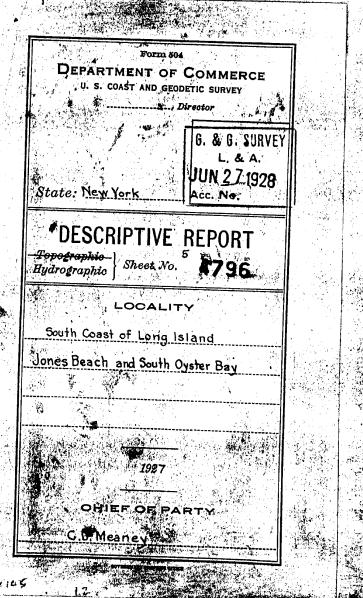
# 4796

Diag Cht No 1215-2



State New York
General locality South Coast of Long Island
South Oyster Bay Locality Violaity of Jones Beach and Massapequa
Locality Violuity of Jones Beach and Massapequa
Scale 1:10.000 Date of survey Sept. 14 to Nov. 8 ,1927
Vessel Launch 66
Chief of Party C. D. Meaney
Surveyed by <b>C. D. Meaney</b>
Protracted by F. G. Johnson
Soundings penciled by P. C. Johnson
Soundings in fathoms feet
Plane of reference M.L.W.
Subdivision of wire dragged areas by
Inked by
Verified by
Instructions dated April 8 ,1928
Remarks:

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#### AUTHOR I TY

In accordance with instructions dated April 8, 1927, a hydrographic survey of the south coast of Long Island was made of the water area between latitude 40° 35° and latitude 40° 40° and longitude 73° 26° W. to longitude 73° 31:5 W.

## JUNCTION

This sheet joins sheet 4 on the west and chart 578 on the east.

Blue

/ plus 680 m. WRECK

The boiler and part of the hull of a steamer was located at latitude 40° 36' 68 m(N), longitude 73° 25' 976m(W). This wreck was previously located by triangulation. The wreck bares 3 feet at M.L.W

# GENERAL DESCRIPTION

The land area comprised within the limits of this survey has been described in the reports for the topographic sheets for 1926.

The water along the outside coast deepens gradually, except for a bar which extends along the coast about 100 meters offshore.

The creeks and flats along the inside are generally muddy. The deep water in the channels shoals rapidly to flats nearly bare at low water. Brown grass which grows to the surface of the water at low water covers many of the flats. Due to this grass propellers become fouled in going over these waters at high water. Weedless propellers are used by launches which find it necessary to traverse the flats.

#### CHANNELS

The main channels shown on this sheet are from north of Brant Point Hotel to the eastern limit of the sheet south of Unqua Point with an effective depth of 6' at M.L.W.; from north of Brant Point Hotel to Wantagh with an effective depth of 4.5 feet at M.L.W.; from north of Brant Point Hotel to High Hill beach with an effective depth of 4 feet at M.L.W.; from north of Brant Point Hotel to the head of Seaford Creek with an effective depth of 4 feet at M.L.W; from Sloop Channel west of Squaw Island to Biltmore Shores with an effective depth of 5 feet to M.L.W.; from Sloop Channel south of West Island to signal Hut with an effective depth of 4 feet M.L.W.; from Sloop Channel to Unqua Point with a depth of 4 feet at M.L.W.

# TIDES

To control tide reducers gauges were maintained at Prospect Gun Club dock on the S.W. point of Meadow Island (Sheet 4) at Freeport near the head of Emories Canal (Sheet 4) and near signal Ambrose at Biltmore Shores.

A comparison of the time and range of the tide at the above places compared with Fort Hamilton is given below

	H.W.I.	r.W.I.	Mean Range
Prospect Gun Club	7.98	1.70	3.1
Freeport	8.61	2.87	2.6
Biltmore Shores	9.89	4.48	1.4

The range of tide and the height of the tide at Biltmore Shore is largely affected by prevailing winds. Therefore, ordinary methods of interpolating can not be used in determining tide recuders for soundings between stations affected by Biltmore Shores. For these soundings tide curves for the Prospect Gun Club and Biltmore Shores were plotted and reducers interpolated directly from the curves.

# SMOOTH SHEET PLOTTING

The smooth sheet was plotted in the Washington Office by F. G. Johnson, Lieutenant (j.g.).

Respectfully submitted,

los Meaney

# Table of Statistics for Sheet 5

# Sea Sled Dinghy

Vol.	Day	Date	Miles	Soundings	Positions
1	a	September 14	2.5	190	23
_	b	September 23	3.6	287	64
	c	September 26	11.0	806	183
	ď	September 27	3.2	. 210	42
2	ď	September 27	2.4	160	<del>1</del> ≈ 45
~	e	September 28	6.6	474	94
•	f	September 29	13.5	896	150
3	g	September 30	7.7	5 <del>4</del> 8	121
	h	October 5	10.0	776	180
4	h	October 5	1.2	132	13
	j	October 6	13.3	897	188
	k	October 7	6.6	482	116
5	k	October 7	4.0	288	81
	ī	October 10	10.8	763	189
	m.	October 11	6.1	498	52
6	m	October 11	6.5	488	97
_	n	October 12	12.3	857	139
	p.	October 14	6.2	415	67
7	p	October 14	10,5	737	102
•	ď	October 17	1.4	104	18
	r	October 19	7.0	516	74
	8	October 20	3.3	226	. 34
8	8	October 20	6.5	482	58
	t	October 24	6.4	463	88
	u	October 25	8.3	601	171
9	v	October 26	7.0	513	87
	W	November 2 1		12	4
	x	November 8 1			17
	T	otal	177.9	12821	2497
		1	sunch #66	<del></del>	
1	A	August 2	€ 16.7	486	106
_	В	August 3	26.0	850	160
	Č	September 23	3.0	108	15
2	Ċ	September 23	5.7	183	20
	D	September 27	15.6	517	58
	Ē	September 28	10.5	333	36
		-			<del></del>
	To	tal	77.5	2477	395
		Cóa	et Guard Surfi	ooat	
1	A	August 10	10.5	513	103

# Copy for Section of Field Records files.

June 30, 1928

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in 12 volumes of sounding records for

HYDROGRAPHIC SHEET 4796

Locality: South coast of Long Island, N. Y.

Chief of Party: C. D. Meaney, 1927
Plane of reference is M. L. W.
4.2 ft. on tide staff at Jones Inlet (Standard gauge)
5.8 " " " Biltmore Shore

Condition of records satisfactory except as checked below:

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

Ecliphief, Division of Fides and Currents.

Note: For time and height corrections see notes in sounding books.

Short 5 Coast Guard A day started, with station 50

# LAUNCH 66

Jones Inlet
30 min. later
0.8 of range

10 - 35C \*
1D - 26D
50D - 58D
1E - 14E

Jones Inlet | 1A - 106A \* 1.4 x range | 1B - 160B \* 1 hr. ahead

Jones Inlet 26D - 50D 0.7 x range 14E - 36E 1 hr. later Jones Inlet

A day

_ Po#	Fishmeter	County for	V C	Echo	Diff ve	/ U
18	605	J. A. Boyar method	602			
10	- 2/5	?	285			
20	195	?	230			
. 33 -	270	> .	300			
34C	140	146	22/		The first	<del></del>
376	140	?	206	<del> </del>	+ 15 fue	
40 C	- 115	124	/23		- 1	V
42c	147	175	162		- 13	<u>,</u>
	620	620	610		_ \0	V
43_D	780	780	795		+ 15	Ý
86 D	490	491	496		+ 5	7
	185	<del>                                     </del>	191	they may roman not		
25 <b>€</b>	140	?	95-	2007	Rulylt 10 few	J
	317	221	209	,	- 12	
18 F	385	346	306		_ 40	
19 F	395	382	370		_ \√	V
22 F	145	145	395-		- 76	
1 49 F	300			E to P. Johnson	+ 3	
50 F	420		269	Frahafra A		4.1
51F	220,240,285	274, 256, 303	437		<u> </u>	
63 F 34°	355 315 368	406, 424, 435, 438	286			
64F	455,503	515,559	428			
66 F	458	510		<u> </u>	Wine 71/2 shope	<u>`</u>
67 F	385	370	450	V. Poor	- 60	
	245	-	3(3			
68 F		293	26/	_ 1	- 32	
2	13.5	151	-190	Who speed not	+ 39	
3H 4H	3/1	343	315	·	- 28	
47 H	240	253	258	· · · · · · · · · · · · · · · · · · ·	+ 5	/
71 H	214	223	200		- 23 - 76	
	190	194	173		- 21	
33 9	445	450	404		_ 46	
5-92	330	368	369		+	V
- 979 - 979 260 L	935	945	694	<b>-</b> 7	<u>+, ~</u>	
260 L	156	179	943		M. read Fatholineter	
53 L	528	601	554			
_72L	880	889	847		- 47 - 22	
IM	660	659	640	\ \	- 19	
•	793	814	794		- 19	
_ 4M	698	705	730		+ 25	
5-M	265	?	231	Brood scho		
6 M	276	277	36/		+ 24	
	the second second second second second second	** · * · · · · · · · · · · · · · · · ·	ere manifest name anna anna e ser per anna e sego a sego anna anna e sego anna anna a sego a sego anna a		1	
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# HYDROGRAPHIC SHEET No. 4796

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

Date: Och. 29,1928
Cartographer: G. Chicegari

Report on Red. 4796. North ageter Bay and John Beach. Specific Instructions, dels, apr. 8, 1927. Chief of Party - C. D. Misney 1. The records, methods and character of survey, conform to the requirements of the General Instructions and extent of direlfment com the Specific Instru yeeps in some spots more development wo But in all cases the cterres could be completed satisfactorily where important. How okcific information on this subject follows at there of this report 8. The field plotting sounding lines crossings are adequate and nearly every instance the crossings are surprisingly good, as in Ceres the lines cross a narrow channel 4. The full plotting of the slough running appropriety north and south between signels Tip and Slat is evidently erroneous and Mr. Meanings decision ill be awaited for There are two countings lines running in official directions which are supposed to go through the same alongs for donner conform to this condition. Owing to the tortum shape when by the compres descript it is well night support satisfecting solution with the and the part to be higher at The names of Belline Creek fackson auch, and extens hin Island shown on Alun Pront # 22,006 will require further light of Mr. Meany GKd. See Supplement Report No. 2 5. a considerable account of fine was consumed on this wheel to shrinking of the accomp tops solved ) in the chesking of the sig motors the use of ten proportional divides and new settings for last organis and which signals in many cases were fruit to to in disagreement in nowice did the change affect the plotting of soundings, sen

# Sufflement Report No 2.

a conflict exists as shown by the older surrays, in the naming of Island auck and feckson auch, both located at the northwestern corner of sheet.

The creek west of Wantaugh Canal is named as follows from, -

B.P. 22,006 - Jackson Creek (1926) T. 1850 - " " (1887) Chart 1215 " " (1928)

T. 15386 David Ball auch (1880) T. 4274 Bellmone auch (1926)

In view of the fact that Chart 1215 recognizes this creek as Jackson Creek," it is assumed that this matter was investigated by the cartographer feftee its acceptance for publication and further investigation was not deemed necessary.

The creek bordering the northwesterly shore of kameno Island is named as follows from, —

B.P. 22,006 - Island audi (1926)

7. 1849 — " " (1887)

T. 1538 b Jackson Geck (1880) T. 4274 " (1926)

In view of the fact that Jackson Creek has been established by Chart 1215 the name Island Creek affects to be correct for the name of this creek and it is so recognized by liver of Party.

filed with Jp. 427.4

5 (Cont.) those involving the use of signal Pipe

Signal Pepe (north east corner of wheet ) showed the largess dis-"sheet of signale" accompanying this It hydro. sheet (Il Topo. sheet did not derely this area). It was necessary to prolong the cute which buded at the north edge of the ohers of eignals and then transper to the hyd sheet.

The new location of signal Pipe improved the location of the of soundings affected which appear to be correctly plotted.

Signal Polo, southwest come of sheet, was located from the computations of Mr. Meany which were in his possession as the time and boaned to me.

6. (a) Character and scope of surrying, good. (b) Field drafting, - good.

Ces. 27, 1928. 7. Reviewed by S. Gesegari

Supplement Report. No 1.

The Junction with Hyd. 4795 appears to be satisfactory

Further information relative to insufficient development will include a number of important spots which should be developed, are as follows:

East side of Long Mendow 630 m Nof Lat. 40°36, 570m. Wy Long. 73°29'
South end of breas 9. 1150 " " " 40°37, 730 " " 73°30' 110 · " " 45° 37′; 950 " · " " East side of South fine 9. 73° 28′ North east of West I'm channel " 40°38' 73 26

Sheet Impected by - a. R. Shaland,

Report continued on opposite page.

## SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4798

West Coast of Hawaii Island - Loa Pt to Kailua Bay

Surveyed in 1928

Instructions dated Movember 3,1927 ( Guide )

Chief of Party, T. J. Maher.

Surveyed by T. J. M., H. C. Farwick and V. M. Gibbons.

Protracted by H. C. W., V. M. G. and G. W. Lovenee.

Soundings by H. C. W. and V. M. G.

Verified and inked by J. Fleming.

1. The records conform to the requirements of the General Instructions with three exceptions. Looking up all correspondence with the Guide in 1928 in the office it appears samples were supposed to be furnished Sripp's Institute for salinity determination.

There appears no record of salinity samples taken. It is probable that this party had past data which permitted the use of 33  $\frac{0}{0.0}$  salinity, as the average value around the Hawaiian Islands. Salinity should be known for each sounding within one part in one thousand, according to general instructions. The salinity correction is as a rule of minor importance so long as approximate salinity is known. This is illustrated by the red pencil curves for 31  $\frac{0}{0.0}$  and 35  $\frac{0}{0.0}$  salinity drawn by me in conjunction with the field party's salinity curve of 33  $\frac{0}{0.0}$  in the Descriptive Report. Temperature values are very important and these

were obtained.

In many cases the "check mark at the extreme right hand edge of the left hand page just to the right of the bottom column" in the records is not entered. This mark is supposed to show that the tachometer is vibrating correctly at maximum amplitude and the readings are coming in correctly for the fathometer rated speed. See notes later under Additional Remarks page 7.

The line ends and line begins are not filled in completely in the record books.

- 2. The plan and character of development conform to the requirements of the General Instructions except as regards fathometer values in areas of excessive slope. This is taken up further under paragraph number 10.
- 3. The plan and extent of development satisfy the specific instructions except as follows. Sounding lines as a general statement are much closer than instructions required altho this is perhaps permissible under paragraph number 14 of the Instructions.

A short sounding line running down the meridian 155° 04' between latitude 19° 38' and 19° 34' would have filled in that area better to comply with spacing instructions there.

There is no record of bottom specimens having been taken every 5 miles out to the 1000 fathom curve as mentioned under paragraph number 17 of the Instructions.

4. In the shoaler water under about 100 fathoms the sounding line crossings are very good. In five instances in shoal water near the shore more careful plotting rectified apparent inadequate crossings. At 7 H to 8 H (ship) the depths are 2 to 4 fathoms too deep in water greater than 35 fathoms depth. Soundings here enough. Advise reject.

At 66 G and 12 H (ship) the depths differ about 2 fathoms in water about 20 fathoms deep. The shoaler depth is plotted as it is obtained by two tubes, and the deeper is fathometer.

Aside from the deeper fathometer soundings in pencil on H4798, which are at excessive slopes, and which an uncertain value is apparent the crossings on the whole are good.

- 5. The usual depth curves can be drawn but with the uncertainty of fathometer values along the 200 fathom curve due to slope this curve is open to doubt in several places.
- 6. The field plotting was completed to the extent prescribed by the General Instructions except as noted below.

The control for this sheet was obtained from T 4343. T 4344. T 4354 and T 4355, all of 1928, and T 3424 of 1913, which latter sheet is based upon a different datum. The 1928 topography was based upon the Old Hawaiian Datum now in use. As the datum on the 1913 sheet was not reduced in the field to the common basis. displacement of some of the signals resulted. All signals from T 3424 were corrected and the hydrographic signals cut in again by J. Fleming. Cartographic Engineer. Then the inshore work was replotted entirely dependent upon these signals, and the position errors were found to be from nothing to a maximum of 50 meters in a few spots. The greatest displacement of poisitions due to the shift in the control was observed in "a" day south of a Puu, and west of a Target on "c" day (blue), and opposite o Spot. The triangulation platting was checked and found to be accurate. As the offshore hydrography was based upon this, no changes were necessary.

That part of the shoreline and its attending features represent-

ed by a solid line was pantographed from the 1928 topographic sheets mentioned above. The shoreline represented by a dashed or broken line was traced from T 3424. Signals from T 3424 and now corrected are marked after the name on H 4798 in pencil thus \*. Signals from other topographic sheets on the correct datum are marked after the name on H 4798 in pencil thus  $\Phi$ .

Altho not standard practice up and down soundings are indicated by a pencil circle around the sounding, and pressure tube soundings have a pencil dash below them.

7. There is a good agreement between the hydrographic and topographic sheets except at the following places.

Near O Flag the rocky reef extends offshore 75 meters on the topographic sheet but 150 meters on the hydrographic sheet. Usually
such as here the hydrographic determination is correct while the
other is an estimate while looking seaward.

Mear 20 d (red) OHen and near O Bud (Bad) the low water line differs on the two sheets. Should follow the hydrographic sheet low water line.

The greatest difference in shoreline is observed at © So (Get) where it amounts to 100 meters with correct datums. A rock awash here has an equal displacement but it is in the same location with respect to each determination. The 1928 shoreline at © So and the rock is about 100 meters south of the 1923 topography. The 1928 work has better triangulation control, and should be used.

O SO H 4798 is OGET T 4354.

Rock awash 300 meters W x N of & Signal was formerly omitted from the hydrographic sheet but was on the topographic sheet 4354.

Some inshore sounding between  $\odot$  Las and  $\odot$  Sha; position 81 H (ship):

and inshore sounding between 24g and 29g (red) were incorrectly plotted by the ship plotter but were corrected and now agree with the records and the boatsheet.

Once and of Twin are topographic signals on H 4798 but are believed to be hydrographic signals with angles unrecorded in the records.

The rock awash 50 meters SW of a Point has been moved north 15 meters on H 4798. It is quite certain the rock here on T 3424; H 4798 and on boatsheet 4798, while all plotted somewhat different, are the same rock.

Two sunken rocks about 60 meters west of o Low previously omitted were placed on H 4798.

8. The junctions with adjacent sheets are satisfactory. This includes H 4768; H 4787; H4789 and H 4790. There are no offshore hydrographic sheets as yet overlapping H 4798 at either the northern or southern extremities.

At 15 H day (ship) crossing Keauhou Bay there are two 18 fathom soundings with the fathometer that appear to be read too deep by  $2\frac{1}{2}$  fathoms, as the whaleboat soundings and the motorsailor soundings hereabouts check each other at the shoaler depths. These two soundings have been rejected.

At position 23 F day (ship) there is a sounding of 133 fathoms which has been restored to the sheet and the depth curves altered. There is no reason for omitting this sounding.

The two fathometer soundings of 180 and 148 fathoms between 103 D and 104 D day (ship) are rejected as they were obtained on a large swinging course, and indefinitely located.

9. I do not consider the fathemeter soundings satisfactory along the

300 fathom curve where the island shelf drops off into deeper water with steep slope. Additional accurate should be done as mentioned below under hemarks if my solution there is not believed acceptable.

## 10.Remarks.

Methods of handling depths obtained with the fathometer on steep slopes are as yet in a state of flux and corrected values are very difficult to determine satisfactorily. In fact if the true depth must be determined as for scientific purposes the fathometer method is not suitable for steep slopes due to the depth normal to the slope being obtained, such slope being knowable only approximately. Perhaps with sufficient study the maximum slope at which fathometer soundings can be reduced sufficiently accurate may be determined, and all soundings thereafter over this limit to be taken with either the pressure tube or vertical casts.

Up to the present status of this H 4798 sheet fathometer soundings have been accepted and inked where the slope corrections are not over 15% of the indicated fathometer depths in depths not over 360 fathoms, and where corrections are not over 16% in depths over 300 fathoms.

As I understand tests have been conducted in the office with officers showing that the personal equation of reading the deep values of the fathometer (white light) are as large as 40 or 50 fathoms, it does not seem unreasonable to use the arbitrary limits of 10% and 15% corrections as above, and are recommended for adoption on this sheet.

Most of the slope corrections have smaller percentages than the 10% and 15%.

With the fathometer soundings in pencil on H 4798, that is those with corrections exceeding the above percentages, it is recomended

that these depths be re-computed using Capt. Parker's graph, C. & G. S. Frint 357, where within its limits, and the method explained by me on the appended onion paper be used. This method is an average of the graph depths at each fathometer sounding obtained from the surrounding fathometer depths, or if necessary in some instances to depth curves. This gives an average value from the surrounding slopes and is not dependent upon onlymone slope direction, as I believe used heretofore. As shown in the example on the onion paper these values at each fathometer sounding from the different slopes check remarkably well I believe when within the limits of the graph as constructed.

Fathometer soundings in pencil a few of which may not give suitable results should be rejected.

If this re-computing the pencil soundings is impracticable from the standpoint of volume of additional work, which I believe with the graph is not large, it is recommended that the pencil seundings be all rejected, and some additional vertical casts only be taken along the 200 to 300 fathom curve area from Healakekus Bay southeastward about 3 miles when hydrography is resumed south of this sheet.

This graph, Print 357, would be better for this sheet if the graph was extended to cover fathometer soundings as close as 175 or 200 meters apart instead of the 275 meters at present, and if the 5 to 555 curves representing difference of adjacent soundings were extended in length down another 6 inches or more at the bottom of the graph.

Additional Remarks.

As I understand the notation in the record books as on page 21.

vol. 1. " Wark / (REED) indicates that the third reed from the left vibrated- Fathometer could not be speeded up sufficiently to make center reed vibrate" means that all the fathometer work with the check mark was done not at the rated speed of the fathometer disk 246 R P M. or assumed sound velocity of 820 fathoms per second. Some days there are no check marks for the reed, and other days there are check marks without the above notes. Check marks without any qualifying note should mean according to the Regulations that the fathometer center reed (one to the right of the third reed ) is vibrating and therefore the apparatus is working as rated. As shown on page 68 of the Hydrographic Manual, which was issued to the field I think just after this survey, under the box " Vibratory Tachometer " with a fathometer rated at a sound velocity of 800 fathoms per second the third reed vibrating from the left would give a sound velocity of 793 fathoms per second, and the machine not working at the rated condition. No data is available for the difference in velocity of such conditions for an 820 fathom velocity machine.

This affects the velocity of sound values as computed in the Correction Table at the back of the Descriptive Report. It is believed this error is of minor importance, but it has not been computed. Then the center reed of the fathometer is vibrating the fathometer is operating at a speed corresponding to the standard sound velocity for the apparatus, here 820, and the correction factors for the velocity of sound in salt water as given on page 159 of the Manual are then applicable.

Thile it is not usually difficult to read the fathometer under about 100 fathoms the question naturally arises in connection with the deeper uncertain fathometer readings whether or not officers only

should be detailed to read the fathometer. In the case at hand the Recorder read the fathometer practically entirely, so far as the peeper cords show. While of course he may be an excellent fathometer man, when there are questionable results, such facts that an officer did not read the fathemeter, should be brought out. As far as apparent however all the principal difficulties of the depths are due to the slope.

There is a sheet appended showing the fathometer corrected for slope, and vertical cast comparisons over 100 fathoms in depth.

The differences are erratic.

It is my recollection when serving on the Pioneer in 1925, on which ship there was no fathometer, that the sonic depth finder obtained excellent results in depths greater than about 100 or 200 fathoms by comparison with the vertical casts. In this work the problem of slope did not arise. The sonic depth finder was unsatisfactory in depths less than about 100 fathoms.

From the experience on the Surveyor in 1927, on which ship there was no sonic, my recollection is that under about 100 or 200 fathoms the fathometer comparisons with the vertical casts checked remarkably well, but over these depths the comparisons were unsatisfactory.

experience to date in reviewing this sheet further confirms my earlier opinion that these two sounding methods so far as at present perfected compliment each other in working depths.

I have gone into the review of this sheet as minutely as time allowed before going back into the field again, both to point out fathometer survey salient points for reveiwers, to try and help solve the slope problems, at least somewhat, and also for my own benefit in understanding the field and office problems of the finished fathometer sheets.

Reviewed by Charles Shaw, June 1929.

Approved:

Chiff, Section of Field Records (Charts)

Chief, Section of Field Work (H. & T. )

Note: The method recommended consists in computing slope correction from all adjacent soundings—cach one giving a different value—and stabeing the mean. It would be more logical to take the largest correction. On account of the work involved and the relative unimportance of the soundings involved, all soundings under 300 fathoms having a slope corr. do computed by seld party in bycess of 1570 and all sodgs had 300 faths with slope corr in excess of 1070 were rejected. A. M. Sobieralskie chief section of Field Record,