5770

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } *Sheet No.* 45

State VIRGINIA

LOCALITY

~~Eastern Shore~~

Offshore Virginia Coast

~~Off shore~~ Wachapreague ~~Great Machipongo~~ to

Great Machipongo

~~Wachapreague~~ Inlets.

1935

CHIEF OF PARTY

H. A. Seran, Comdr., C&GS.
Commanding Ship OCEANOGRAPHER.

U. S. GOVERNMENT PRINTING OFFICE: 1934

5770

Form 537
Ed. Dec., 1930

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 45

REGISTER NO. 5770

State VIRGINIA

General locality ~~Eastern Shore~~ Offshore Virginia Coast

Locality ~~Off shore Great Machipongo~~ Wachapreague Great Machipongo to ~~Wachapreague~~ Inlets

Scale 1-40,000 Date of survey Sept. 5 to Oct. 17 19 ~~35~~ 1934

Vessel Ship OCEANOGRAPHER - Ship LYDONIA - Ship GILBERT

Chief of Party H. A. Seran

Surveyed by Field Officers

Protracted by W. C. Russell

Soundings penciled by F. S. Trantham & W. C. Russell

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated April 27, 19 33

Remarks:

U. S. GOVERNMENT PRINTING OFFICE, 1932

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. 45

VIRGINIA COAST

INSTRUCTIONS:

The work on this sheet was executed in accordance with the Director's instructions to the commanding officers of the Ships OCEANOGRAPHER, LYDONIA and GILBERT, dated April 27, 1933, and covering projects HT-142, HT-143 and HT-144.

LIMITS:

This sheet covers an area from approximately three to twelve miles off the Virginia Coast and extending from Great Machipongo to Washapreague Inlets.

It connects with field sheets No'd 22, 23 and 24 in the west, with field sheet No. 44 in the north, and with field sheet No. 43 in the east.

SURVEY METHODS:

With the exception of a few angles taken on buoys located by the taut-wire-sun azimuth method; the survey of this area was controlled by sextant angles on objects on shore located by triangulation and topography. All soundings were taken with the handlead, standard methods being employed.

The Ship OCEANOGRAPHER was used in surveying most of the area outside of the five fathom curve; while the area lying inside this curve and connection with the launch sheets was surveyed by the Ship GILBERT. The Ship LYDONIA was used for half a days development work.

Lines of fish stakes were encountered on the inshore end of the area surveyed; and their approximate positions were drawn on the boat sheet during the progress of the work. The fish stakes placed on the smooth sheet are those on the boat sheets; supplemented by notes pertaining to same, in the sounding records.

DISCREPANCIES:

In general the crossings of sounding lines on this sheet were excellent.

In most places where there were slight discrepancies, it

was obvious that they were due either to an irregular bottom or a slight displacement of one of the cross lines.

Following is a list of discrepancies in which the adjustment is not absolutely obvious.

1. Soundings between Position 55 and 56 A (OCEO) appear to be about 4 feet too deep. This may be due to an irregular bottom.

2. The 66 feet sounding after position 68 F (OCEØ) appears to be one fathom too deep.

3. Several soundings before position 9 G (OCEO) appear to be about a fathom too shoal when crossing to other lines; however, this could be due to an irregular bottom.

4. Soundings on and on either side of position 87 L (OCEO) appear to be nearly a fathom too shoal.

5. Soundings before position 17 C (GILBERT) appear about 4 feet too high. Possibly due to irregular bottom.

6. Soundings between positions 4 and 6 P are from 2 to 3 feet higher than those on the cross lines.

DANGERS AND SHOALS:

The shoal with a least depth of 12 feet, shown on the chart (1221) at Latitude 37°36.5, Longitude 75°34.8 has either moved to the westward off the limits of the sheet or disappeared as there is no evidence of it in the area. There are 22 foot soundings in the vicinity of the old 12 foot spot.

See review, par. 7a (1)

There is no evidence of the shoal shown on chart 1221 at Latitude 37°35.7', Longitude 75°34.0', which previously had between 15 and 16 feet of water on it.

See review, par. 7a (2)

A shoal about two miles in length, extending in a northeast - southwest direction, lies about a mile west of Parramore Banks Buoy. Altho there are several 19 foot spots on it, the least depth of 18 feet is found at Latitude 37°32.3', Longitude 75°29.8'. By comparison with chart 1221 it appears that this shoal has moved slightly to the southeastward. The least depth previously found was 21 feet.

See review, par. 7a (5)

There are several 19 foot soundings on the shoal at Latitude 37°30.3', Longitude 75°33.8'. By comparison with the chart (1221) this shoal appears to have moved to the southard. The least depth previously found was 25 feet.

The shoal which appears on this sheet at Latitude 37°21.5', Longitude 75°32.7' has a least depth of 34 feet. By comparison with chart 1222, it appears that this shoal has moved slightly to the westward and the least depth has dropped from 36 to 34 feet. An elongation of this shoal in a northwest direction shows a least depth of 33 feet near the 37 foot sounding on the chart.

COMPARISON WITH PREVIOUS SURVEYS:

In the above paragraph are given comparisons between the most important shoals shown on chart 1221 and those found in the area surveyed.

In general the remaining area surveyed compares fairly well with the existing chart, 1221. No definite rule for slight changes in this area could be given as there are places where the present survey indicated shoaler depths and likewise places where the depths are deeper than those on the existing chart.

Respectfully submitted,

R. A. Earle, Lieut., (j.g.), C&GS.,
Ship OCEANOGRAPHER.

Approved, Forwarded:

H. A. Seran, Comdr., C&GS.,
Commanding Ship OCEANOGRAPHER.

LIST OF STATISTICS

OCEANOGRAPHER

Day	Date	Soundings	Positions	Mileage
A Day	Sept. 5	680	99	62.8
B "	" 6	552	73	47.6
C "	" 7	247	35	18.6
D "	" 11	385	45	25.0
E "	" 12	549	79	38.0
F "	" 13	513	93	34.9
G "	" 14	570	113	51.4
H "	" 18	452	70	30.5
J "	" 19	457	70	37.5
K "	" 20	517	66	36.6
L "	" 25	638	92	49.6
M "	" 26	452	72	40.2
N "	" 27	143	19	7.5
P "	" 28	558	87	39.5
Q "	Oct. 3	139	16	9.0
R "	" 4	146	19	8.5
S "	" 9	755	101	52.4
T "	" 10	524	95	40.0
U "	" 11	717	104	45.4
W "	" 12	370	51	21.9
TOTAL		9364	1399	696.9

over

LIST OF STATISTICS (CONT'D)

LYDONIA

Day	Date	Soundings	Positions	Mileage
A Day	Oct. 17	350	63	18.8

GILBERT

Day	Date	Soundings	Positions	Mileage
A Day	Sept. 14	982	149	48.2
B "	" 18	852	141	46.4
C "	" 19	1255	204	56.9
D "	" 20	1230	202	56.0
E "	" 25	641	94	24.0
F "	" 26	1279	196	58.2
G "	" 27	565	97	26.6
H "	Oct. 3	858	136	34.6
J "	" 9	1271	187	60.5
K "	" 10	1310	177	57.8
L "	" 11	1592	197	62.2
M "	" 12	598	80	27.4
N "	" 16	805	114	33.6
P "	" 17	773	105	33.2
TOTAL		14,011	2,079	625.6

TOTAL FOR SHEET	23,725	3,541	1,341.3

HYDROGRAPHIC SURVEY NO. H5770

Smooth Sheet 1

Boat Sheet 2

Sounding Records 16 Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes in Vol. 1

Landmarks for Charts (Form 567)

Statistics Yes

Approved by Chief of Party H. A. Seran

Recoverable Station Cards (Form 524)

Special Chart for Lighthouse Service
(Circular Nov. 30,1933)

Remarks

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. ..5770

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

Number of positions on sheet	3541.
Number of positions checked	287.
Number of positions revised	27.
Number of soundings recorded	23,725
Number of soundings revised	161.
Number of signals erroneously plotted or transferred	0.

Date: August 13 1935

Verification by C. R. Draper Time:

Review by R L Johnston Time: 59 1/4

Report on H-5770 (1934)

1 ~~The sounding records on the "Gilbert" are often illegible and incomprehensible, particularly in that the abbreviations used to denote bottom characteristics are not in conformity with those prescribed in the manual (Pg 158). The records on the "Oceanographer" are more satisfactory, but the abbreviations are frequently not standard and not conforming.~~ In some cases the abbreviations of bottom characteristics were not standard. In other respects the records are considered satisfactory.

RLJ

2 The 2, 3, 5 & 10 fathom curves are shown. The pencil delineation by the field plotter was satisfactory.

The 4 & 6 fathom curves ~~were delineated by the field plotter, and have been inked~~ have not been inked on the smooth sheet.

3. Junction with inshore sheets to the west (1-20,000 scale) H-5703 (1934) H 5704 (1934) & H 5674 (1935) is made on these sheets and is satisfactory.

Junction with H-5771 (1934) to the east is made on that sheet and is satisfactory, except at position 73L & 74L as noted. Several soundings between pos 73L and 74L were omitted. See review. RLJ

No junction is made with H 5715 (1934) to the north because the sheet is incompleted and has not been verified. The junction with H-5715 (1934) has been accomplished and is satisfactory. RLJ.

No junction is made with H-4194 (1921) to the south.

4. The B&W vertical striped Buoy at 76P (green) is mentioned in the sounding records for H-5704 at position 61M (blue) as "Otter Bell Buoy", Great Wachipongo Inlet. This buoy has been marked Bell.

Respectfully submitted

C. R. Draper

Survey No. H5770

GEOGRAPHIC NAMES

Date. May 16, 1935 — VIRGINIA

Chart No. 1221;1222

Diagram No. 1221-2;1222-2

Approved by the Division of Geographic Names, Department of Interior. ✳

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	----------	Wachapreague Inlet			
	----------	Great Machipongo Inlet			
		LITTLE MACHIPONGO INLET			
		PARRAMORE BANKS.			
		C.H. Boyer 3/20/86			

(M-136)

LCC

Form 719
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 27, 1935

Division of Hydrography and Topography:

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

Tide Reducers are approved in
16 volumes of sounding records for

HYDROGRAPHIC SHEET 5770

Locality Wachapreague Inlet to Great Machipongo Inlet, Virginia

Chief of Party: H. A. Seran, R. L. Schoppe, H. Odessey in 1934
Plane of reference is mean low water reading
4.6 ft. on tide staff at Assateague Anchorage
8.8 ft. below B.M. 15

Height of mean high water above plane of reference is 3.7 feet.

Condition of records satisfactory except as noted below:

Paul A. Whitney
Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5770 (1934) FIELD NO. 45

Wachapreague to Great Machipongo Inlets, Offshore Virginia Coast
Surveyed in Sept. to Oct. 1934
Instructions dated April 27, 1933 (OCEANOGRAPHER)

Hand Lead Soundings

3 Point Fixes on Shore Signals and Signal Buoys.

Chief of Party - H. A. Seran.
Surveyed by - Field Officers.
Protracted by - W. C. Russell.
Soundings penciled by - F. S. Trantham, W. C. Russell.
Verified and inked by - C. R. Draper.

1. Condition of Records.

The records are clear and legible and confrom to the requirements of the Hydrographic Manual, except that in some cases standard abbreviations for bottom characteristics were not used.

The Descriptive Report is clear and adequately covers all matters of importance, except that no recommendation was made concerning the wreck charted in latitude 37°31.1', longitude 75°35.3'.

2. Compliance with Instructions for the Project.

The survey adequately complies with the instructions for the project.

3. Shoreline and Signals.

This is an offshore survey and no shoreline is shown. Topographic signals are from graphic control sheets T-4915 (1934) and T-6240a and b (1934).

4. Sounding Line Crossings.

In the flat areas the soundings cross very well, however, there are numerous hard sand ridges where there is considerable difference between the depths of adjacent soundings. In these areas any slight discrepancies are evidently due either to the irregularity of the bottom or a slight displacement of one of the cross lines. In view of the character of the bottom, the sounding line crossings are considered satisfactory.

5. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn.

6. Junctions with Surveys.

a. The junction on the north with H-5715 (1934) is satisfactory.

b. The junctions on the west with the inshore surveys, H-5703 (1934), H-5674 (1934) and H-5704 (1934) are satisfactory.

c. The offshore junction on the east with H-5771 (1934) is satisfactory. The depths are in agreement with the exception of five soundings between pos. 73 and 74L (latitude 37°21.6', longitude 75°29.5') which are about a fathom deeper than those on H-5771 (1934). These soundings were omitted.

d. There is no contemporary survey to the southward, however, the present survey on its southern limits is in general agreement with the last survey, H-4194 (1921), in the area east of longitude 75°39'. In the area west of longitude 75°39', some changes are indicated, particularly in the vicinity of the 18 foot curve. The soundings on H-4194 (1921) outside and adjacent to the southern limits of the present survey are in general agreement, except in the case of the soundings surrounding the 27 and 29 foot shoals in latitude 37°19.0', longitude 75°39.8', which fall in depths of 35 to 40 feet on the present survey. The new work should have extended a little further eastward and southward in order to determine just where these changes cease. In view of the above changes it is probable that corresponding changes have occurred to the eastward and for this reason some of the soundings from H-4194 (1921) have been omitted from the overlap shown on H-5770 (1934). Only those soundings shown on this overlap should be used for charting the area immediately adjacent to the limits of the present survey.

7. Comparison with Prior Surveys.

a. H-348 (1852).

This survey, on a scale of 1:40,000, covers practically the entire area of the present survey and most of the soundings charted in this area originate from it. The sounding lines are controlled by angles observed from shore stations and in some cases the cuts do not cross sharply enough to furnish strong control. The most prominent soundings shown on this survey are the following:

(1) The sanded shoal (charted) with a least depth of 12 feet (actually 13) in latitude 37°36.5', longitude 75°34.8', falls in depths of 22 feet on the present survey. It originates with a single line of soundings, pos. 152q" to 153q", on which all of the depths

are shoaler than the present ones. It is controlled from two shore stations, Dawson's Pt. and Metompkin, which are almost in range with the point observed on, and it is possible the line belongs further inshore. It is believed that this line is either in an erroneous position or else the area has changed. This shoaling should be disregarded in future charting.

(2) The long sanded shoaling (charted) with depths of 15, 16 and 16 feet in latitude 37°36.0', longitude 75°33.7', falls in depths of 30 to 34 feet on the present survey which shows a regular bottom. The shoaling originates with a single line of soundings, pos. 69d + to pos. 71d +, and the angles controlling this line were questioned in the record and do not check when replotted. Another line of soundings, pos. 91r" to pos. 93r", covering the same area shows depths which average over 25 feet. This shoaling is believed to be erroneously located, however, even if it once existed the area is subject to the influence of currents from Wachapreague Inlet and the present soundings indicate a general deepening. This shoaling should be disregarded in future charting.

(3) The 27 foot sounding (charted) in latitude 37°36.4', longitude 75°32.7', and a 30 foot sounding (charted) 360 meters southwest of it, fall in depths of about 38 and 37 feet respectively on the present survey. Both are single soundings on a line, pos. 150r" to pos. 151r". The surrounding soundings are also shoaler than the present depths and a general deepening is indicated. In view of this, the present soundings are considered sufficient for disproving the above soundings which should be disregarded in future charting.

(4) The shoaling with least depth of 24 feet (charted) in latitude 37°35.1', longitude 75°32.5', falls in depths of about 41 feet on the present survey, which shows a 28 foot shoal about 1/4 mile to the northeast and a 30 foot shoal a little to the southward. There are numerous other isolated shoal spots charted in this area (Parramore Banks) north and south of latitude 37°34', between longitude 75°30', and longitude 75°34' with depths of from 25 to 30 feet. In most cases the present survey shows approximately the same depths in different positions. This area is subject to the action of strong currents from Wachapreague Inlet (see Descriptive Report of H-5715 (1934)) and these shoalings probably shift their positions. The present positions of these shoal spots should supersede the former delineation in future charting.

(5) The large shoaling three miles long, about a mile west of buoy signal Par, has apparently moved to the southeastward. The least depths were previously 21 feet, but the present survey shows several 19 foot spots and a least depth of 18 feet at latitude 37°32.3', longitude 75°29.8'. The old soundings on this shoal should be disregarded in future charting.

(6) The following charted soundings were found to be single soundings on lines which fall in open area on the present survey between deeper depths. While there is evidence that the area is variable and unstable, the present survey shows indications of shoaling in these areas and hence the soundings have been retained.

The 24 foot sounding in latitude 37°33.3', longitude 75°28.0', between depths of 36 and 32 feet.

The 28 foot sounding in latitude 37°32.6', longitude 75°27.65', between depths of 37 and 44 feet.

The 28 foot sounding in latitude 37°32.1', longitude 75°28.2', between depths of 34 and 38 feet.

The 27 foot sounding in latitude 37°33.18', longitude 75°27.37', between depths of 36 and 34 feet.

(7) The 33 foot sounding (charted) in latitude 37°30.65' longitude 75°29.75', falls in depths of 39 to 42 feet on the present survey which shows depths of 36 feet to the southwest and 31 and 32 feet about 1/4 mile northward. The 33 is a single sounding on a line and is probably a little out of position or else the position of the shoaling has shifted. The 33 should be disregarded in future charting.

(8) The 25 foot sounding (charted) in latitude 37°31.9', longitude 75°34.35', falls in depths of 35 feet on the present survey which also shows a 25 foot spot about 1/2 mile further offshore and a 26 foot shoaling 1/2 mile to the northwest. The 25 is a single sounding on a line, pos. 92f+to 93f +, on which the other depths are also shoaler than the present soundings. This line is not well located since only one angle was observed at pos. 92f +. The present soundings show a very regular bottom and it is believed that the old 25 foot sounding was either incorrectly located or the area has changed. The 25 foot sounding should be disregarded in future charting.

(9) The 25 foot sounding (charted) in latitude 37°30.68' longitude 75°33.7', falls in about 45 feet on the present survey which shows a 27 foot shoal 1/4 mile eastward and a 21 foot shoaling 1/4 mile southward. The 25 (actually 26 feet in the record, pos. 135d +) is a single sounding on a line and is either an incorrect location of the shoals shown on the present survey or else the shoal has shifted in position. The 25 foot sounding should be disregarded in future charting.

(10) The 16 foot sounding (charted) in latitude 37°29.6', longitude 75°36.28', falls in depths of 30 feet on the present survey. At the time the 16 foot sounding was obtained the entrance to Little Machipongo Inlet lay about one mile westward of the sounding but the entrance to the inlet is now nearly two miles south of its former location. The adjacent areas have changed radically since 1852. There is a note in the record (pos. 140f + to pos. 141f +) that the 16 foot sounding was close to the shoaling at the entrance to the inlet and this shoal breaker area now falls in 23 to 24 feet of water. In view of these changes the 16 should be disregarded in future charting.

(11) The 28 foot sounding (charted) in latitude 37°29.04', longitude 75°35.85', falls in 34 to 38 feet on the present survey which shows a 30 foot spot 120 meters southeastward and a developed shoal with a least depth of 23 feet about a quarter mile southeast. This area was evidently affected by the changes which have occurred in the area adjacent to Little Machipongo Inlet and the new locations should be accepted. The 28 foot sounding should be disregarded in future charting.

(12) The 34 foot sounding (charted) in latitude 37°30.5', longitude 75°30.4', falls in depths of about 40 feet on the present survey. It is a single sounding on a turning line, pos. 129d + to pos. 130d +, and its position is indefinite. The present survey covered the area with cross lines and shows depths of 35 feet 1/4 mile east and southeast of the 34. The new depths should be accepted and the old 34 disregarded in future charting.

(13) The 37 foot sounding (charted) in latitude 37°30.63', longitude 75°28.5', falls in depths of 43 to 47 feet, uniform bottom, on the present survey which, however, shows a developed shoaling with least depths of 31 feet about 1/4 mile eastward. The 37 is a single widely spaced sounding on a line and is probably a part of this shoaling or else the area has changed. The 37 should be disregarded in future charting.

(14) The following charted soundings fall in depths from 3 to 11 feet deeper on the present survey which covered the area fairly closely and shows that a general deepening has occurred in this vicinity. They should be disregarded in future charting:

The 31 foot sounding in lat. 37°24.5', long. 75°37.6'
The 33 foot sounding in lat. 37°24.48', long. 75°37.25'
The 33 foot sounding in lat. 37°24.2', long. 75°36.94'
The 31 foot sounding in lat. 37°24.04', long. 75°36.6'
The 33 foot sounding in lat. 37°23.83', long. 75°36.35'

(15) In the area off Great Machipongo Inlet (south of latitude 37°24', and west of longitude 75°38') there has been considerable general change. In view of these changes no soundings from this survey should be retained on the chart in this area.

(16) The 33 foot sounding (charted) in latitude 37°23.85' longitude 75°34.67', falls in depths of 38 to 40 feet on the present survey. The 33 is a single sounding on a widely spaced line and is probably a part of one of the two shoals with similar depths shown on the present survey about 1/4 mile southwest and northwest of it. The 33 should be disregarded in future charting.

(17) The 36 foot sounding (charted) in latitude 37°22.8' longitude 75°33.38', falls in blank area between depths of 41 and 46 feet on the present survey. The 36 is a single sounding on a line, but since the present soundings adjacent to it show an indication of a shoaling, the 36 was carried forward.

(18) The 36 foot sounding (charted) in latitude 37°21.65' longitude 75°32.4', falls in depths of 40 to 46 feet on the present survey. It is a single sounding on a line and is believed to be a part of a shoal, with least depths of 34 feet, which was developed on the present survey about 400 meters southwest of it. The 36 should be disregarded in future charting.

(19) The 36 foot sounding (charted) in latitude 37°22.15', longitude 75°36.6', falls in depths of 39 to 40 feet on the present survey, but about 350 meters east of a 37 foot sounding. The 36 is a single sounding on a line and is probably somewhat out of position and should not be retained on the chart.

(20) In the vicinity of the 10 fathom curve there are some differences in depths and also in the delineation of the curve. A detailed discussion of those depths

shoaler than the present ones is not considered necessary since the depths are not dangerous to navigation. The differences may be due to differences in location or to shifts in the bottom. None of the old soundings have been carried forward.

There are numerous other soundings, not discussed above, which are slightly shoaler than the present depths, however, in view of the time elapsed between the two surveys, the improved methods under which the present survey was made and the possibility of changes having occurred, the new survey including the soundings carried forward should supersede H-348 (1852) for charting purposes.

b. H-1720 (1886).

This survey, on a scale of 1:200,000, shows a few lines spaced 5 miles apart in the offshore areas. Only three or four soundings on the inner ends of these lines fall within the limits of the present survey. These soundings are in fair agreement with the present depths, however the present survey adequately covers the common area in more detail and these soundings should be disregarded in future charting.

c. H-3298 (1911) and H-3304 (1911).

These surveys, on scales of 1:20,000, cover the areas of Wachapreague Inlet, Little Machipongo Inlet and Great Machipongo Inlet. The outer edge of these surveys overlaps the inshore edge of the present survey. These inlets are highly changeable and general differences between the depths on these surveys and those of the present survey were noted. For this reason these surveys should be superseded within the common area by the present survey.

d. H-3314 (1911).

This survey, on a scale of 1:200,000, shows a few sounding lines which cross the area of the present survey and are in only fair agreement with the present depths. The inshore extremities of these lines are located by fixes, however the other portions are controlled by dead reckoning on which no allowance was made for current or leeway. The only charted soundings originating with this survey which need be mentioned are the following:

(1) The 29 foot sounding (charted) in latitude 37°31.7' longitude 75°33.85', falls in depths of about 39 feet on the present survey. The 29 is probably a part of the 25 foot shoaling located on the present survey about 280 meters south of it. The 29 is believed to be a little out of position and should be disregarded in future charting.

(2) The 33 foot sounding (charted) in latitude 37°30.8', longitude 75°33.0', falls between depths of 37 and 40 feet on the present survey. The 33 is located by a weak fix (pos. 55E) and may be slightly out of position. It is believed to be a part of the 27 foot shoaling which was located on the present survey about 400 meters southwest of it.

(3) The 33 foot sounding (charted) in latitude 37°30.7', longitude 75°32.3', is apparently an incorrect charting of the 33 foot sounding, described in the preceding paragraph, since no other authority could be found for it. When the depth unit of the chart was changed from fathoms to feet (see standard of Aug. 1924) it was discovered that the former 33 was not charted. It was then charted in its correct position (preceding paragraph), however, the erroneous 33 formerly charted (position given in this paragraph) was not expunged from the chart. This 33 falls in depths of about 44 feet, uniform bottom, on the present survey. Its position is considered incorrect and it should be removed from the chart.

The present survey is more accurately controlled and covers the area on a larger scale in greater detail. It should supersede the above survey within the common area for charting purposes.

e. H-4194 (1921).

This survey, on a scale of 1:40,000, shows two lines of soundings, just north of latitude 37°20', and also covers the area in the vicinity of Great Machipongo Inlet south of latitude 37°22', and west of Longitude 75°38'. In the area east of longitude 75°38' the soundings are in general agreement with the present depths. In the area west of longitude 75°38' there have been general changes particularly in the vicinity of the 18 foot curve. In view of these changes this survey should be superseded within the common area by the present survey, however, the soundings off the southern limits of the present survey are in general agreement except as noted in par. 6 of this review.

f. See Addenda attached to this review.

8. Comparison with Chart 1221 (New print dated July 11, 1935) and Chart 1222 (New print dated Jan. 29, 1936)

a. Hydrography.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information except as follows:

(1) The wreck charted in latitude 37°31.1', longitude 75°35.35', was reported by the keeper of Parramore Beach L. S. Station. (Chart letter No. 403 of 1901).

It was said to be a sunken derelict with a spar protruding 20 feet above water and its location was given as 2 miles southeast of the station. The field party made no recommendation concerning the disposition of this wreck, however, the charted position of the wreck was covered very closely with cross lines. (Nothing noted in the sounding records on these lines). It is probable that this wreck has broken up and disappeared in a period of 35 years and the present development is considered sufficient to disprove its present existence in the position charted. The wreck symbol should now be removed from the chart.

(2) No authority could be found for the 36 foot sounding (charted) in latitude 37°24.3', longitude 75°34.6'. It is believed to be a mischarting of the 39 foot sounding, shown on H-348 (1852) in the same position, since this sounding was formerly charted as 39 feet until the depth unit of the chart was changed from fathoms to feet when the fraction was apparently dropped inadvertently. (See standard of Aug. 1924). It falls in depths of 44 to 49 feet on the present survey, which did not cover the area very closely, nevertheless, the present soundings show a regular bottom and indicate a general deepening. The 36 foot sounding (probably 39) should, therefore, be disregarded in future charting.

b. Aids to Navigation.

(1) With the exception of the Gong Buoy of Wachapreague Inlet, the aids to navigation on this survey are discussed in the review of H-5704 (1934) and H-5715 (1934).

(2) Wachapreague Inlet north entrance gong buoy, charted in latitude 37°35.3', longitude 75°33.5', was located about 630 meters north northwest of its charted position. According to Lighthouse Notice to Mariners 33 of 1934, the position of this buoy is temporary and will be moved when conditions in the inlet permit.

9. Field Plotting.

The field plotting was satisfactorily accomplished.

10. Additional Field Work Recommended.

In general this survey is complete and satisfactory, particularly in the deeper areas. However, between Wachapreague Inlet and the eastern limit of Parramore Banks there are a number of

shoal indications that might yield less water if more fully developed. This is particularly true in the area near signal Par where several shoal soundings from the survey of 1852 have been carried forward.

11. - Superseding Old Surveys.

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

H-348 (1852)	in part	H-3304 (1911)	in part
H-1720(1886)	" "	H-3314 (1911)	in part
H-3298 (1911)	" "	H-4194 (1921)	in part
H-354 (1852)	" "		

12. Reviewed by - R. L. Johnston, March 7, 1936.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

L. O. Colbert
Chief, Division of Charts.

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

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

Applied to drawing 1 Chart 1222
5/25-36 q.H.S.

Addenda to Review of H-5770 (1934).

Par. 7. Comparison with Prior Surveys.

f. H-354 (1852).

This 1:20,000 scale survey contains detached developments of Wachapreague and Great Machipongo Inlets, portions of which fall within the limits of the present survey. Considerable changes in depths are noted and a detailed comparison will serve no useful cartographic purpose. In view of the changes noted, the present survey should supersede this survey in future charting.

Reviewed by - Harold W. Murray, Dec. 22, 1936.

Inspected by - A. L. Shalowitz