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

DESCRIPTIVE REPORT

~~Topographic~~ Hydrographic Sheet No. ~~12A~~ 5888

State FLORIDA

LOCALITY

FLORIDA KEYS

SNAKE CREEK TO ALLIGATOR REEF
~~TEATABLE KEY~~

1935

CHIEF OF PARTY

E. R. McCarthy

5888

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. 124 5888

REGISTER NO.

State FLORIDA

General locality FLORIDA KEYS

Locality SNAKE CREEK TO ALLIGATOR REEF

Scale 1:20,000 Date of survey Feb-Mar, 19 35

Vessel _____ Party No. 14

Chief of Party E.R. McCarthy

Surveyed by E.R. McCarthy, J.T. Jarman, J.B. Finch

Protracted by E.L. Patterson

Soundings penciled by E.L. Patterson

Soundings in ~~various~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by _____

Inked by Harold W. Murray

Verified by Harold W. Murray

Instructions dated Nov. 11, 1933 (H.A. Cotton)

Remarks: _____

20
2280
80
M. Kelly
1935 NOV - 1 - AM 8:36

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. 12A

AUTHORITY:

Instructions from the Director dated November 17, 1933 (H.A.Cotton).

LIMITS:

Snake Creek to Teatable Key - Note - the sheet was originally laid out from Snake Creek to Lower Matecumbe but due to an error in laying out the smooth sheet it was necessary to split it up into two sheets (12A & 12B) in order to avoid an excessive dog-ear.

METHODS:

Soundings were taken with a bronze centered lead line graduated in fathoms and feet for practically all soundings. A wooden sounding pole graduated in feet and half feet was used on the inshore skiff work.

Position was fixed by sextant angles on three known points located by triangulation or topography. A few hydrographic signals were located by sextant angles.

EQUIPMENT:

Two forty foot leased power launches were used for the entire sheet except for extreme inshore work which was done with a skiff and outboard.

DISCREPANCIES:

The sounding lines cross quite well as any excessive crossings are in areas of irregular bottom.

Junction with sheet No. 12B on the south will be taken up under the report for that sheet.

Junction with sheet No. 10 on the north is good except as noted under Shoals & Dangers, No. 7. See remarks by verifier.

COMPARISON WITH PREVIOUS SURVEYS:

No previous surveys were available so the sheet was compared with Charts Nos. 1249 and 1250 and the differences taken up under the heading, "Shoals and Dangers".

GENERAL:

Offshore area is largely sand and has frequent differences of 1 to 3 feet on adjacent lines and soundings. The depth curves vary considerably from those shown on the chart. There has been a deepening of some of the offshore areas.

SHOALS AND DANGERS: (All references to Charts Nos. 1249 & 1250).

Position number followed by first initial of boat, E. - "Elmer F", M. - "Marie", S. - "Skiff".

Note: This survey was compared with an enlarged scale bromide of Charts Nos. 1249 & 1250. Soundings on the bromide do not usually check the positions of the apparently same shoals on the present survey but generally like depths may be found within a radius of two to three hundred meters.

1. Lat. 24 - 55.8^{56.5} / Long. 80 - 35.5 to shore - Whale Harbor.

Chart shows two channels, the southerly of which has two branches. The channels originally provided an entrance into the bay from the ocean.

Survey shows the two channels still exist, that two more - not shown on the chart - are also in existence and that a basin has been dredged parallel to the highway (Probably for fill for the highway and railroad embankment).

Depths in the channel are less than shown on the chart probably due to the fill.

2. Lat. 24 - 55.6 / Long. 80 - 35.0 - Snake Creek

Chart shows 8' in the channel to Snake Creek. This depth has shoaled to 6'.

3. Lat. 24 - 55.1 / Long. 80 - 35.2

Chart shows 13'. Survey shows small shoal with depths of 10-11' and least depth of 9' (43-4r-E).

4. Lat. 24 - 55.7 / Long. 80 - 34.7

Soundings on positions (1-2b-E) were rejected as it was apparent from an investigation (1-8j-E) that the recorder had heard 2-4 for 2-2 (a common error).

SHOALS AND DANGERS (CONTINUED):5. Lat. 24 - 55.3 / Long. 80 - 34.6

Chart shows 15'. Surveys shows, on investigation, 14' (48r-E) on a sand shoal. ✓

6. Lat. 24 - 55.7 / Long. 80 - 33.6

Survey shows deepening of 1-2' here. ✓

7. Lat. 24 - 55.3 / Long. 80 - 32.8

Survey shows a 14' (18s-E) and two 14½' (66d-E) soundings here at the junction with sheet No. 10. ✓

The soundings at 66d fall close to 16' on sheet No. 10 and probably show irregular bottom.

The sounding on 18s falls between 20-21' on sheet No. 10 and while it is possible that a 14' ridge may extend from the 14' shoal down between the two lines on sheet No. 10 it is more probable that the sounding was either heard or called one fathom shoal and it is recommended that it be rejected. ✓

For 18s incorrectly plotted. Correct plotting places 14' spot 70m. North which is near above 14's. No conflict exists. ✓

8. Lat. 24 - 55.1 / Long. 80 - 32.7

Chart shows 14'. Least depth on survey is 16' close to the southward. Area developed but not investigated. Bottom sand and area probably deepened. ✓

9. Lat. 24 - 54.8 / Long. 80 - 38.0

A small boat anchorage and harbor for Hotel Matecumbe has been dredged here. It is marked by private temporary stakes except at the entrance where an iron pipe (99r-E) has been established. ✓

10. Lat. 24 - 54.6 / Long. 80 - 37.5

A pipe baring 3' at M.L.W. (probably a channel marker for Hotel Matecumbe Basin) on a 3' shoal was located here. ✓

11. Lat. 24 - 54.3 / Long. 80 - 37.76

A pipe baring 5' at M.L.W. (probably a channel marker for Hotel Matecumbe Basin) was found here on the eastern point of a group of coral heads. The area was examined and high spots (156-164c-S) found. Bottom is sand, rock and grass. Least depth ½' (161c). ✓

SHOALS AND DANGERS (CONTINUED):12. Lat. 24⁴ - 53.8 to 54.2 / Long. 80 - 36.3 to 37.1

Chart shows 2' & 4' on rocks here. Area investigated and found 4 groups of coral heads lying in a "U" with deep water between them, depths as follows: ✓

(a) Lat. 24-54.2/Long. 80-36.6

Chart shows 10'. Survey shows three coral heads with depths of 5 $\frac{1}{2}$ ' (1b-M), 4 $\frac{1}{2}$ ' (2b-M) and 8 $\frac{1}{2}$ ' (3b-M) in small shoal with general depths of 10'. ✓

(b) Lat. 24-54.2/Long. 80-37.0

Chart shows 2'. Survey shows several coral heads in general depths of 12'. Area examined (18-28b-M) and (1-7k-E) and least depths found as follows:

2' (7k-E) ✓
 3-9' (18-21b-M) isolated coral heads general depths 12'.
 9' (22b-M)
 6-9' (23-8b-M) coral heads general depths 12'.

(c) Lat. 24-54.0/Long. 80-37.0

Chart shows 4'. Area examined and found two isolated coral heads with least depths of 2' (1k-E) & 16b-M) and 7 $\frac{1}{2}$ ' (17b-M). General depths 13'. ✓

(d) Lat. 24-53.8/Long. 80-37.0 to 37.2

Chart shows no danger indications here. Area examined (4-15b-M) and found several small coral heads on small shoal. ✓
 Least depths 4 $\frac{1}{2}$ ' (15b-M) on east, 6' (14b-M) in center and 4 $\frac{1}{2}$ ' (11b-M) on west.

13. Lat. 24 - 54.5 / Long. 80 - 36.1

Chart shows 13'. Area examined and found two isolated shoals in general depths of 13-15' of 11 $\frac{1}{2}$ ' (102-3g & 53t-E) and 10 $\frac{1}{2}$ ' (55t-E). ✓

14. Lat. 24 - 54.0 / Long. 80 - 36.5

Chart shows 14'. A shoal indication of 11' (51-2h-E) was found and nothing less obtained on investigation (29-31b-M). ✓

15. Lat. 24 - 54.0 / Long. 80 - 36.0

Chart shows an isolated 12' sounding. No indication in immediate vicinity, 12 $\frac{1}{2}$ ' (198-9b-E) found to N.E. Area not investigated. ✓

SHOALS AND DANGERS (CONTINUED):16. Lat. 24 - 54.8 / Long. 80 - 35.9

A sand shoal with least depth of 12' (184-5a & 41r-E) was found. General depths 13-14'. Sand bottom. ✓

17. Lat. 24 - 54.7 / Long. 80 - 35.5

Chart shows an isolated 12' sounding. Area developed and least depth obtained 12½' (44-5t-E). Sand bottom. ✓

18. Lat. 24 - 54.7 / Long. 80 - 35.4

A small shoal with least depth, upon investigation, of 9½' (42-3t-E) was found. Sand bottom. Not on present chart. ✓

19. Lat. 24 - 54.2 / Long. 80 - 35.2

Chart shows 11' and 12' in this vicinity. Survey shows a number of shoal patches in general depths of 14' - 16'. Least depths are as follows: (area examined): 10½' (59m-E), 10½' (61-2m-E), 12½' (58m-E), 12½' (57m-E), 11½' (39t-E) and 11½' (40t-E). ✓

There is no indication of the charted 12' sounding in its immediate vicinity.

20. Lat. 24 - 54.8 / Long. 80 - 35.2

Chart shows 17'. Survey shows no indication of it.

21. Lat. 24 - 54.4 / Long. 80 - 34.8

Chart shows 17' and 15' (0.2 mile) south. Survey shows irregular bottom with several shoal patches. Least depth in vicinity 17½' (64s-E) and no indication of the 15' charted sounding. The 3 fathom curve is much farther inshore than charted and area in general has probably deepened. ✓

Probably compared with the wrong area. The agreement with the present survey is reasonably good. RJB

22. Lat. 24 - 54.0 / Long. 80 - 34.1

Chart shows 9'. Survey shows a moderate sized shoal with general depths of 15' and least of 11½' (86-7s-E). Examined (22-3c-M) and nothing less found. ✓

23. Lat. 24 - 54.2 / Long. 80 - 33.0

Chart shows 18'. Survey shows no indication. Area not examined as less found to the northward. ✓

see Review par. 7 a (2)

24. Lat. 24 - 54.5 / Long. 80 - 33.0

An area with very irregular bottom was found in the vicinity within the 18' curve. General depths on shoal 15-18'. ✓

SHOALS AND DANGERS (CONTINUED):

25. Lat. 24 - 54.2 / Long. 80 - 32.1

Chart shows 22'. Survey shows 23' (104t-E) which is probably the spur of the 24' curve from the shoal at BN. "H." ✓

26. Lat. 24 - 54.2 / Long. 80 - 31.6

A shoal with a least depth of 54' (59c-M) was found outside the 10 fathom curve. Bottom irregular - Sand & rock. ✓

27. Lat. 24 - 53.7 / Long. 80 - 38.8

Two small shoals with least depths - not examined - of $4\frac{1}{2}'$ (159c-E) and $5\frac{1}{2}'$ (160e-E) were found. Probably irregular bottom. Located just outside of 6' curve. ✓

28. Lat. 24 - 53.9 / Long. 80 - 38.2

A small shoal with least depth of 5' (36b-M) was found. Bottom - sand. Located just outside 6' curve. ✓

29. Lat. 24 - 53.0 / Long. 80 - 38.2

Chart shows 11'. Area developed and least depth in vicinity found to be 12' (170-1a-E), (156-7k-E) and (40b-M). There are several 12' patches in immediate vicinity. General depths 13-14'. ✓

30. Lat. 24 - 53.7 / Long. 80 - 37.5

Chart shows 8' here. Least depth obtained by survey after investigation was 10' (33b-M) and Volume 5 Page 64. ✓

31. Lat. 24 - 53.7 / Long. 80 - 36.8

A sand bar with least depth, upon investigation, of $12\frac{1}{2}'$ (13-14M-E) was found. Not on present chart. General depths 15-17'. ✓

32. Lat. 24 - 53.3 / Long. 80 - 36.3

Chart shows 9' in vicinity of Bn. #41. Area examined and least depth of $11\frac{1}{2}'$ (15k-E) obtained in vicinity. Bottom sand. ✓

33. Lat. 24 - 53.3 / Long. 80 - 36.7

A shoal with a least depth, on investigation, of $12\frac{1}{2}'$ (32b-M) was found. General depths 15' - not on present chart. ✓

34. Lat. 24 - 53.5 / Long. 80 - 35.3

Chart shows 12'. Survey shows shoalest sounding in area $13\frac{1}{2}'$ (115-117d-E). Not investigated. Bottom irregular. ✓

SHOALS AND DANGERS (CONTINUED):35. Lat. 24 - 53.0 / Long. 80 - 35.5

Chart shows 9'. Area investigated and a least depth of 10' (54-5m-E) found. Bottom in area is irregular, a 12 $\frac{1}{2}$ ' (53e-E) patch (not investigated) lies 0.1 mile south. ✓

36. Lat. 24 - 53.6 / Long. 80 - 34.9

Chart shows 9' and 10' on the south end of a long narrow shoal. Area developed and investigated and several patches within the 12' curve found in addition to other 12' shoal patches in 13-15' to northward.

Least depths as follows:

West shoal	8 $\frac{1}{2}$ ' (13c-M)	
East shoal	9 $\frac{1}{2}$ ' (19c-M)	- not on chart ✓
North shoal	9 $\frac{1}{2}$ ' (16c-M)	
Patches	11' (17c-M)	- not on chart

37. Lat. 24 - 53.9 / Long. 80 - 34.6

Chart shows 9'. Survey shows small shoal with least depth of 9 $\frac{1}{2}$ ' (21c-M) in general depths of 14-15'. Bottom in vicinity irregular. ✓

38. Lat. 24 - 53.0 / Long. 80 - 33.9

Chart shows 22'. Survey shows several shoal patches of 22-3' in depths of 26-7' and least depth in vicinity of 19' (150-lq-E). This sounding not investigated as depth curves were not drawn on boat sheet. ✓

39. Lat. 24 - 52.6 / Long. 80 - 39.0

Chart shows 11'. Survey shows that area apparently has deepened as 12' curve is 0.3 mile inshore. ✓

40. Lat. 24 - 52.7 / Long. 80 - 37.2

Chart shows 9'. Survey shows a small shoal with general depths of 10-12' and least of 9 $\frac{1}{2}$ ' (54h-E) on west end. ✓

There is not indication of the 12' charted sounding, Lat. 24 - 52.5/Long. 80 - 37.5 but area was not investigated. ✓

41. Alligator Bank

Present survey shows 13 feet.
Alligator Bank the greater part of which lies within the limits of the sheet extends from Lat. 24-52.5/Long. 80-36.4 south-westerly to Bn. #43 thence southeasterly to Alligator Reef Light, thence north-northeasterly to point of beginning. It covers, ✓

SHOALS AND DANGERS (CONTINUED):41. Alligator Bank(Continued):

within the 12' curve, about 2 square miles.

Depths over the bank are irregular varying from 5-15' and general of 10-11'. The outline of the 12' curve, due to the development, was found to vary in several places from the charted curve. Shoal indications were examined. ✓

Alligator Reef - marked by a first order lighthouse - lies in the S.E. end of the shoal. The reef is smaller and the depths shoaler than charted. ✓

1. Alligator Bank - Least depths:(a) Lat. 24 -52.5/Long.80-37.1

Least depth in vicinity $9\frac{1}{2}'$ (40-1d & 51-2K-E). Examined (1-3c-M) and nothing less obtained. ✓

(b) Lat. 24 -52.4/Long.80-36.9

Least depth, upon investigation, 8' (7c-M). Chart shows 8' in vicinity. ✓

(c) Lat. 24 - ^{52.0}~~52.0~~/Long.80-36.9

Least depth, upon investigation, 5' (9c-M). Chart shows 7' in vicinity. ✓

(d) Lat. 24-51.7 /Long.80-37.0

A least depth of $5\frac{1}{2}'$ (53b-E) was found. Chart shows 7' in locality. ✓

(e) Lat. 24 -51.9/Long.80-37.7

A least depth of $7\frac{1}{2}'$ (62-3K-E) was found. Area not investigated. Bottom irregular. ✓

(f) Lat. 24 -51.8/Long.80-38.4

A least depth of 9' (41b-E) was found. Chart shows 10' in locality. It was recommended to Light-house Service that Bn.#43 be placed on this shoal. ✓

(g) Lat. 24 -51.4/Long.80-37.0

Chart shows 5'. Survey shows $5\frac{1}{2}'$ (123-4^h~~1~~-E). Area probably deepened. ✓

SHOALS AND DANGERS (CONTINUED):41. Alligator Bank (Continued):

2. Alligator Reef - least depths:

Area was investigated on (42-51b-M).

- ✓ (a) Three iron pilings bearing 1-2' (42-44b-M) were found in 9' west of the south edge of the reef. ✓
- ✓ (b) Depth of $2\frac{1}{2}$ ' (^{49b}~~5b~~-M) was obtained on an 8" iron piling in 5'. ✓
- ✓ (c) Least depth of 3' (²~~5~~⁰b-M) was obtained over a broken 8" iron piling in 4' of water about 30 meters east of the lighthouse. ✓

Least depth shown on chart is 5'. Reef breaks in a moderate swell. ✓

42. Lat. 24 - 52.8 / Long. 80 - 36.5

Chart shows 10'. Survey shows two patches with least depths of $11\frac{1}{2}$ ' (~~63-4m-E~~) on northwesterly and 12' (109-10d-E) on southeasterly. ✓
10 has been retained.

43. Lat. 24 - 52.5 / Long. 80 - 36.0

Chart shows 10'. Survey shows no indication of it. Area not examined. Least depth in vicinity is 13'.¹⁵ ✓
10 has been retained

44. Lat. 24 - 52.4 / Long. 80 - 35.7

Chart shows isolated 17' sounding. Survey shows a number of shoal patches with least depths of 18' (31-2m & 35m & 28-9m-E). ✓
General depths 19-20'.

45. Lat. 24 - 52.9 / Long. 80 - 34.3

Chart shows 19'. Survey shows no indication of it in vicinity. ✓
Least depth in vicinity 23'.

46. Lat. 24 - 52.3 / Long. 80 - 34.8

Chart shows 22'. Least depth in vicinity 24'. Area not examined. Bottom irregular. ✓

47. Lat. 24 - 51.8 / Long. 80 - 36.0

Chart shows an isolated 10' sounding. Survey shows small shoal with least depth of $10\frac{1}{2}$ ' (75m-E). Area investigated (106-7q-E) and nothing less obtained. ✓

The 3 fathom curve in the vicinity has changed considerably.

SHOALS AND DANGERS (CONTINUED):48. Lat. 24 - 54.1 / Long. 80 - 39.0

An iron rail, marker for Caribee Colony piers, bearing 3' at M.L.W. (102d-S) lies here. About 0.2 mile offshore are the ruins of a long pier marked at its extremity by several piling bare at all stages of the tide. ✓

WRECKS:

There are no wrecks within the limits of the sheet. Iron and wooden pilings were described under the heading, "Shoals and Dangers". ✓

CHANNELS & HARBORS:HAWK CHANNEL:

This channel extends the full length of the sheet. It is used considerably by yachts, fishing boats and the lighthouse tender, the draft of the average boat using it is from 6' to 8' and the draft of the largest 10'. A stranger with a draft of over 8' should employ a pilot although the channel is fairly well marked. ✓

Directions:

	Course (T)	Distance (Nautical)
1. To 400 yards 135° T from Hen & Chickens Lt.	221	11.8
2. To midway between Bn.s Nos. 26 & 43	234	6.8 ✓

Bn. No. 41 marks an 11½' ^{sand} ~~had~~ shoal and the recommended route passes 450 yards N.W. of it. Least depth on recommended route 11'. ✓

SNAKE CREEK:

Snake creek affords a passage between the ocean and the bay and is used by charter and commercial boats which base at Islamorada on Florida Bay. ✓

The creek divides into two branches shortly before entering the ocean which branches unite again. The north is good for a draft of 2' at M.L.W. and the south 3'. The south channel is usually marked with wooden stakes. Depths in the creek proper are ample for any boat capable of entering. Height of boats is restricted by the clearance over the fixed highway and railroad bridges. ✓

CHANNELS AND HARBORS:(CONTINUED):SNAKE CREEK (Continued):

A very strong current sets through the restricted channel through the railroad bridge, a difference in level of 1' on either side of the bridge being not unusual. ✓

The shoals on either side of the entrance bare at extreme low water at which time the channel is very well defined. A stranger drawing over 2' should employ a pilot unless the sun is high. ✓

WHALE HARBOR:

Whale Harbor is used considerably by charter fishing boats and to some extent by commercial fishing boats which maintain small fish houses here. ✓

Fishing boats anchor in 3-4' close into shore in the basin which parallels the highway and which was dredged in the construction of it. ✓

From the basin several channels lead to the ocean. The north central (main) and the south are most used and are marked at the edge of the reef by private day beacons (a barrel on a pole). The 3' curve has been drawn to better define the channels. ✓

Controlling Depths:

North entrance: ⁴
1' entrance, $3\frac{1}{2}$ ' in channel

North central (main channel):
⁴ $3\frac{1}{2}$ ' in entrance, 5' in channel, pass north and close to entrance beacon. ₄₋₆

South central:
East branch: ⁴
 $3\frac{1}{2}$ ' in entrance, 5' in channel .
South branch: ⁴
 $3\frac{1}{2}$ ' in entrance, 6' in channel.

South entrance: ✓
 $4\frac{1}{2}$ ' in entrance, 4' in channel. Pass either side of entrance beacon.

There are a number of small wharfs to which boats tie in order to receive gasoline, supplies and passengers. ✓

Gasoline, water and supplies may be trucked from Tavernier or Islamorada.

CHANNELS & HARBORS (CONTINUED):HOTEL MATECUMBE BASIN:

This basin is used by charter fish boats belonging to the hotel. It is reached via a small channel with a controlling depth of 2'. The entrance is marked on the south side by an iron pipe. Iron pipe markers were also established on a shoal in Lat. 24 - 54.7/Long. 80 - 37.5 and on the S.E. end of a group of sand shoals in Lat. 24 - 54.2/Long. 80 - 37.7.

Directions:

Leave entrance marker to S.W. and head directly inshore - follow private wooden markers as found. Basin and channel are private.

GENERAL:

Local fishermen anchor anywhere close to shore south of Whale Harbor. Wharfs have been built at Hotel Matecumbe and Caribee Colony.

LANDMARKS:

Landmarks in addition to the lights have been described in the topographic sheet covering this area and also submitted in a separate report.

GEOGRAPHIC NAMES:

The following names of hydrographic features are well established locally and should be used in charting:

Snake Creek ✓
 Alligator Shoal ✓
 Alligator ~~SHOAL~~ BANK ✓
 Whale Harbor ✓

See list of approved names

Other names will be covered by a special report.

MISCELLANEOUS:

The hurricane of Sept. 2-3 passed directly over the area covered by this sheet and did considerably damage.

MISCELLANEOUS (CONTINUED):

The railroad fill washed out at Whale Harbor, crevasses were washed out on either side of the Snake Creek Railroad bridge and the highway bridge was destroyed. ✓

To date, October 1935, the Snake Creek highway bridge has been rebuilt and the highway ^{fill} at Whale Harbor replaced. ✓

Respectfully submitted:

E. R. McCarthy
E. R. McCarthy,
Lieut.(j.g.) C&GS,
Chief of Party.

MEMORANDUM BY CHIEF OF PARTY

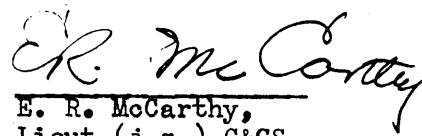
The records are in fairly good shape except that several reduced soundings were placed in the "Office Column" instead of the "Field Column".

The parties operated out of Tavernier, the base office being in Miami, 75 miles north, and the records examined every week or two weeks. There were three hydrographic and one topographic parties in operation during February and March.

The reviewer should bear in mind that bottom, under ordinary conditions, is visible up to 30' and, with good conditions, up to 50'. A chop decreases visibility somewhat and a cloudy day considerably.

The survey shows considerable change in places from the chart especially in the depth curves and the deepening of some sections of the area.

The damage done by the Sept. 2-3 hurricane is not known. It may have changed the sand areas somewhat.


E. R. McCarthy,
Lieut.(j.g.) C&GS,
Chief of Party.

STATISTICSPROJECT HT 158FLORIDA KEYSSHEET NO. 12ALAUNCH "ELMER F"

DAY	DATE	MILES (STATUTE)	SOUNDINGS	POSITIONS	DAYS RUN (MILES)	DISTANCE TO & FROM WORK
p p p p p p p p p p p p p p	2-8-35	41.9	1111	191	45.4	3.5
	2-11-35	48.9	1327	226	52.9	3.5
	2-12-35	40.0	1052	182	48.0	3.0
	2-13-35	44.6	1214	206	51.6	6.5
	2-14-35	42.5	1114	205	50.5	6.5
	2-15-35	26.2	820	142	30.7	2.5
	2-19-35	26.6	750	149	35.1	3.0
	2-20-35	32.3	835	161	41.8	4.5
	2-21-35	16.0	476	104	23.0	6.0
	2-22-35	29.3	802	162	35.7	5.0
	2-25-35	25.2	724	144	33.2	2.5
	2-26-35	17.2	487	108	28.9	6.5
	2-27-35	21.8	690	145	30.3	4.5
	p p p p p	3-7-35	21.2	360	124	41.2
3-8-35		23.6	594	151	33.8	9.0
3-13-35		3.3	120	48	27.8	14.0
3-14-35		14.3	459	87	20.3	6.0
3-15-35		16.2	351	112	32.0	8.0
TOTALS		491.1	13286	2647	662.2	105.5

LAUNCH "MARIE"

p p p	3-18-35	6.2	158	42	13.2	5.0
	3-19-35	---	55	55	24.0	9.0
	3-20-35	3.0	125	64	22.0	5.0
TOTALS		9.2	338	161	59.2	19.0

"SKIFF"

p p p p	2-21-35	6.1	267	60	7.9	0.0
	3-18-35	2.1	96	17	3.5	0.9
	3-21-35	18.6	874	167	25.7	2.1
	3-22-35	14.8	593	107	21.7	0.9
TOTALS		41.6	1830	351	58.7	3.9

STATISTICSPROJECT HT, 158FLORIDA KEYSSHEET NO. 12ARECAPITULATION

BOAT	MILES (STATUTE)	SOUNDINGS	POSITIONS	DAYS RUN (MILES)	DISTANCE TO & FROM WORK
"ELMER F"	491.1	13,286	2,647	662.2	105.5
"MARIE"	9.2	338	161	59.2	19.0
"SKIFF"	41.6	1,830	351	58.7	3.9
TOTALS	<u>541.9</u>	<u>15,454</u>	<u>3,159</u>	<u>780.1</u>	<u>128.4</u>

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO.5888

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

Number of positions on sheet	3159
Number of positions checked	113
Number of positions revised	9
Number of soundings recorded	15454
Number of soundings revised	78
Number of signals erroneously plotted or transferred	✓

Date: Feb. 3, 1936

Verification by Harold W. Murray

Time: 5 1/2 days

Review by R. J. Christman

Time: 29 hrs

HYDROGRAPHIC SURVEY NO. 5888

Smooth Sheet yes

Boat Sheet 1

Sounding Records 12 Vols. _____

Descriptive Report yes

Title Sheet yes

List of Signals yes

Landmarks for Charts (Form 567) yes

Statistics yes

Approved by Chief of Party yes

Recoverable Station Cards (Form 524) none

Special Chart for Lighthouse Service * no
(Circular Nov. 30, 1933)

*212 floating aids
are charted.*

Remarks * Lighthouse Chart 1249 has been submitted by

Hinkley but the area of this survey is not covered.

Remarks

Decisions

	Remarks	Decisions
1		
2		
3		
4	<i>Not answering definition of a harbor.</i>	
5		
6	<i>alligator Reef appears to be the proper designation.</i>	
7		
8		
9		
10		
11		
12	<i>11/29/35.</i>	
13	<i>O. Egan</i>	
14		
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23		
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25		
26		
27		

GEOGRAPHIC NAMES

Survey No. 5888

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
✓ UPPER MATECUMBE KEY	1249 1250										1
✓ WINDLEY KEY	1249 1250										2
✓ SNAKE CREEK	1249 1250			✓							3
WHALE HARBOR		Do not put on chart.									4
✓ TEATABLE KEY	1250										5
✓ ALLIGATOR REEF	1250 1249				ALLIGATOR REEF			ALLIG REEF.			6
✓ PLANTATION PT.	1250 1249										7
* HAWK CHANNEL	1250 1249										8
* Letter after sheet is inked-											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

11/29/35
O. E. Ogden

LCC

TIDE NOTE FOR HYDROGRAPHIC SHEET

January 18, 1936.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
12 volumes of sounding records for

HYDROGRAPHIC SHEET 5888

Locality Snake Creek to Alligator Reef, Florida Keys

Chief of Party: E. R. McCarthy in 1935
Plane of reference is mean low water reading
2.2 ft. on tide staff at Whale Harbor
11.2 ft. below B.M. 1

Height of mean high water above plane of reference is 2.2 feet.

Condition of records satisfactory except as noted below:

W. H. Ham
Chief, Division of Tides and Currents.

Verification Report on H-5888(1935)

1. Condition of Records.

The records are ^{very} neat, legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. "Rocky" bottom characteristics were frequently entered in the records as "Rk" for areas of even bottom. These were plotted as "rky" in the office.
- b. Field reduction of soundings were frequently entered in the "office column". This departure was commented upon by the Chief of Party (See D. R., p. 14).

2. Shoreline & Signals.

- a. The shoreline on this sheet is from air photo compilation. It will be checked and completed when these surveys are registered.
- b. The signals shown on this sheet original with Graphical Control sheets: T-6257(1934), T-6360 B(1935), T-6360 B(1935) and T-6258(1934).

3. Soundings ~~and~~ Line Crossings.

Soundings line crossings are satisfactory. ✓

4. Depth Curves.

The usual depth curves may be satisfactorily drawn including portions of the zero foot curve. Half foot fractions were freely used to smooth out irregularities. ✓

5. Junctions with surveys

- a. The junction on the north west with H-5595(1934-35) is satisfactory although soundings ^{lines} of neither survey run under the bridge shown here. ✓
- b. Junctions on the NE with H-5879a(1935) and on the SW with H-5892a(1935) will be considered when these sheets have been verified. ✓
- c. Soundings and groundings of H-5892b(1935) were being were transferred to this survey in green. These soundings which were in agreement with depths on the present survey were omitted. ✓
- d. There are no contemporary surveys offshore of the limits of the present survey. ✓

6. Field plotting.

Field plotting and plotting were accurate and conform to the requirements of the Hydrographic Manual. ✓

7. Remarks.

- a. The hurricane of Sept. 2-3rd (see D.R., page 14) occurred ~~the~~ about 6 months after this survey was made. Some changes in depth are therefore to be expected. ✓
- b. Items mentioned in the descriptive Report which affected verifications and need not be duplicated by the reviewer were checked off by the verifier. ✓
- c. The boat sheet shows a dashed line outlining the several channels near Windley Key. These were not transferred

pending inspection of the air photo compilation.

- d. The 19 foot sounding in lat. $24^{\circ} 53.0'$, long. $80^{\circ} 53.8'$ which marked "OK" in the records might have been further investigated.

8. Verified by Harold W. Murray Feb. 3, 1936

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5888 (1935) FIELD NO. 12-A

Snake Creek to Alligator Reef, Florida Keys, Florida

Surveyed in February - March, 1935

Instructions dated November 17, 1933 (H. A. Cotton)

Chief of Party - E.R. McCarthy

Surveyed by - E. R. McCarthy, J. T. Jarman, J. B. Finch

Protracted by - E. L. Patterson

Soundings penciled by - E. L. Patterson

Verified and inked by - H. W. Murray

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. The abbreviation Rk was frequently used in place of rky as a bottom characteristic.
- b. Reduced soundings were frequently entered into the column reserved for the office "Office Column". This was commented on by the Chief of Party (see Descriptive Report, p. 14).

The Descriptive Report is complete and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of development are in accordance with the instructions for the project.

3. Shoreline and Signals.

The shoreline originates with air photo compilations. They have not been received in the office as yet.

The signals originate with Graphic Control surveys T-6257 (1934), T-6258 (1934), T-6360a and T-6360b (1935).

4. Sounding Line Crossings.

The sounding line crossings are satisfactory, depths generally agreeing within 1 foot or less, except in areas where the adjacent soundings indicate very irregular bottom.

5. Depth Curves.

Within the area covered by the survey the usual depth curves may be satisfactorily drawn.

6. Junctions with Contemporary Surveys.

The junction with H-5595 (1934-5) to the northwest is satisfactory. The junctions with H-5879a (1935) to the northeast and with H-5892a (1936) to the southwest are satisfactory.

Soundings and groundings shown on H-5892b (1935) Wiredrag, were transferred to H-5888 (1935) in green. The soundings that were in good agreement with the present survey were not transferred. No contemporary surveys have been made off shore. The agreement with the 1862-3 surveys is good along the junction with the present survey. (see par. 7).

7. Comparison with Prior Surveys.a. H774 (1862), H-777 (1863)

These surveys are on scale 1:20,000 and 1:40,000 respectively. The general agreement with the present survey is good except inshore opposite the openings between the keys where there is evidence of considerable change. A considerable change in details of the depth curves is noted but this is principally due to the close development on H-5888 (1935) which also locates a large number of additional shoals. A number of shoal soundings were carried forward where the present survey does not completely disprove the existence of the shoals but where the difference in depth was less than 2 feet or there were other shoals of similar depth in the vicinity, the present survey was considered adequate. An examination of the sounding records failed to justify the use of the sunken rock symbol on the above surveys and in some cases the sounding plotted near them apparently was an estimated depth and not recorded in the records. The control on H-774 (1862) depends on direction angles from two shore stations. On H-777 (1863), time of soundings were recorded only at 5 minute intervals. On both sheets the fixes positions are at longer intervals than in use on present day surveys, all tending towards a weak control of the hydrography. Special attention is directed to the following items:

- (1) A 12 foot sounding (charted) in lat. $24^{\circ}52.4$, long. $80^{\circ}37.5$ and $12\frac{1}{2}$ foot sounding (charted) in lat. $24^{\circ}52.1$, long. $80^{\circ}38.1$ come from H-774 (1862). They fall between sounding lines on the present survey that indicate depths deeper by 2 to 4 feet. They are considered disproved in the locations assigned because the wire drag, at effective depths of 13 and $13\frac{1}{2}$ feet respectively cleared these localities. See Review H-5892b (1935 W.D.) par. 6.
- (2) A 3 fathom sounding (charted as a detached 18 foot depth) in lat. $24^{\circ}54.2$, long. $80^{\circ}53.0$ comes from H-777 (1863). An examination of the records shows that the actual depth was 19.3 feet and several other soundings on this same line were 2 to 3 feet less than depths on the lines crossing it. The deeper soundings on the 1863 survey are in agreement with the present survey and the 18 should no longer be charted.

Because of the larger scale and better control of the present survey and because of the changes that have taken place in inshore areas H-5888 (1935) with indicated additions, should supersede the above surveys for charting purposes.

b. H-2007 (1890)

This survey on scale 1:40,000 shows the entrance from seaward to Snake Creek, and the opening between the keys $1\frac{1}{2}$ miles westward. The area common to the present survey has changed greatly and the above survey should be superseded by H-5888 (1935) for charting purposes.

8. Comparison with Chart 1250 (New Print dated May 12, 1936)

a. Hydrography

Within the area covered by the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no other information that needs consideration in this review.

b. Aids to Navigation.

The charted positions of the aids in the area of this survey are in agreement with the positions given on H-5888 (1935).

9. Field Plotting.

The field plotting was accurate and conforms to the requirements of the Hydrographic Manual.

10. Additional Field Work Recommended.

The survey is complete and satisfactory and no further work is required.

Since the date of this survey, the destructive hurricane of Sept. 2-3, 1935, swept the area and quite probably caused depth changes.

11. Superseding Old Surveys.

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

H-774 (1862) in part
H-777 (1863) " "
H-2007 (1890) " "

12. Reviewed by - R. J. Christman, June 3, 1936.

Inspected by E. P. Ellis, June 25, 1936.

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

Fred. L. Peacock
Chief, Section of Field Work.

L. O. Pollock
Chief, Division of Charts.

Glenn
Chief, Division of H. & T.

20 - Dec. 30 - 1935.

Applied to C.N. 1249 - Mar. 1937. ^{Call} J.S.V.
" " 1113 April 1938. J.S.V.
Further application made to 1250 May 1952 P.H.
Completely applied to N.C. #850 Aug. 1956 McAinden