓	99 ✓
H	10-3-34 ✓	3 ✓	13.5 ✓	768 ✓	104 ✓
J	10-4-34 ✓	4 ✓	10.0 ✓	726 ✓	102 ✓
K	10-5-34 ✓	4 ✓	8.0 ✓	624 ✓	85 ✓
L	10-6-34 ✓	4 ✓	4.75 ✓	346 ✓	47 ✓
M	10-8-34 ✓	4 ✓	4.3 ✓	368 ✓	52 ✓
M	10-8-34 ✓	5 ✓	3.7 ✓	267 ✓	36 ✓
N	10-9-34 ✓	5 ✓	6.3 ✓	513 ✓	72 ✓
P	10-11-34 ✓	5 ✓	13.0 ✓	704 ✓	111 ✓
Q	10-13-34 ✓	5 ✓	2.75 ✓	153 ✓	24 ✓
R	10-15-34 ✓	5 ✓	0.5 ✓	45 ✓	6 ✓
S	10-16-34 ✓	6 ✓	2.8 ✓	257 ✓	35 ✓
S	10-16-34 ✓	6 ✓	6.4 ✓	405 ✓	57 ✓
T	10-17-34 ✓	6 ✓	7.7 ✓	623 ✓	88 ✓
U	10-18-34 ✓	6 ✓	6.2 ✓	523 ✓	86 ✓
V	10-19-34 ✓	6 ✓	6.0 ✓	482 ✓	66 ✓
V	10-19-34 ✓	7 ✓	1.4 ✓	174 ✓	26 ✓
W	10-22-34 ✓	7 ✓	7.6 ✓	507 ✓	69 ✓
X	10-24-34 ✓	7 ✓	11.1 ✓	739 ✓	115 ✓
Y	10-25-34 ✓	7 ✓	5.9 ✓	445 ✓	68 ✓
Z	10-26-34 ✓	7 ✓	3.5 ✓	217 ✓	32 ✓
Z	10-26-34 ✓	8 ✓	8.5 ✓	597 ✓	87 ✓

SKIFF

aa	10-27-34 ✓	8 ✓	6.0 ✓	436 ✓	57 ✓
bb	10-29-34 ✓	8 ✓	11.5 ✓	391 ✓	115 ✓
cc	10-30-34 ✓	8 ✓	3.5 ✓	381 ✓	39 ✓
cc	10-30-34 ✓	9 ✓	11.3 ✓	926 ✓	110 ✓
dd	10-31-34 ✓	9 ✓	6.2 ✓	488 ✓	67 ✓
ee	11-1-34 ✓	9 ✓	4.5 ✓	338 ✓	50 ✓
ff	11-3-34 ✓	9 ✓	0.5 ✓	66 ✓	11 ✓

KULP LAUNCH

A	3-14-35 ✓	10 ✓	2.8 ✓	167 ✓	21 ✓
B	3-14-35 ✓	10 ✓	13.1 ✓	721 ✓	130 ✓
C	3-14-35 ✓	10 ✓	3.3 ✓	144 ✓	26 ✓

TOTALS

273.7

19387

2739

200

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 16, 1935.

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in
10 volumes of sounding records for

HYDROGRAPHIC SHEET 5727

Locality Miami Harbor and vicinity, Florida

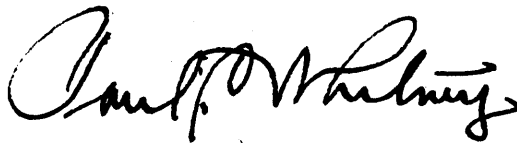
Chief of Party: H. A. Cotton in 1934-1935

Plane of reference is mean low water reading

- 2.2 ft. on tide staff at Pier #4
- 6.6 ft. below B.M. 1
- 1.7 ft. on tide staff at Pier #1
- 6.5 ft. below B.M. 1 (1934)
- 2.0 ft. on tide staff at Miami Beach (Carter's Pier)
- 7.5 ft. below B.M. 6 (USED)
- 1.7 ft. on tide staff at East End County Causeway
- 8.8 ft. below B.M. #7

Height of mean high water above plane of reference is 2.0 ft. at Pier #4;
1.7 ft. at Pier #1; 2.0 ft. at East End of Causeway; and 2.5 ft. at
Miami Beach (Carter's Pier).

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **.5727**

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

Number of positions on sheet	2739
Number of positions checked	101
Number of positions revised	7
Number of soundings recorded	19387
Number of soundings revised	34
Number of signals erroneously plotted or transferred	0

Date: **AUG. 6, 1935**

Verification by **M.D. COOPER**
INKED BY R.W. BURTON

Review by **H.W. Murray (in part)**

Ed. Braun

P.L. Johnston

Time: **79 HRS**
50 HRS

Time: **2 1/2 "**
26 3/4 hrs.

10 3/4 hrs

HYDROGRAPHIC SURVEY NO. 5727

Smooth Sheet 1

Boat Sheet 1

Sounding Records 10 Vols. _____

Descriptive Report Yes

Title Sheet Yes

List of Signals Vol. 1 Page 1

Landmarks for Charts (Form 537) Filed with Letter #886

Statistics None *My*

Approved by Chief of Party Yes

Recoverable Stations Cards (Form 524) None Rec'd April 24, 1935

Special Charts for Lighthouse Service ~~XXXXXXXX~~ No. 583
(Circular Nov. 30, 1935)

Remarks 2 U.S. Engineers Blue Prints of Miami Harbor

H-5727

H-5727

The records conform to the requirements, ✓
being fairly neat and legible.

The usual depth curves can be completely ✓
drawn, a detailed development was made.

The field plotting was completed as ✓
required, plotting was accurate in all cases.

The drafting could have been improved, ✓
the field draftsman in some cases failed to use
spacing dividers. In some cases he should have ✓
made a selection of soundings instead of crowding,
and his figures were none to neat.

The junction with H-5779 to the ✓
north is adequate.

REMARKS:-

In the spots on the sheet which are
used for dumping grounds, these areas are
constantly being filled in. The topography
was run subsequent to the hydrography
therefore, due to filling in, some soundings
plotted on the dump areas, these were not ✓
inked.

Pos. 18P at (25-46.9)(80-07.65) is a 9 ft.
sounding, looks like a fathom error. Rejected. ~~10~~

H-5727
(2)

Just north of Beacon 83 in the Channel we find a 4 ft and a 5 ft sounding, replotting * and respacing failed to remove these two soundings from the Channel, therefore judgement is passed to the reviewer.

Sheet as a whole caused considerable difficulty, several reasons were advanced. First experience for the hydrographer, the field draftsman could have done a better job, and the inking done here in the office was by an inexperienced draftsman.

M. D. Cooper

Aug 6, 1935

An extensive search for a description of signals "Riz - Bid" & sign was made, but failed to aid in establishing just what they were.

* The 4 and 5 foot soundings probably belong further to the edge of the channel, in any case these soundings were obtained while dredging was in progress. The area was developed after the completion of dredging on H-5779 (1935) See par 8c(2) of this review and page 3 of D.R.

R.L.G.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5727 (1934-35) - FIELD NO. 11

Miami Harbor and Vicinity, Biscayne Bay, Florida

Surveyed in 1934-35

Instructions dated November 17, 1933, and October 29, 1934 (H. A. Cotton)

Hand Lead and Pole Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - H. A. Cotton and E. R. McCarthy.

Surveyed by - E. R. Cotton.

Protracted by - E. R. Cotton.

Soundings penciled by - P. M. Mealo.

Inked by - R. W. Burton.

Verified by - M. D. Cooper.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual, except that the topographic feature on which signal Sign (lat. $25^{\circ} 46.13'$, long. $80^{\circ} 06.86'$), Bid (lat. $25^{\circ} 45.18'$, long. $80^{\circ} 07.54'$), and Rix (lat. $25^{\circ} 45.1'$, long. $80^{\circ} 07.54'$) are located was not shown on the smooth sheet, boat sheet or topographic sheet. These are all probably temporary markers.

The Descriptive Report is quite complete and satisfactorily covers all matters of importance except that several charted shoal soundings on the outside coast were not discussed.

2. Compliance with Instructions for the Project.

This survey complies with the instructions for the project except that critical soundings were not transferred to the boat sheet, due to the field party not having photostats of the previous surveys. See paragraph 2 on page 2 of the Descriptive Report.

3. Shoreline.

The shoreline and control signals for the hydrography originate with T-6275 (1934).

4. Sounding Line Crossings.

Cross lines are adequate and in excellent agreement.

5. Depth Curves.

The usual depth curves may be satisfactorily drawn within the limits of this survey.

6. Junctions with Contemporary Surveys.

The junction with H-5779 (1935) on the north is satisfactory.

The junction with the U. S. Army Engineers surveys of 1933 to 1934, Bps. No. 28,972 and 28,973 in the main channel is satisfactory. It is noted, however, that in the turning basin, lat. $25^{\circ} 47.0'$, long. $80^{\circ} 11.0'$, between beacons No's. 20 and 23 the depths on the present survey are about seven feet deeper than shown on blue print No. 28,973. This is evidently due to dredging subsequent to the Army Engineers survey and prior to the present survey. (See 3rd paragraph on page 3 of Descriptive Report "Main Channel.")

7. Comparison with Prior Surveys.

- a. H-407 (1852), H-1545 (1883),
H-1329 (1876), H-1554 (1883).

A comparison between the above surveys and the present survey reveals numerous changes in depths and the location of shoals, as well as marked changes in shoreline. Because of the extensive waterfront improvements, most of which have occurred in the last 15 years, it is unnecessary to consider in detail from a standpoint of information to be carried forward, the various changes noted. The present survey should supersede the above surveys for charting purposes.

- b. H-4075 (1919).

This survey, on a 1 to 20,000 scale, includes the entire area covered by the present survey. There is fair agreement in depths over large flat areas in Biscayne Bay, but radical differences in depth are noted where extensive waterfront improvements have been made. These consist generally of dredging channels and the building of artificial islands with the spoil, such as the Venetian Islands, Hibiscus Island, and Palm Island.

Soundings shoaler than those on the present survey on the outside coast and exclusive of the area covered by the U. S. Army Engineers Surveys at the entrance to the main channel are as follows:

- (1) 7 foot sounding (charted), lat. $25^{\circ} 48.02'$, long. $80^{\circ} 07.1'$, falls in depths of 9 to 10 feet on the present survey.
- (2) 11 foot sounding (charted), lat. $25^{\circ} 46.8'$, long. $80^{\circ} 07.5'$, falls in depths of 14 to 17 feet on the present survey.
- (3) 11 foot sounding (not charted), lat. $25^{\circ} 44.85'$, long. $80^{\circ} 07.95'$, falls in depths of 16 feet on the present survey.

- (4) 12 foot sounding (not charted), lat. 25° 45.1', long. 80° 07.93', falls in depths of 16 feet on the present survey.
- (5) 10 foot sounding (not charted), lat. 25° 45.2', long. 80° 07.84', falls in depths of 15 feet on the present survey.
- (6) 12 foot sounding (not charted), lat. 25° 45.28', long. 80° 07.75', falls in depths of 15 to 17 feet on the present survey.

The above soundings were not investigated on the present survey. The area south of the Entrance Channel has been used as a dumping ground for dredged material and the character of the bottom is generally hard sand and occasionally rocky according to the records of the present survey. There is good general agreement of the majority of soundings in this area with the present survey. The Army Engineers surveys did not subsequently cover the area. It is considered that these soundings are not sufficiently disproved by the present work and they have therefore been carried forward.

8. Comparison with Chart No. 583.

a. Hydrography.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and numerous U. S. Army Engineers surveys, the most recent of which are blue prints No. 24477 (1931) and 24478 (1931). The chart contains no additional information which needs consideration in this review.

b. Aids to Navigation.

The buoys and beacons within this area were located in positions which in some cases vary considerably from their charted positions. This is due in part to their removal and replacement because of dredging. The present locations adequately mark the features intended with the following exceptions:

The positions of the two beacons (topographic signals Oval and Flit) at the entrance to the small channel leading to the Miami River in approximate lat. 25° 45.9', long. 80° 09.2' are too far south to correctly mark the channel.

These beacons intended to mark the channel north of Fisher Island

RLJ

The following beacons were located on the graphic control sheet, T-6275 (1934), but were not added to H-5727 (1934-5) in the field. While the hydrography was done later than the general topography, verbal information from the Chief of Party was obtained that several beacons were located after the hydrography was completed. These have, therefore, been added to the smooth sheet.

Bn. 13 in Main Channel - lat. 25° 46.4', long. 80° 09.4'.
 Bn. 18 in Yacht Basin - " 25° 47.0', " 80° 10.8'.
 Bn. 3 in Miami River - " 25° 46.2', " 80° 11.2'.

c. Controlling Depths.

- (1) The Main Channel was not developed on the present survey since it was covered by the Engineers survey of 1933 to 1934.
- (2) That portion of the Intracoastal Waterway north of Venetian Causeway was not developed on the present survey because dredging was then in progress. Soundings of the lines of the present survey crossing the channel, which were obtained before dredging was completed, should be disregarded. This channel was later developed on H-5779 (1935) after the area was dredged. It is said to have a controlling depth of 10 feet (see D. R. page 3) which is consistent with the depths from H-5779 (1935). The controlling depth of 8 feet which is charted in the northern part of the Intracoastal Waterway, originates with chart letter No. 306 (1934). 8 ft letter
712-1935
Lury
- (3) The charted controlling depth of 11 feet in the portion of the Intracoastal Waterway south of the Miami River, originates with chart letter No. 448, (1930). The soundings of the present survey are consistent with this depth.
- (4) The charted controlling depth of 5 feet in the small channel leading from the sea to the Miami River, apparently originates from an Engineers Survey of 1927. The present hydrography shows that the controlling depth is now 8 feet. (See par. 5, page 3 of D. R. for discussion of this channel).
- (5) In the cut on the southwest side of Fisher Island, the present soundings are consistent with the charted controlling depth of 18 feet.
- (6) For controlling depths and descriptions of the less important channels and basins see Descriptive Report, pages 4, 5 and 6.

9. Field Plotting.

The field plotting is satisfactory.

10. Additional Field Work Recommended.

This survey is satisfactory and in general is quite complete except that some of the shoaler soundings on the outside coast from the survey of 1919, H-4075, were not investigated. An examination of these soundings, described in par. 7b of this review, is desirable when work is resumed in this locality.

11. Note to Compiler.

Attention is called to the fact that Bn. 1 in lat. 25° 46.3', long. 80° 11.05' was located 70 meters westward of its charted position.

12. Superseding Old Surveys.

Within the area covered, the present survey, with the indicated additions from previous surveys, supersedes the following surveys for charting purposes:

H- 407 (1852)	in part.
H-1329 (1876)	" "
H-1545 (1883)	" "
H-1554 (1883)	" "
H-4075 (1919)	" "

13. Reviewed by - Leo S. Straw, September 9, 1935, and R. L. Johnston, September 10, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

T. Borden
Chief, Section of Field Work.

R. O. Albert
Chief, Division of Charts.

G. H. de
Chief, Division of H. & T.

25 Jan 2, 1936

Ch.D.

Applied to chart 848 (new compilation) Sept 14, 1938. R.L.D.

applied to chart 547 (drawing) May 4, 1942 H.F.C.