

5892a

5892a

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Taxonomic~~ }
Hydrographic } Sheet No. 12B

State FLORIDA

LOCALITY

FLORIDA KEYS

TEATABLE KEY TO LOWER MATECUMBE

Key

193 5

CHIEF OF PARTY

E. R. McCarthy

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. 12B 5892a

REGISTER NO.

State FLORIDA

General locality FLORIDA KEYS

Locality TEATABLE KEY TO LOWER MATECUMBE KEY

Scale 1:20,000 Date of survey Mar.13-Apr.12, 19 35

Vessel FIELD PARTY NO. 14

Chief of Party E.R.MCCARTHY

Surveyed by J.T.JARMAN, T.R.FELTS

Protracted by E.L.PATTERSON

Soundings penciled by E.L.PATTERSON

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by *EC McElrosson*

Verified by *EC McElrosson*

Instructions dated November 17, 1933 (H.A.Cotton), 19

Remarks:

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. 12B

AUTHORITY:

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

LIMITS:

Teatable Key to Lower Matecumbe (Channel Two) and from the shore to the ten fathom curve.

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:

One forty foot leased power launch and one twenty foot leased power launch plus a skiff with an outboard for inshore work were used for the entire sheet.

DISCREPANCIES:

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

Junction with sheet No. 12A on the east is good.

Junction with sheet No. 14 on the west will be taken up in the report for that sheet.

Three soundings were apparently called in error as follows: Page 21, Volume 6, also Volume 8 Page 29; Volume 6 Page 5, also Volume 6 Page 63; Volume 8 Page 14, also Volume 8 Page 35.

IT IS RECOMMENDED THAT THESE SOUNDINGS BE REJECTED.

COMPARISON WITH PREVIOUS SURVEYS:

No previous surveys were available so the sheet was compared with Charts ~~No. 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 Chart No. 1250)

Position number followed by first initial of boat,
A. - "AMALIE", D. - "DENNY", S. - "SKIFF"

Note: This survey was compared with an enlarged scale bromide of Chart No. 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. Teatable Key Channel and Indian Key Channel ✓

The area in the vicinity of these two channels has been changed since the construction of the railroad. A connecting channel parallel to the railroad fill has been dug out; the charted areas north of Indian Key, west of Teatable Key, and between the channel shown bare at low water are covered with from one to two feet; the connecting channel about 0.2 mile N.E. of the railroad has less water on the west end than shown; and the channels have shoaled north of the entrances.

✓ 2. Lat. 24 - 52.7 / Long. 80 - 41.2

The small isolated charted shoal bare at L.W. no longer exists and no indication of the charted 13' sounding east of it was obtained. *H 774 (1862) does not have this 13' sdg. Remove from chart. E.H.G.*
It is on H. 1927 (1889).

✓ 3. Lat. 24 - 52.6 / Long. 80 - 41.3 - West Channel

This channel has shoaled across its whole width. ✓ *OK. E.H.G.*

✓ 4. Lat. 24 - 52.3 / Long. 80 - 39.2 - Bn. #26

This beacon marks a small shoal with a least depth, on investigation, of $11\frac{1}{2}'$ (101r-A). General depths 12-13', sand bottom. The 12' curve in this vicinity is 0.1 to 0.2 mile in-shore from its charted position. *OK. E.H.G.*

SHOALS AND DANGERS (CONTINUED):5. Lat. 24 - 51.2 / Long. 80 - 43.5

A number of shoal patches in general depths of 7' and located just outside of the 6' curve were found. Least depths are: (6' (42r-A), 6 $\frac{1}{2}$ ' (43r-A) and 5' (44r & 2k-A). Not investigated. Sand and grass bottom. *O.K. G.H.*

Note: All further development by Launch "AMALIE".

6. Lat. 24 - 51.9 / Long. 80 - 41.7

Chart shows an isolated 6' sounding. Survey indicates it falls within the 6' curve. *O.K. G.H.*

7. Lat. 24 - 51.6 / Long. 80 - 41.0

Chart shows a long (0.5 mile) shoal with 12' on either end. Survey shows no indication of west 12' and several 13' patches in the approximate location of its eastern extremity. Least depths are 13 $\frac{1}{2}$ ' (24-5a, 69-70(1) and 64(1). Area investigated (94w) and nothing less obtained. Sand bottom, irregular, general depths 14-17'. *O.K. as noted. G.H.*

8. Lat. 24 - 51.9 / Long. 80 - 40.9

Chart shows an isolated 12' sounding. Survey shows no indication of it in its immediate locality but a small sand shoal with least depth, upon investigation, of 11' (12s). General depths 15-17'. Bottom irregular. *Falls between soundings lines of #5892, and therefore carried forward. G.H.*

9. Lat. 24 - 51.3 / Long. 80 - 39.1

Chart shows 15' within 18' curve. Survey shows an isolated shoal with least depth of 16 $\frac{1}{2}$ ' (59-60m) in general depths of 19-21'. Area developed but not investigated as bottom was sand and irregular. A second 16 $\frac{1}{2}$ ' (48-9n) sounding was obtained within the 18' curve about 0.1 mile west. *err. authentic but not carried forward, due to shifting area. G.H.*

10. Lat. 24 - 51.2 / Long. 80 - 39.2

A small sand shoal with a least depth of 11 $\frac{1}{2}$ ' (106r & 95w) was found. General depths 15-17'. Not on present chart. *Chart. G.H.*

11. Lat. 24 - 51.0 / Long. 80 - 39.2

Chart shows 18' in vicinity. Survey shows a ridge with a least depth of 15 $\frac{1}{2}$ ' (13s). General depths 19-21'. Sand bottom. *Chart. G.H.*

12. Lat. 24 - 51.6 / Long. 80 - 38.5 - Bn. #43

Beacon is placed on a small shoal with least depth of 12 $\frac{1}{2}$ ' (104r). General depths 13-17'. *O.K. G.H.*

SHOALS AND DANGERS: (CONTINUED)13. Lat. 24 - 51.5 / Long. 80 - 38.8

A small sand shoal with least depth of $12\frac{1}{2}$ ' (105r) was found. General depths 16'. Chart shows 12' 0.1 mile S.E. *OK. chart etc.*

14. Lat. 24 - 51.3 / Long. 80 - 38.4

A small shoal with least depth of 8' (46q) in general depths of 11-12' was found. It is on the S.E. point of Alligator Bank. About 0.1 mile S.E. is a 12' patch with least depth of 12' (97-8m). Investigated (44q). *new data. OK. etc.*

15. Lat. 24 - 51.0 / Long. 80 - 38.4

Chart shows 12' and 13' here. Survey shows two shoal patches with least depths of 11' (47q) and 12' (48q). General depths 15'. Bottom - sand and irregular. *OK. etc.*

16. Lat. 24 - 51.1 / Long. 80 - 38.6

A sounding of $12\frac{1}{2}$ ' (53n) was obtained here. It was investigated (96-109w) and not found after a thorough search. As it was the first sounding on the line and for the reasons given by the hydrographer (Volume 8 Page 29) it is recommended that the original sounding (53n) be rejected. *Reject. etc.*

17. Lat. 24 - 50.0 to 51.0 / Long. 80 - 44.0 to shore

The areas shown bare at low water in this locality are now covered with $\frac{1}{2}$ ' to 1'. A channel cuts through the ^{WESTERLY} ~~southerly~~ reef in a W.N.W. direction which channel is not shown on the present chart. Near Lat. 24 - 50.0 the 6' curve is about 0.2 mile inshore from the charted curve and there are no indications of the charted 5' and 3' soundings. *Disregard 5' + 3' sdgs. OK. as recommended. etc.*

18. Lat. 24 - 50.2 / Long. 80 - 43.8

A shoal indication was examined (20-6x) and several coral heads found. Least depth is $5\frac{1}{2}$ ' (22x). General depths 10-12'. Not on present chart. *This is new data. OK. etc.*

19. Lat. 24 - 51.0 / Long. 80 - 42.1

Chart shows 12'. Area developed and no indication obtained. Least depth in vicinity 14'. Not investigated. *Accept. Bottom rocky. Falls between sdg. lines of HS892 etc.*

20. Lat. 24 - 50.6 / Long. 80 - 42.1

Chart shows 11' here. Area developed and least depth obtained in vicinity was 18'. Bottom sand - not investigated.

No indications on present survey. Probably old sdg. 1 fm. in error. See reviews. Reject. etc.

SHOALS AND DANGERS (CONTINUED):

21. Lat. 24 - 51.0 / Long. 80 - 41.5

Chart shows 12'. Area developed and survey shows no indication in immediate locality but a small sand shoal with least depth of $13\frac{1}{2}'$ (92-3w) was found 0.2 mile S.W. Bottom irregular. *Reject 12' shoal. E.T.G.*

22. Lat. 24 - 50.8 / Long. 80 - 40.0

Chart shows 17'. Area developed and no indication of it found. A patch with least depth of 18' (107r) was found close by to the N.N.E. and a second patch with least depth of $18\frac{1}{2}'$ (67-8g) and (73-4m) close by to the S.S.W. *Group 2 see review. E.T.G.*

23. Lat. 24 - 50.6 / Long. 80 - 40.3

Chart shows 18'. Area developed and no indication obtained. Least depth in vicinity is 22'. *Group 2. See review. E.T.G.*

24. Lat. 24 - 50.2 / Long. 80 - 40.8

Chart shows 16'. Survey shows sand shoal with least depth of $14\frac{1}{2}'$ (23s). General depths 20'. *due to closer development. O.K. E.T.G.*

25. Lat. 24 - 50.2 / Long. 80 - 41.1

A sand shoal with least depth of $18\frac{1}{2}'$ (90w) was found. General depths 21'. Not on present chart. *O.K. chart. Unused on old survey.*

26. Lat. 24 - 49.1 / Long. 80 - 44.1

Chart shows 17'. Area investigated and least depth found $16\frac{1}{2}'$ (17v) on a sand shoal. General depths 21'. *O.K. E.T.G.*

27. Lat. 24 - 49.7 / Long. 80 - 43.8

Chart shows 16'. Area investigated and least depth of $16\frac{1}{2}'$ (1x) found. A depth of $14\frac{1}{2}'$ (14w) was found here but could not be checked upon investigation. It is recommended by the hydrographer that the $14\frac{1}{2}'$ sounding be rejected. In view of the development the recommendation is endorsed. The 18' curve falls about 0.3 mile inshore. *THIS 14 1/2' Sdg. HAS BEEN RETAINED. E.T.G.*

28. Lat. 24 - 49.7 / Long. 80 - 43.1

Chart shows 17'. Survey shows two sand shoals with least depths of $16\frac{1}{2}'$ (26v & 28v). *Group 2. O.K. E.T.G. See review.*

There are additional shoal patches to the east and west with 17-18'. General depths 23-24'. *Same E.T.G.*

SHOALS AND DANGERS (CONTINUED):

29. Lat. 24 - 48.1 / Long. 80 - 43.9

- ① Chart shows 12' here. Area investigated and least depth of 16 $\frac{1}{2}$ ' (19v) obtained on a small sand shoal. General depths 20'.
Group 2 o.k. etc.
See review

30. Lat. 24 - 49.2 / Long. 80 - 43.5

- ① Chart shows 14' on a long ridge. Area investigated and found two sand patches with least depths of 17 $\frac{1}{2}$ ' (20v) and 16 $\frac{1}{2}$ ' (22v & 24v). General depths 20-21'.
Same etc.

31. Lat. 24 - 49.0 / Long. 80 - 43.4

- ① Chart shows 16' here. Area investigated and found three shoal patches with least depths of 18 $\frac{1}{2}$ ' (184-5d) and nothing less on (1-4-5v), 18 $\frac{1}{2}$ ' (183-4d) and nothing less on (2-3v), and 17 $\frac{1}{2}$ ' (7-8v). General depths 21'.
Group 2 same etc.

32. Lat. 24 - 49.9 / Long. 80 - 42.6

- ① Chart shows 15'. Survey shows a sand shoal with least depth of 15 $\frac{1}{2}$ ' (108-9c). Area developed but not investigated. Survey shows additional shoal patches of 18' in general depths of 20' to eastward.
o.k. etc.

33. Lat. 24 - 49.7 / Long. 80 - 42.5

- ① Chart shows crescent shaped ridge with 17' on south end and 16' on north. Survey shows a number of shoal patches with 17' & 18' in depths of 20 to 23' in same approximate locality. Area developed but not investigated.
Group 2. etc.
see review.

34. Lat. 24 - 49.1 / Long. 80 - 42.1

- ① Chart shows 19'. Survey shows 21' as least in vicinity. Probably deepened.
Same etc.

35. Lat. 24 - 50.0 / Long. 80 - 41.9

- ① Chart shows 16'. Survey shows least depth in vicinity (after development) is 18' (80-ld).
Same. etc.

36. Lat. 24 - 49.2 / Long. 80 - 41.5

- ① Chart shows 16'. Survey shows sand shoal with least depth (after development) of 16 $\frac{1}{2}$ ' (134j). General depths 21'.
Group 1. o.k. etc.
Bokey

SHOALS AND DANGERS (CONTINUED):

④ 37. Lat. 24 - 49.2 / Long. 80 - 41.1

Chart shows a long ridge with 17' on north end and 15' on south. Area developed and found three shoal patches with least depths of $17\frac{1}{2}'$ (132-3j), $17\frac{1}{2}'$ (13-14j) and $14\frac{1}{2}'$ (89w). GROUP 1. *etc. OK.*

⑤ 38. Lat. 24 - 49.5 / Long. 80 - 40.9

There is no indication of the charted 16' sounding in this locality. Least in vicinity is 20'. Bottom irregular and area developed. *delete etc.*

39. Lat. 24 - 49.9 / Long. 80 - 39.1

A small sand and grass shoal with a least depth of 24' (50p) was found. General depths 30'. Not on present chart. *OK. chart. etc. missed in old survey.*

⑥ 40. Lat. 24 - 49.9 / Long. 80 - 38.8

Chart shows 13' here. Area developed and least depth in vicinity found to be 24' (91e). This sounding not investigated. Bottom - sand. *See review and recommendations for add. work. etc.*

⑦ 41. Lat. 24 - 48.8 / Long. 80 - 44.6

Chart shows 19'. Least depth in vicinity is 23'. Area probably deepened. *delete. etc.*

⑧ 42. Lat. 24 - 48.2 / Long. 80 - 44.0

Chart shows 13' in this locality. Survey shows a sand shoal with least depth, upon investigation, of $17\frac{1}{2}'$ (128-9f) and 161-2 (1). General depths 20'. *group 2 see review. etc.*

⑨ 43. Lat. 24 - 48.8 / Long. 80 - 43.6

Chart shows 17'. Survey shows no indication of it in the immediate vicinity but two shoal sand patches to the north and northwest with least depths of 18' (135-6d) on east, and $16\frac{1}{2}'$ (13v) on west. Area investigated (9-14v). General depths on shoal 17-18'. *Group 2 Shifted sand. OK. etc.*

44. Lat. 24 - 48.0 to 49.0 / Long. 80 - 41.0 to 43.0

This area indicates a deepening of 2' to 3' over the charted depths. There are no indications of the charted 11' and two 18' soundings. *OK. etc. accept. as is.*

⑩ 45. Lat. 24 - 48.5 / Long. 80 - 40.9

A rocky shoal with general depths of 28' and least of 23' (81p) on south and $22\frac{1}{2}'$ (16e) on north. Both high spots investigated. Not on present chart. *OK. New data. etc.*

SHOALS AND DANGERS (CONTINUED):✓ 46. Lat. 24 - 48.9 / Long. 80 - 40.2

A small shoal with a least depth of 24' (47e) was found. It was investigated (45g) and nothing less obtained. General depths 28'. Not on present chart. *Chart. OK. etc.*

✓ 47. Lat. 24 - 47.0 to 48.0 / Long. 80 - 42.0 to 43.0

Chart shows four 21' soundings. Survey shows area deepened 2 to 3 feet. *accept present data. etc.*

CHANNELS AND 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'. The depth is ample for any boat using it at present.

Directions:

	Course	Distance(Naut.)
1. To midway between Bn. 26 & 43	234° (T)	6.8
2. To 200 yards 145° T from Bn. 30	240° (T)	9.1

Beacon #26 marks the eastern limit of a 11½' sand shoal. Bn. #43 marks a 12½' shoal but it has been recommended to the Light-house Service that it be moved northward 0.2 mile to mark the western limit of Alligator Bank (depth 9').

Least depth on recommended route 16'.

TEATABLE KEY CHANNEL:

This channel lies west of Teatable Key and east of Indian Key and - since the hurricane of Sept. 2-3, 1935 broke through the fill - affords a passage between the ocean and the bay.

Controlling depth in the entrance is 7' and depths in the channel ample for any vessel capable of entering. Channel is about 200 yards wide and its banks are very sharply defined by shoals on either side.

The chart is the best guide. Channel is unmarked.

CHANNELS AND HARBORS (CONTINUED):INDIAN KEY CHANNEL:

This channel lies on the east side of Indian Key and also leads into the bay from the ocean as it also washed through during the hurricane of Sept. 2-3, 1935.

Controlling depth is $7\frac{1}{2}$ ' in the entrance with ample depths in the channel for vessels capable of entering.

The channel is about 200 yards wide and its banks are very sharply defined by a shoal on either side.

The chart is the best guide. The channel is unmarked.

WEST CHANNEL:

This channel is little used. Controlling depth in ^{entrance} channel is 4' and 2-3' on its northern end.

Channel is unmarked.

OTHER CHANNELS IN VICINITY OF INDIAN KEY:

A channel dredged by the railroad to obtain fill parallels the railroad embankment. It is bulkheaded but the bulkhead is in poor condition. It connects all three of the above channels. Controlling depth is 4'.

CHANNEL ONE:

The channel is located south of the south end of Lower Matecumbe and originally led from the ocean to the bay but has been cut off by the railroad fill.

Controlling depth is 3'. It leads to a small basin which may be used for an anchorage for small craft.

ADDITIONAL CHANNELS IN VICINITY OF MATECUMBE:

There is a narrow channel leading from the ocean to Channel Two. It leads to N.W. from the ocean to a junction with Channel Two at the end of the railroad fill. Controlling depth in the entrance is 4', and is ample in the channel for any boat capable of entering. It is used by fishing boats.

ANCHORAGES:

Vessels may anchor anywhere that there is sufficient swinging room. In hard bottom the cable should be given plenty of scope or a watch left in rough weather. In soft bottom, the holding is good.

ANCHORAGES (CONTINUED):

Some fishermen anchor in 9-10' in the bight south of the east end of Lower Matecumbe.

LANDMARKS:

These have been described in a separate report and also submitted with the topographic sheet.

GEOGRAPHIC NAMES:

The following names of hydrographic features are in local use and should be used for charting:

Teatable Key Channel	Channel One
Indian Key Channel	Channel Two
Indian Key Anchorage	

Additional names will be covered in a special report on this subject.

MISCELLANEOUS:

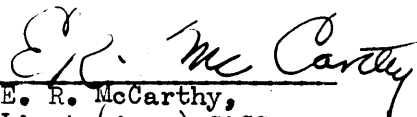
The hurricane of Sept. 2 - 3, 1935 passed directly over the area and did considerable damage. All the houses on both keys (Upper and Lower Matecumbe) were destroyed and the railroad and highway fills were washed through at Teatable Key Channel and at Indian Key Channel.

A new ferry slip for the Overseas Highway has been built on the south end of Upper Matecumbe in Teatable Key Channel.

At the present time, November 1, 1935, no attempt has been made to rebuild either the railroad or highway south of Upper Matecumbe Key.

Statistics are attached.

Respectfully submitted:


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

MEMORANDUM BY CHIEF OF PARTY

^{Volume 9} 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 were 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 location of 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
E. R. McCarthy,
Lieut.(j.g.) C&GS,
Chief of Party.

STATISTICSPROJECT HT 158FLORIDA KEYSHYDROGRAPHIC SHEET12BLAUNCH "AMALIE"

DAY	DATE	MILES (STATUTE)	SOUNDINGS	POSITIONS	DAYS RUN (MILES)	DISTANCE TO & FROM WORK
—	3-13-35	18.9	566	96	30.3	5.4
—	3-14-35	22.1	612	101	28.4	5.0
—	3-15-35	27.6	784	120	34.1	6.2
—	3-18-35	42.2	1338	191	49.8	7.4
—	3-19-35	27.4	642	129	38.6	9.1
—	3-20-35	25.3	540	143	34.8	9.5
—	3-21-35	16.6	416	88	26.5	4.8
—	3-22-35	28.0	517	123	36.7	8.7
—	3-25-35	35.9	952	150	46.8	8.5
—	3-26-35	28.3	748	124	46.6	10.7
—	3-27-35	34.2	917	162	47.7	6.7
—	3-28-35	20.6	570	111	37.1	12.5
—	3-29-35	19.9	534	109	37.7	9.1
—	4-1-35	14.4	413	82	29.4	8.8
—	4-2-35	14.7	419	70	28.7	3.6
—	4-3-35	16.7	554	107	32.0	9.8
—	4-4-35	4.4	136	34	21.4	9.6
—	4-5-35	12.9	394	75	21.5	7.6
—	4-6-35	5.5	164	29	15.4	7.3
—	4-10-35	0.0	29	29	8.0	3.0
—	4-11-35	18.9	419	110	37.2	9.5
—	4-12-35	5.3	192	52	18.3	6.0
—	TOTALS	439.8	11,856	2,235	707.0	168.8

"SKIFF"

—	4-4-35	6.6	247	52	14.7	7.6
—	4-5-35	10.4	382	71	11.9	0.7
—	4-6-35	13.4	455	81	15.5	1.2
—	4-9-35	6.0	304	46	8.4	2.4
—	TOTALS	36.4	1,388	250	50.5	11.9

"DENNY LAUNCH"

—	4-9-35	17.4	602	111	---	11.5
---	--------	------	-----	-----	-----	------

STATISTICSPROJECT HT 158FLORIDA KEYS

HYDROGRAPHIC SHEET NO. 12B

RECAPITULATION

BOAT	MILES (STATUTE)	SOUNDINGS	POSITIONS	DAYS RUN (MILES)	DISTANCE TO & FROM WORK
"AMALIE"	439.8	11,856	2,235	707.0	168.8
"SKIFF"	36.4	1,388	250	50.5	11.9
"DENNY LAUNCH"	17.4	602	111	----	11.5
TOTALS	<u>493.6</u>	<u>13,846</u>	<u>2,596</u>	<u>757.5</u>	<u>192.2</u>

Verifier's Report on H-5892b (Wire Drag)

Records: Records conformed fairly well with specifications. No record was submitted for end launch. ✓

Drafting: Drafting was good. This field party places superfluous notes on the smooth sheet. They also failed to ink in curves at tide and lift changes. They show a dot for the position of each buoy in the drag. This is unnecessary. Lift corrections are drawn to too fine a point. In most cases the lift varies between 0 and 1 foot. A single correction of 1 foot could be applied in such cases. The field party applies corrections of 0, $\frac{1}{2}$, and 1 foot and so clutters up the sheet with numerous drag strip subdivisions. ✓

Junctions: Junction was made with H-5879b (Wire Drag) on the north. There is no mention made in the descriptive report of a sheet to the south. ✓

Control: Topographic control for this sheet is from T-6360(a+b) ✓

Remarks: "N" buoy grounded and pulled clear at Pos. 37B. (Lat. 24-51.8 Long. 80-38.3). Sounding tender obtained a sounding of $12\frac{1}{2}$ feet. Effective depth was $13\frac{1}{2}$ feet. Sounding was very close to plotted position of "N" buoy so verifier altered drag strip slightly to show sounding outside strip and so avoid conflict between sounding and effective depth. ✓

Hydrographic sheets H-5892a and H-5888 have not been verified so soundings were not transferred. ✓

December 26, 1935.

Submitted,

J. A. McCormick

J. A. McCormick.

** The curves were inked by Verifier, R*

Field Records Section (Charts).

HYDROGRAPHIC SHEET NO. **5892 a**

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

Number of positions on sheet	2596
Number of positions checked	.76...
Number of positions revised	None.
Number of soundings recorded	13846
Number of soundings revised	.208.
Number of signals erroneously plotted or transferred	None.

Date: 2-7-36

Verification by *B. C. McEldown*

Time: 9 days 6 hr.

Review by

Time:

HYDROGRAPHIC SURVEY NO. 5892a

Smooth Sheet yes

Boat Sheet 1

Sounding Records 11 Vols.

Descriptive Report yes

Title Sheet yes

List of Signals Vol 1

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)

Remarks

Remarks

Decisions

	Remarks	Decisions
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No.
H5892a

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
Channel Two		no	—	✓	not to be charted						1
Channel One		no	—	✓	not to be charted						2
✓ <u>Lower Matecumbe Key</u>		yes no	—								3
✓ <u>Indian Key Channel</u>	none	no	—	✓							4
✓ <u>Teatable Key Channel</u>	none	no.	—	✓							5
✓ <u>Upper Matecumbe Key</u>	name 1250	yes.	—								6
✓ <u>Teatable Key</u>	1250	yes	—								7
✓ <u>Indian Key</u>	1250	yes.	—								8
* <u>Indian Key Anchorage</u>		no	—	✓							9
* <u>Hawk Channel</u> <i>look later</i>	1250	yes	—								10
✓ <u>Atlantic Ocean</u>	1249 1250	yes.	—								11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names approved Dec 3 1935

O. E. Ogner

TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Hydrography and Topography:

January 23, 1936.

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

Tide Reducers are approved in
11 volumes of sounding records for

HYDROGRAPHIC SHEET 5892a

Locality Teatable Key to Lower Matecumbe Key, 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:



Chief, Division of Tides and Currents.

Report on H-5892a

1. The records conform to the requirements of the General Instructions.
2. The usual depth curves can be completely drawn within the limits of the sheet.
3. The field plotting was complete and very accurate, however the soundings were so faint on the smooth sheet that it was necessary to ink each one from sounding records. Also, the bottom characteristics were not complete and it was necessary to ink them from the records.
4. The office draftsman did not have to do over any part of drafting done by field party except as already noted.
5. The junction with H-5888 (1935) on the east is satisfactory. There is no junction on the north or south with

Contemporary ⁽²⁾ sheets.

On the west is field sheet 14 which will be compared with H-5892a when it is completed.

6. In the area of lat $24^{\circ}51'$ long $80^{\circ}40'$, the cross lines do not agree by 1 or 2 ft. This is probably due to the tide reducer. The tide gage is some distance from the area, and when a south wind is blowing it might have a tendency to create an erroneous tide reducer.

In volume 6 page 5, position 97 m, a 10 ft sounding is recorded. This sounding was investigated and no indication of the shoal was found. Therefore, as the Chief of Party believes this an error in reading the lead line, the sounding was rejected.

In volume 6 page 21, position 53 m, a $12\frac{1}{2}$ ft. sounding is recorded. This area was investigated and no indication of the shoal was found to exist. The Chief of Party believes this

(3)
to be another error in reading
the lead line, consequently the
sounding was rejected.

In volume 8 page 14, position
14W, a 14½ ft sounding is recorded.
The Chief of Party recommends that
it be rejected in view of further
development. However I did not
reject this sounding because in
developing this shoal the hydrographer
found numerous 16 ft soundings
and it is possible that a 14½
ft. shoal exists.

The shoreline and signals on
H-5892a are taken from Tgo 6360b.
There are no air-photo sheets
covering this area, in the office.

Teatable Key Channel and
Indian Key Channel were
developed on H-5778 (1934-35)
There is no overlap between H-5778
and H-5892a as they are separated
by a road.

Respectfully submitted,
E.C. McGloovin

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5892a (1935) FIELD NO. 12b

Florida Reefs; Teatable Key to Lower Matecumbe Key

Surveyed in Mar. - Apr. 1935

Instructions dated Nov. 17, 1933 (H. A. COTTON)

Hand Lead Pole Soundings.

3 Point fixes on shore signals.

Chief of Party - E. R. McCarthy
Surveyed by - J.T. Jarman, T. R. Felts
Protracted by - E. L. Patterson
Soundings penciled by - E. L. Patterson
Verified and inked by - G. C. McGlasson

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual.

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

2. Compliance with Instructions for the Project.

The plan and character of development are in accordance with the instructions for the Project except that implied instructions to investigate charted shoals were not completely carried out.

3. Shoreline and Signals.

The shoreline and topographic signals originate with graphic control surveys T-6360b and T-6418b, both of 1935. The instructions directed that the shoreline be rodded in where air-photo surveys had not yet been made.

Signals were located by 1934 triangulation and by topography on the above graphic control surveys.

4. Sounding Line Crossings.

The crossings are generally very good, the depth in nearly all cases agreeing within 1 foot or less.

5. Depth Curves.

Within the area of the survey, the usual depth curves may be satisfactorily drawn including small portions of the low water line. Owing to the small range of tide no special attempt was made to develop the low water line.

6. Junction with Contemporary Surveys.

Junction with H-5888 (1935) to the northeast is satisfactory.
Junction with H-5778 (1935) to the north is satisfactory.
Junction with H-5952 (1935) to the southwest will be considered in the review of that sheet.

No contemporary surveys have been made in the offshore area to the southward.

7. Comparison with Prior Surveys.

a. H-774 (1862)

This survey, on a scale of 1:20,000 embraces practically all of the area of the present survey. The general agreement in depth is very good. The inshore area out to the 12 foot curve is shown by a widely spaced system of zigzag lines but the depth curves are in remarkably close agreement with the curves on the much closer development of the present survey.

Numerous shoal spots are found in the area governed by general depths of 12 to 24 feet. These spots can be divided into two general groups or classes.

Group I consists of shoals with a rocky or coral foundation which in some cases protrudes through the sand covering and reach fairly close to the surface. These shoals remain relatively fixed in position and vary only slightly in depth due to the shifting of the sand cover.

Group II consists of hard sand but without a sufficiently definite rough outcrop foundation to hold them in position. Many such shoals having depths of 16 to 18 feet over them, lie along Hawk Channel. The present survey shows shoals similar in shape but differing somewhat in depth and positions. A listing of this class of shoals would serve no useful cartographic purpose. Generally the present survey should be accepted.

The Descriptive Report under "Shoals and Dangers" lists 47 items to which the comments of the reviewer have been added. Special attention is directed to the following items:

- (1) The 13 foot isolated sounding (charted) in lat. 24°49.9' long. 80°38.8' is probably 2 fathoms too shoal. Reference to the original sounding records shows that soundings were being taken from both sides of the steamer VIXEN. A depth of 2 fathoms 3 feet was obtained by the port lead simultaneously with a depth of 4 fathoms on the starboard lead. The difference was not noted at the time, however, later the sounding was questioned by the chief of party but was reduced for tide and plotted as 13 feet.

On the present survey the sounding was not specially investigated but a sounding of 28 feet (reduced for tide) falls only 30 meters from it on a well controlled line. The chief of party in his memorandum attached to the Descriptive Report states "The reviewer should bear in mind that bottom, under ordinary conditions, is visible up to 30 feet and with good conditions up to 50 feet". In view of this the 13 has not been retained and should no longer be charted. (Item 40, Descriptive Report)

- (2) Two $18\frac{1}{2}$ foot soundings (charted 18) in lat. $24^{\circ}48.5'$ long. $80^{\circ}41.6'$ fall in depths of 22 feet on the present survey. There is no indication of any shoaling in the vicinity and the 18 should no longer be charted.
- (3) A shoal with depths of 16 to 18 feet (charted 16) in lat. $24^{\circ}48.3'$ long. $80^{\circ}42.0'$ falls on the present survey in regular bottom 20 to 23 feet. A general change in the vicinity is indicated and the 16 should no longer be charted.
- (4) An 18 foot sounding (charted) in lat. $24^{\circ}48.6'$ long. $80^{\circ}42.8'$ falls in depths of 21 feet on the present survey. There is a 19 foot sounding on H-5892a (1935) about 200 meters to the SSE of the former shoal indicating a change in the former shoal. The present survey should be accepted for future charting.
- (5) A $13\frac{1}{2}$ foot shoal (charted 13) in lat. $24^{\circ}48.4'$ long. $80^{\circ}43.9'$ falls in general depths of 22 feet on the present survey. A shoal with a least depth of $17\frac{1}{2}$ feet lies about 400 meters to the SW of the former shoal. The evidence of change is sufficient to class it as a shifting shoal and the representation on the present survey should be accepted for charting purposes. (Item 42, Descriptive Report).
- (6) A shoal with a $14\frac{1}{2}$ foot depth on a long ridge (charted 14) in lat. $24^{\circ}49.3'$ long. $80^{\circ}43.4'$ has apparently shifted about 200 meters southward where the present survey shows a similar shoal with a least depth of $16\frac{1}{2}$ feet. The representation on the present survey should be accepted for charting. (Item 30, Descriptive Report)
- (7) There are a number of other shoals of a nature similar to the foregoing in and near Hawk Channel. They have been discussed in the Descriptive Report under "Shoals and Dangers".

Because of the many changes that have taken place as well as the closer development on the present survey H-5892a (1935) with indicated additions should supersede the above survey for charting purposes.

b. H-1927 (1889)

This survey on scale 1:40,000 overlaps the present survey at the inner end of several of the channels between the keys. The area common to the two surveys has been greatly changed by storms as well as by the construction of railway and highway between the several keys. The above survey should be superseded by H-5892 (1935) for charting this area.

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

a. Hydrography.

Within the area of 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 positions of the two beacons falling within the area of the present survey were determined by the plane table and agree with the charted positions.

9. Field Plotting.

The field plotting was accurate and well done except that the penciling of soundings was rather faint.

10. Additional Field Work Recommended.

The survey is satisfactory and no additional field work is required.


11. Superseding Old Surveys.

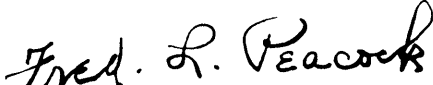
Within the area covered the present survey with indicated additions supersedes the following surveys for charting purposes:

H-774 (1862) in part
H-1927 (1889) in part


12. Reviewed by - C. A. Egner, Feb. 20, 1936 and
R. J. Christman, July 17, 1936

Inspected by - A. L. Shalowitz


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


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


L. O. Polbut,
Chief, Division of Charts.


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

20 - Dec 30, 1935

applied to charts 1249-50 Mar. 1937 - J.S.S.
" " " 1213 Apr. 1938 H.S.S.
Further application to chart 1250 May 1952 M.S.
Applied to chart 851 - Sept 15, 1958 - J.S.W.