

6840

Diag. Cht. No. 1204-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. 1113 Office No. H-6840

LOCALITY

State MAINE

General locality COAST OF MAINE

Locality SHEEPSCOT & BOOTH BAYS

1944

CHIEF OF PARTY

L. P. Raynor

LIBRARY & ARCHIVES

DATE JANUARY 30, 1945

B-1870-1 (1)

6840

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. H-6840

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.

REGISTER No. H-6840

Field No. 1143

State MAINE

General locality COAST OF MAINE

Locality SHEEPSHOT RIVER & BOOTH BAYS

Scale 1:10,000 Date of survey June - August, 1943

Instructions dated May 7, 1941, Supplemental Instructions March 16, 1943

Vessel LAUNCHES NOS. 79 & 82 - Ship LYDONIA

Chief of party L. P. Raynor

Surveyed by Ship's Officers C.J. Wagner

Soundings taken by fathometer, graphic recorder, hand lead, ~~etc.~~

Protracted by J. D. Curd

Soundings penciled by J. D. Curd

Soundings in ~~fathoms~~ feet at MLW ~~MLW~~

REMARKS: This sheet was processed in the Hydrographic Section, S: E. District, Norfolk, Virginia

ADEQUACY OF SURVEY:

Attention is directed to "Approval by Chief of Party" which is attached to this report. ✓

CROSSLINES:

An adequate number of crosslines were run. Because of the irregular bottom the crossline soundings differed in some instances. However, some of these discrepancies in crossings were attributed to slight displacements of hydrography. ✓


COMPARISON WITH CHART:

See "Notes for Descriptive Report" attached to this report. ✓

DANGERS & SHOALS:

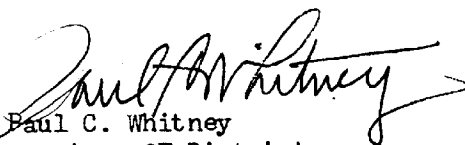
See "Notes for Descriptive Report" attached to this report. The dangers have been reported on Form No. 786. ✓

Respectfully submitted,


Isadore M. Zeskind
Cartographic Engineer

Norfolk, Va.
Jan. 27, 1945

Approved & Forwarded


Paul C. Whitney
Supervisor SE District

NOTES FOR DESCRIPTIVE REPORT H-6840 (1143)

Shoals noted on preliminary Review for project CS-265, Charts 313 and 314 were investigated and all charted soundings verified, with the following exceptions:

No. 17, Chart 314 - This area was covered by closely spaced sounding lines and no indication of the ^{16 ft} shoal found. About 300 meters north of the spot a least depth of 10 feet was found. This latter depth falls near a charted 14 foot sounding from H-771(1860). Lat. 43°46.6', Long. 69°39.7'
16 ft carried forward
revised position
Review, Par. 5C (2)

The 11 foot sounding from H-771(1860) and Colby 1882, ^{3/4 mile west of Damariscove Island} was searched for on two occasions at low tide, smooth sea. Kelp was visible at a depth of 10 to 12 feet under the surface, but no bottom was visible. The kelp was so thick that the lead would stop on the kelp then drop through. A least depth of 18 feet was obtained on the rock itself. However, the 11 foot sounding should be retained until disproved by wire drag. Lat. 43°45.46', Long. 69°37.8'
11 ft retained
Review, Par 5a(5)
superseded by
10 ft on H-6983 (1944)
W.D.
3/15/46 - G.F.J.

The rock ("The Motions") from H-771 was verified, but other rocks were located to northward which are not charted. This party does not believe a 16 foot channel should be charted to north of "The Motions". A depth of ^{4.5} feet should be indicated for this channel as shown on the present survey. Lat. 43°45.05'
Long. 69°37.15'

On Pinkham Shoal a least depth of 15 feet was obtained but recommend that 12 feet be continued on chart. Lat. 43°44.65'
Long. 69°35.4'
Review, Par. 5d.

The channel between Damariscove and Fisherman Islands has many spots shoaler than charted. Lat. 43°47.2', Long. 69°36.2'

On Chart 313, ~~the charted rocks and shoals were verified, except as noted but~~ less water was obtained on some of the shoals. On outer Heron Ledge a least depth of 6 1/2 feet was obtained. This rock breaks in a heavy swell. Lat. 43°46.2', Long. 69°33.87'

The 10 foot spot to south and east of Pumpkin Island, from H-791, was searched for, and a least depth of 11 feet obtained. Recommend the 10 foot be retained on chart. Lat. 43°45.08'
Long. 69°34.35'
11 ft considered adequate.
10 ft from Pillsbury's 1885 investigation

The rock in lat. 43 45.72, long. 69 35.3 was not verified. Work was carried on in the vicinity at low tide, with heavy swell, and no breaker or other indication of rock was noted. Recommend it be deleted from the chart. Accepted
Review, Par 5b(3)

C. D. Wagner
C. D. Wagner, Lt. Comdr. C&GS

Approved:
L. P. Rayner
L. P. Rayner, Lt. Comdr. C&GS
Chief of Party

TIDAL NOTE

Tide gages at Boothbay Harbor and Damariscove Island
were used for reducers for this survey.

M.L.W. on Staff 3.9 at Boothbay Harbor
2.4*

M.L.W. on Staff 3.0** at Damariscove Harbor

* before 1700 - 8-15-43
** rest of season

APPROVAL BY CHIEF OF PARTY

Boat Sheets 1143, Reg. No. H-6840 have been inspected and approved by me. The field work was done under my daily supervision. No additional hydrography is considered necessary. In the area that has been wire dragged, the drag clearance over shoals) should be used for least depths. ?

To be considered
in reviews of wire-
drag surveys.

(page 3)
As noted in the notes, the 11 foot sounding charted west of Damariscove Island should be retained until cleared by wire drag.



L. P. Raynor
Lieut. Comdr. C&GS
Commanding Ship LYDONIA

Volume	Day	No.of Positions	Statute miles Sdg. line
1	a (blue)	131	23.1
1	b "	122	17.4
1 & 2	c "	151	17.6
5	d "	62	7.1
3	a (red)	114	12.8
3	b "	227	35.7
2	c "	90	11.5
2	d "	115	10.4
2 & 4	e "	174	28.4
4	f "	211	34.5
5	g "	167	15.0
5 & 6	h "	135	16.2
6	j "	63	3.7
6 & 7	k "	218	18.8
7	l "	129	18.3
7 & 8	m "	227	31.3
8	n "	216	36.6
9	p "	120	15.2
9 & 10	q "	204	32.2
10	r "	152	21.5
10 & 11	s "	226	38.9
11	t "	158	16.6
11 & 12	u "	209	31.8
12	v "	93	9.2
12 & 13	w "	155	24.3
13 & 14	x "	233	30.3
14	y "	33	3.4
14	z "	198	21.0
14 & 15	aa "	228	29.8
	Total	4561	612.6

LIST OF SIGNALS
SHEET NO. H-6840(Field 1143)

TRIANGULATION STATIONS

CUCKOLDS LIGHTHOUSE 1934
 DAMARISCOVE C.G. EAST LOOKOUT TOWER 1934
 SQUIRREL I. END BEACON, 1934
 THE HYPOCRITES BEACON, 1934
RAM ISLAND L.H., 1934
 DAMARISCOVE C.G. WEST LOOKOUT TOWER 1934
WHITE ISLAND 1934
GRIFFITH HEAD, 1857

TOPOGRAPHIC SIGNALS

(Signals with asterisk are from
 Topo Sheet No. T-5990, others from Sh.No.
 T-5989)

Abe*	Frap	Or	
Aim*	Gait	Pad*	
Alas	Sar	Par	
Alum	Gob*	Pet*	Yes*
Babe	Gull	Pete*	Yoyo*
Bark	Hit	Pleb	Zag*
Boat*	Hoe*	Ram	Zig
Brat	Ida*	Rio	
Caw*	It	Sam	
Cod*	Ivy*	Sop*	
Crib*	Jane	Spar	
Dasp	Jib*	Tank	
Dare	Job*	Tar*	
Deb*	Jog	Ton	
Dip*	Key*	Top	
Doe*	Lad	Tug	
Eke	Lam*	Urn	
Emo*	Last	Van*	
Pad	Lava	Wasp	
Fail*	Lay*	Wax	
Far*	Lazy	Wen*	
Pit*	Ma	Wire	
Dunk	Hab*	Worm	

HYDROGRAPHIC SIGNALS

See Sdg.Vol.

Ant	5
Apt	5
Ben	3
Bird	from 1243(Reg.H-6839)
Bum	See next page
Cent	2
Cop	See next page
Day	4 & 5
Gal	1 - also on 1243 Reg. H-6839
Galc	2
Kay	8
Kid	Boatsheet
Lame	4
Man	9
New	10
Nip	4 & 5
Nap	
Oil	10

Rat 9 (also can be obtained from picture)
Toy See this page
Tree 2
Yak 8

At Toy - (by bldg. party, MV WAINWRIGHT)
No. 306 (T-5990)
Hypo 32 39
Ivy 44 48

At Cop - Boat 136 25
Caw
East 30 40

At Bum - Boat 135 00
Caw 23 43
West
East 18 41

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6841**

Records accompanying survey:

Boat sheets .2...; sounding vols. .15...; wire drag vols.;
 bomb vols.; graphic recorder rolls .8....;
 special reports, etc.

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

Number of positions on sheet		.4561	
Number of positions checked		..229.	
Number of positions revised		...8.	
Number of soundings recorded		prop. 14	
Number of soundings revised (refers to depth only)		..53.	
Number of soundings erroneously spaced	5.	
Number of signals erroneously plotted or transferred		
Topographic details	Time	...8.	
Junctions	Time	...18.	
Verification of soundings from graphic record	Time	...9.	
Verification by <i>G.F. Jordan</i>	Total time	.219..	Date <i>Mar. 17, 1945</i>
Review by <i>G.F. Jordan</i>	Time	.50.	Date <i>Mar. 26, 1945</i>

GEOGRAPHIC NAMES

Survey No.
H6840

Name on Survey

	A	B	C	D	E	F	G	H	K
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
<u>Sheepscot Bay</u>			437	696					U.S.G.B. 1
<u>Booth Bay</u>			438	696					2
<u>Southport I.</u>			438	696					3
<u>Damariscove I.</u>			437	696				"	4
<u>Fisherman I</u>			437	695					5
<u>Squirrel I.</u>			438	696					6
<u>Cape I.</u>			437	696					7
<u>Outer Heron I</u>			437	695					8
<u>Damariscove Harbor</u>			437	696					9
									10
									11
									12
									13
<u>Boothbay Harbor</u>				(location of one tide staff)				U.S.G.B.	14
									15
* <u>The Motions</u>			437	696					16
<u>Pinkham Shoal</u>			437	695					17
* <u>Outer Heron I. Ledge</u>			437	695					18
<u>Pumpkin Island</u>			"						19
<u>S E Breaker</u>			"						20
* <u>Griffith Head Ledge</u>			437	697					21
* <u>Cape Harbor</u>			437	696					22
<u>Cranberry Ledge</u>			"						23
									24
									25
									26
									27
									M 234

Names underlined in red approved
by L. Heck on 3/26/45

rac
ml

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 3, 1945.

~~Division of Hydrography and Topography~~

Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in
15 volumes of sounding records for

HYDROGRAPHIC SHEET 6840

Locality Sheepscot River and Booth Bay, Maine.

Chief of Party: L. P. Raynor in 1943
Plane of reference is mean low water
3.9 ft. on tide staff at Boothbay Harbor
13.2 ft. below B. M. 6
2.9 ft. on tide staff at Damariscove Harbor
16.4 ft. below B. M. 1

Height of mean high water above plane of reference is 8.8 feet.

Condition of records satisfactory except as noted below:

Tide reducers were revised on pages 46-55, Vol. 3.



Acting Chief, Division of Tides and Currents.

DIVISION OF CHARTS
REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6840

Field No. 1143

Maine, Coast of Maine, Sheepscot and Booth Bays
Surveyed in June - August, 1943, Scale 1:10,000
Instructions dated May 7, 1941, March 16, 1943

Soundings:

Hand lead
808 Fathometer

Control:

Three-point fix on shore signals

Chief of Party - L. P. Raynor
Surveyed by - C. J. Wagner
Protracted by - J. D. Curd
Soundings plotted by - J. D. Curd
Verified and inked by - G. F. Jordan
Reviewed by - J. F. Jordan
Inspected by - H. W. Murray, March 26, 1945

1. Shoreline and Signals

The source of the shoreline and signals is given in the descriptive report.

The low water detail is from numerous detached positions and out-lining on the boat sheet. Air photos were taken at high water only.

2. Sounding Line Crossings

Agreements of crosslines are very good.

3. Depth Curves and Submarine Relief

The close development has enabled accurate delineation of the depth curves.

The larger part of the present survey covers a very irregular bottom, typical of the coast of Maine. A good example is the pinnacle ledge at Lat. $43^{\circ} 45.7'$ Long. $69^{\circ} 35.7'$ which rises from 140 ft. depths to $9\frac{1}{2}$ ft., a distance of only 100 meters.

The remainder of the survey is over smooth sedimentary bottom dotted with occasional outcroppings of ledge.

4. Junctions with Contemporary Surveys

Satisfactory junctions have been completed with H-6858 (1943), H-6675 (1941) H-6805 (1942) and H-6839 (1943). The junction with H-6844 (1943) in Booth Bay will be considered after the verification of that survey.

5. Comparison with Prior Surveysa. H-771 (1860) 1:10,000 scale

The agreement in depths with this prior survey is unsatisfactory.

A number of positions were taken at $1\frac{1}{2}$ mile intervals, lending doubt to the positions of the intermediate soundings. Several unimportant shoal soundings falling in deeper depths on the present survey, but near comparable depths, have been considered and disregarded without comment, as it is evident that proper recording of sounding intervals might well have placed the prior soundings in satisfactory agreement.

- (1) The 57 ft. prior sounding at Lat. $43^{\circ} 46.87'$, Long. $69^{\circ} 40.56'$ and the 55 ft. sounding 800 meters southeast at Lat. $43^{\circ} 46.55'$, Long. $69^{\circ} 40.13'$, charted on 314 should be disregarded. The two prior soundings are on the same line between positions taken $1\frac{1}{2}$ miles apart. They are considered to have fallen on the present adjacent 57 ft. and 33 ft. shoals, instead of in 120 ft. and 96 ft. depths, respectively.
- (2) The 15 ft. prior sounding charted on 314 at Lat. $43^{\circ} 46.8'$, Long. $69^{\circ} 39.8'$ should be disregarded. The 15 is considered to have fallen on the present 17 ft. shoal 170 meters NNE, instead of in 60 ft. depths. All soundings on the short prior line are erroneously spaced, according to present depths. The present 17 is considered adequate.
- (3) The 22 ft. prior sounding at Lat. $43^{\circ} 46.9'$, Long. $69^{\circ} 39.17'$, appearing on Chart 314 as the limiting depth in the passage, should be disregarded. The present development indicates that the 22 should have been spaced 50 meters south of the plotted position.
- (4) The 48 ft. prior sounding charted on 314 at Lat. $43^{\circ} 46.45'$, Long. $69^{\circ} 39.1'$, and falling in 66 ft. depths between 31 ft. and 51 ft. shoals should be disregarded. The prior sounding records were not located; however, the sounding is not considered of sufficient importance to carry forward in this area.
- (5) The 11 ft. prior sounding charted on 314 at Lat. $43^{\circ} 45.46'$ Long. $69^{\circ} 37.8'$ has been carried forward on this critical shoal as recommended in the descriptive report. Superseded by 10ft on H-6983 (1944) W.D. 3/15/46 - G.F.J.

Special investigation in 1882 obtained 11, 15 and 17 ft. depths. The present survey shows 19 ft. from hand lead investigation, but a definite 14 ft. depth appears on the fathogram between positions 205-206 m.

b. H-791 (1860) 1:10,000 scale

This prior survey covers the eastern half of the present survey, where the bottom is very irregular. A satisfactory comparison between the two surveys is difficult because of steep slopes and wide spacing of soundings on the prior survey.

- (1) The 8 ft. prior sounding charted on 313 at Lat. $43^{\circ} 46.13'$, Long. $69^{\circ} 33.8'$, previously charted as the least depth on Outer Heron Ledge, should be disregarded. It is considered that the position of the 8 obtained from special investigation in 1883 should have coincided with the present $6\frac{1}{2}$ ft. 80 meters northwest. The present survey is considered adequate.
- (2) a. The 42 ft. prior sounding charted on 1204 at Lat. $43^{\circ} 44.8'$ Long. $69^{\circ} 34.3'$ and falling in present 75 ft. depths should be disregarded. This sounding from Pillsbury's investigation in 1883 is considered to have fallen 170 meters southeast on the present 42 ft. shoal.
 - b. Pillsbury's 1885 location of the 19 ft. depth on SE Breaker is 90 meters east of the present correct position.
- (3) The descriptive report recommends that the rock awash charted on Charts 313 and 314 at Lat. $43^{\circ} 45.7'$, Long. $69^{\circ} 35.3'$ should be disregarded, as there was no indication of a rock at low tide at a time of heavy swells. The rock, originating from a note in the prior records in reference to a ledge 40 yards from the end of a line, could have been on the north end of the present ledges. Close development was not executed in this area.
- (4) The 21 ft. prior sounding charted on 313 at Lat. $43^{\circ} 45.56'$, Long. $69^{\circ} 35.0'$ should be disregarded. Falling in 34 to 42 ft. depths on the prior and present surveys, the sounding is considered to have fallen actually on the shoal area to the east. The end position of the three position line had been rejected, leaving only this sounding plotted at the middle position.
- (5) The 8 ft. prior sounding charted on 313 at Lat. $43^{\circ} 45.52'$ Long. $69^{\circ} 34.72'$ and falling between the 30 and 36 ft. curves on the present survey should be disregarded. The sounding is controlled by an erroneously plotted position. It actually falls on the slope of the present $4\frac{1}{2}$ ft. shoal.
- (6) The 38 ft. prior sounding, charted 37 on 313 at Lat. $43^{\circ} 45.5'$ Long. $69^{\circ} 35.1'$ has been carried forward on the present 59 ft. shoal in surrounding 66 ft. depths. The original prior sounding may have been 11 fm. instead of 7 fm., but its position on the present undeveloped shoal precludes its rejection.

- (7) The 33 ft. prior sounding charted on 313 and 314 at Lat. $43^{\circ} 45.02'$, Long. $69^{\circ} 35.4'$, falling in closely developed 75 to 90 ft. depths, should be disregarded. Several positions on the prior line are weak and swingers. Although the prior 33 could not be satisfactorily adjusted to fall on present shoals, the present survey is considered adequate.

c. H-696 (1859) 1:40,000 scale

This prior survey makes a slight overlap along the southwest limits of the present survey.

- (1) The 46 ft. prior sounding charted on 314 at Lat. $43^{\circ} 46.83'$, Long. $69^{\circ} 40.4'$ should be disregarded. Falling in 100 ft. depths on the turn of a line, it is considered that the 46 should have fallen on the present 43 ft. shoal 200 meters northeast.
- (2) The 16 ft. prior sounding charted on 314 and falling in 55 ft. depths has been carried forward at Lat. $43^{\circ} 46.6'$ Long. $69^{\circ} 39.7'$, 100 meters NNW of its plotted position. The prior position of the 16 is discredited by the present survey but as the sounding was obtained on the turn of a line it could have fallen in the present 23 ft. shoal depth.

d. H-746 (1860) 1:20,000

A slight overlap is made on the southeast with this prior survey.

The 12 ft. prior sounding on Pinkham Shoal, charted on 314 at Lat. $43^{\circ} 44.65'$, Long. $69^{\circ} 35.4'$ from investigation by Pillsbury in 1885, has been carried forward, as recommended in the descriptive report. The present survey shows a least depth of 15 ft. after a 15 minute investigation with hand lead and fathometer.

e. T-1000 (1865)

The northerly of two rocks awash charted on 314 at Lat. $43^{\circ} 46.61'$, Long. $69^{\circ} 36.8'$ should be disregarded. Both rocks awash are shown as breakers on the prior survey. No mention of either rock is given in the records of H-771 (1860). Although no mention of the northerly rock in 23 ft. depths is given in the present survey, investigation at minus tide resulted in the location of the southerly rock covered with 2 ft. at MLW.

6. Comparison with Wire Drag Surveys

Wire drag surveys H-6923 (1943) and H-6830 (1943) satisfactorily covered the area of the present survey east to Longitude $69^{\circ} 38'-37'$. Two soundings shoaler than present hydrography have been transferred to the smooth sheet. Wire drag surveys to the east have not been received.

7. Comparison with Chart 313 (print of Apr. 15, 1944)
314 (print of July 14, 1944)
1204 (print of July 10, 1943)

The charted hydrography is from the prior surveys already discussed, with the addition of critical soundings from advance information on the present survey. One foot differences in critical depths may be disregarded, as a result of the final smooth plotting.

a. Chart 313

- (1) The northwesterly rock awash charted from breakers located on T-1000 (1865) at Lat. $43^{\circ} 47.3'$, Long. $69^{\circ} 34.67'$ is accurately defined by the present survey as being covered with 2 ft. at M.L.W.
- (2) The 48 ft. sounding charted from H-791 (1860) at Lat. $43^{\circ} 46.08'$ Long. $69^{\circ} 33.8'$ is 90 meters south of its correct position.
- (3) The 105 ft. sounding charted at Lat. $43^{\circ} 47.5'$, Long. $69^{\circ} 35.0'$ is actually 165 ft. on H-791 (1860).
- (4) The 37 ft. sounding charted at Lat. $43^{\circ} 46.2'$, Long. $69^{\circ} 34.7'$ is actually 87 ft. on H-791 (1860).

b. Chart 314

- (1) No authority was found for the high water rock charted at Lat. $43^{\circ} 46.7'$, Long. $69^{\circ} 39.25'$. Prior and present topographic and hydrographic surveys show low water ledge.
- (2) The 52 ft. sounding charted at Lat. $43^{\circ} 47.05'$, Long. $69^{\circ} 42.9'$ is 100 meters north of its position on H-771 (1860). The present survey is adequate.

c. Charts 313 and 314

- (1) The two small high water rocks charted north and south of Lat. $43^{\circ} 47.9'$ Long. $69^{\circ} 35.3'$, but sketched as shoals on H-791 (1860), should be disregarded. The present survey adequately developed this area, with investigation at minus tide, resulting in rocks awash on the north and rock covered with $4\frac{1}{2}$ ft. at MLW on the south.
- (2) The 28 ft. sounding charted from H-791 (1860) at Lat. $43^{\circ} 48.16'$, Long. $69^{\circ} 35.55'$ should be disregarded. This sounding actually falls on the edge of comparable depths on the present survey.

d. Chart 1204

Comparison with this chart south of the limits of chart 313 is satisfactory.

e. Aids to Navigation

The present survey is in satisfactory agreement with the charted

aids to navigation. No addition or changes in aids are recommended.

f. Dredged Channels

There are no dredged channels within the limits of the present survey.

8. Condition of the Survey

- a. The sounding records are complete, and indicate attention to critical details of the survey.
- b. The descriptive report is satisfactory.
- c. The smooth plotting was well done.
- d. This is an excellent survey. Close development was executed in all shoal areas, and spot examinations with hand lead, pole and fathometer were made to determine least depths on critical shoal. The limits of ledges were defined by detached positions and outlined on the boat sheet. Frequent check angles were taken at detached positions.
- e. A questionable 11 ft. depth on crossline 185 to 186 u, appears as a clear shoal echo superimposed on depth readings which agree with other lines at Lat. $43^{\circ} 45.03'$, Long. $69^{\circ} 34.97'$. The 11 does not appear as astray or kelp, yet there is no indication of a shoal on the fathograms of crosslines 78-79 and 83-84 z, which show 29 ft. depths. Special investigation is not considered necessary.

9. Compliance with Instructions

The survey satisfactorily complies with instructions for the project.

10. Additional Field Work

No additional field work is recommended. This is a basic survey for the area covered.

11. Superseded Surveys

The following surveys are superseded in part.

H-696 (1859)
H-746 (1860)

H-771 (1860)
H-791 (1860)

Examined and Approved:

Charles Pease
Division of Charts

Earl O. Heston
Chief, Section of Hydrography

J. S. Borden
Chief, Chart Division

Raymond C. Egan
Acting Chief, Division of Coastal Surveys

Essential corrections made to chart 1204 S.M.A. Apr 3, 1945 (partially applied)

Spot corrections made to chart 313 F.A.M. 6/7/45 (part. app'd)