

8765

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Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. BE-10-1-62 Office No. H-8765

LOCALITY

State North Carolina

General locality North Carolina Coast *outer Banks*

Locality Oregon Inlet - Pamlico Sound

1962

CHIEF OF PARTY

Oliver C. Swindell

LIBRARY & ARCHIVES

DATE FEB 9 1965

COMM-DC 61300

50718

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

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-8765

Field No. BE 10-1-62

State NORTH CAROLINA

General locality NORTH CAROLINA COAST

Locality OREGON INLET

Scale 1:10,000 Date of survey 19 July - 26 Sept. 1962

Instructions dated 4 June 1962

Vessel LAUNCH PARTY BETA

Chief of party OLIVER C. SWINDELL

Surveyed by OLIVER C. SWINDELL

Soundings taken by ~~fathometer~~ XXXXXX, graphic recorder, hand lead, ~~wire~~ XXX SOUNDING POLE

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by PARTY PERSONNEL

Protracted by HARRY R. SMITH (Norfolk Office)

Soundings penciled by HARRY R. SMITH " "

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

REMARKS: Field work incomplete.

*JMD*

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY

H- (Field No. BE-10-1-62)

A. PROJECT

A hydrographic survey was conducted according to instructions: Project OPR-433, Oregon Inlet, North Carolina, dated 4 June 1962. The survey is incomplete at this time. See Addendum -

B. AREA SURVEYED

The project includes development of the 30-foot curve,  $1\frac{1}{4}$  miles north and  $1\frac{1}{4}$  miles south of Oregon Inlet on the Atlantic Coast, and the area east of 75 38'W between latitudes 35 41.5'N and 35 49.5'N in Pamlico Sound. 45.7'N

A Project limit sketch showing the area completed is enclosed with this report.

C. SOUNDING VESSELS

All of the hydrography of this survey was accomplished by Launch CS-182 and skiff CS-735. The launch was used mostly outside the inlet and used blue ink for position numbers. The skiff was used inside Pamlico Sound and used violet ink for position numbers.

D. SOUNDING EQUIPMENT

All echo sounding was done with a 808 type fathometer #57-37, calibrated for 820 fathoms/second. A sounding pole was used by skiff CS-735 in shoal areas. The fathometer velocity corrections were calculated from bar checks.

E. SMOOTH SHEET

The smooth sheet will be plotted by the Norfolk Office, Hydrographic Processing Section.

F. CONTROL

All hydrography was controlled by three point sextant fixes taken simultaneously on hydrographic signals and natural objects.

The hydrographic signals were of three types; triangulation stations, geodimeter and teleurometer stations, and signals located by sextant angles. A complete list of signal names accompanies this report.

The horizontal datum for the planimetric manuscripts, triangulation, and the boatsheet is the North American 1927 Datum. Triangulation in the area was done in 1849, 1875, and 1962 by the Coast and Geodetic Survey. The cronaflex prints of the manuscripts used for transfer of signals to the boat sheet were T-11,672, T-11,665, T-12,133 and T-12,140.

#### G. SHORELINE

Preliminary shoreline from 1953 scale 1:20,000 topographic sheet, supplemented by recent aerial photographs, was applied to the boat sheet in the Washington Office. New manuscripts will be available for smooth plotting. T-11665, T-11672  
T-12133, T-12140

#### H. CROSSLINES

Crosslines were run on the sheet to an extent of about 8% of the regular scheme. All crossings are in good agreement.

#### I. JUNCTIONS

A copy of H-6228, scale 1:10,000, 1937 was furnished for comparison purposes. It was found that this area has undergone extensive change and that all prior surveys are obsolete. Prior survey soundings taking from C&GS Chart 1229 are located in green on the boat sheet.

#### J. COMPARISON WITH PRIOR SURVEY

See section I.

#### K. COMPARISON WITH CHART

See section I.

#### L. ADEQUACY OF SURVEY

The survey is incomplete at this time.

M. AIDS TO NAVIGATION

All aids to navigation within the limits of this boat sheet were located and are plotted on the boat sheet.

*See NR - List Floating Aids*

N. STATISTICS

<u>Vessel</u>	<u>Number of Positions</u>	<u>N.M. of Sounding Lines</u>
Launch CS-182	1428	141.7
Skiff CS-735	3394	289.8
Total:	4822	431.5

Total area surveyed: 15.7 square nautical miles  
 Number of bottom samples: 19  
 Number of tide gages: 3

Q. RECOMMENDATIONS

Extensive dredging operations were underway after surveying this area. A resurvey in these areas should be undertaken.

Respectfully submitted

John W. Bricker  
 LTJG, C&GS

TIDE NOTE

Three tide gages were used to control the tidal data for this boat sheet. A gage located at Kitty Hawk, North Carolina (36 06.1N, 75 42.6W) was used to control all work outside Oregon Inlet. Mean low water was 2.0 feet on the staff and all heights recorded on the marigram should be corrected by this amount

A gage located at South Point, Oregon Inlet ( 35 46.05N, 75 31.45W) was used to infer tides to Kitty Hawk, North Carolina. Mean low water was 2.6 feet on the staff and all heights recorded on the marigram should be corrected by this amount.

A gage located at Duck Island, Pamlico Sound, North Carolina ( 35 48.0N, 75 35.5W) was used to control all hydrography inside the mouth of Oregon Inlet. Mean low water was 2.7 feet on the staff and all heights recorded on the marigram should be corrected by this amount.

Time meridian 75W (ZD 5) was used for times on all three gages.

WVW

ABSTRACT OF VELOCITY CORRECTION

( BE-10-1-62 )

Launch CS-182

Corrections to Depth

		<u>Corr.</u>	<u>Depth</u>
<u>Group I</u>	a-d days	0.0	0.0-10.0
		+0.2	10.1-20.0
		+0.4	20.1-30.0
		+0.6	30.1- .....
<u>Group II</u>	e,f,h days	0.0	0.0-40.0
		+0.2	40.1- ....
<u>Group III</u>	g,j,k days	0.0	0.0- 9.0
		-0.2	9.1-30.0
		-0.4	30.1- ....

Skiff CS-735

		<u>Corr.</u>	<u>Depth</u>
<u>Group I</u>	a-u days	0.0	0.0- 5.0
		+0.2	5.1-10.0
		+0.4	10.1- .....

LIST OF STATIONS

H-

( BE-10-1-62 )

Name Used in Hydrographic Survey	Origin of Station
Art	T-11672
Bat	Bat, 1962 T-12133
Big	T-12140
Bob	T-12140
Bodie	<u>Bodie</u> Island Lighthouse, 1875 T-11665
Bus	T-12140
Car	Old House Channel Lt. 3, 1962 T-12133
Chan	Roanoke Sound <u>Channel</u> Lt. 3, 1962 T-11665
Club	Club, 1933 T-12133
Com	T-12140
Coo	T-12140
Cop	T-12140
Cow	T-12140
Cup	Oregon Inlet Coast Guard <u>Cupola</u> 1933 T-12140
Daw	T-11665
Day	T-11665
Del	T-12133
Dix	T-11665
Ducky	Ducky, 1962 T-12133
Dud	T-12140
Duo	T-12133
Ear	T-12140
East	Duck Island Club, <u>East</u> Gable, 1962 T-12133
Ebb	T-11665
End	T-12140
Eva	T-12133
Few	T-12140
Fez	T-12133
Flag	Oregon Inlet Coast Guard <u>Flagpole</u> , 1933, T-12140
Fly	T-12133
Fun	T-12133
Gal	Gal, 1962 T-12133
Hod	T-12140
Hot	T-11665
Ida	T-12140

*See N.P.O  
list of signals-*



Name Used in Hydrographic Survey	Origin of Station
Irk	T-11665
Let	Oregon Inlet Lt. 5, 1962 T-12140
Mar	T-12140
Nel	Roanoke Sound Channel Lt. 7, 1962 T-11665
Noke	Roanoke Sound Channel Lt. 2, 1962 T-12133
Nut	T-12133
Oak	T-11665
Ohm	T-12140
Oil	T-12140
Old	Old House Channel Daybeacon 4, 1962 T-12133
Ore	Oregon Inlet Junction Lt., 1962 T-12133
Out	T-12133
Pow	T-12140
Put	T-11665
Rio	T-12140
Roa	T-12133
Ron	Walter Slough Daybeacon 3 T-12140
Sol	T-12140
Tan	T-11665
Tax	T-12133
Tank	Bodie Island National Park Service Water Tank, T-11665
Tom	T-11665
Toy	T-11665
Tow	T-12140
Thru	Roanoke Island Cut Thru Lt. T-12133
Use	Old House Channel Lt. 2, 1962 T-12133
Wal	Walter Slough Channel Lt., 1962 T-12133
War	Stewart, 1962 T-12133
Way	Oregon Inlet Channel Lt. 10, 1962 T-12140

## APPROVAL SHEET

The boat sheet and records for the portion of the project area surveyed were under my supervision and daily inspection. The portion of the project area surveyed is complete and adequate for charting. Additional field work is recommended in areas of recent dredging operations.

*Oliver C. Swindell*  
Oliver C. Swindell  
Chief of Party

NORFOLK HYDROGRAPHIC PROCESSING BRANCH  
LIST OF SIGNALS  
H-8765

TRIANGULATION STATIONS

BOB BOB, 1962  
 BODIE BODIE ISLAND L.H., 1875-1933  
 CAR OLD HOUSE CHANNEL, LT. 3, 1962  
 CHAN ROANOKE SOUND, CHAN. LT. 3, 1962  
 CLUB CLUB, 1933  
 CUP OREGON INLET C.G. CUPOLA, 1933  
 DUCKY DUCKY, 1962  
 FLAG OREGON INLET C.G. FLAGPOLE, 1933  
 FUN FUN, 1962 — Photo Station?  
 HEN OLD HOUSE CHAN. LT, 6, 1962  
 LET OREGON INLET, CHAN. LT. 5, 1962  
 NEL ROANOKE SOUND, CHAN. LT. 7, 1962  
 NOKE ROANOKE SOUND, CHAN. LT. 2, 1962  
 ORE OREGON INLET, JUNCTION LT., 1962  
 PARK PARK, 1962  
 PIT OREGON INLET, CHAN. LT. 13, 1962  
 ROA ROANOKE SOUND, CHAN. LT. 1, 1962  
 TANK BODIE ISLAND, NAT. PARK SERVICE, WATER TANK, 1962  
 THRU ROANOKE ISLAND, CUT THRU LT., 1962  
 USE OLD HOUSE CHAN., LT. 2, 1962  
 WAL WALTER SLOUGH, CHAN. LT. 1, 1962  
 WAY OREGON INLET, CHAN. LT. 10, 1962

PHOTO-HYDRO STATIONS

SOURCE T-11665

ARK	BAT	DAW	DAY	DIX	EBB	EVA	HOT	IRK	NUT	OAK
PUT	TAN	TOM	TOY	WAB						

SOURCE T-11672

ADD	AIM	ART	AXE	BIG	BUS	COM	OHM
-----	-----	-----	-----	-----	-----	-----	-----

SOURCE T-12133

DUO	EAST	FEZ	FLY	GAL	OLD	OUT	TAX
-----	------	-----	-----	-----	-----	-----	-----

SOURCE T-12140

COO	COP	COW	DUD	END	HOD	NMAR	OIL	POW	RIO	RON
SOL	TOW									

SOURCE - FIELD NOTE

BUL	CON	DEL	WIN
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HYDROGRAPHIC STATIONS

EAR	Vol. 2, pg. 5	FEW	Vol. 1, pg. 29
IDA	Vol. 3, pg. 48	PAX	Vol. 5, pg. 4

NAME	LATITUDE & LONGITUDE	Seconds in Meters
<del>Oregon Inlet Channel Daybn #9</del>	<del>35° 46' 18" - 75°</del>	
Oregon Inlet Channel Daybn #9 Bul - ✓ BS.	35° 46' 18" - 75° 32' 75"	334.00 1120.00
" " " " #12	35° 46' 28" - 75° 33' 12"	522.80 164.90
" " " " #14	35° 46' 40" - 75° 34' 20"	740.22 295.22
" " " " #15	35° 46' 39" - 75° 34' 71"	7119.8 1067.7
Old House Channel Daybn #2A DEL ✓ Boat shut.	35° 47' 07" - 75° 34' 52"	120.11 770.71
" CON " Junction Daybn	35° 46' 47" - 75° 34' 66"	874.60 992.22

Value of 1' Latitude between 35° 47' 00" & 35° 48' 00" = 1849.9  
 35° 47' 00" & 35° 48' 00" = 1849.9

NORFOLK HYDROGRAPHIC PROCESSING BRANCH  
 FLOATING AIDS TO NAVIGATION  
 H-8765

<u>BUOY</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
OREGON INLET					
Chan. Lighted Buoy 8	35-46.35'	75-32.31'	6'	23	9/11/62
Chan. Buoy 6	46.79	31.99	23'	33	"
Chan. Lighted Buoy 3	46.92	31.64	26'	43	"
Chan. Buoy 4	47.12	31.51	25'	53	"
Chan. Lighted Buoy 2	47.36	31.21	16'	63	"
Chan. Buoy 1	47.47	30.99	11'	11e	7/26/62

PRIVATELY MAINTAINED

Dredging Buoy	47.57	31.08	10'	112e	"
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NORFOLK HYDROGRAPHIC PROCESSING BRANCH  
ADDENDUM  
To Accompany

HYDROGRAPHIC SURVEY H-8765 (BE 10-1-62)

GENERAL

Although the field work on this survey is incomplete, it was smooth plotted in compliance with the Deputy Director's priority list, dated Jan. 9, 1964, C-835.

Except for occasional one foot discrepancies, soundings are in good agreement at crossings. In areas of flat bottom fractional depth units were used frequently in an effort to smooth curves.

CONTROL

Stations BUL, WIN, CON and DEL do not appear on the air-photo compilations nor could positions be furnished by Washington Office. They were plotted on the smooth sheet using the positions recorded on the attached field note. These agree with boatsheet locations.

Respectfully submitted,



Hugh L. Proffitt  
Cartographer

Norfolk, Va.  
5 Feb. 1965

**GEOGRAPHIC NAMES**  
Survey No. H-8765

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
Atlantic Ocean											1
Bodie Island											2
Cedar Island											3
Cedar Point											4
Duck Pt.											5
North Pt.											6
Off Island											7
Old House Chan.											8
Oregon Inlet											9
Pamlico Sound											10
Pea Island											11
Roanoke I.											12
South Point											13
Walter Slough											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names approved

4-15-65

A. J. Wright

## Verifier's Report to the Reviewer

Report Items (In reference to Form-946A - Verifier's Report):

### Part I - Descriptive Report

Item 3. Topographic sheets were not referred to by year.

### Part II - Shoreline and Signals

Item 4. Signal Fun, 1962 is listed as a triangulation station in the Descriptive Report although there is no record of it in the Geodetic files. It appears to be a Photo Point improperly transferred. The T-sheets are now being reviewed at Norfolk.

Item 5. The existence of an islet or portion thereof between positions 72 f and 72 f, 1<sup>st</sup> out of the skiff work is disproved based upon examination of the bathogram.

The existence of an islet between position 97 f, 4<sup>th</sup> out and 98 f of the skiff work is disproved based on examination of the bathogram.



Item 5. (continued)

The center portion of an islet between position 126 f and 126 f, 1<sup>st</sup> out is disposed based upon examination of the fathogram.

Part II - Volumes

Item 12.

(b) Line turns were not always indicated in the remarks column of the volumes.

(g & h) Numerous errors exist in the volumes of the skiff work concerning corrections applied to soundings. These errors consisted of inappropriate echo corrections, initial correctors and improperly computed reduced soundings. Fathograms were not adequately scanned for the skiff hydro in respect to situations where pole and fathogram trace occur simultaneously.

(k) ~~See~~ See item 5 of Part II preceding.

## Part V Protracting

Stem 17. Three arm protractor (plastic) used  
was checked August 9, 1972.

## Part VI - Soundings

Stem 19. Crossline soundings of positions  
20 to 22 9 day of the skiff work were  
rejected in their crossing of a day of  
the skiff work. Rejection was based  
upon evaluation of the records and  
character of the bottom defined by the records.

Stem 22. On processing a day of the skiff  
work initial corrections were applied to  
pole soundings.

## Part VII - Notes to the Reviewer

Stem 34. The line of soundings from  
position 77a thru 88a was rejected.  
This line falls within the sounding  
lines of a day of the skiff work.  
The soundings rejected were approximately  
one foot greater in depth.

Part II (Continued)

Item 36. The original tide reducer of a day of the skiff work was replaced by an arbitrary tide reducer at the time of smooth plotting. Mr. Hubbard of Tides Section (Rockville) constructed a tide curve based on Duck Island tide station for September 19, 1962 to be used for a day. It was determined that the original reducer was in agreement with the constructed curve. Therefore, the original reduced soundings of the volume were correct. The smooth plot and volumes were corrected accordingly.

R. D. Sanck

13 Oct 1972

TIDE NOTE FOR HYDROGRAPHIC SHEET

7/2/65

Nautical Chart Division: R. H. Carstens

Plane of reference approved in  
16 volumes of sounding records for

HYDROGRAPHIC SHEET 8765

Locality: Oregon Inlet, North Carolina

Chief of Party: O. C. Swindell (1962)

Plane of reference is mean low water

Tide Station Used (Form C&GS-681):

Kitty Hawk  
South Point, Oregon Inlet  
Duck Island, Pamlico Sound

Height of Mean High Water above Plane of Reference is as follows:

Kitty Hawk	3.2 ft.
South Point, Oregon Inlet	2.0 "
Duck Island, Pamlico Sound	0.4 "

Remarks

NOTE: Tide reducers for the positions listed below have been revised in red and verified.

<u>Vol.</u>	<u>Pos.</u>
11	1k to 26k
14	1s to 111s
15	112 to 225s

*J. M. Symons*  
Chief, Tides and Currents Branch

HYDROGRAPHIC SURVEY STATISTICS  
HYDROGRAPHIC SURVEY NO. 8765

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		1	BOAT SHEETS		1	
DESCRIPTIVE REPORT		1	OVERLAYS			
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES						
CAHIERS	2					1
VOLUMES	16					
BOXES						

T-SHEET PRINTS (List)

Blue line prints 11672, 11665(2), 12133 & 12140.

SPECIAL REPORTS (List)

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				4822
POSITIONS CHECKED		1366		
POSITIONS REVISED		104		
DEPTH SOUNDINGS REVISED		2885		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		123		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		1		
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		12		
JUNCTIONS		1		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		302		
SPECIAL ADJUSTMENTS		97		
ALL OTHER WORK		8		
TOTALS		420		
PRE-VERIFICATION BY	BEGINNING DATE		ENDING DATE	
VERIFICATION BY <i>R. D. Sanocki</i>	16 May 1972		16 Oct 1972	
REVIEW BY	BEGINNING DATE		ENDING DATE	

**VERIFIER'S REPORT**  
**HYDROGRAPHIC SURVEY, H - 8765**

**INSTRUCTIONS** - This form serves to identify items of a check list in verification together with items which are separately reported to the Reviewer. The form is not to be forwarded to the Reviewer. A report, which is prepared for the Reviewer, should identify items by number and letter and will be filed in the Descriptive Report until the survey is reviewed.

**CL - Check List Items:** should be checked as having been completed during the verification processes.

**R - Report Item:** This column refers to those items reported to the reviewer and is used to indicate the items discussed.

Part I - DESCRIPTIVE REPORT	CL	R	Part III - JUNCTIONS (Continued)	CL	R	
<p><b>Note:</b> The verifier should first read the Descriptive Report for general information and problems.</p> <p>1. The Descriptive Report was consulted, paragraphs checked if found satisfactory, and notations were made in soft black pencil regarding action taken. Remarks Required: -- None</p>	✓		<p>10. Junctions with contemporary surveys were satisfactory except as follows: Remarks Required: -- Consider conditions after adjustments have been made; note adjustments made. Make special notes of Butt junctions and areas which are <b>SUPERSEDED</b>. <i>No contemporary surveys to junction.</i></p>	✓		
<p>2. Soundings originating with the survey and mentioned in the Descriptive Report have been verified and checked in soft black pencil, including latitude and longitude, together with position identification. Remarks Required: -- None</p>	✓		<p><b>Part IV - VOLUMES</b></p> <p>11. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken and exceptions noted in the volumes. Remarks Required: -- None</p>		✓	
<p>3. All reference to survey sheets mentioned in the Descriptive Report should include registry number and year. Remarks Required: -- None</p>		✓	<p>12. Condition of sounding records was satisfactory except as follows: Remarks Required: -- Mention deficiencies in completeness of notes or actions for the following: (a) rocks (b) line turns (c) position values of beginning and ending of lines (d) bar check or velocity correctors (e) time recording (f) notes or markings on fathograms (g) was reduction of soundings accurately done? (h) was scanning accurate? (i) were peaks at uneven intervals missed? (j) were stamps completed? (k) references to adjacent features</p>			
<p><b>Part II - SHORELINE AND SIGNALS</b></p> <p>4. Source of shoreline signals Remarks Required: -- List all surveys a. Give earliest and latest dates of photographs b. Field inspection date c. Field Edit date d. Reviewed-Unreviewed</p>		✓				
<p>5. The transfer of contemporary topographic information was carefully examined and reconciled with the hydrography. Remarks Required: -- Discuss remaining differences.</p>		✓				✓
<p>6. The plotting of all triangulation stations, topographic stations and hydrographic signals has been checked and noted in processing stamp No. 42 on the smooth sheet. Remarks Required: -- None</p>	✓					
<p>7. Objects on which signals are located and which fall outside of the high-water line have been described on the sheet. Remarks Required: -- List those signals still unidentified.</p>	✓		<p><b>Part V - PROTRACTING</b></p> <p>13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp. Remarks Required: -- None</p>	✓		
<p><b>Part III - JUNCTIONS</b></p> <p><b>Note:</b> Make a cursory comparison preliminary to inking soundings in area of overlap.</p> <p>8. All junctions of contemporary or overlapping sheets were transferred in colored ink and overlapping curves were made identical. Remarks Required: -- None</p>	✓		<p>14. The protracting and plotting of all unsatisfactory crossings were verified. Remarks Required: -- None</p>	✓		
<p>9. The notation in slanted lettering "JOINS H--- (19 )" was added in colored ink for all verified contemporary adjoining or overlapping sheets. Those not verified are shown in pencil. Remarks Required: -- None</p>	✓		<p>15. All detached positions locating critical soundings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position numbers are legible. Remarks Required: -- None</p>	✓		

Part V - PROTRACTING (Continued)	CL	R	Part VIII - AIDS TO NAVIGATION	CL	R
16. The protracting was satisfactory except as follows: Remarks Required: -- Refers to protracting in general except for specific faults repeated often, or faults in control information, which required considerable replotting or adjustments.		✓	26. All fixed aids located together with those on the contemporary topographic sheets, have been shown on the survey. Remarks Required: -- Conflicts of any nature listed.	✓	
17. The protractor has been checked within the last three months. Remarks Required: -- Date of check, type of protractor and number.		✓	27. All floating aids listed in the Descriptive Report should be verified and checked in soft black pencil, including latitude and longitude and position identification. Remarks Required: -- None	✓	
<b>Part VI - SOUNDINGS</b> 18. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings. Remarks Required: -- None	✓		<b>Part IX - BOATSHEET</b> 28. The boat sheet was constantly compared with the smooth sheet with reference to notes, position of sounding lines and supplemental information. Remarks Required: -- None	✓	
19. Sounding line crossings were satisfactory except as follows: Remarks Required: -- Discuss adjustments.		✓	29. Heights of rocks awash were correctly reduced and compared with topographic information. Remarks Required: -- Note excessive conflicts with topographic information.	✓	
20. The spacing of soundings as recorded in the records was closely followed; Remarks Required: -- None	✓		<b>Part X - GENERAL</b> 30. All information on the sheet is shown in accordance with figures 82 and 83 in the Hydrographic Manual (Pub. 20-2). Remarks Required: -- None	✓	
21. The scanning, reduction, spacing, plotting of questionable soundings have been verified. Remarks Required: -- None	✓		31. Unnecessary pencil notes have been removed from the sheet. Remarks Required: -- None	✓	
22. The smooth plotting of soundings was satisfactory except as follows: Remarks Required: -- Refer to legibility, errors in spacing, and errors in numbers - but not to errors in scanning.		✓	32. Degree, minute values and symbols have been checked; also electronic distance arcs have been properly identified and checked on the smooth sheet. Remarks Required: -- None	✓	
<b>Part VII - CURVES</b> 23. The depth curves have been inspected before inking. Remarks Required: -- By whom was the penciled curves inspected.	✓		33. The bottom characteristics are adequately shown. Remarks Required: -- None	✓	
24. The low-water line and delineation of shoal areas have been properly shown in accordance with the following: a. From T-Sheet in dotted black lines ✓ b. From soundings in orange ✓ c. Approximate position of sketched curve is dashed orange ✓ d. Approximate position of shoal area not sounded in black dashed Remarks Required: -- None	✓		<b>Part XI - NOTES TO THE REVIEWER</b> 34. Unresolved discrepancies and questionable soundings.		✓
25. Depth curves were satisfactory except as follows: (This statement should not refer to the manner in which the curves were drawn). Remarks Required: -- Indicate areas where curves could not be drawn completely because of lack of soundings. For some inshore areas a general statement is sufficient.	✓		35. Notation of discrepancies with photogrammetric survey inserted in report of unreviewed photogrammetric survey or on copy.	✓	
26. Supplemental information.		✓	Verified by <i>R. D. Sanocki</i> Date <i>16 Oct. 1972</i>		







