6325

U. S. COAST & GEONETIC SURVEY

APR 3 1939

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Form 504
Rev. Dec, 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic | Hydrographic | Sheet No. H-6325

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State Florida

LOCALITY

Florida Keys

American Shoal Light to Saddlebunch

Harbor

193 8-9

CHIEF OF PARTY

E. H. McCarthy

U. S. GOVERNMENT PRINTING OFFICE: 193

DEPARTMENT OF COMMERCE

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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. 23 REGISTER NO. 6325 H 6325 State FLORIDA General locality FLORIDA KEYS Locality AMERICAN SHOAL LIGHTHOUSE TO SADDLEBUNCH HARBOR June-September 1938 Scale 1:20000 Date of survey January March 1939, 19 Vessel Shore Party No. 1 Chief of Party E. R. McCarthy Surveyed by E. R. McCarthy, P.A. Weber Protracted by E. L. Patterson, P. A. Weber Soundings penciled by E. L. Patterson, P. A. Weber Soundings in fathoms feet Plane of reference Mean Low Water Subdivision of wire dragged areas by Inked by H.F. Stegman Verified by H.F. Stegman Instructions dated November 17 , 1935 Remarks:

U. S. GOTERNMENT PRINTING OFFICE, 1932

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

L. O. COLBERT, DIRECTOR

DESCRIPTIVE REPORT

HYDROGRAPHIC SHEET NO. H-6325

FLORIDA KEYS

AMERICAN SHOAL LIGHTHOUSE TO SADDLEBUNCH HARBOR

FLORIDA

SHORE PARTY #1
KEY WEST, FLORIDA

E. R. McCARTHY LIEUT (j.g.)C & GS CHIEF OF PARTY DESCRIPTIVE REPORT TO: ACCOMPANY HYDROGRAPHIC SHEET 6225.

AUTHORITY

Instructions of the Director to H. A. Cotton dated November 17, 1933.

LIMITS

American Shoal Lighthouse to Saddlebunch Harbor and shore to the approximate ten fathom curve.

METHODS

Soundings were taken with a 15'sounding pole graduated in feet and half feet and with a stainless steel center lead line graduated in feet and fathoms.

Positions were fixed with sextant angles on signals located by plane table, air-photo topography, and sextant.

Signal "Kat" was located from Topographic Map No. T-5545.

EQUIPMENT

Leased launches drawingbl6" to 30", fishing boat type. They were based at Bird Key for the most of the sheet.

DISCREPANCIES

The soundings cross very well. There are a number of crossings which fail to agree by $l_2^{\frac{1}{2}}$, to 2° but they occur in areas of irregular sand and shell bottom.

1. Lat 24-30.3 Long 81-35.3 Pos. 63-4m' and 124-5t' (red)

Difference on the cross line is 3'. Probably due to the sharp droppoff from the rocky shoal to the north.

COMPARISONS WITH PREVIOUS SURVEYS

The sheet was compared with sections of sheets 4165-1920, 4168-1920, and a copy of chart 1251 enlarged to scale 1:20000. No other surveys were furnished the party.

Sheet 4165-1920.

A portion of the area covered by this sheet was resurveyed and the agreement is very good. All shoals as indicated were examined and in general shoaler depths obtained. Numerous coral heads were located at 24-3422/81-39.1 which were not indicated on this sheet, see No. 249 SHOALS & DANGERS. The area in the vicinity of 24-33.2 to 33.4 indicates a shoaling of 1'-2' to the west of the 4 fathom curve.

COMPARISONS WITH PREVIOUS SURVEYS (CONT'D)

Sheet No. 4168-1920.

This survey is little more than reconnaissance. Agreement See par. 54. with current work is very good. Practically all of the shoals in- raview dicated were found but most were displaced inshore and changed in size and shape. Some new patches were located.

Chart 1251.

Comparison with the chart and with above sheets is taken up / under the heading SHOALS AND DANGERS.

SHOALS AND DANGERS

Note: Check marks in brown after the following geographic coordinates indicate that detached positions have been verified in the office.

Unless otherwise noted, the red boat is understood when a position number is given. In general the offshore sheals were found to be a series of isolated patches instead of the extensive shoals indicated on the present chart.

1. Lat 24-32.0 Long 81-28.9

Chart shows isolated shoal area with 17'. Area developed and investigation shows three small sand, shell and rocky shoals in the immediate vicinity with least depths as follows 17 is from H-4168 (1920). Carried forward. 18' -- 35**v**' 18'--36v' 19'--34v'

The 17' is probably displaced.

2. Lat 24-32.3 Long 81-28.7

Chart shows 25°. Closely spaced lines on the present survey gives general depths of 31-34', the bottom is sand and sheel and shows a general deepening. The 25' sounding may be displaced as the 5 fathom curve lies about 200 meters to the north. 25 13 from H-650 (1856). Falls in 30 ft. and 100m. SW of 27. General change.

3. Lat 24-32.4 Long 81-29.0

Chart shows 27'. The bottom in this area is sand and shell From H-650. Falls in 30 ft. and has probably deepened. Recommend removal. Differences general.

Not carried.

4. Lat 24-32.8 Long 81-29.0 /

Chart shows 51'. The bottom in this area is sand and shell Fram H- 650. and has probably deepened. Recommend removal. Falls in 33 ft. Not carried.

5. Lat 24-32.8 Long 81-29.6 V

6. 1 - 1 - 1 - 1 - 1

Chart shows 36'. Area developed and investigated (36-41y') no indication could be found. The bottom is sand and shell and From 4-650. has probably deepened. Recommend removal. Falls in 38 ft. Not carried.

6. Lat 24-32.5 Long 81-29.3

Chart shows 19'. Area developed and investigated, found a rocky shoal with least depth 18' (43v').

7. Lat 24-32.4 Long 81-29.7

Chart shows 17. Area developed and investigated, found a sand and shell shoal with least depth 162' on line 83-4r'.

8. Lat 24-32.1 Long 81-29.6

Chart shows 22'. Area developed and investigated, found a small sand, shell and rocky shoal with least depth 24' (40v').

9. Lat 24-32.5 Long 81-29.4

22 originates with 23% on H-650. Disregard.

Area investigated and found a sand, shell and rocky shoal with least depth 23' (42v'). Not charted.

10. Lat 24-32.1 Long 81-29.2

Chart shows 21'. Area investigated and two soungings of 25' obtained at 37v' and 38v' in immediate vicinity of the charted sounding.

22 on H-650. Two surveys differ similarly in sorvey without additions.

21 originates with

A small sand, shell and rock shoal was found about 200 hecept present meters to the SWwith least depth of 23'(39v').

11. Lat 24-31.8 Long 81-29.2

Chart shows 24'. Area developed and investigated, found two small sand, shell and rock shoals with least depths as follows / 20'--31v' on E'ly shoal 20'--35v' on W'ly shoal

12. Lat 24-31.7 Long 81-29.4

Chart shows 16. Area developed and investigated, found two rocky shoals with least depths as follows 16 is from H-4168. Carried forward. 18'--30v' on E'ly shoal $18\frac{1}{2}$ -29v on W'ly shoal.

13. Lat 24-31.5 Long 81-29.4

Chart showsx31'. This falls in general depths of 41' on the present survey, it is believed the charted sounding is displaced.

14. Lat 24-31.6 Long 81-30.3

No authority for 31. Disregard.

Chart shows extensive shoal with 14'at east end and 17' at west end. Area developed and investigated, found numerous coral patches within the 24' curve as follows beginning from the east 171 (28v'); 141 (27v'); 151 (26v'); 16'(25v'); 18'(24v').

14. Continued

A 28% sounding about 4 mile SW originating on sheet 4168 28 carried. was investigated, a sounding dropped directly overvthe 28' gave Surrounding 36'(23v'). The 28' is probably displaced to the south or is point depths of shoal to the northeast. 15. Lat 24-31.8 Long 81-30.0

Chart shows large shoal with 15%. Area developed and in- Chartas 15 13 vestigated, found a general deepening in this vicinity; two small from H-650 spots of shoals were found, one near the south tip of the shoal as charted with least depth 162 (46 v'); and one near the east tip Not carried. with least depth 172' (45v'). Recommend removal of 15' sounding.

16. Lat 24-32.0 Long 81-30.3 to 30.7

Chart shows a long shoal with 16' at east end and 18' at west end. The area was carefully developed and investigated, found H-650. a general deepening in this vicinity. The bottom is sand and has General probably shifted. Two soundings $22\frac{1}{2}$ (47v'), $21\frac{1}{2}$ (48v') wre dropped to carried over the charted 16'. The 18' at the west end of the charted shoal checks the present work; a least depth 14 (50) occurs hear the center of the charted shoal.

17. Lat 24-32.3 Long 81-30.5

Chart shows 17. Abea developed and investigated, found a 17. on H-650 least depth of 202 (51v). Bottom sand and shell and rocky. Rec-charted slightly commend removal. Falls in 1 on present survey. N 19 \$1. carried .

18. Lat 24-32.2 Long 81-30.8

Chart shows 19'. Area developed and investigated. found a small shoal with leastbdepth 172' (52v').

19. Lat 24-32.3 Long 81-30.9 /

Chart shows 17'. Area developed and investigated, found a small sand, shell and rocky patch with least depth 172 (70-1d).

20. Lat 24-32.6 Long 81-30.2

Chart shows 19. Area developed and investigation shows the bottom to, be sand and shell with depths of 21-4'. A 24' sounding 19 from H-650 Differences general. Not 45y' was dropped over the charted sounding. Recommend removal. carried.

21. Lat 24-32.7 Long 81-30.4 L

Chart shows 37'. Area developed and investigated, found a small sand and shell shoal with least depth 35'(35y').

22. Lat 24-32.8 Long 81-30.7

Chart shows 39. Area developed and investigated, found 39 from H-650. no indication of this sounding. Investigation 20-28c purple shows that the sand and shell bottom has probably washed deeper. Rec
Differences
Seneral. Not carried.

23. Lat 24-33.3 Long 81-30.6

Chart shows 27°. This falls in general depths of 29-30° 27 from H-650. on the present survey. The bottom is sand and shell has probably Not carried. washed deeper. Recommend removal.

24. Lat 24-33.5 to 33.9 Long 81-29.9 to 30.5

Area developed and investigated, found the charted shoal to be broken into a number of smaller shoals with least depths as follows beginning at the east

16'(57z); 16'(55z); 11'(133s) on live coral head in vicinity of charted 12'. 17'(53z); 16'(52z, 47z).

25. Lat 24-371 Long 81-31.1

Pos. 4a purple is on point of rocky shoal off southeast point of Sugarloaf Key. Depth on shoal area $\frac{1}{2}$ M.L.W.

NOTE: Attention is called to the general deepening of the area from the southeast point of Sugarloaf Key to Sugarloaf Creek. The chart shows no soundings between the shore and a line approximately $\frac{1}{2}$ mile offshore. Hydrography was carried as closely as possible to the shore and the soundings indicate are water close in; This is especially the case in the bight between signal "Wil" and triangulation station "SUGARLOAF 2, 1909".

26. Lat 24-36.6 to 36.9 Long 81-31.1 to 31.5

Sigs from H-650. Differences general-None carried.

Chart shows two 2° and a 3° within the 6° curve. Area developed, found that the sand bottom has washed deeper.

27. Lat 24-36.5 Long 81-31.6

Chart shows 5°. Area developed by closely spaced lines / shows a rocky spall 120-21n with 3½°. A small patch with 5° 121-22n lies about 0.2 mile NE. Not investigated.

28. Lat 24-36.4 Long 81-31.6

Chart shows 8'. Survey indicates 8' about 200 meters N'ly

charted sounding probably displaced.

8 from H-650
charted singhtly
out of position.
Two surveys agree.

29. Lat 24-36.1 Long 81-31.8

Chart shows 11. Area developed and investigated (85-9-q), from M-650. A least depth was found to be 13. (91q). The bottom is mud and has Differences probably washed deeper. Recommenderemoval.

30. Lat 24-36.1 Long 81-512

Chart shows 12°. Area developed and investigated (92-101q)
found no indication. Bottom gud and has probably washed deeper. 12 from H-620.
Recommend removal.

11's on old survey as compared with on present. Nothing carried.

Chart shows two shoals with 12. Area developed and inves- Worm H-650 tigated (102-140q) found no indication. Bottom is sand and mud Eas Differences general. Not washed deeper. Least found on lines was 14. Recommend removal. Carried.

32. Lat 24- 35.4 Long 81-31.5

Chart shows 10°. Area developed and investigated (60-76p) found a least depth $15\frac{1}{2}$ ° (77p). Bottom is sand and has probably 10½ sft on H-650. Washed deeper. Redommendoremoval.

Note: Credence is given to the above by the fact that the Not carried.

Note: Credence is given to the above by the fact that the chart shows a "soft" bottom characteristic in the same place that a rocky bottom is indicated on the present survey. The soft upper layer probably washed away due to tidal action and hurriganes.

33. Lat 24-35.3 Long 81-31.4 to 31.9

Chart shows 14°. This falls in depths of 16-17°. Bottom Hot correct. sand has probably washed deeper. Recommend removal. See note 32.

34. Lat 24035.0 Long 81-31.4

Chart shows 11°. Area developed and investigated (78-89p) It had on H-650. Charted slightly found least depth to 15°. Bottom is flat rock. The soft upper out of position to that developed has probably washed away. See note 32. Recommend removal.

Ment does not adequately cover.

Carried forward.

Chart shows 14'. This falls in general depths of 17-8'. Several 14's on H-650. Present Bottom is sand and has probably washed deeper. Recommend removal development adequate. None 56. Lat 24-34.7 Long 81-31.0

Survey shows a flat rocky shoal with least depth $18\frac{1}{2}$ on \checkmark line 130-31p.

57. Lat 24-34.5 Long 81-51.2

Chart shows 16°. Area investigated found 19° (59z) directly over charted sounding. 17° (61z) was found 200 meters NW°ly. The Several libia on the H-650 Present charted sounding is probably displaced.

38. Lat 24-34.4 Long 81-31.7

Chart shows 15°. Area developed and investigated, found an isolated rocky shoal withnleast depth 18° (63z). From H-650.

Surrounding acting in similar in similar disagreement. New disagreement. New disagreement.

39. Lat 24-33.9 Long 81-31.0

Chart shows 19°. Area developed and investigated (71-828), Savaral 19's found nothing less than 21° on line. Bottom sand and shell has probably washed deeper. Recommend removal.

40. Lat 24-33.6 Long 81-31.1

Area investigated found small isolated rocky sheal with least depth 17'(134s). Not charted.

41. Lat 24-33.5 Long 81-31.5

Area developed and investigated, found a sand and shell ridge with least depth 21'(42z). Not charted.

42. Lat 24-33.43 Long 81-31.8

Chart shows 17. Area developed and investigated, found flat rocky shoal with least depth 16. (40z).

43. Lat 24-33.2 to 33.5 Long 81-31.6

Area investigated found two sand and rocky shoals with least depths 19 (39z); 23 (38z). Not charted.

44. Lat 24+33.3 Long 81-31.3

Chart shows 20°. Area developed and investigated, found three small isolated rocky shoals with least depths as follows 24°(81-2m); 21°(140s); 21°(46z)

From H-650.
Surrounding depths
in Similar
disagreement.
None carried.

45. Lat 24-33.4 Long 81-31.0

Chartsshows 19. Area developed and investigated, found flat rocky shoal with least depth 18 (139s).

46. Lat 24-32.9 Long 81-31.9

Chart shows 16°. Area developed and investigated, found a rocky shoal with least depths on live coral heads 15°(35z) 13°(36z). and 20°(34z) on NW end of shoal.

47. Lat 24-32.9 Long 81-31.7

Area developed and investigated, found a small rocky shoal with least depth 22*(102-51). Not charted.

48. Lat 24-32.8 Long 81-51.3

Chart shows 40°. This falls in general depths of 43°. The Several 40's on H-650.

Charted sounding is probably displaced.

49. Lat 24-32.5 Long 81-31.5

Chart shows 51'. This falls in general depths of 35-6'. The from H-650.

Disagree ment general. Not carried.

50. Lat 24-32.1 Long 81-31.2

Chart shows 18. Survey shows depths of 19-22. Bottom is 18. on fi-650 and and has probably washed deeper. Recommend removal.

51. Lat 24-31.8 Long 81-51.7

Chart shows 14°. Area developed and investigated, found A 14, several no indication of the charted sounding. An isolated sand spot with 15's and 16's least depth 18°(770°) was found about 200 meters SE of the charted where present sounding. The bottom is sand and has probably washed deeper. Recom—18 to 20 ft.

Present development adequate.

Nothing carried.

52. Lat 24-31.5 Long 81-31.2

Chart shows an extensive shoal around American Shoal Light-house. Area developed and investigated, found that the shoal area $\frac{D_{4}\rho th_{5}}{H_{-}650}$ average is now much smaller. A least depth $1\frac{1}{2}$ (62u') was found on an old 2 ft. shoaler iron stake that was probably used as an anchor for guy rods for present survey old spindle beacon lying 100 meters south of the light. Another Latter adequate least depth $2\frac{1}{2}$ (46y') was taken on old iron gear wheel. The natural additions. bottom has a least depth of 5'(88-9j). The above shoal is known as American Shoal.

53. Lat 24-31.4 Long 81-31.5

Area investigated found a small coral rock shoal with least depth 16'(22v') at SW point of American Shoal as charted.

Not charted.

54. Lat 24-31.0 Long 81-32.8 V

Chart shows one large shoal with 10° and 12°.

Area developed and investigated, found three sand, shell and rock 40 minus shoals with least depths as follows

 $15\frac{1}{2}$ (56u') on SE shoal

122' (55u') on SW shoal in vicinity of charted 12'.

 $14\frac{1}{2}$ '(52, 53u') in vicinity of charted 10'. At the time this investigated was made the bottom was visible. Recommend removal of 10'.

55. Lat 24-31.1 Long 81-33.0

Area developed and investigated, found a sand, shell and rock patch with least depth 19'(92t'). Not charted.

56. Lat 24-31.3 Long 81-32.2

Chart shows 22. Area developed and investigated, found From H-650. a sand shell and rock shoal with least depth 25^1_Z (61u).

57. Lat 24-51.5 Long 81-33.0

Area developed and investigated, found a small sand, shell and rock shoal with least depth 232 (18v'). Not charted.

58. Lat 24-31.7 Long 81-32.1

Chart shows 19'. Area developed and investigated, found From H-650. Present least depth 21'(21v'). Bottom is sand and has probably washed deeper. 2007/22 adequate.

59. Lat 24-31.9 Long 81-32.0

Area developed and investigated, found a small sand, shell and rock shoal with least depth 18'(20v').

60. Lat 24-31.8 Long 8132.6

Chart shows 19'. Area developed but hot investigated, 3 N's on H-650. found 20 (59-60r'). Bottom is sand and shell has probably washed None carried. deeper.

61. Lat 24-31.5 to 31.9 Long 81-32.8 to 33.1

Chart shows extensive shoal with 15' and 17'. Area developed and investigated, found two sand, shell and rock shoals as follows from H-650.

15½'(17v') in vicinity of charted 15'

10' (13v') in vicinity of charted 17'.

investigation on present survey adequate. Nothing carried forward.

From 4-650.

ment satisfactory.

Nothing carried.

SHOALS AND DANGERS (CONT')

62. Lat 24-32.9 Long 81-32.7

Chart shows 21'. Area developed and investigated, found a small rocky shoal with least depth 17'(28z).& 26' (29z) 0.5 mile

63. Lat 24-33.3 Long 81-32.3

Chart shows 23°. Area developed and investigated found no indication. Two soundings 29°(18c,19c purple) were dropped from H-650. Old depths average in vicinity of the charted sounding. Bottom is sand and shell up ft. shocker than has probably washed deeper. Recommend removal.

64. Lat 24-33.5 Long 81-32.8

Chart shows 18. Area developed and investigated, found a rocky shoal with least depth 18. (30-12).

65. Lat 24-33.7 Long 81-32.8

Chart shows 19°. Area developed but not investigated, shows general depths of 21-2°(90-lh). Bottom is sand and shell has probably deepened. Recommend removal.

From 14-50.
Present developed

66. Lat 24-33.6 Long 81-32.7

Chart shows 22'. Area developed but not investigated, shows general depths of 24'. Bottom is sand and shell has probably deepened.

-Recommend-removal. 22' is close by to eastward. Probably shifted. From H-650.

Nothing carried.

67. Lat 24-33.9 Long 81-32.5

Chart shows point of three fathom curve. Close development shows that the three fathom has washed back closer to shore.

68. Lat 24-34.2 Long 81-32.1

Chart shows 17°. Area developed and investigated, found From H-450. nothing less than 19°(64-5z). Bottom has probably washed deeper. Not carried. Recommend removal.

69. Lat 24-34. Flong 81-32.6

Chart shows 15'. Area developed and investigated, found least depth $15\frac{1}{2}$ ' (33-4j) on spur of three fathom curve.

70. Lat 24-34.6 Long 81-32.0

Chart shows 14'. Area developed and investigated, found V
least depth 16'(67z). Bottom sand and shell has probably washed deeper.

Several int's and 15's
on H-450. Hone
carried.

71. Lat 24-34.5 Long 81832.8

Chart shows 16. Area developed and investigated, found None carried. least depth on sand and shell shoal 18'(2c purple). Recommend removal.

72. Lat 24-34.9 Long 81-32.3

Chart shows 15°. Area developed and investigated (164-7q) found no indication. Bottom is sand and shell has probably deepened. Recommend removal. 18 ft. on present survey. Old survey averages 2 ft. shooler. 15 not carried.

73. Lat 24-35.2 Long 81-32.8

Thart shows 12'. Area developed and investigated, found a live coral head with least depth 112 (53p).

74. Lat 24-35.6 Long 81-32.5

Chart shows 13. Area developed and investigated, found nothing less than 158(40-lg). Bottomis sand and has probably washed deeper. Recommend removal. 2 ft. shoalar than present survey. Nothing carried.

75. Lat 24-35.8 Long 81-32.9

Chart shows 15%. Area developed by closely spaced lines shows 15° to be about 300 meters N'ly. - Charted - sounding -is - probably - displaced. Several 15's on M-650. Present survey satisfactory 76. Lat 24-36.1 Long 81-32.0

Chart shows 13%. Area developed shows 13% to be about 200 H-650 averages meters N'ly. - Charted - sounding - is - probably - displaced. 2 ft. shoaler. Nothing carried.

77. Lat 24-36.1 Long 81-32.7

Chart shows 2'. Areas developed and investigated, found rocky offshoot of 3' curve with least depth 1'(61q).

78. Lat 24-36.4 Long 81-32.1

Chart shows 3. Area developed and investigated, found rocky shoal with least depth 22'(1,2c')

79. Lat 24-36.6 Long 81-32.2V

Chart shows 1'. Close development shows that deeper water 1 on H-600. extends closer to shore, and gradually shoals to the edge of the 2'z on present. mangroves. Recommend that present survey supersede old surveys in this area.

80. Lat 24-35.8 Long 81-337 to 33.9

Chart shows two sunken rock symbols. Area developed and From H-650. investigated, found numerous live coral heads with least depths as follows

8c1--311 14c8---21 20c'--3} 9c'--5' 15c'--3' 21c'--5' 10c'-4' 16c'--31 22c'--31 11c'--31/2' 170' -- 3½' 23c'--5' 12c'--3' 18c'---1항 24c'--4' 13c'--51' 104-5n---1

81. Lat 24-35.1 Long 81-33.5

Chart shows 18. Area developed and investigated, found Not carried. least depth of 192. (33p). Bottom is mud and has probably washed deeper.

82. Lat 24-34.7 Long 81-33.9

Chart shows ll'. Area developed and investigated (34-50r), found least depth on live coral head 5'(51r).

83. Lat 24-34.5 Long 81-33.8

Chart shows17. Area developed and investigated, found least depth 20'(34s). Bottom sand and shell has probably deepened of surrounding depths in good agreement.

Carried forward.

84. Lat 24-34.4 Long 81-33.5

Chart shows 21. Area shows general depths of 123°, bottom is From H-650. Several depths and shell has probably deepened.

Several depths of 31. None carried.

85. Lat 26-34.1 Long 81-33.1

South Chart shows Nine Foot Shoal Light which according to light list/Atlantic Coast page 114 is in 9' in mid channel. This area was carefully investigated and the fellowing obtained

121 (65r); A least depth of 10° was obtained about 10 metersb satisfactory. NE of the light structure. SEE V22 PCS-NOTE

86. Lat 24-33.9 Long 81-33.4

Chart shows 17. Area developed and investigated, shows nothing less than 24 as obtained on lines. Bottom is sandand has probably from H-650. deepened.

A live coral head with least depth 11'(198p) was located about 200 meters SW'ly.

87. Lat 24-33.8 Long 81-33.1

Chart shows 15. Investigation shows a least depthliz! (110u) on isolated live coral head.

88. Lat 24-33.7 Long 81-33.4

Chart shows 22'. Area developed and investigated, (4-12c pupple) found two isolated rocky patches with least depths as follows 14' (4c purple); 16'(12c purple)

89. Lat 24-33.6 Long 81-33.3

Chart shows shoal with 16'. Area developed and investigated found two coral rock shoals with least depth as follows 14출 (55s); 15출 (56s)

90. Lat 24-33.5 Long 81-33.0

Chart shows 25'. Area developed and investigated, found a sand and rock shoal 200 meters E'ly with least depth 22' (93-4x)

91. Lat 24-33.8 Long 81-33.9

Chart shows 23'. Area developed but not investigated, found From H-650 detached sand lumps in this area with 24°. Bottom is sand and prob-Accept ably shifts leaving small lumps. · Ksv702

92. Lat 24-33.3 Long 8133.8

Chart shows 4. Area developed and investigated, found live coral head with least depth $6\frac{1}{2}$ (60u) just east of beacon 51.

4 15 from H-650. on prosent survey. Unlikely 4 would have been missed. Not carried.

93. Lat 24-3333 Long 81-34.0

Chart shows 10. Area developed and investigated, found a coral roack shoal with least depth 16'(19w'). From H-650. The 10 is not an actual sage but an estimated depth from a distance of 20 meters. It is not carried.

Area developed and investigated, found two rocky patches 🗸 🗸 15'(18w'); 20\ (57-8u).

95. Lat 24-33.8' Long 81-33.5

chart shows 15. Area developed and investigated, found 🗸 live coral head with least depth 15'(21w').

96. Lat 24-35.2 Long 81-33.2

Chart shows 28'. This falls in general depths of 30', the From H-650. soft bottom has probably washed deeper. Recommend removal. May be gangeral. Not carried. displaced. 97. Lat 24-33.0 Long 81-33.7

Area developed and investigated, found a coral rock shoal with least depth 162 (61u). Not charted.

98. Lat 24-32.8 Long 81-33.2

Chart shows 27'. Area developed and investigated, found two small rocky shoals with least depths 20° (26z); 221 (272)

99. Lat 24-52.5 to 53.1 Long 81-33.9 to 34.2

Chart shows an extensive shoal with 7' at the south end and 9° at the north end.

Area developed and investigated, found three shoal patches with least depths as follows

16'(22z); 16'(23z); 16'(24z)

Two fairly large rocky shoals were also found in this area least depth on S'ly one $9^{1}_{\mathcal{L}}$ '(122y) in vicinity of charted 7': least depths on live coral heads on this shoal 15'(157h'); 12'(158h');10' (121y*). The N'ly shoal has a least depth 10^{1}_{2} (66-7u) in vicinity of charted From 91. Present investigation sufficient. Nothing carried forward

100. Lat 24-31.6 Long 81-33.8 6

H-650. Chart shows 22. Area developed and investigated, found From Not carried. a sand, shell and rock patch with least depth 23'(2v').

101. Lat 24-32.2 Long 81-35.8

Chart shows 34. Area developed and investigated (33-40c purple) found an isolated rocky patch with least depth 342 (40c purple).

102. Lat 24-32.4 Long 81-53.6

Surveysindicates a shoal as $35\frac{1}{2}$ was found on line 40-ld. in general depths of 57. Not investigated.

103. Lat 24-31.6 Long 81-33.4

Chart shows 24°. Irregular sand bottom with numerous lumps, 242 found on line 52-3r.

Yery satisfactory

investigation.

and B is close to

SHOALS AND DANGERS (CONT'D)

104. Lat 24-31.4 Long 81-33.6

Chart shows 25°. Area developed and investigated, found a From H-650.

Small coral rock, shoal with least depth 27°(11v°).

105. Lat 24-31.8 Long 81-33.8

Chart shows 28°. Area developed shows 28° to be about From H-650.

Not carried.

106. Lat 24-30.8 Long 81-33.2

Chart shows 20°. Area developed and investigated, found a sand and rocky shoal with least depth $15\frac{1}{2}$ ° (29u°).

107. Lat 24-3017 Long 81-33.0

Chart shows 24°. Area developed and investigated (29-32c purple) found no, indication. The charted sounding is probably displaced as the 4 fathom curve is about 200 meters N°ly.

No authority for charted 24.

Disregard.

108. Lat 24-30.5 to 30.8 Long 81-33.4 to 34.4

Chart shows an extensive shoal to the east of Beacon "L" with 18° at east end; 15° in center; and 10° near beacon.

Area developed and investigated, found the east end to be separated from the main shoal with patches with least depths 17'(26u'); 18'(24u').

At the charted 15' there is a sand, shell and rock shoal with least \checkmark depth $13\frac{1}{2}$ ' (155-6j). Investigated 86-7q'.

About 400 meters ENE of the beacon there is a sand, shell and rock patch with least depth 15* (22u*); other patches as follows 24'(23u*): 15'(22u*).

At the charted 10°, there is a small rocky patch with least depth 7°(76-7q°). Least depths on live coral heads as follows

11'(89q'); 10'(90q'); 10'(91q').

Also on this shoal there is an old iron reef marker about 20' long submerged with shoal end to seaward with least depth 8'(88q'). Depth only shown as area is congested

109. Lat 24-30.6 Long 81-34.8

Chart shows 19'. Area developed and investigated, found from H-650.

2 sand, shell and rock patches with least depths as fpllows

20'(90m'); 20'(83m').

110. Lat 24-30. Long 81-34.5

Area developed but not investigated, shows a sand, shell Satisfactory and rock ridge with least depth $2l_2^{\frac{1}{2}}$ on line 65-6q.

110A. Lat 24-30.9 Long 81-33.6

A patch with a, least depth of 24' (23u') was found here.

111.Lat 24-30.8 Long 81-34.5

Chart shows 16'. Area developed and investigated, found a small coral rock shoal with least depth $17\frac{1}{2}$ (53q'), about 200 meters investigation. 16 carried - north of the charted sounding. forward.

112. Lat 24-30.9 Long 81-34.8

Area developed and investigated, found a small coral rock shoal with least depth 24'(139p') on boulder.

113. Lat 24-31.1 Long 81-34.6

Area developed and investigated, found a coral rock shoal with numerous small coral heads, least depth on shoal on live coral head 19'(48p').

114. Lat 24-31.1 to 31.5 Long 81-34.1 to 35.1

Chart shows an extensive shoal within the 3 fathom curve around what is known locally as Pelican Shoal (not named on chart) with 15' at east end; 11' near center; 14' at west end. The shoal is represented by two rocks awash symbols.

Area developed and investigated, found shoal within the 3 fathom curve that conforms to the charted shoal but is much smaller. Least depth at east end $14\frac{1}{2}$ (83-4p).

Near the center of the shoal on the south side there are a number of patches and live coral heads with least depths as follows

Satisfactory investigation.

16'(lr'); 13'(2r'); on patches 10'(3r'); 10'(4r'); 8'(5r'); on live coral heads

The shoal area in vicinity of rocks awash symbols was outlined 75-82p' all fixes being on live coral heads with least depths as follows

75p'-½' 77p'--3' 79p'--2½' 81p'--13' 76p'-1' 78p'-3' 80p1--31 82p'--61

The above outlined area consists of a sand bar about 2' above high water and numerous jagged rocks and coral heads to the south, and east. There are breakers in this area in moderate weather.

115. Lat 24-31.9 Long 81-34.7

From H-650. Chart shows 39'. This falls in general depths of 41-2' Not carried. the bottom is sand and has probably shifted.

Note: The 5 fathom curve checks fairly well here but there is evidence of a general deepening.

116. Lat 24-31.8 Long 81-34.0

20' Chart shows 26'. Area developed and investigated, 128-33p'. no indication was found. The charted sounding is probably displaced. Recommend removal.

From H-650. 10 min. solit lines.
May have been read 3 fms. in error
on old survey but is carried on old forward.

117. Lat 24-32.4 Long 81-34.7

Chart shows 21'. Area developed and investigated, found 21 carried forward. 142's a sand, shell and rock shoal with least depth 14½'(119y).

Chart shows 21'. Area developed and investigated, found 21 carried forward. 142's 119y).

118. Lat 24-32.8 Long 81-34.4

Chart shows a shoal with 18'. Area developed and investigated found a small shoal with shoal spots as follows $16\frac{1}{2}$ ' (20z); $14\frac{1}{2}$ ' (21z)

119. Lat 24-32.8 Long 81-34.4

Chart shows 17°. Area developed and investigated, found arocky patch with least depth $16\frac{1}{2}$ ° (14w°).

120. Lat 24-32.7 Long 81-34.8

Area developed and investigated, found an isolated rocky shoal with least depth 14'(15z). Not charted.

121. Lat 24-32.9 Long 81-34.9

Chart shows 11'. Area developed and investigated, found a coral rock patch with least depth $8\frac{1}{2}$ ' (78u).

Two other rocky patches were located 200 and 400 meters
to the SE with least depths as follows

15½'(16w'); 15½'(121-2u).

Three more patches were found to the north and NW with \checkmark least depths as follows $13\frac{1}{2}$ ' (76-7u); $13\frac{1}{2}$ ' (16z); $13\frac{1}{2}$ ' (75u)

122. Lat 24-33.1 Long 81-34.6

Chart shows 10°. Area developed and investigated, found a number of coral rock patches with least depths as follows $9\frac{1}{2}$ '(128-9k); 10'(74u); $13\frac{1}{2}$ '(72u); $16\frac{1}{2}$ '(71u); $13\frac{1}{2}$ (80u); $15\frac{1}{2}$ '(81u) $14\frac{1}{2}$ '(70u); $15\frac{1}{2}$ '(109u); $15\frac{1}{2}$ (15w'); $11\frac{1}{2}$ '(17z); $14\frac{1}{2}$ '(18z); $15\frac{1}{2}$ (19z).

123. Lat 24-33.2 Long 81-34.3

10 is from H-650. It is not an actual sdg. but an estimated depth from a distance of 100 m.

Not carried.

Chart shows 8'. Area developed and investigated but no indication could be found. Two coral rock patches were found in this area with least depths as follows

17½'(69u); 16½'(68u)

Not corried.

124. Lat 24-33.5 Long 81-34.2

Chart shows 25°. This falls in area of irregular sand

From H-65°.

bottom in general depths of 27°. Bottom has probably washed deeper. 32rdsral.

Not carried.

125. Lat 24-33.3 Long 81-34.9

Chart shows 16. Area developed and investigated, found numerous coral rock patches with least depths as follows

 $14\frac{1}{2}$ ' (106u) in vicinity of the charted 16'

18'(148-9t) 18'(198-9j) live coral head

12½'(103u) 16'(105u) 17'(108u) 10'(140-9t)

126. Lat 24-33.5 Long 81-34.7

Area developed and investigated, found a small coral rock shoal with least depth on live coral headl4'(146t). Not charted.

127. Lat 24-33.6 Long 81-34.5

Chart shows 18°. Area developed and investigated, found a small rocky shoal with least depth on live coral head 18°(148r). Another live coral head was located with least depth15°(149r). A coral rock patch with least depth $17\frac{1}{2}$ °(107u) was located about $\frac{1}{2}$ mile WSW of pos. 148r.

128. Lat 24-34.4 Long 81-34.0

Chart shows 17°. Area developed and investigated (52-64r) but no indication was found. Bottom is sand and shell and has probably washed deeper. Recommend removal. See also Vo/10 Page 41-Note.

129. Lat 24-34.5 Long 81-34.76

From H-650. Falls on edge of devolopment but old survey records sft bottom; sdg might have been read I fm in error; and 20 min. spent in drift sounding. Not carried.

Chart shows 22'. This falls in general depths of 24', the bottom is sand and has probably washed deeper. Recommend removal. From N-650.

Differences general. Not

130. Lat 24-34.9 Long 81-34.4

Area investigated found two live coral heads with least
10 not shown.
Too close to 7.

depths as follows
10'(201r); 7'(202r)

131. Lat 24-35.1 Long 81-34.5

Chart shows 20°. This falls in general depths of 22-3°, From H-L5° bottom is mud and sand has probably deepened. Recommend removal.

132. Lat 24-35.3 Long 81-34.6

Chart shows 3'. Area developed and investigated, found numerous live coral heads with least depths as follows

27c'--5' 31c'--4' 35c'--2' 39c'--3' 43c'--2'

 $28c' - -5\frac{1}{2}$, $32c' - -2\frac{1}{2}$, $36c' - -2\frac{1}{2}$, $40c' - -1\frac{1}{2}$, $44c' - -1\frac{1}{2}$

 $290' - 2\frac{1}{2}'$ $330' - 2\frac{1}{2}'$ $370' - 3\frac{1}{2}'$ 410' - 2' $450' - 2\frac{1}{2}'$

 $30c^{*}-4\frac{1}{2}$; $34c^{*}-1\frac{1}{2}$; $38c^{*}-4$; $42c^{*}-3$; $46c^{*}-2\frac{1}{2}$;

4' (26c') close to position on chart.

132 (cont).

Area covered by #132 Lat 24-35.0 to 35.2 Lon 81-34.6 to 35.2

79z--3=1 76z--2* 73z--11 74z--21 77z--431 78z--5* 75z--21 50c* --0

Coral heads covered to 12 ft. are shown as rocks awash at MLW

133. Let 24-35.6 Long 81-34.3

Chart shows a sunken rock symbol. Areaadeveloped and investigated found a patch of corals heads with least depths as follows

Note-69z--awash at low water

#69-70-71 form a cluster.

71z--1

72z--4분1

A sounding staken directly over the charted position, found 91 (20b purple). Caral heads covered to 11 ft. plotted as rocks awash. Fall at mil west of those on H-650 but the ald plotting is attremely dubious.

134. Lat 24-35.8 Long 81-34.3

Chart shows 2. This falls in depths of 5-6, area has 22 on H-2006 (1990). Differences general. probably deepened. Not carried.

135. Lat 24-36.0 Long 81-34.2

Chart shows 4'. This falls in a channel known as Sugarloaf Creek. The channel was sounded out from the highway bridge (63-7b). The banks on either side of the channel outlined as follows

on east side of channel 85, 86a purple, this bank bares in spots at M. L. W.

on west side of channel (57-8c)(87-9a purple), this bank also bares in spots at M.L.W.

136. Lat 24-35.5 Long 81-35.1

Chart shows 3. This falls in general depths of 5, bottom From H-650. The 3 has not been carried but a 12 rock on mi. SSE has been carried forward has probably washed deeper. as a rock awash at MLW. Falls in 6 ft. on present 137. Lat 24-34.7 Long 81-35.5

Chart shows 2° and "Rock" notation. Area developed and investigated, found a number of live coral heads with > least depths as follows

52c'-- 21 54c'--2号 56c'--2' 530 -- 2 Plotted as rock awash MLW

138. Lat 24-34.7 Long 81-35.9

Chart shows 21. Area developed and investigated, found tongue of 3' curve about 250 meters N'ly, with least depth 3'(8-9c). A sounding 7'(27y8) was taken in vicinity of charted sounding. The general. 2' is probably displaced. riot carried.

distance

P. 126 + 143 above. Present survey adequate.

SHOALS AND DANGERS (CONT'D)

139. Lat 24-34.6 Long 81-35.8

Area investigated, found a patch of live coral heads about 10 meters in diameter with least depth 52 (57c). Not charted.

140. Lat 24-34.5 Long 81-35.5

Chart shows ? . This falls in depths of 9-10, not investigated. There are a number of 8' spundings about 200 meters SW. Satisfactory.

141. Lat 24-33.1 Long 81-35.1 V

The light list South Atlantic Coast page 244 states that Accept 12 over West Washerwoman Bn. 53 is in 9' of water. The least depth found was 125° alongside beacon, see Vol. 11, pg. 2.9 net on There is a coral rock patch 100 meters NH of the beacon with least dopth 15 1000 (mispioned on smooth sheet) 45.

142. Lat 24-33.0 Long 81-35.2 - SEE Pzo A

· Chart shows 2'. Area developed and investigated. found numerous live coral heads with least depths as follows-

203-4t5' $50u1\frac{1}{2}$ ' $96u5$ ' $101u7$ ' $39-40u3\frac{1}{2}$ ' $92u2\frac{1}{2}$ ' $97u4\frac{1}{2}$ ' $102u2$ '	_					
$39-40u3\frac{1}{2}$, $92u2\frac{1}{2}$, $97u4\frac{1}{2}$, $102u2$	201t2½'	49u½'	9511	100u3½°		
	203-4t5'	50u12	96 n 5'	101u7°		
47 39 07 09 00 70	39-40u3½'	92421	97u4 1 1	102u2*		
47u	47u11	93021	98u5 ⁷	2y5°		
180 ½ 94u 7' 99u 6½' 6yQ 2½'		9412-71	99u-611	679-211		

143. Lat 24-32.8 Long 81-35.7

Chart shows 8. Area developed and investigated, found 8 12 from H-650 three isolated rocky patchesabout 150 meters NE of charted 8', and is estimated with least depths as follows 10/2

rather than an actual sdg. Disregard. 9½'(41c purple); 9½'(42c purple); 9½'(43c purple). A sounding 14°(ly) was dropped directly over charted sounding. The charted sounding is probably displaced.

144. Lat 24-32.7 Long 81-35.1

Chart shows 23'. A shell and sand patch was indicated on the Satisfactory. survey with 242 on line 126-7u.

145. Lat 24-32.6 Long 81-35.9"

Chart shows 5'. Area developed and investigated but found no indication of this sounding; a live coral head with least depth 13'(7y) was located, in this wicinity. Two isolated patches were found on pocky point of 18' curve with 4-650 very unreliable least depths $13\frac{1}{2}$ '(12y); $13\frac{1}{2}$ '(13y). in this area. See

See also #142 on P20A following

142. Lat 24 -32.6 to 35.0 Long 81-35.0 to 35.7

Chart shows a shoal with 2' on its north end and 1' on its south end. A second shoal lies close by to the southeast with 2' on its north end. Area developed and investigated and found a shoal section of small extent within the six foot curve with least depths on three coral heads as follows: $1\frac{1}{2}$ * (48-9-50u) Satisfactory and a number of coral heads studded about within the 12' curve. An iron pipe baring $3\frac{1}{2}$ * at MLW lies on the west side of the shoalest section (see note after position 47u).

The coral heads are listed for convenience:

47u1	92u21	94u7*	98u-5'	102u2*
201t21°	93u2°	95u4*	99u6½ °	
203-4t5°		96 u 5*	100u3 ¹	*
39-40u3½	2y5*	97u42°	101u7*	

See also shoal #145 for the 5' sounding in Lat 24-32.7 Long 81-35.9

146. Lat 24-32.4 Long 81-36.0

Chart shows 10°. Area developed and investigated, found as an a small rocky shoal with least depth 12½°(11y).

Three other patches were found about ½ mile to the east with least Dieregard. depths as follows

 $12\frac{1}{2}$ (131-2u); 13'(10y); 118(9y) on live coral head.

147. Lat 24-32.4 Long 81-35.0 to 35.4

Chart shows a single shoal with 12'. Area developed and investigated, found that the shoal is farther north and broken up into a number of isolated patches. A sndg of 33' (5w') on pos of charted 12'.

Live coral heads with least depths as follows were located in this area 115y-2' 116y-4'

Coral rock patches with least depths as follows $15\frac{1}{2}$ '--6w'; $15\frac{1}{2}$ '--118y

Note;: Close development in this area indicates a general deepening.

148. Lat 24-32.3 Long 81-35.8

Chart shows 6°. Area developed and investigated, found a rocky sheal with least depth5½°(114y) on live coral head.

Other coral rock patches were located in this area

145(112y); 15'(113y); 14½°(114-15f)—NE point of sheal.

149. Lat 24-32.1 Long 81-35.9

Chart shows 18. Area developed and investigated, found a rocky patch on point of 5 fathom curve with least depth 18'(4w').

150. Lat 24-31.2 Long 81-35.8

Chart shows 16°. Area developed and investigated, found a live coral head with least depth $\lambda 6\frac{1}{5}$ (25q°). There are several rock and sand patches in this area with least depths as follows $16\frac{1}{5}$ (12q°): $18\frac{1}{5}$ (26q°): $21\frac{1}{5}$ (10q°).

151. Lat 24-31.1 Long 81-35.6

Chart shows 20°. Area developed and investigated, found 18 100 m. west nothing less than $28\frac{1}{2}$ ($28q^{\circ}$). An isolated coral rock and sand patch lies about 200 meters S'ly Satisfactory with least depth $23\frac{1}{2}$ ($27q^{\circ}$). Recommend removal of 20°.

152. Lat 24-31.3 Long 81-35.5

Chart shows 17°. This falls in general depths of 228, bottom sand, shell and rock has probably deepened. Least in vicinity is 252 (18u*).

From H-650.
Similar disagreement in
surrounding
depths.
Not carried.

153. Lat 24-31.0 Long 81-35.2

chart shows 10°. Area developed and investigated, found a live coral head with least depth $10\frac{1}{2}$ ° (52q°).

154. Lat 24-30.7 Long 81-35.3

Area investigated, found a sand, shell and rock shoal with least depth $26\frac{1}{2}$ (5lq°). Not charted.

155. Lat 24-30.8 Long 81-35.6

Chart shows 13°. Area developed and investigated, found that the sounding is probably displaced, $52^{\circ}(5t^{\circ})$ was dropped over from H-650. the charted position.

Thre is a sand and rock shoal about 200 meters N°ly withleast depth of $19\frac{1}{2}^{\circ}(29q^{\circ})$.

There is another rocky patch to the west with least depth $16\frac{1}{2}^{\circ}(45q^{\circ})$.

156. Lat 24-30.5 Long 81-35.3

Chart shows 18'. Area developed and investigated, found that the sounding is probably displaced, 37'(35q') was dropped over the charted position. There is a sand and rock shoal about 200 meters

NE'ly with least depth 20'(34q').

The sounding is probably displaced, 37'(35q') was dropped over the charted position. There is a sand and rock shoal about 200 meters

The sounding is probably displaced, 37'(35q') was dropped over the charted position. There is a sand and rock shoal about 200 meters

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The sounding is probably displaced, 37'(35q') was dropped over the charted position. There is a sand and rock shoal about 200 meters

The sounding is probably displaced, 37'(35q') was dropped over the charted position. The sounding is probably displaced, 37'(35q') was dropped over the charted position.

157. Lat 24-30.5 Long 81-35.5

Chart shows 22. Area developed and investigated, found 21. (31q.) on sand bottom within the 245 curve.

158. Lat 24-30.4 Long 81-35.5

Chart shows 15°. Area developed and investigated, found Satisfactory. a number of coral rock patches with least depths as follows 16'(36q'); 16'(37q'); 16'(41q'); 15'(38q'); 16'(76m') on live coral head. \$\frac{1}{15} \text{ is 0.4 mile west.}

159. Lat 24-30.3 Long 81-36.0

Chart shows ll'. Area developed and investigated, found a From H-650 rocky shoal with least depth on live coral heads as follows

14'(73m'); 14'(74m').

11 not carried.

160. Lat 24-30.4 Long 81-35.2

Checks H-650.
Area investigated, found a coral rock patch with least
depth 28'(13t'). Not charted.

161. Lat 24-30.5 Long 81-35.0

Area investigated, found a coral rock patch with least 27 100m. depth 25'(32q'). Not charted.

162. Lat 24-30.3 Long 81-36.3

Area developed and investigated, found a sand rock and grass V shoal with least depth $18\frac{1}{2}$ (5p°).

163. Lat 24-30.5 Long 81-36.5

Chart shows 22'. Area developed and investigated, found a small coral rock shoal on point of 5 fathom curve with least depth $19\frac{1}{2}$ ' (49q').

164. Lat 24-30.6 Long 81-36.8

Area investigated, found a coral rock patch with least depth 26'(5u'). Checks H-650.

165. Lat 24-30.8 Long 81-36.2

Chart shows 14°. Area developed and investigated, found From H-65°. two isolated Boral rock patches with least depths as follows $18\frac{1}{2}$ ° (46q°); $18\frac{1}{2}$ ° (61-2e°). Similar differences in surrounding depths. Investigation Much time was spent drifting in this area, and the bottom was satisfactory. Nothing carried.

166. Lat 24-30.8 Long 81-36.5

Area investigated, found two isolated coral rock patches $16\frac{1}{2}$ (7q*) on live coral head; $18\frac{1}{2}$ (8q*).

167. Lat 24-30.8 Long 81-36.7

Chart shows 19'. Area developed and investigated, found a number of coral rock patches, with least depths as follows 19'(3q'); 21'(2q'); 21'(5q'); $21\frac{1}{2}'(22-3e)$.

168. Lat 24-31.1 Long 81-36.1

Chart shows 14°. Area developed and investigated, found two coral rock sheals with least depths $15\frac{1}{2}$ °(22q°) on live coral head; $20\frac{1}{2}$ °(9q°)—on rocky bottom.

169. Lat 24-31.2 Long 81-36.1

Area investigated, found a small coral rock shoal with \checkmark least depths on live coral heads $20\frac{1}{2}$ ($23q^{\circ}$); $17\frac{1}{2}$ ($24q^{\circ}$).

Satisfactory.

SHOALS AND DANGERS (CONT'D)

170. Lat 24-31.1 Long 81-36.9

Chart shows 16. Area developed and investigated, found From H-650.

Similar differences general depths of 22-4, the bottomis sand, shell and rock and in sucrounding has probably deepened. A sounding 24'(5m') was taken in vicinity depths. Not of charted position.

171. Lat 24-31.8 Long 81-36.1

Chart shows 35°. Area developed and investigated (44-7c purple)
found no indication. Bottom is sticky mud and has probably washed from H-650.
deeper. Recommend removal.

37 ft. on
present survey
satisfactory.

172. Lat 24-31.8 Long 81-36.7

Chart shows large shoal with 6'. Area developed and investigated found large rocky shoal with least depth $5\frac{1}{2}$ (104y) on live coral head. V Other coral rock patches in this area 15'(3w'); 17'(105y); 17'(103y).

173. Lat 24-31.9 Long 81-36.4

Chart shows 12'. Area developed and investigated, found that the charted sounding id probably displaced, 31'(lw') was dropped over the charted position.

Present investigation investigation investigation satisfactory depths

17'(110y) 13½'(119-20f) 16'(107y) 14'(106y) 15'(109y) 16'(108y) 19½'(147-8f)

174. Lat 24-32.4 Long 81-36.5

Area investigated, found two coral rock patches with least depth $14\frac{1}{2}$ (38-9f); 15'(35y).

175. Lat 24-32.6 Long 81-36.2

Chart shows 7'. Area developed and investigated, found two live coral heads with least depths 9'(32y); 10'(33y). There are a number of coral rock patches in this area with least depths as follows

 $13\frac{1}{2}$ '(14y) $15\frac{1}{2}$ '(16y) $13\frac{1}{2}$ '(18y). $14\frac{1}{2}$ '(15y) $16\frac{1}{2}$ '(1-2x) not investigated 12'(190-1k)""

176. Lat 24-32.2 Long 81-37.0

Area investigated, found numerous rocky patches with least depths as follows

 $14\frac{1}{2}$ '(50y) $10\frac{1}{2}$ '(52y) live coral head $14\frac{1}{2}$ '(54y) $14\frac{1}{2}$ '(51y) $15\frac{1}{2}$ '(53y) $14\frac{1}{2}$ '(35-6f)

177. Lat 24-32.4 Long 81-36.8 *

Chart shows 12' and a wreck. Area developed and investigated, found a rocky shoal with least depth 13' (36y); on nouth and 14' (37y) on north. The wreck was found about 385 metrs NNE from charted position. It is lying upright, is about 60' long, 18' beam, wooden boat with steel ribs. According to local rumor the boat is an old banana schooner that caught fire and sank. The wreck lies in depths of 25'; depth on deck 14 (137t'); least depth 9 (38y) taken on davit over Wreck charted from Daily Memo 5647 of 3/2/27. after section. Present investigation Satisfactory .

178. Lat 24-32.6 Long 81-36.6

Chart shows 12'. Area developed and investigated, found numerous coral rock patches as follows

27y--14등' 19y--135 23y--15g Satisfactory $26y-13\frac{1}{2}$ on live coral head 28y--13½' 20y--13計 24y--14½* 30y--14' coral head 21y--14ㅎ 29y--14' 22y--135 25y--16点。

179. Lat 24-32.7 Long 81-36.2

Chart shows 10. Area developed and investigated, found to is an istimated depth that the charted sounding is probably displaced, 20'(3ly) was Disregard. dropped over the charted sounding. Recommend removal of 10.

180. Lat 24-33.1 Long 81-36.1

Chart shows 16'. This falls in general depths of 18'; the bottom is sand and the area lies across Hawk Channel and has probably differences Similar differences in sorrounding depths. 16 not carried washed deeper. Recommend removal.

181. Lat 24-33.3 Long 81-36.5

Chart shows 16'. This falls in general depths of $17\frac{1}{2}$ ', Satisfactory. bottom is sand and has probably washed deeper.

182. Lat 24-33.5 Long 81-36.3 :-

Chart shows 16. Area investigated, found a small sand and shell shoal with least depth $17\frac{1}{2}$ (14y). Bottom has probably washed Satisfactory. deeper; recommend removal.

183. Lat 24-33.3 Long 81-37.0

Chart shows 16'. Area developed and investigated, found no indication in the immediate vicinity. There is an isolated rocky Satisfactory. patch about 200 meters SE'ly with least depth $15\frac{1}{2}$ '(5u) on isolated coral head.

184. Lat 24-33.5 Long 81-36.9

Area investigated, found least depth on coral rock patch $16\frac{1}{2}$ (121t). Not charted.

185. Lat 24-33.9 Long 81-36.3

Chart shows 18'. Area investigated, found nothing less than $19\frac{1}{2}$ (15y'). Bottom mud and grass has probably washed deeper. Differences general. Recommend removal.

Note: 3 fathom curve in this area checks the charted curve very well. 🗸 🗡

186. Lat 24-34.2 Long 81-36.7

Chart shows 15°. This fallin general depths of 16° probably Satisfactory is not carried ane to irregular bottom.

187. Lat 24-34.5 Long 81-36.1

Chart shows 5'. Area investigated, found no indication Appears to be 10'(26y') dropped directly over charted position. There is a $6\frac{1}{2}$ old records. lump (22-3g) about 200 meters NW ly. Bottom to sand and has - probably washed deeper. . Probably shifted.

From H-650. Present investigation sufficient Not

188. Lat 24-34.5 Long 81-36.6

Area investigated, found live coral heads with least depths / as follows $8\frac{1}{2}$ (58c'); 9'(29-30n); $6\frac{1}{2}$ (27-8n). Not charted.

189. Lat 24-34.7 Long 81-36.8

Chart shows 3'. This falls within the 6' curve, bottom is 5 ft. on present sorvey satisfactory sand and has probably washed deeper.

190. Lat 24-35.0 to 36.0 Long 81-36.5 to 37.5

The large bight in this area is inaccessible at the extreme NE section at any stage of tide; the remainder is mud and grass flat accessible for real shoal draft boats at extreme high water only. There is a blind channel in the bank close to shore as indicated, it has enough water for anything able to get into it; accessible only at high water.

174-77 a purple and 17-9b purple outline mud and grass bank off SW point of Sugarloaf Key, this bank bares in spots at M.L.W. The entrance to Saddlebunch Harbor was developed (1-17z') and is in good agreement with the chart. The banks on either side are well defined and the channel is clearly visible.

191. Lat 24-34.5 Long 81-37.0 -

Chart shows two sunken rock symbols and l*.

Area investigated, found numerous live coral heads with least
depths as follows

depths as follows Satisfactory 127a(purple)-22' 122a(purple)-4' -21 600 -- 42 Plotted -4. 128a 123a 61c'-2' as rack 62c'-3' -9' on mud &grass patch 129a 124a - 41 130a 125a - 41 131a 126a 6301--21

132a(purple)--10* 134a(purple)--4* 136a(purple)--2* 135a ** --6* 135a ** ---5*

192. Lat 24-34.56 Long 81-37.47

Chart shows 1. The sounding is probably displaced and From H-4165 should be on the bank about 0.1 mile N'ly. This bank outlined falls 30 m. west 161-2a purple, makes out from the east point of Pelican Key. bank. Satisfactory. Least depth 1. M.L.W.

193. Lat 24-33.7 Long 81-37.4

Chart shows 24'. This falls in general depths of 19-22' bottom sand and shell has probably shoaled.

194. Lat 24-33.5 Long 81-37.3

Chart shows 17. Area developed and investigated, found From H-650-least depth 19. (3h.). Bottom sand and shell has probably washed disagreement deeper. Recommend removal.

In surrounding depths. Not carried.

195. Lat 24-33.5 Long 81-37.7 Chart shows 20' Area developed and investigated, found Satisfactory.
least depth 21'(11t). See also 10y'.

196. Lat 24-33.2 Long 81-38.0

Chart shows 23'. Area developed and found nothing less Sutremaking than 26½'(5-9y'). Bottom mud and grass probably washed deeper. Action is deplicated to the superior of the

From H-650.
Surrounding depths in similar disagreement. Not carried.

197. Lat 24-33.2 Long 81-37.7

An isolated sand lump 24'(217-8q) not investigated. Irregular sand bottom has lumps which vary $1-l_{Z}^{\frac{1}{2}}$ from surrounding battom.

198. Lat 24-33.2 Long 81-37.2

Chart shows 11' at Beacon 55. Area developed and investigated, found a rocky shoal with least depth $12\frac{1}{E}$ (6u).

199. Lat 24-32.9 Long 81-37.1

Chart shows 20°. Area investigated, found a live coral head with least depth 13°(6h°).

200. Lat 24-32.5 Long 81-37.0°

Chart shows 21. Area developed and investigated, found numerous coral rock patches with least depths

39y--17' 41y--14' 48y--15'

40y--17* 47y--16*

201. Lat 24-32.4 Long 81-37.3

Chart shows 10°. Area investigated, found live coral head with least depth 11'(49y).

Numerous coral rock patches in this area with least depths

42-y--15° 43y--14° 44y--16°

202. Lat 24-32.5 Long 81-37.5

Chart shows 20'. This falls in general depths of 23-4', Several 20's bottom is sand and shell and has probably washed deeper.

Disregard.

203. Lat 24-32.3 Long 81-37.9

Chart shows 5'. Area developed and investigated, found a coral rock shoal with least depths on live coral heads 6'(78y) Satisfactory. 10'(77y); 11'(75y); and 9' (76y).

A number of coral rock patches in this area with least depths

72y--16' 74y--15' 24h'--14'

73y--13' 79y--14'

204. Lat 24-32.2 Long 81-37.4 L

Chart shows 13. Area investigated, found an isolated Disregard 13. coral rock patch with least depth 15'(71y). Recommend removal.

205. Lat 24-32.1 Long 81-37.1

Chart shows 10°. Area investigated, found no indication to is an of this sounding. Least depth on live coral head $17\frac{1}{2}$ ' (59y); estimated depths on rocky patches $14\frac{1}{2}$ ' (56y); $14\frac{1}{2}$ (57y); $14\frac{1}{2}$ ' (58y).

Discegard.

206. Lat 24-32.0 Long 81-37.6

جمد

Chart shows 11'. Area investigated, found no indication From N-650. of this sounding. Coral rock patches with least depths in this area 14'(12z); 18'(43-4w); $13\frac{1}{2}'(65y)$; $13\frac{1}{2}'(66y)$.

207. Lat 24-31.9 Long 81-37.3

Chart shows 14. Area investigated, found a number of coral rock patches

15号(6ly) 15号'(60y) 15号(67岁)

13½! (68y) 14号*(62y)

208. Lat 24-31-78 Long 81-37.5 L

Area investigated, found two isolated coral rock patches with least depths $16\frac{1}{2}$ (63y); $13\frac{1}{2}$ (64y).

209. Lat 24-31.8 Long 81-37.8

Chart shows 10'. Area investigated, found no indication of thsi sounding. Coral rock patches with least depths were located 13'(41-2w); 15'(11z); 14'(96y); 15'(97y). 10 is an estimated depth

About 0.3 mile SSW'ly the chart shows 12'. Area inves-on H-650. tigated found least depth on live coral headl2'(95y). Disregard.

210. Lat 24-31.5 Long 81-37.6

Chart shows 12'. Area investigated, found that the sounding must be displaced. A small rocky shoal found 150 meters NE'ly with From H-650.
Investigation and proventing at the supposed in a disprove present existence. least depth 15' (98y).

211. Lat 24-31.5 Long 81-37.5

Area investigated, found two coral rock patches in general depths of 6-7 fathoms. Least depths 17'(99y); 21'(100y). Not charted.

212. Lat 24-31.5 Long 81-37.3

Chart shows 18'. Area investigated, found a rosky patch with least depth 18'(101y).

213. Lat 24-31.5 Long 81-37.0

Chart shows 32°. Area investigated, found a rocky patch with least depth 20'(102y). Not charted.

214. Lat 24-31.3 Long 81-38.0

Chart shows 38. Area investigated, found a rocky patch with least depth 212 (1b).

215. Lat 24-31.3 Long 81-37.4

Area developed and investigated (18-27d purple) found a small rocky shoal with least depth 23' (27d purple) on boulder.

216. Lat. 24-31.0 Long 81-37.7

Chart shows 14. Area investigated found $14\frac{1}{2}$ (11-2b); (18-91).

217. Lat 24-30.8 Long 81-37.6

Chart shows ll'. Area investigated, found least depth in immediate vicinity 15'(8M'), bottom is sand and shell has probably washed deeper.

Other sand lumps in this area 12'(127-8d'); 12'(125d'); 11'(125-6d') 12'(139-401').

218. Lat 24-30.7 Long 81-37.1

Chart shows 7'. Area investigated, found a coral rock shoal with least depth $7\frac{1}{2}$ '(1381'); least depth on live coral head $8\frac{1}{2}$ '(1371').

219. Lat 24-30.5 Long 81-37.8

Chart shows 8'. Area developed and investigated, found a sand, shell, rock and grass shoal with least depth $5\frac{1}{2}$ '(45m'); least depth on live coral head 7'(38m').

220. Lat 24-30.3 Long 81-37.4

Chart shows 4' with "Rock" notation. Area investigated, found a large coral rock shoal with least depth $3\frac{1}{2}$ (1331').

221. Lat 24-30.1 Long 81-37.1

Chart shows 22'. Area investigated, found rocky shoal with least depth 17'(1351'); another patch with least depth 27'(1361') was located.

222. Lat 24-30.1 Long 81-37.4

Area investigated, found a coral rock shoal with least depth $10\frac{1}{2}$ (65-6g').

223. Lat 24-30.1 Long 81-37.8

Chart shows 3' and calls the shoal Pelican Shoal. This shoal is known locally as Eastern Sambo, outlined (25-32m'). Shoal area consists of a changing sand bar about 3-4' above H.W. (33-6m'), and numerous jagged rocks. Breakers in the area in moderate weather. Rocks bare at MLW.

224. Lat 24-29.8 Long 81-38.1

Chart shows 31. Area developed and investigated, found no From H-650. indication; the sounding is probably displaced as a point of the Devegard.

5 fathom curve lies about 200 meters E'ly.

225. Lat 24-29.8 Long 81-38.4

Chart showsx17'. Area investigated, found a small rocky shoal with least depth $15\frac{1}{2}$ '(24m').

226/ Lat 24-29.8 Long 81-38.45

Area investigated, found a rocky patch with least depth 12'(1041').

There is a rock awash symbol about 0.1 mile W'ly. From H-650. Present investigation Area investigated, found least depths on live coral heads ample to disprove existence of rock 16m'-8' 18m'-6' $20m'-3\frac{1}{2}'$ Recommend removal of awash. Not 17m'-6' $19m'-5\frac{1}{2}'$ 21m'-4' rock awash symbol.

227. Lat 24-30.1 Long 81-38.5 /

Chart shows 21'. Area investigated, found a sand lump with least depth 21'(46m'); also a rocky patch 17'(15m').

228. Lat 24-30.7 Long 81-38.3

Areabinvestigated, found a small sand and shell lump at west edge of charted shoal with least depth 12'(13m').

229. Lat 24-30.8 Long 81-38.1 /

Chart shows 13'. Area investigated, found sand lump in 15 close by. immediate vicinity with least depth 17'(llm'). Another sand Satisfactory. lump was found 300 meters NE'ly with least depth 12½'(9-10b').

230. Lat 24-30.5 Long 81-38.56

Area investigated, found rocky patch with least depth 18' (135-6d'). Not charted.

231. Lat 24-30.6 Long 81-38.7

Chart shows 20°. Area investigated, found no indication, least depth in area $24\frac{1}{2}$ '(9n°). Bottom sand, shell and rock has probably washed deeper. See also Vol 19 Page 57.

From H-650.

24 min, drift

manding on

and bottom.

20 not carried.

232. Lat 24-31.1 Long 81-39.0

Area developed and investigated, found two rocky shoals within the 5 fathom curve with least depths 29'(39-40d purple); 25'(35-6h')

233. Lat 24-31.4 Long 81-39.0

Chart shows 5'. Area investigated, large rocky shoal with least depths on live coral heads 6'(90y); 7'(69-70w).

Several isolated rocky patches with least depths Indian; (3z).

234. Lat 24-31.5 Long 81-38.3

Chart shows 23°. Area investigated, found a number of rocky patches with least depths as follows 86y--14° 87y--14° 88y--12° 89y--16°

235. Lat 24-31.67 Long 81-38.2

Chart shows 12. Area investigated, found two rocky patches about 200 meters N'ly with least depths 13'(7z); 15'(8z).

54tisfactory.

236. Lat 24-32.0 Long 81-38.2

Chart shows extensive shoal area with rack awash symbol and 3'.

Investigated, found area 66 coral heads with limits indicated of plotted as rock by 82y-1½' and 83y-4', in vicinity of rock awash symbol.

Area investigated in vicinity of the charted 3', found a coral rock shoal with least depth $4\frac{1}{2}$ '(138-9f). Least depths on live coral heads 6'(84y); $5\frac{1}{2}$ '(85y).

237. Lat 24-31.7 Long 81-38.6

Chart shows 14°. Area investigated, found a rocky shoal with least depth 13°(6z].

238. Lat 24-31.6 Long 81-39.0

Chart shows 11'. Area investigated, found an isolated rocky patch about $\frac{1}{200}$ meters $\frac{1}{200}$ with least depth $11\frac{1}{2}$ '(2z). Another socky shoal located about 200 meters E'ly with least depth $13\frac{1}{2}$ '(135-6f).

239. Lat 24-31.8 Long 81-38.9

Chart shows 16°. Area investigated, found two isolated rocky patches with least depths $16\frac{1}{2}$ '(1z); 13'(9d purple). An 18' sounding in this area on sheet 4165 was investigated (6-17d purple) found no indication.

240. Lat 24-32.2 Long 81-38.1

Chart shows 7°. Area investigated, found live coral head with least depth $7\frac{1}{2}$ °(8ly).

241. Lat 24-32.4 Long 81-38.4

Chart shows 18°. Area investigated, found two rocky patches with least depths $15\frac{1}{2}$ ° (14-5u); $15\frac{1}{2}$ ° (18u).

SHOALS AND DANGERS (CONT'D)

242. Lat 24-32.4 Long 81-38.8

Chart shows 12°. Area investigated (1924u) found least 12 is from H-650. depth on smooth rock shoal 15½°(19-20u). A sand lump was found to whether is is on this investigation just east of the rocky shoal with least least depth. 12 carried forward.

243. Lat 24-32.8 Long 81-38.2

Chart shows 20°. Area investigated, found least depth 20°(8h°)

about 300 meters SW'ly.

Several 20's on H-650.
22 on present survey
Not carried.

244. Lat 24-33.0 Long 81-38.8

A 22' sounding at 147b was investigated (1-4y') (1-5d purple).

About 30 minutes was spent in drifting in this area but no indication could be found. On examining the record book it is believed 22 rejected. that the either the leadsman made an error in reading the line or else the recorder misunderstood the leadsman; the bottom is mud.

Recommend the shoal sounding be rejected. See also Vol 17-Page 12.

245. Lat 24-33.3 Long 81-38.5 ×

Chart shows 20°. Area investigated, found nothing less From H-45°.

Similar differences than 222° (28-9x°). Bottom is sand and has probably deepened. in surrounding depths. Disregard.

246. Lat 24-34.3 Long 81-38.4

Chart shows two sunken rock symbols. Area investigated found numerous live coral heads with least depths

1x'2' 2x'5' 2x'6' 4x'6' 5x'42'	$6x^{4}-4\frac{1}{2}^{4}$ $7x^{4}-5^{4}$ $8x^{4}-3\frac{1}{2}^{4}$ $9x^{4}-\frac{1}{2}^{4}$ $10x^{4}-\frac{1}{2}^{4}$	11x'1' * 12x'2' 13x'2½' 14x'3'	* Plotted as rocks awash at MLW.
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247. Lat 24-34.5 Long 81-38.5

Two small mud and grass banks here outlined by (4-5b purpls) $\sqrt{\nu}$ 6-9b purple). Both banks have a least depth $\frac{1}{2}$ M. Light.

248. Lat 24-34.7 Long 81-38.0 to 39.0

Shoal area from the SW point of Pelican Key to west end of Saddlehill Key outlined 163-73 a purple, and 16bpurple. The area enclosed varies from rock to mud and grass and bares in spots at M.L.W.

13-5b purple on bank to west of small channel whic passes to north of Saddlehill Key.

SHOALS AND DANGERS (CONT'D)

249. Lat 24-34.2 Long 81-39.1

Chart shows l*. Area just outside limits of sheet but the following live coral heads were located

 $20x^{1}-1\frac{1}{2}$ × $23x^{1}-2\frac{1}{2}$

26x'--5'

21x'--1' * 24x'--2'

27x*--5*

* Plotted as rocks awash at KLW.

22x'--3' 25x'--41'

250. Lat 24-29.1 to 29.9 Long 81-39.2 to 40.9

Area charted as Eastern Sambo and Middle Sambo was developed and investigated.

Sunken rock symbol SE of Beacon M is probably displaced sig, "small rocks" on should be on the shoalon which the beacon is located.

Results from 28 ft.

Bis probably displaced sig, "small rocks" on the shoalon which the beacon is located.

Shoal around Bn. M outline (18-32z*). Area enclosed is rocky with numerous jagged rocks and coral heads bare $1-1\frac{1}{2}$ * at extreme LW. Breakers in moderate weather.

Shoal area to west outlined 58-49z'; area enclosed is rocky with numerous jagged rocks bare 1-2' extreme LW. Breakers in moderate weather. At the north tip of the shoal area near 38z' there is a small sand bar 5 x 2 meters which shifts position and disappears at certain stages of tide; this was borne out by visual investigation while cruising in the area at a later date.

Sand bar in disabled at the time the Magnetic Station as plotted was observed it was on the sandbar.

A coral head with least depth 1'(40z') was located on north side of shoal.

There is good water between the shoals varying from 17-24.

A 17' patch was investigated, found least depth 17' (32d purple).

Charted 19' sounding was investigated (109-1152!) but found no indication; the charted sounding is probably displaced to the south.

Least found in the area 65' (112-3z').

19 12 from H-381 (1850-51). Not varified by probably or H-4165.

Disregard.

JUNCTION WITH CURRENT SURVEYS

Junction with current work on the east and northeast is good.

There is no current work to the west or to the north.

H-5913 (1935) on north.

CHANNELS AND HARBORS

HAWK CHANNEL

This channel traverses the full length of the sheet and is marked by one lighted and three unlighted beacons. It is used by the lighthouse tenders, yachts, and fishing and freight boats. The maximan draft using it, at present, is 10°.

The channel was completely sounded out and all grid lines for $\frac{1}{4}$ mile on either side of the centerline were split. The depths in the channel are much greater than the draft of any boat using it at this time.

Directions (Continued from sheets 16-18-22)

1. Continue on course $257\frac{1}{2}$ T for the length of the sheet.

Nine Foot Shoal Light is a skeleton steel structure in mid-channel and marks a 10° shoal. It may be passed on either side. The recommended course passes close by to the northward.

Beacon 51 marks the eastern limit of the groupof coral and rock patches loosely designated as West Washerwoman Shoal. It is on a 6' patch.

Beacon 53 marks the north point of the main section of West Washerwoman Shoal. It is in 11.

Note-Both Beacons 51 & 53 are about 0.8 mile south of the centerline of the channel.

Beacon 55 marks a 12* shoal and is on its north side. The recommended course passes close by to the north-ward.

Note- All vessels are cautioned to remain north of a line between Nine Foot Shoal Light and Beacon 55 as the area to the south is studded with rock and coral patches.

There is little current in the channel.

SUGARLOAF CREEK

A narrow crocked channel with a controlling depth of $2\frac{1}{2}$ leads from the ocean into Sugarloaf Creek. It is usually marked by private stakes. Fishermen and spongers use the channel to a small extent.

Anchorage may be had in the creek between the highway bridge and the creek mouth and is fair protection even from

25

SUGARLOAF CREEK (CONT'D)

A southeast blow.

Few boats pass north of the highway bridge. Clearances are-11 horizontal and 7 vertical at HW.

SADDLEBUNCH ENTRANCE

The entrance was again sounded out and is in good agree— ment with previous surveys. Controlling depth is $6\frac{1}{2}$ in the entrance.

The harbor proper was developed on sheet H-5923 (W. H. Bainbridge). It is used to little extent by spongers and fishermen.

ANCHORAGES

There are two anchorages described on Page 286 of the Coast Pilet-Section D. They are not used as Hawk Channel is now well lighted and boats may make the passage as easily by night as by day. The same statement applies to practically all anchorages-listed in the Coast Pilot-adjacent to Hawk Channel.

GEOGRAPHIC NAMES LA

The following names shown on the chart were verified-

American Shoal Maryland Shoal

West Washerwoman Shoals.—The name is very loosely applied to all the patches between Beacons 51 & 53. When used locally, it usually designated the shoal areasauth of Beacon 55.

The following names were verified but do not correctly indicate the proper feature on the present edition of Chart 1251.

Pelican Shoal

The name is universally used locally to designate the shoal in Lat 24-31.5 Long 81-34.8 which is unnamed on the present chart. Its use in the area shown on the boat sheet is recommended.

2

The same

GEOGRAPHIC NAMES (CONT'D)

Eastern Sandbar.

This name is-at present- charted as Pelican Shoal. The name is in universal general use and the change is recommended.

Western Sandbar

This feature is -at present- charted as Eastern Sambo. The name in universal general use is Western Sandbar and the change is recommended.

The name Sambo is probably used by the fishermen as a contraction for Sandbar.

The Boilers

This feature is - at present- charted as Middle Sambo. The name 'TheBoilers' is in universal general use and is recommended.

The origin comes from the fact the the breakers or the surf 'boils' over the shoal at practically all times.

The Long Reef (Off the sheet)

This feature is charted as Western Sambo. The name above is in universal general use and is recommended.

Note- Authorities for the above names are local fishermen and spongers.

LANDMARKS

There are no landmarks of any kind within the limits of the sheet.

Positions of aids to navigation have been previously submitted. These have remained unchanged since 1935 with the exception of Beacon 55. New position obtained by topo.

MISCELLANEOUS

The three foot curve was drawn inshore to better define the $_{\rm Net}$ $_{\rm mkzd}$. shoal areas close to shore . It is the danger curve for most of the fishermen and spongers.

There are no settlements of any sort along the shore.

Statistics and tidal note are attached.

Respectfully submitted,

Chilip A. Weber,

Hydrographer.

Forwarded Approved.

E. M.McCarthy
Chief of Party

KEY WEST FLA MARCH 28 1939.

MEMORANDUM BY CHIEF OF PARTY***SHEET 6325

The sub-party engaged in hydrographic work was based upon Key West and worked out of Bird Key-Saddlebunch Harbor (Similiar Sound). The greater part of the hydrography was done with Ensign P. A. Weber in charge of the launch. He also wrote the bulk of the report.

The party was furnished copies of the sheets to the westward of the west limits of the area, copies of sheets to the southward executed in 1920, and copies of the 185 1935 sheets in the vicinity of Saddlebunch Harbor. The shhets covering the greater part of the area in which hydrography was executed were not furnished but a copy of Chart 1251 enlarged to scale 1:20000 was furnished.

In general, soundings shown on the chart were checked. If not, like depths were found in the near vicinity. The offshore shoal areas as charted are extensive. It was found, on development, that the shoal areas were of comparatively small extent and that there were a very large number of rocky or coral patches of very small extent within the charted extensive areas. Considerable time was devoted to locating these patches and practically all are described by notes in the record.

The inshore area, as may be expected, differ considerably from the chart. This is probably due to the length of time elapsing since the original surveys.

The offshore areas are usually of sand over smooth or ladge rock. The coating of sand -apparently- is constantly changing in depth due to scour and storms.

The attention of the reviewer is called to the fact that the waters of the reefs are exceptionally clear and that -under ordinary circumstances- bottom is visible in depths of 30°. The shoals along the edge of the Gulf Stream can be seen at almost any time. Ordinarily a patch, rock, or shoal with 18° or less on it may be seem several hundred yards if the sun be behind the observer or if it be on or near the meridian. Sand shoals show a distinctive light green and rock and grass as a brown.

The original instructions to wire drag Hawk Channel were modified by the letter of the Director dated July 12 1938 and , during the 1938 season, the channel lines were split in mile on either side of the center.

All signals in the water are temporary targets. They are made of 2x4's.

E. R. McCarthy
Chief of Party C&GS

meenthy

22/mm 1990

July 12, 1938.

To: Lieutenent (j.g.) E. R. McCerthy, U. S. Coast and Geodetic Survey, F. O. Box 10, Key West, Florids.

Prom: The Director,
U. S. Goast and Geodetic Survey.

Subject: Eire Drag Surveys.

Your verbal recommendation to the Chief, Division of Hydrography and Topography on his recent inspection of your party, that wire drag surveys of the western part of Hawk Channel, and the wire drag investigations which had been scheduled in the vicinity of Key West be emitted as unnecessary, is approved.

In view of the decision to omit further wire drag surveys in the Florida Keys, the wire drag launches RODGERS and MARINDIN will not be returned to Florida at the close of their present season's work in northern waters.

It is understood that you have a small wire drag available which can be used effectively with such small craft as you are using in your present hydrographic work. Should the need for any small wire drag investigation be indicated to satisfactorily complete your present project, you will please not besitate to make such investigation using the equipment you now have available.

(Signed) L. O. Colbert

Director.

STATISTICS

PROJECT HT 158

FLORIDA KEYS

HYDROGRAPHIC SHEET # H-6325

		LAUNCH	BLUEFISH (RED)		
DAY	DATE	MILES (STATUTI	Soundings E)	Positions	DAYS RUN
. a .	6/14/38	29.6	919	142	35.4
Ъ	6/15/38	27.5	932	148	34.2
C	6/16/38	37.2	1640	162	45.0
đ	6/17/38	34.7	813	185	36.7
е	6/20/38	16.7	466	86	31.4
f	6/21/38	30.5	962	179	3 6.5
g	6/22/38	38.9	1149	194	42.2
h	6/24/38	35.8	1041	176	44.1
j	6/28/38	40.8	1284	219	48.2
k	6/29/38	35.2	1122	191	43.1
1	6/30/38	30.4	960	199	41.3
m	7/ 1/38	15.0	516	98	28.2
n	7/ 6/38	30.3	1071	198	41.8
р	7/ 7/38	21.5	865	198	32.9
q.	7/11/38	31.3	1226	227	40.8
r	7/12/38	24.6	942	202	36.5
8	7/13/38	16.2	62 4	14 0	33.3
t	7/14/38	27.8	1038	216	37.0
u	7/15/38	15.3	574	153	28.3
V	7/18/38	9.0	317	57	20.7
₩	7/19/38	12.9	445	102	28.5
x	7/20/38	16.0	547	136	34.3
y	7/25/38	0.0	133	123	26.1
Z	7/26/38	0.1	91	79	27.9
a†	7/27/38	20.9	560	177	32. 6
b'	7/28/38	10.7	293	70	17.8
c'	8/22/38	0.5	79	63	10.7
d.	8/23/38	22.4	774	182	34.4
e¹	8/24/38	8.9	295	84	22.1
- ft	8/26/38	27.1	859	215	42.3
g*	8/29/38	17.1	646	149	35.2
B-TOTAI		684.9	22580	4750	1049.5

LAUNCH BLUEFISH (Continued)

DAY	DATE	miles (Statute)	SOUNDINGS	POSITIONS	DAYS RUN
Carried	Fwd.	684.9	22580	47 50	1649.5
. h *	8/31/38	18.5	656	158	34.8
j'	9/ 1/38	27.9	913	212	41.6
k'	9/ 2/38	21.8	552	179	38.6
1'	9/ 6/38	22.2	741	147	35.3
m*	9/ 7/38	6.0	244	90	31.5
n!	9/12/38	8.2	285	67	22.7
p*	9/13/38	20.4	652	143	39.5
q*	9/14/38	4.4	215	91	23.4
r'	9/15/38	32.4	1094	196	49.9
st	9/16/38	20.7	584	133	38.3
t'	9/19/38	22.6	654	137	42.9
u'	9/21/38	4.9	218	78	26.7
¥*	9/22/38	0.1	77	53	25.1
w!	9/23/38	2.2	116	41	18.8
x*	9/26/38	3.7	171	5 6	13.8
y '	9/27/38	3.5	147	46	28.3
z	9/28/38	12.0	511	128	44.0
TOTAL		916.4	30410	6705	1604.7

STATISTICS

PROJECT HT 158

FLORIDA KEYS

HYDROGRAPHIC SHEET # H-6325

	LAUNCI	H BOWEN (PU	RPLE		
DAY	DATE	MILES (STATUTE)	SOUNDINGS	POSITIONS	DAYS RUN
a b c d	1/26/39 1/27/39 3/13/39 3/14/39	14.8 1.2 2.4 2.9	824 47 107 124	177 20 47 44	24.5 19.0 24.1 22.5
TOTA	L	21.3	1102	288	90.1
	RECAPI	FULATION			
BOAT		viles Fatute)	soundings	POSITIONS	DAYS RUN MILES
BLUE	FISH 9	16.4	30410	6705	1604.7
BOWEN	Ţ 2	21.3	1102	288	90.1
TOTAL	LS 9:	37_7	31512	6993	1694.8

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Hydrography and Topography:

May 12, 1939.

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

Plane of reference approved in 25 volumes of sounding records for

HYDROGRAPHIC SHEET 6325

Locality American Shoal L.H. to Saddlebunch Harbor, Florida Keys.

Chief of Party: E. R. McCarthy in 1938-1939
Plane of reference is mean low water reading

- 2.1 ft. on tide staff at American Shoal Light
- 17.1 ft. below B. M. 4
- 1.7 ft. on tide staff at Nine Foot Shoal Light
- 4.5 ft. below B. M. 1
- 4.3 ft. on tide staff at Key West
- 8.8 ft. below B. M. 29

Height of mean high water above plane of reference is 1.4 feet.

Condition of records satisfactory except as noted below:

Acting Chief, Division of Tides and Currents.

s. сочинивит разитис оргаса 15432

	GEOGRAPHIC NAMES Survey No. 14-632	25	0° 40 / 0	or to or	S. Mod	COLLINGTON TO THE PARTY OF THE	or noon	Sociate of	Pard McHally	N.S. Light	<i>z</i> /
i	Name on Survey		of ₹0′ o	or 20 / or C,	D	E E	or / r	Q. G	⁴ _{δy} H). K	
	Sugarloaf Key										1
	Bird Key										2
ś	Saddlebunch Keys					<u> </u>	<u> </u>				3
	Geiger Key						ļ		<u> </u>		4
	Pelican Key						ļ				5
	Washerwoman Voy shoe	al				<u> </u>					6
#	Pelican Shoal		,				<u> </u>	<u> </u>			7
	American Shoal	1		1.				<u> </u>			8
	Hastefry Saydyay										9
	The Hilere										10
	Western Sandbar						<u> </u>		ļ		11
	Meryland Shoel	1					-		-		12
	Ninefoot Shoal	4				<u> </u>			1		13
	Geiger Creek				ļ						14
	Sugarleaf Creek	4			-						15
	Saddlehill Key	1						<u> </u>	1		16
-	Saddlebunch Harbor	4		-		<u></u>		 			17
#	Rastern Sembo	+-							1		18
址	Middle Sembo	4							!		19
	Western Sambo						1		!	<u> </u>	20
	Hawk Channel					ļ!		-	<u> </u>		21
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H-6325

Decisions Remarks. Change of location, and application of "Rastern Sandber" to charted location not approved. USGB "Western Sandbar" not approved. "The Boilers" not approved. Off sheet. Name "Long Reef" proposed not approved. M 234

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO.

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

Number of positions on sheet	6993
Number of positions checked	. 631
Number of positions revised	. 15
Number of soundings recorded	3/5/2
Number of soundings revised	
Number of soundings erroneously spaced	70
Number of signals erroneously plotted or transferred	(possibly 0 Kat-see DR page 1 par. 5 and Verification Report page 2)

Date: 9-11-39

Verification by Harold F. Stegman

Review by J. A. McCormick 10/2/39

Time: 21 days 3 hrs (150 hrs)

Rime: 542 hrs.

HYDROGRAPHIC SURVEY NO. H-6325

Smooth Sheet Yes	
Boat Sheet Two	
Records; Sounding 25 Vols., Wire I	Orag Vols., Bomb Vols.
Descriptive Report Yes	
Title Sheet Yes	
List of Signals Vol.#1	
Landmarks for Charts (Form 567)	None within area of this surve
Statistics	Yes
Approved by Chief of Party	D.R.Only
Recoverable Station Cards (Form 52	4)
Special Chart for Lighthouse Servi (Circular Nov.30, 1933)	ce Yes
Hydrography: Total Days 52; L	ast Date March 14, 1939
Remarks	

MEMORANDUM IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT	No.	H-6325
SHOOTOSTATION	*****	ХĀХ

received April 3, 1939
registered April 17, 1939
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE	Initia	Attention called to
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RETURN TO

T. B. Reed

V MOSE

Verification Report on H-6325 (1938-39)

1. CONDITION OF RECORDS

The records are neat and legible, and conform to the requirements of the Hydrographic Manual. Notes on the examination of shoots, least depths, etc are very complete.

The Descriptive Report discusses, in great detail, efforts made to recover shoul soundings shown on previous surveys, and on the chart, and lists the results of these investigations.

2. SHORELINE AND SIGNALS

Shore line originates with Topographic Nop T-5545. The low water line as shown on this map was not transferred to H-6325 as it was not in agreement with the inshore soundings on the sheet. The broken line indicating the limits of shool area, was inked from information in the sounding records and boatsheet. Since the mean periodic tide range in this area is 1.4 ft it is believed that the shool water line is of greater value than the lowwater line.

Signals originate with Graphic Control sheets T-6667a (1937-38:39)
T-6668 (1938), and T-5545. Roc and Sea were located by sextant cuts
as noted in the indices of vols 3 and 16.

3. SOUNDING LINE CROSSINGS

Crossings, generally, were excellent. The maximum discrepancy noted was at \$\phi - 24^\cdot 32'\sigma \lambda - 81^\cdot 30'\cdot 9 wherea 25ft sdq (following pos. 118c) falls almost on a 31ft sdq (following pos. 39d'- not inked). As the slope in this vicinity is rather steep it is believed that the difference is of no importance. Adjacent crossings on these two lines are in excellent agreement. Satisfactory.

4. DEPTH. CUEVES

The usual depth curves could be completely drawn. I

5. JUNCTIONS WITH CONTEMPORARY SURVEYS.

Junction with H-6323 (1937-38) on the east, is satisfactory. I An abuttal junction was made with H-5923 (1935) which joins H-6325 in Saddlebunch harbor and Sugarloof Creek. Agreement was good. Soundings in the overlapping portion of H-5923 were in good agreement with those of H-6325, and altho the common area was developed more fully on H-5923, H-6325 contains all the information needed for charting purposes.

FLELD PLOTTING.

Field plotting was satisfactory except that:

- 1. Signal Mum was erroneously inked as Odo on the smooth sheet.
 - 2. Signal Odo was not inked.
- 3. Degree and minute marks were omitted from latitude and I longitude figures on the projection.

The reference station on N.A. 1927 datum, and the correction to change the projection to N.A. 1927 datum were made by the verifier.

Sept 11, 1939

Respectfully Submitted Larold I. Stegman

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6325 (1938-39) FIELD NO. 23

American Shoal Lighthouse to Saddlebunch Harbor,
Florida Keys, Florida.

urveyed in June-Sept. 1938 Jan.-Mar. 1939 Scale 1:20

Surveyed in June-Sept., 1938, Jan.-Mar., 1939, Scale 1:20,000 Instructions dated November 17, 1933 (H. A. Cotton)

Hand Lead and Pole Soundings. 3 Point fixes on shore signals.

Chief of Party - E. R. McCarthy
Surveyed by - E. R. McCarthy, P. A. Weber
Protracted by - E. L. Patterson, P. A. Weber
Soundings plotted by - E. L. Patterson, P. A. Weber
Verified and inked by - H. F. Stegman.

1. Shoreline and Signals.

Shoreline is from topographic map T-5545, which was also used by the field party to spot the positions of Signals KAT and ACE (inked in green). Topographic signals are from T-6667a (1937-39) and T-6668 (1938). Sextant locations of hydrographic signals are properly indexed in the sounding volumes.

2. Depth Curves.

Satisfactory.

3. Sounding Line Crossings.

Satisfactory.

4. Junctions with Contemporary Surveys.

Junctions with H-5923 (1935) on the north and H-6323 (1937-38) on the east are satisfactory. There are no contemporary surveys on the south and west nor are any contemplated at the present time. Overlaps with old surveys are satisfactory for charting purposes.

5. Comparison with Prior Surveys.

a. H-248 (1850), 1:20,000: H-281 (1850-51), 1:20,000; H-779 (1863), 1;20,000; H-2006 (1890), 1:40,000.

Each of these surveys overlaps a very small portion of the area covered by the present survey. Agreement with the present survey is fair to poor. The 7 foot depth charted in lat. 24°30.0', long. 81°39.0' is presumably from H-281 but the old survey is in such poor condition in this vicinity as to be illegible. The 7 falls near a 12 at the western limit of the present survey and to the east of 14 foot depths on H-4165 (1919-20). As the latter does not actually

overlap the present survey at this point it is possible that the 7 exists and it should be retained on the chart. It is relatively unimportant, however, as it is within 300 meters of the 6 foot curve on the present survey. The old surveys are superseded in the area common to the present survey.

b. H-650 (1856), 1:20,000.

This is the principal authority for present charting of the area covered by the present survey. Agreement with the present survey is good in some places; in others it is poor. The present Chief of Party is probably correct in his statement (addendum to descriptive report) that offshore areas are usually sand over ledge rock with the sand constantly changing in depth due to scour and storms. This could account for instances such as that in lat. 24°32.0', long. 81°29.0' where a 20 foot shoal indication on the old survey not only does not rall on a similar indication on the present survey but actually falls in a depth of 31 feet. The present survey, however, does show an 18 foot shoal 300 meters to the northeast. scriptive report discusses in detail the numerous differences and office disposition has been made directly therein. It should be noted here that sunken rock symbols on the old survey are in the nature of bottom characteristics and that many of the depths on rocky shoals such as West Washerwoman were estimated from sounding lines as much as 100 meters away. A few soundings from the old survey have been carried forward in order to be on the side of safety. The present survey, with indicated additions, supersedes H-650 in the common area.

c. H-3580 (1914) W.D., 1:15,000.

This wire drag survey overlaps the southwestern corner of the present survey. There are no conflicts between effective drag depths and hydrography.

d. $\frac{\text{H-4165 (1919-20), 1:15,000; H-4168 (1920), 1:40,000;}}{\text{H-4169a (1920), 1:40,000}}$

These fairly modern surveys overlap the south and western limits of the present survey. Agreement with the latter is fair to good. The present survey, with indicated additions, supersedes the older surveys in the overlapping area.

6. Comparison with Chart 1251 (New Print of October 27, 1938)

a. Hydrography.

Within the area of the present survey the chart is

based on surveys discussed in the foregoing paragraphs.

b. Aids to Navigation.

Survey positions of navigational aids are in good agreement with charted positions and satisfactorily mark the features intended.

7. Condition of Survey.

Investigation of shoals and discussion thereof in the descriptive report were in exceptional detail. Field drafting was satisfactory and sounding records were excellent.

- 8. Compliance with Instructions for the Project.
 Satisfactory.
- 9. Additional Field Work Recommended.
 None.
- 10. Superseded surveys.

H-248 (1850) H-281 (1850-51) H-650 (1856) H-779 (1863)	in part.	H-2006 (1890) H-4165 (1919-20) H-4168 (1920) H-4169a (1920)	17 17	part.
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Reviewed by - J. A. McCormick, October 3, 1939.
 Inspected by - H. R. Edmonston, October 7, 1939.

Examined and Approved:

Thorosoceed

T. B. Reed, Chief, Section of Field Records. Chief, Division of Charts.

Mid. L Veacock Chief, Section of Field Work.

Chief, Division of H. & T.

Applied to Cht. 1251 1-12-40 K. P.

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854 May 29, 1956 - Jaw

853 Oct 28, 1958 J.W.

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