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Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., Director

State: Florida.....

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic

Soundings 4845a
Sheet No. and 4845b

LOCALITY

West Coast

San Carlos Bay and Caloosahatchee

River Entrance

1927-'28-'29

CHIEF OF PARTY

R. PEyman and G. Shaw

GOVERNMENT PRINTING OFFICE

4845a 4845b

Office

U. S. SURVEY
MAR 2 1929
Acc. No.

DESCRIPTIVE REPORT

To Accompany
HYDROGRAPHIC SHEET "D"
and
SUB-PLAN SHEET TO SHEET "D"

Caloosahatchee River
Florida
1928

SHIP HYDROGRAPHER
Charles Shaw, H. & G. Eng'r.
Commanding

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SHEET "D"

and

SUB-PLAN SHEET TO SHEET "D"

1. AUTHORITY:

The work on these two sheets was done in accordance with The Director's orders to the Commanding Officer of the Ship HYDROGRAPHER dated Oct. 21, 1926, and supplemental instructions dated May 26, 1928.

2. LIMITS OF SHEET:

This area is bounded on the west by a line drawn from Sword Point to Kitchell Key to Fisherman Key to Point Ybel; On the south by a line drawn from Point Ybel to the N. W. end of Estero Island; On the north by the shore line, and on the east by the shore line and a line drawn from signal Calf, one mile west of Piney Point, through signal Ha ch to the shore line of Shell Point.

This sheet joins on to sheet "C" to the southward, and to sheet "E" at the N. E.

3. GENERAL DESCRIPTION:

The scale of this sheet is 1:10,000, and the soundings are referred to the automatic tide gauge at Punta Rasa. The sounding lines are run parallel to the channel except for the area in San Carlos Bay north of the main channel, where the lines are run normal to the shore line.

The work was begun with Lt. R. P. Eymann in command, and Lt. (j.g.) E. B. Latham in charge of sounding party, Sept. 23, 1927,

and continued until Nov. 17, 1927. At this time the ship was taken away from this work and began work on the aerial photographic survey to Cape Sable. By this time the work had been completed from the northern limits of the sheet to Punta Rasa and a half dozen lines from here towards Point Ybel. Before resuming work on this sheet all previous soundings had been reduced and the smooth sheet plotted up to that date by the party of R. P. Eymann.

On Oct. 9, 1928 the work was resumed on this sheet with Lt. Charles Shaw in command, and Lt. (j.g.) J. C. Sammons in charge of hydrographic party. This work was continued until Nov. 2, 1928 when the field work for this sheet was completed.

During the time the work was discontinued on this sheet until it was resumed again, the U.S.E.D. "SARASOTA" dredged shoal spots along the 10 ft. channel from Fort Myers to Punta Rasa only, to obtain this depth throughout. In accordance with the supplemental orders of The Director dated May 26, 1928, the channel and spoil banks from Punta Rasa to the northern limits of the sheet were re-sounded to obtain changes made by the U.S.E.D. dredge. This hydrography in the area of sheet "D" sounded a second time is plotted on a sub-plan sheet accompanying sheet "D". This sub-plan sheet was plotted before the amendment to Hydrographic Manual (paragraph 157) was issued regarding plotting complicated areas on tracing cloth.

Due to the fact that field work on this sheet area was done by two separate parties, 1927 and 1928, and the smooth sheets plotted by three officers, there is attached to this report a list of statistics showing the Officer in charge of the work and the

Officer plotting the smooth sheet, etc.

4. SURVEY METHODS:

There were no new methods used in this work on this sheet. The party consisted of 2 officers, 1 recorder, 1 engineer, and 1 cox'n. and 1 leadsman alternating. The work in the Caloosahatchee River outside of the main channel was done with Lt. E. B. Latham in charge, using Punt #2. ^{in 1927} This area is studded with oyster bars, and strong currents run between them. Punt #2 is rather clumsy to handle in close quarters, and it will readily be seen that the hydrographer had much difficulty in running lines in this area.

The work in the channel of the river and all the work in San Carlos Bay on this sheet was done in the ship's launch with the usual launch hydrographic party, in charge of Lt. (j.g.) J. C. Sammons and Lt. (j.g.) E. B. Latham in 1927, and Lt. (j.g.) J. C. Sammons in 1928.

5. DISCREPANCIES:

Positions 56 d-day and 177 m-day show cross soundings of 3 ft. and 9 ft. respectively by launch parties on same spot. This discrepancy is perhaps due to the soundings being on the edge of the shoal here.

A cross sounding just previous to position 70 d-day shows 4 to 5 feet where 7 feet plots halfway between positions 177 m and 178 m day. This is perhaps due to the same reason as above. Both discrepancies are of little importance as will be evident by referring to this sheet.

In volume 14, Page 58, Pos. 72, "s" day, a sounding of

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7 ft. was recorded between 9 ft. and 13 ft. soundings. This sounding is in the channel and was later investigated (Vol. 15, Page 6, Pos. 14, "t" day) and found to be 6 ft. in error. Instead of 7 ft. this sounding should have been 13 ft.

In Vol. 14, Page 41, Pos. 9, "s" day, a sounding of 1 fm. 5 ft. is changed to 1 fm. 0 ft. in the record book. This sounding falls on a line of 9 ft. soundings and there are 9 ft. soundings on all sides of it. It is almost positive that it was intended to change this sounding from 1 fm. 5 ft. to 2 fms. 0 ft. and the recorder changed the 5 ft. to 0 ft. but failed to change the 1 fm. to 2 fms. This sounding should be plotted as 2 fms. 0 ft. instead of 1 fm. 0 ft.

During the time when the work on this sheet was discontinued till it was resumed again, the Light House Dept. changed several of the beacons in the river and San Carlos Bay. Also many of the stations originally located by the topographer and hydrographer in 1927 could not be recovered in 1928. When the work was resumed in 1928 several of the stations used in 1927 were relocated by triangulation. Some of these were renamed while others retained their old names. Also several new stations were located by triangulation, topography, and hydrography. Some of these stations are close to old stations of 1927, and given the same name although they are not the same location. Others are given a different name. Due to the above facts, there is attached to this report lists of stations for both main sheet and sub-plan sheet. These lists show the time and method of location, with notes explaining whether they are to be used in 1927 or 1928.

6. SIGNALS HOP AND ATE, (1927)

The location of signals Hop and Ate of 1927 were on the smooth hydrographic sheet as topographic (?) locations, but the D. M's. and D.P's. are not to be found in this list attached to the 1927 Descriptive Report of this topography. No cuts for location of these two signals could be found in the 1927 sounding volumes for this sheet. This party has no other data regarding these two 1927 signals.

7. SHORELINE REVISION:

The correct shoreline as rerun in 1928 from Δ Mix to Δ Bowditch Pt. 2 on sheet "D" is shown in pencil alongside the incorrect shoreline which was inked in 1927. The 1928 shoreline checks with the ends of the sounding lines.

8. DREDGE CHANGES:

The principal changes (since the 1927 sounding) made on this sheet by the U. S. Engineer's dredge appears to be in the dredged channel immediately east of Δ Bar where the channel is widened and the depth 10 ft. ~~and~~ deeper.

The dredged channel between ○ Dad to ○ Fi appears to be widened by comparison with the 1927 and 1928 soundings.

The channel immediately east of ○ Aft appears to be a foot or two shoaler than in 1927. In 1927, 16 foot soundings are now 14 feet. This is probably due to the swift current at times, dividing sharply, swinging eastward at ○ Aft, slowing down, and depositing material here.

In the channel southward from Bn. 5 to Punta Rasa there appears to be no changes.

9. CHANNELS AND BARS:

The main channel on the range through San Carlos Bay from the southern limits of this sheet off Bn. 4 to abeam of Bn. 12 where the course changes northerly past Punta Rasa and up the river has a controlling depth of 12 ft. or better, with the shoalest place being just south of Bn. 6. The channel from Punta Rasa to the N. E. limits off Bn. 13 of this sheet has a controlling depth of 10 ft. or better.

From Bn. 4 to Bn. 6 in San Carlos Bay the channel is broad; however, about 100 meters just north of the line joining Bn. 4 and Bn. 6 and parallel to it out of the channel there is a ridge or old spoil bank having a depth of 8 to 9 ft. From Bn. 6 to Bn. 8 there is a broad channel with a depth of 12 ft. From Bn. 8 to Bn. 10 the channel is fairly narrow with 7 ft. soundings 100 meters on either side of the channel range. Just north of the channel and parallel to it at this place there is a long sand spoil bank bare at all stages of the tide, and about 3 feet high at the highest place. This bar has some grass and weeds growing on it. From Bn. 10 to Bn. 12 the channel is broad and has good water with a least depth of 10 ft. However, a line joining Bn. 10 to Bn. 12 passes over a 4 ft. shoal, and it is necessary for a boat to pass well beyond Bn. 10 before heading up for Bn. 12. From a position on the Punta Rasa Range abreast of Bn. 10, a course direct to Bn. 12 passes just clear of a 5 ft. shoal north of the channel. From Bn. 12 northward to Lat. $26^{\circ} 30'$ there is a broad, deep, natural channel better than 10 ft. deep. But 30 meters west of the line Bn. 12 to Punta Rasa point there are 6 ft. depths extending from the shoal water just south of Punta Rasa. Near Lat. $26^{\circ} 30'$ east of Kitchelí Key the channel turns

about N. Wily. and there is no Bn. at this place to show the change. However, the channel is fairly broad and anyone familiar with the channel should not have trouble in obtaining a depth of 11 or 12 feet up to Bn. 5. From Bn. 5 to the N. E. limits of the sheet the channel is narrow and has strong currents with a depth of 10 ft. and generally more. However, it is well marked with ranges through this area.

From near signal Ham (Bn.7) to signal Aft on the north side of the channel there is a sand and shell bar bare at all stages of the tide, and about 3 ft. high. It is known locally as Shell Island, and is covered with mangrove trees about 20 feet tall for most of the way. Signal Hach is located on another sand and shell island covered with mangrove trees about 20 ft. high. Between signal Aft and the island on which signal Hach is located the bottom is uneven, and very strong currents run in and out of the main channel. Δ Bar is located on a sand and shell key almost connected to Shell Id. at L. L. W. There is no vegetation on this. On the south side of the channel from signal Clot to signal Fork there are several oyster bars of which ^{one is} ~~are~~ bare at extreme low water. From signal Fork to the S. W. to a point about 300 meters N. W. of Δ Lip there is a chain of oyster bars bare at low water. The area in the three parts of Kitchells Key is all mud flat covered with grass and bare at low water. The area in the river from the west of Δ Bar to the north of ◦ Hach is shoal and studded with oyster bars. There is a fairly deep channel extending from Bn. 5 towards ◦ Bo and thus to the N. E., winding around the oyster bars; however, this should not be used by anyone not familiar with this location as there are no channel markers.

From Bn. 4 in San Carlos Bay to Estero Pass lighted Bn. to the draw in the bridge over Estero Pass there is a fairly broad channel with a controlling depth of about 9 ft. Estero Pass Lt. Bn. is about 50 meters north of the best water in the channel. There is a small dredged cut extending from the Estero Pass channel to the bay to the east of \circ Met. Near \circ Egg there are 3 channels dredged south into Estero Id. which have a depth of about 4 or 5 ft., and are used by small boats in bad weather.

10. MATANZAS PASS:

The area shown baring at low water just east of Δ Arch is approximate in position and extent. To the north here in the bight the water is all shoal.

11. ANCHORAGES:

The area in the mouth of the river to the west or north-west of Punta Rasa is used as an anchorage by steamers in bad weather, also by steamers waiting for tide or day light to go up the river. It has good protection from the sea in all directions but the bottom is of hard sand.

The area along and north of the channel through San Carlos Bay from Bn. 4 to Bn. 8 is used by fishing boats as an anchorage during easterly blows. The area just N. of Sanibel Island is used by fishing boats in all kinds of weather. It has good protection but the bottom is hard.

Submitted by

Approved:
Charles Shaw
Chief of Party

Jack C. Sammons, Jr.

Jack C. Sammons, Jr. H. & G. Eng'r.

February 4th, 1929.

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STATIONS ON SUB-PLAN SHEET "D"

1928

Name of Station	Located by	Date	Remarks
Jewfish "Jew"	Δ	1927	Recovered and used 1928.
Piney Point "Pine"	Δ	1927	Recovered and used 1928.
Bn. 15 "Boy"	Δ	1927	Recovered, checked and used 1928.
Bn. 13 "Tir"	Δ	1927	Recovered, checked and used 1928.
"Tom"	Δ	1927	Recovered and used 1928.
"A1"	Hyd.	1928	Recovered (tree with ban.) located different to 1927. Cuts Sheet E Vol. 15, {P.69. Cuts sheet D Vol.14,P.71. P.12.
"Loo"	Topo.	1927	See Note "A"; Banner; Recovered and used 1928.
"Ka"	Topo.	1927	See Note "A"; Banner; Recovered and used 1928.
"Aft"	Hyd.	1928	Cuts Vol.14, P.71; Δ cut from Δ Jewfish. 1927 Aft not recovered.
"Ro"	Δ	1928	Relocated 1928 by triangulation.
"It"	Hyd.	1927	Fix and check angles Vol.5,P.13, Recovered Checked and used 1928, Vol.14 P.70.
"Clot"	Hyd.	1928	Fix and cuts Vol.15 P.20; Vol.14 P.71. Not used in 1927.
"To"	Topo.	1927	See Note "A". Recovered, checked, and used in 1928.
"On"	Δ	1928	Same as Topo. on 1927. Recovered, relocated, and used 1928.
"Dol"	Hyd.	1928	Cuts Vol.14 P.70-71. Not used 1927.
"Box"	Hyd.	1927	Fix Vol.5 P.15; Cuts Vol.14 P.71. Recovered, checked, and used 1928.

Note "A" - D.M's. and D.P's. in Descriptive Report of Topo. Sheet #3 1927.

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STATIONS ON SUB-PLAN SHEET "D"

1928

Name of Station	Located by	Date	Remarks
"Fork"	Δ	1928	Same signal as Topo. ◊ "Fork" 1927. Recovered and relocated 1928.
"Tan"	Topo.	1927	Topo. sheet #3 called "Tab". Recovered and relocated 1928.
R.R. to Bn. 7 "Hop"	Δ	1928	New Bn. in 1928. 1927 Hop shown as topo. signal on sheet "D", but not mentioned in Desc. Report (topo) D.M's and D.P's.
"Cut"	Hyd.	1928	Cuts Vol.14 P.70-71; Δ cut from Δ Ont. Not same location as in 1927.
Bn. 7 "Ham"	Δ	1928	Located 1927 by topography. Recovered and relocated 1928.
"Bar"	Δ	1928	Located 1927 by topography. Recovered and relocated 1928.
"Lip"	Δ	1928	Near same location as ◊ Pil 1927. ◊ Pil not recovered.
Bn. 5 "Fi"	Hyd.	1928	Fix and cuts Vol.14 P.70; Δ cut from Δ Jewfish. 1927 "Fi" slightly diff. location.
"Flag"	Topo.	1927	See Note "A". Recovered and checked 1928.
"Dip"	Topo.	1927	See Note "A". Recovered and checked 1928.
"Fat"	Topo.	1927	See Note "A". Recovered and checked 1928.
"Fig"	Topo.	1927	See Note "A". Recovered and checked 1928.
"Mal"	Topo.	1927	See Note "A". Recovered and checked 1928.
"Palm"	Topo.	1927	See Note "A". Recovered and checked 1928.
"Les"	Hyd.	1928	Fix and check angles Vol.12 P.26; Vol. 14 P.41;45. Near Hydro. ◊ "Nee" 1927. ◊ "Nee" not recovered.

Note "A"- D.M's & D.P's. in Descriptive Report of Topo. Sheet #3 1927.

STATIONS ON SUB-PLAN SHEET "D"

1928

Name of Station	Located by	Date	Remarks
"Cable"	△	1927	Recovered 1928.
Punta Rasa R.R. "Ray"	△	1928	Located originally in 1927 by △ . Recovered and relocated 1928.
Oyster(San Carlos Bay) "Oyster"	△	1892	Recovered 1927 and 1928.
Punta Rasa F.R. "Ont"	△	1928	Located originally in 1927 by △ . Recovered and relocated 1928.
Bn. 12 "Do"	△	1928	Located 1927 by hyd. Called "Bee". Old Bn. renewed. Relocated 1928.
Bn. 10 "Rat"	△	1928	Located 1927 by △. Called hyd. "Ten" Old Bn. renewed, relocated 1928.
Bn. 8 "Me"	△	1928	Located 1927 by topo. Called "Ate", but not in D.M. & D.P's. of Desc. Report. Old Bn. renewed, relocated 1928.
Bn. 6 "Cone"	△	1928	Not in 1927. New.
Sanibel Id. L.H. "San"	△	1909	Recovered 1927 - 1928.
"Hach"	Topo.	1927	See Note"A". Recovered and checked 1928. Cuts Vol.14 P.71 Sheet D. " " 15 " 69 " E.

Note "A"- D.M.'s. & D.P's. in Descriptive Report of Topo. Sheet #3 1927.

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STATIONS ON SHEET "D"

1927 - 1928

Name of Station	Located by	Date	Remarks
"Sord"	Topo.	1927	See Note "A". "Sword Pt" Not used 1928
"Off"	Topo.	1927	See Note "A". Not used in 1928.
"Bo"	Topo.	1927	See Note "A". Not used in 1928.
"Limb"	Topo.	1927	See Note "A". Not used in 1928.
Jewish "Jew"	△	1927	Recovered in 1928.
"Kap"	Topo.	1927	See Note "A". Not used in 1928.
"Whit"	Topo.	1927	See Note "A". Not used in 1928.
"Spin"	Topo.	1927	See Note "A". Not used in 1928.
"Nay"	Topo.	1927	See Note "A". Not used in 1928.
"Lit"	Topo.	1927	See Note "A". Used in 1927 only. This "Lit" not used 1928. Another Lit elsewhere by 1928 △ is used.
"Sam"	Topo.	1927	See Note "A". Not used in 1928.
"Cop"	Topo.	1927	See Note "A". Not used in 1928.
"Calif"	Topo.	1927	See Note "A". Not used in 1928.
"Shor"	Topo.	1927	See Note "A". Not used in 1928.
"Art"	Topo.	1927	See Note "A". Not used ^{this sheet} in 1928.
Piney Point "Pine"	△	1927	Recovered 1928.
Bn. 17 A	△	1927	Old Bn renewed, new one relocated 1928; not used this sheet, in 1928.
Bn. 17	△	1927	New one 1928. Not used this sheet 1928.
Bn. 15 "Boy"	△	1927	Recovered and checked in 1928.
Bn. 13 "Tir"	△	1927	Recovered and checked in 1928.

Note "A" - D.M's. & D.P's. in Descriptive Report of Topo. Sheet #3, 1927.

STATIONS ON SHEET "D"

1927 - 1928

Name of Station	Located by	Date	Remarks
"Hach"	Topo. Hyd.	1927 1927	See Note "A". Fix Vol.5 P.13-15. Called "Rek". Rek and Hach same signal. (C.S.)
"Sa"	Topo.	1927	See Note "A". Named "Say". Not recovered in 1928.
"Aft"	Topo.	1927	See Note "A". Not recovered in 1928. New signal same name near same location 1928.
"Ro"	Δ	1927	Relocated in 1928 by triangulation.
"It"	Hyd.	1927	Fix and check angles Vol.5 P.13. Recovered and checked in 1928.
"To"	Topo.	1927	See Note "A". Recovered and checked in 1928.
"On"	Topo.	1927	See Note "A". Relocated by triangulation in 1928.
"Box"	Hyd.	1927	Fix Vol.5 P.15. Recovered and checked in 1928.
"Tab"	Topo.	1927	See Note "A". Recovered, checked, and called Tan in 1928.
"Hop"	Topo.	1927	Shown as topo. signal on smooth hydro. sheet. Not on topo. Desc. Report 1927. New beacon, and relocated by Δ in 1928.
"Cut"	Topo.	1927	See Note "A". Not recovered in 1928. 1928 signal same name near same location by hydro. in 1928.
"Ham"	Topo.	1927	See Note "A". Relocated by Δ in 1928.
"Bar"	Topo.	1927	See Note "A". Relocated by Δ in 1928.
Bn. 5 "Fi"	Topo.	1927	See Note "A". Bn. renewed and relocated by hydro. in 1928.
"Lamb"	Topo.	1927	See Note "A". Not used this sheet 1928.
"Pump"	Topo.	1927	See Note "A". Not used this sheet 1928.
"Kay"	Topo.	1927	See Note "A". Not used this sheet 1928.
"Roar"	Topo.	1927	See Note "A". Not used this sheet 1928.

Note "A"- D.M's. & D.P's. in Descriptive Report of Topo. Sheet #3, 1927. ves

STATIONS ON SHEET "D"

1927 - 1928

Name of Station	Located by	Date	Remarks
"Tusk"	Topo.	1927	See Note "A". Not used this sheet 1928.
"Tom"	△	1927	Recovered in 1928.
"Nee"	Topo.	1927	See Note "A". Not used this sheet 1928. Signal same name by hydro. 1927 near Punta Rasa.
"Gain"	Topo.	1927	See Note "A". Not used this sheet 1928.
"Al"	Topo.	1927	See Note "A". Recovered 1928. Banner on tree. 1928 location some different.
"Loo"	Topo.	1927	See Note "A". Recovered 1928.
"Ka"	Topo.	1927	See Note "A". Recovered 1928.
"Zig"	Hyd.	1927	Pos. 161 Vol.5 P.12. Not recovered 1928.
"Gra"	Topo.	1927	See Note "A". Not used 1928.
"Fork"	Hyd.	1927	Fix Vol.5 P.15. Same signal. ^{formed dead tree.} Relocated in 1928 by triangulation.
"Dad"	Topo.	1927	See Note "A". Recovered 1928.
"Pil"	Topo.	1927	See Note "A". Near same location as △ Lip in 1928.
"Dam"	Topo.	1927	See Note "A". Not recovered in 1928.
"Flag"	Topo.	1927	See Note "A". Recovered and checked 1928.
"Crab"	Topo.	1927	See Note "A". Not recovered in 1928.
"Dip"	Topo.	1927	See Note "A". Recovered and checked 1928.
"Fat"	Topo.	1927	See Note "A". Recovered and checked 1928.
"Fig"	Topo.	1927	See Note "A". Recovered and checked 1928.
"Nee"	Hyd.	1927	Fix Vol.5 P.15; Not topo. "Nee" 1927. ○ "Les ^a " 1928 near same location.
"End"	Topo.	1927	See Note "A". Not recovered in 1928.

Note "A" - D.M's. & D.P's. in Descriptive Report of Topo. Sheet #3, 1927.

STATIONS ON SHEET "D"

1927 - 1928

Name of Station	Located by	Date	Remarks
"Cable"	△	1927	Recovered in 1928.
"Got"	Topo.	1927	See Note "A". Not recovered in 1928.
"Sign"	Hyd.	1928	Fix, check angles, cuts Vol.8 P.70-71 Not used in 1927.
"Bat"	Topo.	1927	See Note "A". Not recovered in 1928.
"Jil"	Topo.	1927	See Note "A". Not recovered in 1928.
"Ro"	Topo.	1927	See Note "A". Not recovered in 1928. Not same as △ Ro.
"Man"	Topo.	1927	See Note "A". Recovered and checked in 1928.
"Fop"	Topo.	1927	See Note "A". Not recovered in 1928.
"Root"	△	1928	
"Boy"	Topo.	1927	See Note "A". Not recovered in 1928. ◦ Girl 1928 near same location.
"Girl"	Hyd.	1928	Fix, check angles, cuts Vol.8 P.70-71. Near ◦ Boy 1927.
"Hit"	Topo.	1927	See Note "A". Not recovered 1928. ◦ Hite 1928 near same location.
"Hite"	Hyd.	1928	Fix, check angles, cuts Vol.8 P.71. Near ◦ Hit 1927.
"Jug"	Topo.	1927	See Note "A". Not recovered in 1928.
"Jef"	Hyd.	1928	Fix, check angles, cuts Vol.8 P.70-71.
"Kit"	Topo.	1927	See Note "A". Not recovered in 1928.
"Low"	Topo.	1927	See Note "A". Not recovered in 1928.
"Dead"	Topo.	1927	See Note "A". Recovered, checked 1928.
"Mix"	△	1928	
"Lap"	Topo.	1927	See Note "A". Not recovered in 1928.
"Stump"	Topo.	1927	See Note "A". Recovered in 1928.

Note "A" - D.M's. & D.P's. in Descriptive Report of Topo. Sheet #3, 1927. 100-

STATIONS ON SHEET "D"

1927 - 1928

Name of Station	Located by	Date	Remarks
"Fuz"	Topo.	1928	Fix, check angles, cuts Vol.8 P.70-71.
	Hyd.	1928	Revision topo. 1928 Desc. Report.
"Met"	Topo.	1928	Topo. sheet #3 <u>Revision 1928</u> . Recovered tree in 1928.
"Arch"	△	1928	Located by topography 1927 erroneously. Relocated by triangulation in 1928.
"Lam"	Topo.	1928	Located 1st by topo. on boat sheet. 2nd location on Revision topo. sheet 1928. D.M's. & D.P's. in Vol.13 P.53. Sheet "D"
"Sin"	Topo.	1928	Located by topo. on boat sheet. Not located on Revision topo. sheet 1928. D.M's. & D.P's. Vol.13 P.53. Sheet "D"
"Egg"	Topo.	1928	Same ^{remarks} as signal "Lam".
Bridge "Brig"	△	1928	Located 1927 by topography. Relocated in 1928 by triangulation.
"Di"	Hyd.	1928	Fix, check angles, cuts Vol.8 P.70-71. Revision topo. 1928 Desc. Report.
"Point"	Hyd.	1928	Fix, check angles Vol.13 P.72. Cuts Vol.9 P.3. Revision topo. 1928 Desc. Report.
"Dog"	Topo.	1927	See Note "A". Not recovered in 1928.
"Hot"	Topo.	1927	See Note "A". Not recovered in 1928.
"Pop"	Topo.	1927	See Note "A". Not recovered in 1928.
"Con"	Topo.	1927	See Note "A". Not recovered in 1928.
Bowditch Pt.2 "Bow"	△	1883	Recovered in 1927 and 1928.
"Bath"	Topo.	1927	See Note "A". Recovered in 1928.
Estero Pass Bn. "Trip"	Topo.	1927	See Note "A". Bn. renewed and relocated 1928 by triangulation. (hydro. "Lit")
Estero Pass Bn. "Lit"	△	1928	Old Bn. renewed. New Bn. located by triangulation. Called "Lit" in Hydro.

Note "A" - D.M's. & D.P's. in Descriptive Report of Topo. Sheet #3, 1927.

STATIONS ON SHEET "D"

1927 - 1928

Name of Station	Located by	Date	Remarks
Bn. 4 "Ben"	△	1928	Not in 1927.
Bn. 6 "Cone"	△	1928	Not in 1927.
Bn. 8 "Ate"	Topo.	1927	Shown on hydrographic smooth sheet as topo. signal but not in Desc. Report. D.M. and D.F.
Bn. 8 "Me"	△	1928	Bn. 8 renewed since 1927. Relocated by triangulation in 1928.
Bn. 10. "Ten"	△	1927	Bn. 10 renewed. Relocated in 1928.
Bn. 10 "Bat"	△	1928	Old Bn. called Ten renewed. New one relocated by triangulation in 1928.
Bn. 12 "Bee"	Hyd.	1927	Fix in Vol.7, P.30; Bn. renewed. New Bn. relocated by triangulation in 1928.
Bn. 12 "Do"	△	1928	Old Bn. 12 renewed. New Bn. located by triangulation in 1928.
Sanibel Id L.H. "San"	△	1909	Recovered 1927 - 1928.
"Life".	Hyd.	1928	Cuts Sheet "C" Vol.5 P.8 " 2 " 24 " 1 " 3
"Tea"	△	1928	Located 1927 by triangulation. Relocated 1928 by triangulation.
Punta Rasa F.R. "Ont"	△	1927 1928	Located 1927 by triangulation. Relocated 1928 by triangulation.
Punta Rasa R.R. "Ray"	△	1927 1928	Located 1927 by triangulation. Relocated 1928 by triangulation.
Oyster (San Carlos Bay) "Oyster"	△	1892	Recovered 1927 - 1928.
"Palm"	Topo.	1927	Recovered and checked 1928. See Note "A"
"Mal"	Topo.	1927	Recovered and checked 1928. See Note "A".
Bird Island "Bird"	△	1892	Recovered 1927.

STATISTICS FOR SHEET "D" 4845 a

And

SUB-PLAN SHEET "D" - 4845 b

Date	Letter	Volume	Positions	Soundings	Miles Statute	Vessel	Commanding Officer	Officer in charge	Smooth Sheet	
									Protracted By	Soundings Pencil'd By
Sept. 23 1927	a	1	199	1429	22.3	Punt	R.P.E.	E.B.L.	C.L.	C.L.
" 26 "	b	2	82	564	7 $\frac{1}{2}$	"	"	"	"	"
" 27 "	c	2	163	997	15.2	"	"	"	"	"
" 28 "	d	3	251	1297	24	"	"	"	"	"
" 29 "	e	4	186	1105	19.6	"	"	"	"	"
" 30 "	f	4-5	168	850	14	"	"	"	"	"
Oct. 7 "	a	5	104	724	8.8	Launch	"	J.C.S.	"	E.A.D.
Nov. 8 "	b	5-6	107	546	9.5	"	"	E.B.L.	"	"
" 9 "	c	6	225	1070	22	"	"	"	"	"
" 10 "	d	7	133	617	14.5	"	"	"	"	"
" 15 "	g	7	72	320	5 $\frac{3}{4}$	Punt	"	J.C.S.	"	"
" 16 "	h	7	89	374	7 $\frac{1}{4}$	"	"	E.B.L.	"	"
" 16 "	e	8	51	212	5 $\frac{1}{4}$	Launch	"	"	"	"
" 17 "	f	8	24	121	3.2	"	"	"	"	"
Oct. 9 1928	g	9	164	714	19 $\frac{1}{2}$	"	C.S.	J.C.S.	E.A.D.	"
" 10 "	h	9	175	745	21	"	"	"	"	"
" 11 "	j	10	240	1125	29 $\frac{1}{2}$	"	"	"	"	"
" 12 "	k	10-11	226	948	22	"	"	"	"	"
" 15 "	l	11	191	1033	25	"	"	"	"	"
" 16 "	m	12	227	1242	31	"	"	"	"	"
" 17 "	n	12-13	233	860	24.5	"	"	"	"	"
" 18 "	p	13	108	469	12.5	"	"	"	"	"
" 19 "	q	13-14	208	922	24	"	"	"	J.C.S.	J.C.S.
" 23 "	r	14	49	257	7.5	"	"	"	"	"
" 25 "	s	14	121	620	16	"	"	"	"	"
" 26 "	t	15	186	920	20	"	"	"	"	"
" 27 "	u	15	51	190	5	"	"	"	"	"
Nov. 2 "	v	15	77	123	2	"	"	"	"	"
Jan. 22 1929	a	16	11	62	1	Dinghy	"	"	"	"
Totals		16	4121	20456	439 $\frac{1}{2}$					

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Fort Myers, Florida

January 30, 19 29

SUPERINTENDENT, U. S. COAST AND GEODETIC SURVEY:

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

Charles Shaw
Charles Shaw

48 45 a

Chief of Party.

DESCRIPTION.	POSITION.					Method of determination.	Charts affected.
	Latitude.		Longitude.		Datum.		
	'	D. M. meters.	'	D. P. meters.			
Sanibel Id. Light House	26	27	(1551.3) 295.2	82 00	(224.1) 1438.1	N. A.	1909 A 473; 1255
"Dip, Dine, Dance" Bldg. (o Bath) 100'X 50'X 50' high. White, wooden bldg. with green roof, all on concrete foundation. <i>Estero Id.</i>	26	27	(1746) 100	81 57	(1369) 293	N. A.	1927 Topo. 473; 1255
Cable Bldg. (West. Union) White stucco with red roof, about 90'X 30'X 30' high. Fix is E'ly. concrete steps of two pair in front of bldg. <i>Punta Rasa, Fla.</i>	26	29	(1591) 256	82 00	(537) 1125	N. A.	1929 Sextant 473; 1255

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

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

APPROVAL OF RECORDS

The 1928 work on sheet "D", and Sub-plan sheet "D", records, and Descriptive Report have been inspected and are approved. Work on sheet "D" 1927 was completed by Capt. Eyman's party before being turned over to me.

The smooth sheet "D" started in 1927 and completed now has been on the ship for $1\frac{1}{2}$ years. On account of this, and so many officers' working on it, it has been a difficult sheet to complete satisfactorily.

The dog ear addition was necessary due to using Δ Tea for an object when sounding close to Point Ybel. Other signals were not visible or satisfactory.

Except for actually plotting the 1928 positions and soundings I have done everything possible to see that all data ^{are} is correct and complete.

Charles Shaw

Charles Shaw,
Chief of Party.

Fort Myers, Florida,
February 27, 1929.

TIDAL DATA

For Hydrographic Sheet "D"

4845a

And

4845b

Sub-Plan Sheet "D".

Location:

Punta Rasa, Fla. Automatic gauge used for entire sheet.

Reading on tide staff of M. L. W. is 3.3 ft. (Office letter, Oct. 19, 1928, No. 25 ACB)

Highest tide observed from May 19, 1928 to Jan. 14, 1929 is 6.2 ft. on each of the following dates: May 22; Aug. 10; Sept. 29, 30, 1928.

Lowest tide observed from May 19, 1928 to Jan. 14, 1929 is 1.7 ft. on Dec. 26, 1928.

March 15, 1929

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
16 volumes of sounding records for

HYDROGRAPHIC SHEET (4845-a) and (4845-b)

Locality: San Carlos Bay and Calcosahatchee River, Gulf Coast of Florida

Chief of Party: R. P. Eymen in 1927; Charles Shaw in 1928-1929.
Plane of reference is

~~ft. on tide staff at~~ Mean low water, reading
~~ft. below B. M.~~

3.3 ft. on tide staff at Punta Rasa, Florida

Condition of records satisfactory except as checked below:

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

Paul C. Whitney

Chief, Division of Tides and Currents.

Section of Field Records.

Report on sheet No - 4845^a.

Surveyed in - 1927 and 1928

Instructions dated - Oct. 21, 1926 - supplemental inst. May 26, 1928

Chief of Party - R. P. Eymann and Charles Shaw.

Surveyed by - E. B. Latham and J. C. Sammons.

Projected by - C. L. Fiebré, E. A. Daily and J. C. Sammons

Soundings penciled by - C. L., E. A. D., and J. C. S.

Verified and inked by - H. E. MacEwan

- 1 The records conform to the requirements of the General Instructions.
- 2 The plan and character of the development fulfils the requirement of the General Instructions.
- 3 The specific instructions were carefully followed in planning and developing the survey.
4. * With possibly one exception the sounding line crossings were adequate.
- 5 The material obtained is sufficient to allow all the depth curves to be completely drawn.
6. The field plotting was carefully and completely executed.
7. The junctions with adjacent sheets are satisfactory.
8. With the exception of the channel area between Δ Mc and Δ Rat no further surveying is required to fully develop important areas within the limits of this sheet. * Had cross lines

been run in the area mentioned above the channel would have been clearly defined especially regarding its width.

9. Remarks: -

a. Some difficulty was encountered in the early stages of the verification of this sheet due to the various designations of signals on the sheet and in the records. For instance: \odot Bo on the sheet is referred to in parts of the record as \odot Sa & So. \odot Sa (in a different locality) on the sheet is variously referred to in the records as Sa and So. \triangle F.R. Bn Out on the sheet is sometimes referred to as \triangle Fro and sometimes as \triangle Out in the records. There are other instances of one signal having more than one designation in the record but the irregularity in each case not mentioned above was readily apparent and caused the office draftsman no inconvenience.

This difficulty should have been straightened out in the field by the field draftsman who was without doubt in possession of first hand information concerning triangulation.

b. In plotting soundings under one foot the field draftsman did not follow paragraph 153 lines 7 and 8 of the Hydrographic manual.

c. The shoreline between signals \triangle Nir and \triangle Bow was found to be in conflict with some of the plotted hydrographic lines.

a resurvey was made in the field, but an examination in the office proved the necessity of a further adjustment. The final adjustment was made using the resurvey ^{numbers} mentioned above (DAILY, 1928) and an aerial photographic survey made in 1928 (Sheet T-4388) as authority.

d. No geographic names were lettered on the sheet by the field draftsman.

e. Sheet 4845² covering the entrance channel to Calcasatchou River supercedes the corresponding area on sheet 4845³. This channel from signal Δ TIR to signal Δ BEE was surveyed in 1927 by the party in charge of R. P. Eymann. Before work was resumed, after an interval, under the charge of C. Shaw in 1928, dredging operations had been undertaken by the U. S. E. D. "Sarasota" to deepen the channel. In compliance with paragraph 7 of the supplemental instructions dated May 26, 1928 this area was resurveyed.

f. The information required in paragraph 25 of the Hydrographic Manual pertaining to Projection Data was not completely given by the 1927 Party. This can not be construed as an oversight, however, since the instructions reading as follows: "and the initials of the persons plotting and checking the stations shall be given" did not appear in the field instructions at the time the work was done, which was

prior to publication of the Hydrographic Manual now in force.

g. An itemized list of all the beacons in this area has been compiled by the field party and can be found in the list of triangulation data (872 GTZ 1928'S - G-198 - Caloosahatchee River and San Carlos Bay) together with the computed Latitudes and Longitudes.

h. The following apparent irregularities in sounding depths were found:

(1) In Lat. $26^{\circ}28'09''$, Long. $82^{\circ}01'07''$ a sounding of 3 feet (56d day) plots close to a 9 foot sounding (177m day). This occurs on the edge of a shoal and should not be considered incorrect.

(2) In Lat. $26^{\circ}31'37''$, Long. $82^{\circ}00'10''$ a sounding of 5 feet plots close to a sounding of 8 feet. This also occurs on the edge of a shoal and is no doubt correct.

(3) In Lat. $26^{\circ}30'20''$, Long. $82^{\circ}00'49''$ - sounding line 69b to 70b plots 3 to 4 feet shallower than line 149e to 150e which it crosses. This discrepancy is of little importance being considerably outside of the channel.

(4) A sounding of 2 feet (112d) plots close to a 7 foot sounding (99c) 100 meters south of signal Δ few. This difference in depth occurs on a well defined shoal and is apparently correct.

(5) 200 meters south of signal \odot Cop a sounding of 2 feet plots close between soundings of 8 feet and 12 feet. This occurs on the edge of a steep

bank and is apparently correct.

10. Rating of work.

a. Character and scope of surveying - excellent.

b. Field drafting - very good.

11. Reviewed by - H. E. MacSwan

June 25, 1929.

Inspected by P. L. Johnston

July 3, 1929

Section of Field Records.

Report on sheet no. - 4845^b

Surveyed in - 1928 and 1929

Instructions dated - May 26, 1928

Chief of Party - Charles Shaw

Surveyed by - J. C. Sammons.

Projected by - J. C. S.

Soundings penciled by - J. C. S.

Verified and inked by - H. E. Mac Ewen

1. This survey is supplementary to 4845^a. It is a further development of the channel entrance to Caloosahatchee River subsequent to the dredging done by the U. S. E. D "Sarasota". This survey shows the changes made in the channel over the area covered and was made necessary because the changes were made during an interval in the surveying of this locality.
2. The records conform to the requirements of the general instructions.
3. The specific instructions were carefully followed.
4. The depth curves cannot be completely drawn.
5. No further surveying is required to fully develop important areas within the limits of this sheet.
6. Rating of work.
 - a. Character and scope of surveying - Excellent
 - b. Field drafting - Excellent
7. Reviewed by - H. E. Mac Ewen
Inspected by R. L. Johnston

June 27, 1929
July 3, 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO.
48452

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. "D".....

REGISTER NO. 48452

State Florida.....

General locality West Coast.....

Locality San Carlos Bay and Caloosahatchee River Entrance

Scale 1:10,000 Date of survey Sept. 23 - Nov. 17, 1927
Oct. 9 - Nov. 2, 1928

Vessel Ship HYDROGRAPHER.....

Chief of Party R. P. E. ^{ynan} and C. S. ^{bar}.....

Surveyed by E. B. L. ^{itan} and J. C. S. ^{.....}.....

Protracted by C. L. ^{Fure}, E. A. D. ^{Daily} and J. C. S......

Soundings penciled by C. L., E. A. D. and J. C. S......

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W. (Office letter Oct. 19/28 #25-ACB states
3.3. feet on Punta Rasa staff is M. L. W.)

Subdivision of wire dragged areas by ---.....

Inked by

Verified by

Instructions dated October 21, 1926; May 26 , 1928

Remarks:

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. 4845b

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. Sub-Plan to Sheet "D"

REGISTER NO. 4845b

State Florida

General locality West Coast

Locality Caloosahatchee River, Entrance Channel

Scale 1:10,000 Date of survey Oct. 9 - Nov. 2, 1928
Split line Jan. 22, 1929

Vessel Ship HYDROGRAPHER

Chief of Party Charles Shaw

Surveyed by J. C. Sammons

Protracted by " "

Soundings penciled by J. C. S.

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W. (Office letter Oct. 19/28 #25-ACB states
3.3 feet on Punta Rasa staff is M.L.W.)

Subdivision of wire dragged areas by _____

Inked by _____

Verified by _____

Instructions dated Oct. 21, 1926; May 26, 1928

Remarks: _____

Field Records Section (Charts)

HYDROGRAPHIC SHEETS No. *4845^a* and *4845^b*

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

Number of positions on sheet . *4,125* .
Number of positions checked . *513* .
Number of positions revised . *29* .
Number of soundings recorded *20,376* .
Number of soundings revised . *643* .
Number of signals erroneously
plotted or transferred . . *NONE* . .

Date: - - - *June 26* - - - *1929* - - -
Cartographer: - - - *H. E. MacEwen* - - -