

9530

Diag. Cht. No. 1229-2.

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT (HYDROGRAPHIC)

Type of Survey ... HYDROGRAPHIC
Field No. AHP-5-5-75
Office No. H-9530

LOCALITY

State ... North Carolina
General Locality ... Oregon Inlet
Locality ... ^{Near} ~~Offshore~~ South Point

1975

CHIEF OF PARTY

..... Lt. Cdr. J. O. Rolland

LIBRARY & ARCHIVES

DATE 10-7-75

☆U.S. GOVERNMENT PRINTING OFFICE: 1974-763-098

9530

Area 2
Chart
1229
1295c

HYDROGRAPHIC TITLE SHEET

H-9530

INSTRUCTIONS - 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.

AHP 5-5-75

State North Carolina

General locality Oregon Inlet

Locality Near Offshore South Point

Scale 1:5000

Date of survey June-July 1975

Instructions dated 28 Feb. 75

Project No. OPR-513-AHP-75

Vessel Launch 1277

Chief of party J. O. Rolland

Surveyed by W. A. Wert, F. L. Kleinschmidt, J. S. Bradford, D. M. Bryant

Soundings taken by echo sounder, ~~XXXXXX~~, pole _____

Graphic record scaled by Launch Personnel

Graphic record checked by Launch Personnel

Protracted by N/A

Automated plot by AMC-CALCOMP 618
~~EDP-818~~

Verification by AMC

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

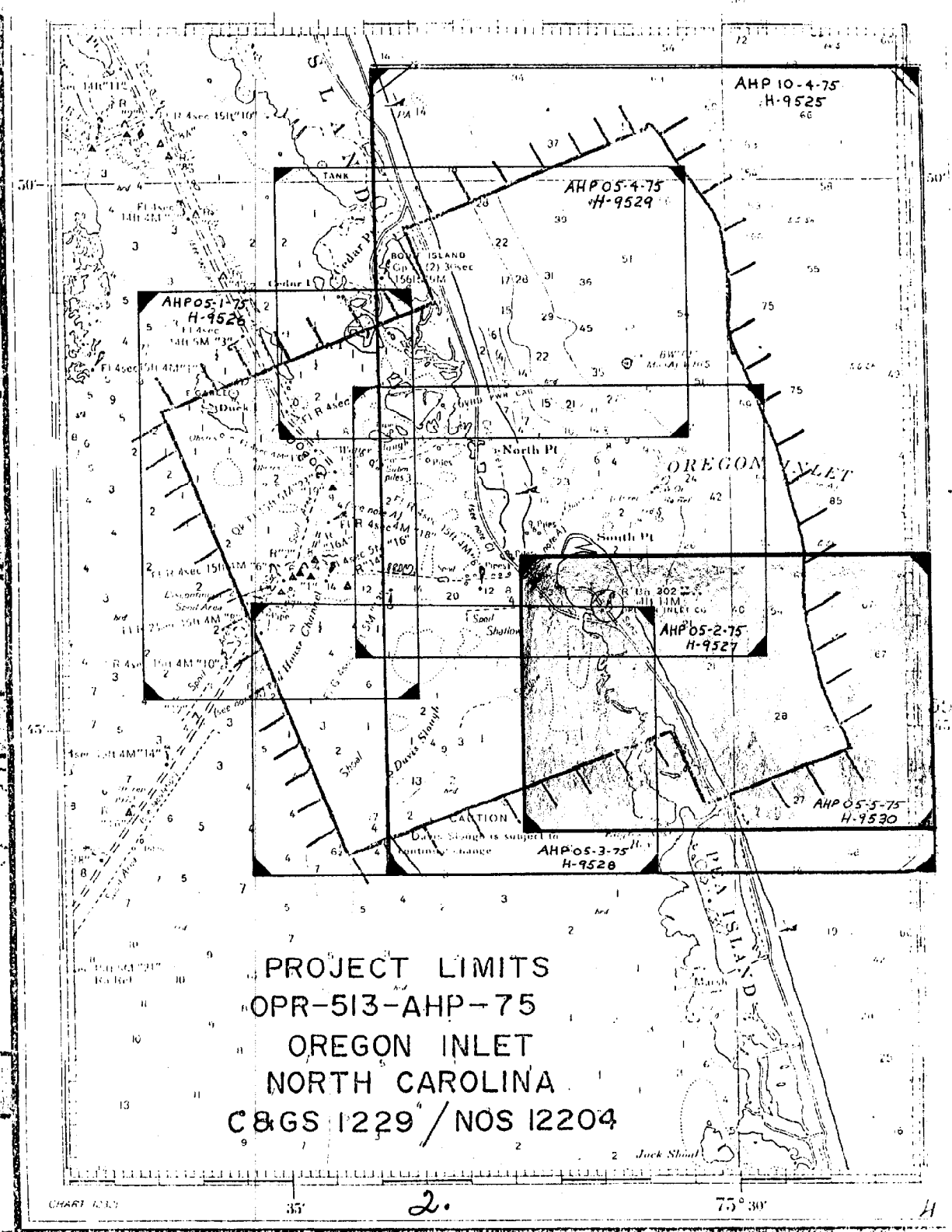
REMARKS:

*Applied to state 2/9/76
CRB.*

1.

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PROJECT LIMITS
 OPR-513-AHP-75
 OREGON INLET
 NORTH CAROLINA
 C&GS 1229 / NOS 12204

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY H-9530 (AHP-05-5-75)

SCALE: 1:5,000
VESSEL: ATLANTIC HYDROGRAPHIC PARTY

1975
CHIEF OF PARTY JOHN O. ROLLAND

A. Project

OPR-513 is a cooperative agreement between NOS and the U.S. Army Corps of Engineers to provide a new Hydrographic Data Base for computer model studies of Oregon Inlet. The survey was accomplished in accordance with Project Instructions OPR-513-AHP-75 dated 28 February 1975 change number 1 dated 21 March 1975, the Revised Hydrographic Manual and Chapter 3 of the AMG Manual.

Provisional

B. Area Surveyed

The area encompassed by Sheet AHP-05-5-75 is an irregular section extending offshore from South Point to a junction at the 30 foot depth curve with previous work accomplished by NOAA Launch 1277. The approximate limits of hydrography are bounded on the east by $35^{\circ} 46' 00''$, $75^{\circ} 30' 15''$; $35^{\circ} 44' 35''$, $75^{\circ} 29' 30''$ and the shoreline on the west. Junction was made with contemporary survey H-9525, AHP 10-4-75. Detailed prior surveys of the area are H-1053, 1:40,000 scale, 1870. All field work was accomplished during the period 25 June 1975 to 8 July 1975.

and H-9525 (1962) on the north half of the area

C. Sounding Vessel

Launch 1277 was used exclusively to accomplish the survey work on AHP 05-5-75.

D. Sounding Equipment and Corrections to Echo Soundings

A Raytheon Fathometer, Model Number DE 723 D, serial number 1904 was used in Launch 1277. Depth corrections were obtained by averaging bar check values and excluding values which differed by more than 0.4 feet. A graph was constructed and velocity correctors were scaled in accordance with Table 3 of the revised Hydrographic Manual. No appreciable changes occurred between the first and last days of hydrography, therefore one velocity table was constructed. The graph, corrector value abstract and bar check abstract are included with this report. Settlement and squat correctors were obtained as outlined in Section 4.9.4.2 of the Revised Hydrographic Manual.

Provisional

The graph and corrector value abstract are included with this report. Daily TRA corrections were determined as outlined in Section 4.9.4.1 of the ^{Provisional} Revised Hydrographic Manual to reflect gain/loss of fuel load. Frequent A to F scale checks were taken to insure correct stylus arm length. All initial settings were adjusted to zero. All fathograms were scanned to mean out sea swell action where applicable.

E. Hydrographic Sheets

Field sheets were constructed, raw master tapes were logged and data plotted on the field sheets by the launch's on board PDP 8/e Hydroplot System. Edited master and corrector tapes, velocity tape, and TC/TI tape were logged by launch personnel and submitted for smooth plotting by Processing Division, Atlantic Marine Center.

F. Control Stations

Control stations P-02 1975, G.G. Cupola 1974, PD-03 1975, PD-04 1975, PD-05 1975, and PD-06 1975 were established or verified by Coastal Mapping Division, Atlantic Marine Center. Refer to Horizontal Control Report OPR-513 Oregon Inlet, North Carolina for surveying methods, geodetic abstracts, and computations. ✓

G. Hydrographic Position Control

Del Norte positioning equipment, which operates in a Range-Range mode, was used to control all of the hydrography on Sheet AHP 05-5-75. Five separate control networks were used on this sheet. All shore stations were located at established third order triangulation or traverse stations. Whenever possible, calibration was established twice daily, either by sextant fix or by positioning the launch at a known third-order traverse station. Del Norte ranges were compared to ranges calculated by the PDP 8/e computer using the RK 407 and RK 561 programs. Refer to daily raw data printouts and RK-561 sextant calibration printouts for calibration data, and see appendix for Abstract of Correctors. A maximum difference of 4 meters between morning and evening calibrations was observed, with mean daily differences ranging from 1 to 3 meters. The maximum mean standard deviation of calibrations for any one station was 3.4 meters. Performance of the Del Norte Equipment was fair due to the presence of extensive skip zones throughout the project area. This resulted in an excessive number of erroneous positions which had to be plotted by time and course. On Day 184 the DMU, serial number 159, failed to operate. Printed circuit cards 200-06A and 200-09A were replaced. (See Failog #5139). The following is a summary of equipment utilization during the project. (Refer to enclosed signal list for shore station names and locations):

Shore Stations

<u>Signal #</u>	<u>S/N</u>	<u>Julian Days Used</u>
10	189	176, 177, 189
13	188	177, 189
14	189	189
15	188	189
16	216	176, 177, 189

Mobile Transponder

<u>S/N</u>	<u>Julian Days Used</u>
159	176, 177, 189

Distance Measuring Unit (DMU)

<u>S/N</u>	<u>Julian Days Used</u>
159	176, 177, 189

H. Shoreline

Shoreline and topographic details were transferred from ^{Class I} incomplete manuscripts TP 00889 and TP 00891. The MLW line could not be delineated by hydrography due to a prevalent breaker zone extending offshore approximately 20 to 30 meters. Depths ranging between 2 and 5 feet were found adjacent to or within this breaker zone. The 6 foot curve was defined by hydrography.

I. Crosslines

Approximately 3.1 nautical miles or 10.0% of the main scheme hydrography run on Sheet AHP 05-5-75 were crosslines. The agreement with main scheme lines was very good and most soundings agreed to the nearest foot. Maximum discrepancies of 2 feet occurred at crossings run at the extreme stages of the tides. Actual tidal ranges observed offshore were substantially greater than predicted tidal ranges at Oregon Inlet. *Smooth sheet crossings are very good*

J. Junctions

Junction with H-9525, 1:10,000, 1975 at the 30 foot depth curve was excellent and soundings agreed exactly.

K. Comparison with Prior Surveys

Accurate comparison with H-1053, 1:40,000, 1870 could not be accomplished because of the ambiguity of the superimposed NAD 1927 latitude and longitude lines. In addition soundings plotted on H-1053 were reduced to the nearest .25 fathoms. Comparison did, however, show contemporary survey soundings to be from 6 to 10 feet deeper. Comparison with the MLW line shows a westward shift of approximately 400 meters. No presurvey review items were contained within the limits of AHP 05-5-75, however a 18 foot finger shoal with a 26 foot scour centered approximately at 35° 44' 57", 75° 30' 03" corresponds with the wreck "INGLE" (PA) charted on H-1053. Inspection of the fathogram within this area shows little indication and therefore no further investigation was made. ✓

L. Comparison with the Chart

A comparison with C&GS Chart 1229, 19 Edition, 2 March 1974 shows general disagreement. The contemporary survey 30 foot depth curve is located approximately 200 meters west of the charted 30 foot depth curve in the northern section of Sheet AHP 05-5-75 and approximately 700 meters west of the charted 30 foot depth curve in the southern part of Sheet AHP 05-5-75. Contemporary survey soundings were 3 to 5 feet deeper inside the 30 foot depth curve. ✓

M. Adequacy of Survey

This survey is complete and adequate to supersede prior surveys for charting. ✓

N. Aids to Navigation

No fixed aids or floating aids to navigation are contained within the limits of AHP 05-5-75. ✓

O. Statistics

<u>Vessel</u>	<u>Nautical Miles of Sounding</u>	<u>Sq. Nautical Miles</u>	<u>No. of Bottom Samples</u>	<u>No. of Positions</u>
Launch 1277	34.1	.9	6	542

 ✓

P. Miscellaneous

None

Q. Recommendations

It is recommended that all critical sounding data be immediately applied to the existing chart. It is additionally recommended that prior survey H-1053, 1:40,000, 1870 be retained for historical purposes only.

R. Automated Data Processing

<u>NAME</u>	<u>NUMBER</u>	<u>VERSION DATE</u>
On-Line R/R R.T.S.	RK111	8/7/74
Grid, Signal Plot	RK201	2/19/75 and 4/18/75
Off-Line R/R Non R.T.S.	RK211	8/16/74
Utility	AM300	5/24/73
Utility	RK300	5/22/75
Corrector Abstract	PM360	3/21/74
Geodetic Direct/Inverse	RK407	8/15/74
Predicted Tides	AM500	11/10/72
Calibration	RK561	2/19/75
Elinore	AM602	3/10/72 and 5/21/75

S. References to Reports

1. Horizontal Control Report OPR-513, Oregon Inlet, N.C. 1975.

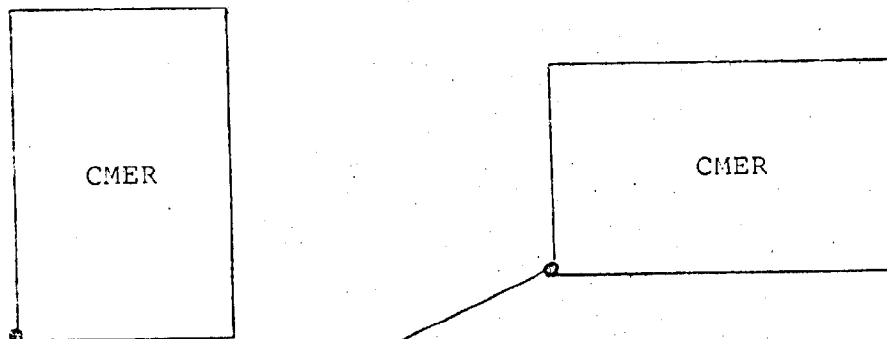
Respectfully Submitted

W.A. Wert
William A. Wert
LT, NOAA
OIG, Launch 1277

CAM3-1
1/31/74

ATLANTIC MARINE CENTER
PROJECTION PARAMETERS
POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

1. Project No. OPR-513 4. Requested By Verification Branch
2. Reg. No. H-9350 5. Ship or Office _____
3. Field No. AHP-5-5-75 6. Date Required _____
7. Polyconic Modified Transverse Mercator
8. Central Meridian of Projection 75 ° 32 ' 00 "
9. Survey Scale: 1: 5,000
10. Size of Sheet (check one):
36 x 54 36 x 60 Other Specify 36²
11. Sheet Orientation (check one):
NYX = 1 NYX = 0
N N



12. Plotter Origin: S.W. Corner of Sheet (not necessarily a grid intersection)
Latitude 35 ° 44 ' 03 "
Longitude 75 ° 31 ' 35 "
13. G.P.'s of triangulation and/or signals attached
14. Material Desired: Tracing Paper Mylar
Smooth Sheet Other Specify _____
15. Remarks: _____

ATLANTIC MARINE CENTER
ELECTRONIC CONTROL PARAMETERS

- 1. Project # OPR-513 2. Reg. # II-9530 3. Field # AMP-05-5-75
- 4. Type of Control DEL NORTE (Hi-Fix, Raydist, EPI, etc.)
- 5. Frequency 1498.35 (for conversion of electronic lanes to meters)
- 6. Mode of Operation (check one):

Range-Range

Range-Visual

Range One (R₁)
 Station I.D. PD-06(519.16)
 Range Two (R₂)
 Station I.D. CG CUPOLA(519.10)

Lat.	<u>35</u> °	<u>44</u>	<u>17.202</u> "
Long.	<u>75</u> °	<u>30</u>	<u>05.126</u> "
Lat.	<u>35</u> °	<u>46</u>	<u>08.747</u> "
Long.	<u>75</u> °	<u>31</u>	<u>26.724</u> "

Hyperbolic (3-station)

Hyper-Visual

Slave One
 Station I.D. _____
 Master
 Station I.D. _____
 Slave Two
 Station I.D. _____

Lat.	_____ °	_____	_____ "
Long.	_____ °	_____	_____ "
Lat.	_____ °	_____	_____ "
Long.	_____ °	_____	_____ "
Lat.	_____ °	_____	_____ "
Long.	_____ °	_____	_____ "

7. Location of Survey:

Range-Range

Imagine an observer is standing at R₁ Station and looking directly at R₂ (check one):

Survey area is to observer's Right A=0

Survey area is to observer's Left A=1

Hyperbolic

Looking from survey area toward Master Station:

Slave One must be to observer's Left.

Slave Two must be to observer's Right.

8. This form is submitted as an aid in preparing a boat sheet.

This form applies to all data on this survey.

This form applies to part of the data on this survey.

Vessel	From		To		Position Numbers	
EDP #	Time	Day	Time	Day	(inclusive)	
<u>1277</u>	<u>143239</u>	<u>176</u>	<u>145333</u>	<u>177</u>	<u>1</u>	to <u>342</u>
_____	_____	_____	_____	_____	_____	to _____
_____	_____	_____	_____	_____	_____	to _____

9. Remarks:

9.

11

4-6-71

ATLANTIC MARINE CENTER
ELECTRONIC CONTROL PARAMETERS

- 1. Project # OPR-513 2. Reg. # II-9530 3. Field # AHP-05-5-75
- 4. Type of Control DEL NORTE (Hi-Fix, Raydist, LPI, etc.)
- 5. Frequency 1498.35 (for conversion of electronic lanes to meters)
- 6. Mode of Operation (check one):

Range-Range

Range-Visual

Range One (R₁)
 Station I.D. PD-03 (519 13)
 Range Two (R₂)
 Station I.D. CG CUPOLA (519 10)

Lat.	<u>35</u> °	<u>45</u>	<u>09.035</u> "
Long.	<u>75</u> °	<u>30</u>	<u>35.395</u> "
Lat.	<u>35</u> °	<u>46</u>	<u>03.747</u> "
Long.	<u>75</u> °	<u>31</u>	<u>26.724</u> "

Hyperbolic (3-station)

Hyper-Visual

Slave One
 Station I.D. _____
 Master
 Station I.D. _____
 Slave Two
 Station I.D. _____

Lat.	°	'	"
Long.	°	'	"
Lat.	°	'	"
Long.	°	'	"
Lat.	°	'	"
Long.	°	'	"

7. Location of Survey:

Range-Range

Imagine an observer is standing at R₁ Station and looking directly at R₂ (check one):

Survey area is to observer's Right A=0

Survey area is to observer's Left A=1

Hyperbolic

Looking from survey area toward Master Station:

Slave One must be to observer's Left.

Slave Two must be to observer's Right.

8. This form is submitted as an aid in preparing a boat sheet.

This form applies to all data on this survey.

This form applies to part of the data on this survey.

Vessel EDP #	From Time	Day	To Time	Day	Position Numbers (inclusive)
<u>1277</u>	<u>191745</u>	<u>177</u>	<u>150400</u>	<u>189</u>	<u>343</u> to <u>417</u>
_____	_____	_____	_____	_____	to _____
_____	_____	_____	_____	_____	to _____

9. Remarks:

ATLANTIC MARINE CENTER
ELECTRONIC CONTROL PARAMETERS

1. Project # OPR-513 2. Reg. # II-9530 3. Field # AMP-05-5-75
 4. Type of Control DEL NORTE (Hi-Fix, Raydist, EPI, etc.)
 5. Frequency 1498.35 (for conversion of electronic lanes to meters)
 6. Mode of Operation (check one):

Range-Range

Range-Visual

Range One (R₁)

Station I.D.

Range Two (R₂)

Station I.D.

PD-04(519.14)

PD-03(519.13)

Lat.

Long.

Lat.

Long.

35 °

75 °

35 °

75 °

44

30

45

30

51.551"

25.265"

09.035"

35.375"

Hyperbolic (3-station)

Hyper-Visual

Slave One

Station I.D.

Master

Station I.D.

Slave Two

Station I.D.

Lat.

Long.

Lat.

Long.

Lat.

Long.

7. Location of Survey:

Range-Range

Imagine an observer is standing at R₁ Station and looking directly at R₂ (check one):

Survey area is to observer's Right A=0

Survey area is to observer's Left A=1

Hyperbolic

Looking from survey area toward Master Station:

Slave One must be to observer's Left.

Slave Two must be to observer's Right.

8. This form is submitted as an aid in preparing a boat sheet.

This form applies to all data on this survey.

This form applies to part of the data on this survey.

Vessel

EDP #

From

Time

Day

To

Time

Day

Position Numbers

(inclusive)

1277

153733

189

162105

189

418

to 478

to

to

9. Remarks:

ATLANTIC MARINE CENTER
ELECTRONIC CONTROL PARAMETERS

- 1. Project # OPR-513 2. Reg. # II-9530 3. Field # AHP-05-5-75
- 4. Type of Control DEL NORTE (Hi-Fix, Raydist, EPI, etc.)
- 5. Frequency 1498.35 (for conversion of electronic lanes to meters)
- 6. Mode of Operation (check one):

Range-Range

Range-Visual

Range One (R₁)

Station I.D. PD-05(512.15)

Range Two (R₂)

Station I.D. PD-04(519.14)

Lat. 35 ° 44 ' 34.908 "

Long. 75 ° 30 ' 14.826 "

Lat. 35 ° 44 ' 51.551 "

Long. 75 ° 30 ' 25.265 "

Hyperbolic (3-station)

Hyper-Visual

Slave One

Station I.D. _____

Master

Station I.D. _____

Slave Two

Station I.D. _____

Lat. _____ ° _____ ' _____ "

Long. _____ ° _____ ' _____ "

Lat. _____ ° _____ ' _____ "

Long. _____ ° _____ ' _____ "

Lat. _____ ° _____ ' _____ "

Long. _____ ° _____ ' _____ "

7. Location of Survey:

Range-Range

Imagine an observer is standing at R₁ Station and looking directly at R₂ (check one):

Survey area is to observer's Right A=0

Survey area is to observer's Left A=1

Hyperbolic

Looking from survey area toward Master Station:

Slave One must be to observer's Left.

Slave Two must be to observer's Right.

8. This form is submitted as an aid in preparing a boat sheet.

This form applies to all data on this survey.

This form applies to part of the data on this survey.

Vessel	From		To		Position Numbers	
EDP #	Time	Day	Time	Day	(inclusive)	
<u>1277</u>	<u>172207</u>	<u>189</u>	<u>174326</u>	<u>189</u>	<u>479</u>	to <u>510</u>
_____	_____	_____	_____	_____	_____	to _____
_____	_____	_____	_____	_____	_____	to _____

9. Remarks: _____

ATLANTIC MARINE CENTER

ELECTRONIC CONTROL PARAMETERS

1. Project # OPR-513 2. Reg. # II-9530 3. Field # AHP-05-5-75
 4. Type of Control DEL NORTE (Hi-Fix, Raydist, EPI, etc.)
 5. Frequency 1498.35 (for conversion of electronic lanes to meters)
 6. Mode of Operation (check one):

Range-Range

Range-Visual

Range One (R₁)
 Station I.D. PD-06 (51916)
 Range Two (R₂)
 Station I.D. PD-05 (51915)

Lat.	<u>35</u> °	<u>44</u>	<u>17.202</u> "
Long.	<u>75</u> °	<u>30</u>	<u>05.126</u> "
Lat.	<u>35</u> °	<u>44</u>	<u>34.908</u> "
Long.	<u>75</u> °	<u>30</u>	<u>14.826</u> "

Hyperbolic (3-station)

Hyper-Visual

Slave One
 Station I.D. _____
 Master
 Station I.D. _____
 Slave Two
 Station I.D. _____

Lat.	_____ °	_____	_____ "
Long.	_____ °	_____	_____ "
Lat.	_____ °	_____	_____ "
Long.	_____ °	_____	_____ "
Lat.	_____ °	_____	_____ "
Long.	_____ °	_____	_____ "

7. Location of Survey:

Range-Range

Imagine an observer is standing at R₁ Station and looking directly at R₂ (check one):

Survey area is to observer's Right A=0

Survey area is to observer's Left A=1

Hyperbolic

Looking from survey area toward Master Station:

Slave One must be to observer's Left.

Slave Two must be to observer's Right.

8. This form is submitted as an aid in preparing a boat sheet.

This form applies to all data on this survey.

This form applies to part of the data on this survey.

Vessel EDP #	From Time Day	To Time Day	Position Numbers (inclusive)
<u>1277</u>	<u>175410</u> <u>189</u>	<u>181819</u> <u>189</u>	<u>511</u> to <u>542</u>
_____	_____	_____	_____ to _____
_____	_____	_____	_____ to _____

9. Remarks:

ATLANTIC MARINE CENTER

TIDE NOTE

1. Project No: 513 2. Vessel/Field Unit: AHP LAUNCH 1277
 3. Year: 1975 4. Meridian Time Zone: 075°W
 5. Tide Station Name: JEANETTE'S FISHING PIER
 6. Position: Lat. 35° 54.6 Long. 075° 35.7

7. Plane of Reference: MLW, MLLW corresponds to _____ feet on the tide staff for the period _____.

8. Hourly Heights: Standard Gauge, furnished from Rockville.
 Scaled and logged from field marigrams.

9. Tidal Zoning: Not applicable.
 By two or more gauges automatically zoned.
 By applying tidal differences and constants

for the area(s): a. _____

TIME (Hour, Minute)		HEIGHT (Feet)		HEIGHT RATIO (If Applicable)	
High Water	Low Water	High Water	Low Water	High Water	Low Water

b. _____

TIME (Hour, Minute)		HEIGHT (Feet)		HEIGHT RATIO (If Applicable)	
High Water	Low Water	High Water	Low Water	High Water	Low Water

c. Include additional areas on separate sheet(s).

10. Remarks: _____

ATLANTIC MARINE CENTER

TIDE NOTE

1. Project No: 513 2. Vessel/Field Unit: AHP CAUCH 1277
 3. Year: 1975 4. Meridian Time Zone: GMT
 5. Tide Station Name: OREGON INLET BRIDGE
 6. Position: Lat. 35 ° 46.4 ' Long. 075 ° 32.5 '
 7. Plane of Reference: MLW, MLLW corresponds to _____
 feet on the tide staff for the period _____
 8. Hourly Heights: Standard Gauge, furnished from Rockville.
 Scaled and logged from field marigrams.
 9. Tidal Zoning: Not applicable.
 By two or more gauges automatically zoned.
 By applying tidal differences and constants
 for the area(s): a. _____

TIME (Hour, Minute)		HEIGHT (Feet)		HEIGHT RATIO (If Applicable)	
High Water	Low Water	High Water	Low Water	High Water	Low Water

b. _____

TIME (Hour, Minute)		HEIGHT (Feet)		HEIGHT RATIO (If Applicable)	
High Water	Low Water	High Water	Low Water	High Water	Low Water

c. Include additional areas on separate sheet(s).

10. Remarks: _____

ELECTRONIC CORRECTOR ABSTRACT

VESSEL : 1277

SHEET : AHP-05-5-75

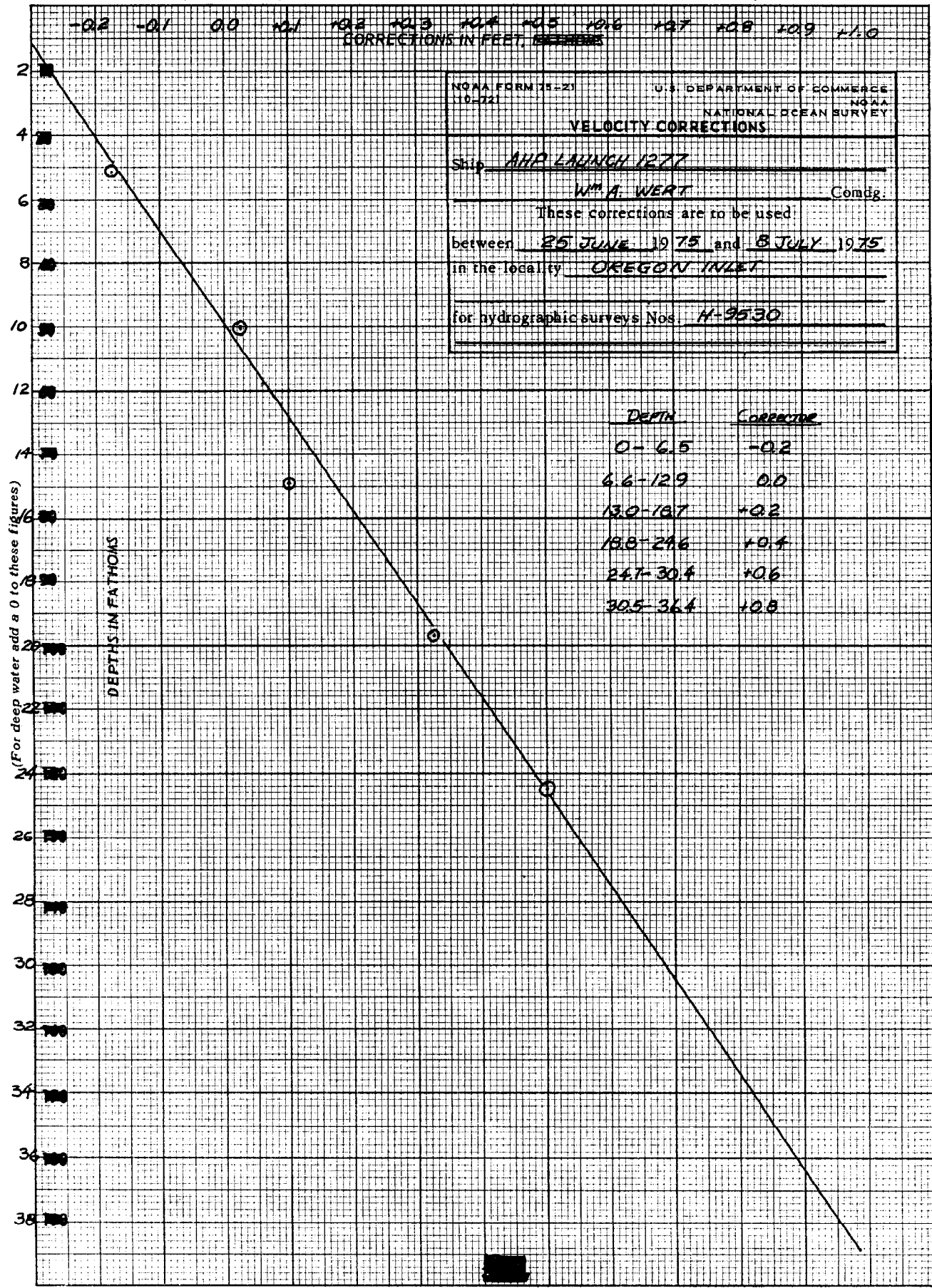
TIME	DAY	PATTERN 1	PATTERN 2
143239	176	-00001	-00001
200000		-00001	-00001
142814	177	-00003	+00000
191745		-00001	-00004
193109		-00001	-00004
194004		-00001	-00004
194013		-00001	-00004
194529		-00001	-00004
195102		-00001	-00004
195109		-00001	-00004
195600		-00001	-00004
195607		-00001	-00004
200201		-00001	-00004
200203		-00001	-00004
204000		-00001	-00004
144636	189	+00000	-00003
153733		-00003	+00000
172207		+00000	-00003
175410		+00004	+00000

SIGNAL LIST FOR AHP-05-5-75 (H-9530)

STA	C	LATITUDE			LONGITUDE			DPC	ELEV	FREQ	NAME
009	4	35	46	18151	075	31	55153	243	0004	000000	P-02, 1975 (DOLPHIN)
010	2	35	46	03747	075	31	26724	250	0017	000000	C.G. CUPCLA, 1974 *
013	2	35	45	09035	075	30	35395	254	0010	000000	PD-03, 1975
014	2	35	44	51551	075	30	25265	254	0010	000000	PD-04, 1975
015	2	35	44	34908	075	30	14826	254	0010	000000	PD-05, 1975
016	2	35	44	17202	075	30	05126	254	0010	000000	PD-06, 1975

* GP is same as the light at C.G. station
(a topo position)

20 X 20 TO THE INCH 46 1240
 MADE IN U.S.A.
 KEUFFEL &



NOAA FORM 75-21
 (10-72)

U.S. DEPARTMENT OF COMMERCE
 NATIONAL OCEAN SURVEY

VELOCITY CORRECTIONS

Ship AHR LAUNCH 1277

W. A. WERT Comdg.

These corrections are to be used
 between 25 JUNE 1975 and 8 JULY 1975
 in the locality OREGON INLET
 for hydrographic surveys Nos H-9530

SETTLEMENT & SQUAT

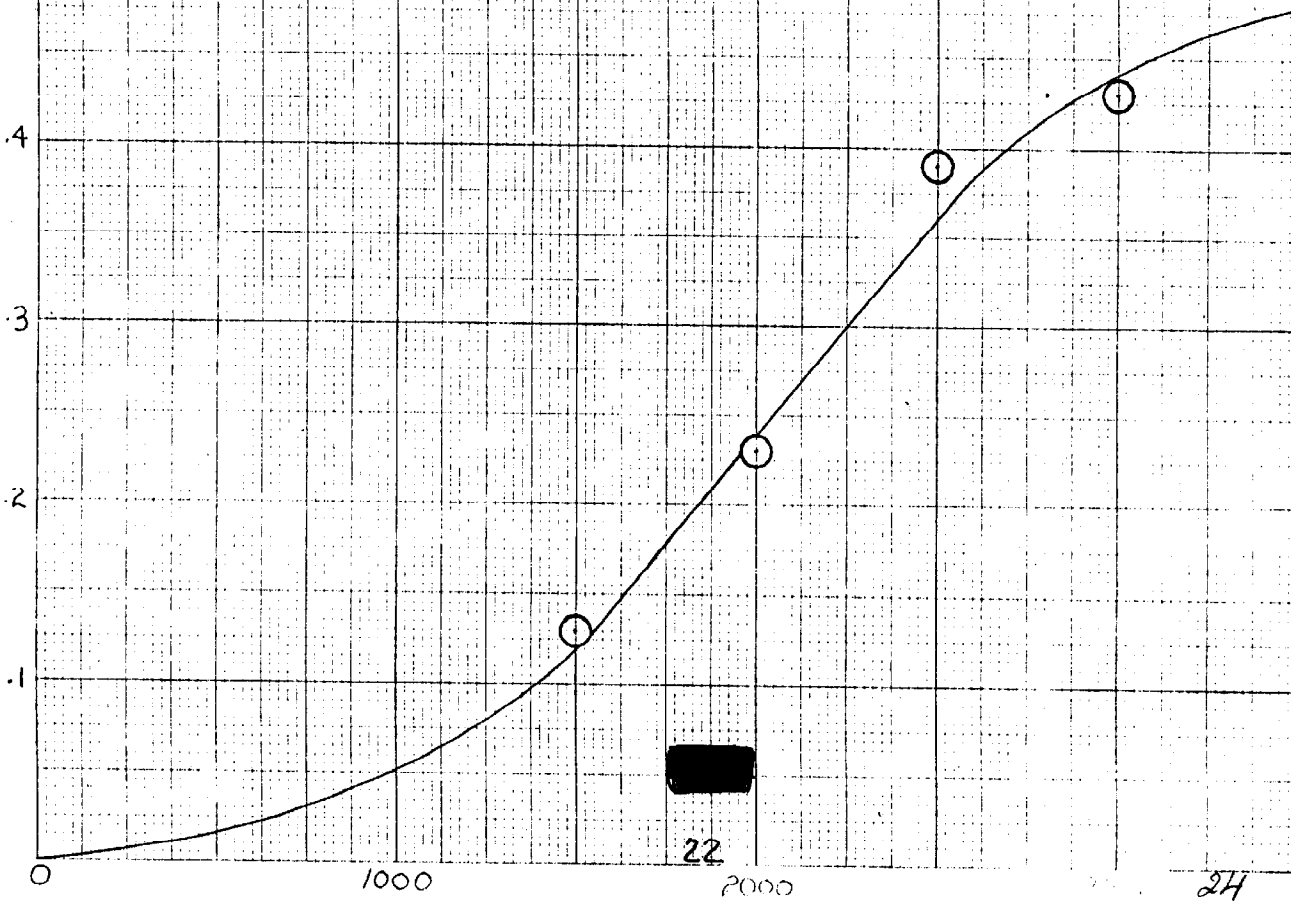
LAUNCH 1277

MAY 7, 1974

ABSTRACT OF SETTLEMENT & SQUAT

RPM	CORRECTION (FT)
0-1499	0.0
1500-2000	+0.2
2001-3000	+0.4

CORRECTION (FT)



ENGINE DIV TEN DIV
U.S.A.

ASPH PAPER

DIETZGEN
24 X 20 F

APPROVAL SHEET
SURVEY H-9530 AHP 05-5-75

The hydrographic records transmitted with this report are complete and adequate.



J. O. Rolland
LCDR, NOAA
Chief, Atlantic Hydrographic Party



A P P E N D I X

8/26/75

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for Form 362

Tide Station Used (NOAA Form 77-12): Oregon Inlet USCG Station
Jeanettes Pier, Pea Island

Period: June 25 - July 8, 1975.

HYDROGRAPHIC SHEET: H-9530

OPR: 513

Locality: Oregon Inlet

1.1 ft.-Jeanettes Pier
3.7 ft.-Pea Island
0.8 ft.-USCG Station

Plane of reference (mean ~~lower~~ low water):

Height of Mean High Water above Plane of Reference is

3.3 ft. outside of Oregon Inlet
1.5 ft. inside of Oregon Inlet

Remarks: Recommended zoning:

1. Outside of Oregon Inlet zone direct on Jeanettes Pier.
Inside of Oregon Inlet.
2. North of $35^{\circ}46'.0$ zone direct to USCG Station.
3. South of $35^{\circ}46'.0$ zone direct on Pea Island.

for James R. Huldbrand
Chief, Tides Branch

GEOGRAPHIC NAMES

M-9530

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
ATLANTIC OCEAN											1
PEA ISLAND											2
											3
											4
											5
											6
											7
											8
											9
											10
											11
											12
											13
											14
											15
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											18
											19
											20
											21
											22
											23
											24
											25

Approved
Chas E. Harrington
 Staff Geographer - CS1x2
 21 Nov. 1975

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. H-9530
AHP-5-5-75

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET & 2-Overlays		1	BOAT SHEETS		1	
DESCRIPTIVE REPORT		1	OVERLAYS		2	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES	2					
CAHIERS	1					
VOLUMES						
BOXES			1			
T-SHEET PRINTS (List)						
XXXXXXXXXXXXXXXXXXXX						
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	#1 REVIEW AMC	TOTALS
POSITIONS ON SHEET				542
POSITIONS CHECKED		54		
POSITIONS REVISED		1		
DEPTH SOUNDINGS REVISED		20		
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS				
JUNCTIONS		6		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		8		
SPECIAL ADJUSTMENTS				
ALL OTHER WORK		16		
TOTALS		30	8	
PRE-VERIFICATION BY	BEGINNING DATE		ENDING DATE	
VERIFICATION BY	BEGINNING DATE		ENDING DATE	
Harry R. Smith	9/8/75		9/16/75	
REVIEW BY	BEGINNING DATE		ENDING DATE	
Hydrographic Inspection Team AMC	9/19/75		9/19/75	

Q.C. Carstens 16 hr 1/7/76 * U.S. G.P.O. 1972-769-562/439 REG.#6

29

REGISTRY NO. _____

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey, the following shall be completed:

CARDS CORRECTED

DATE _____ TIME REQUIRED _____ INITIALS _____

REMARKS:

REGISTRY NO. 9530

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made ^{Quality} during evaluation, ~~and review.~~ *No changes in automated data were made during Quality Evaluation. RHC*

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE 2/20/80 TIME REQUIRED _____ INITIALS JAC

REMARKS:

H-9530

Items for Future Presurvey Reviews

The bottom is very changeable and the shoreline is receding. Continued change is anticipated.

<u>Position</u>	<u>Index</u>	<u>Bottom Change</u>	<u>Use</u>	<u>Resurvey</u>
<u>Lat.</u>	<u>Long.</u>	<u>Index</u>	<u>Index</u>	<u>Cycle</u>
354	0754	5	2	25 years
354	0753	5	2	25 years

HYDROGRAPHIC INSPECTION TEAM

ATLANTIC MARINE CENTER

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9530

FIELD NO. AHP-5-5-75

GENERAL LOCALITY and SPECIFIC LOCATION

Oregon Inlet, North Carolina
Near shore, south of Inlet

SURVEYED: June 25, 1975 through July 8, 1975

PROJECT NO.: OPR-513

SCALE: 1:5,000

SOUNDINGS BY: Raytheon Fathometer,
Model DE723, Serial 1904

CONTROL: Del Norte

Automated Plot by Calcomp Plotter #618 (AMC)
Verified and Inked by H.R. Smith

1. Description of the Area

The area covered by this survey extends near shore from the inlet east to the 30 foot curve. The bottom is mostly gray mud, fine sand and broken shell.

2. Control and Shoreline
Type-Source-Origin

unreviewed Class I (1974-75) RHC

The control is adequately described in the Descriptive Report. The shoreline was taken from TP-00889 and TP-00891, 1:10,000 scale and enlarged by AMC personnel to 1:5,000. The shoreline is applied for orientation purposes.

3. Hydrography

A. Crossings:

The crossings are in excellent agreement.

B. Depth Curves:

The standard depth curves adequately delineate the bottom features.

C. Low-Water Line:

The low water line was transferred from the manuscripts.

D. Developments:

There are no developments.

4. Condition of the Survey

The sounding records, automated plotting and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual, supplemented by the Instruction Manual-Automated Hydrographic Surveys.

5. Junctions

Adequate junction was made with H-9525 (1975), 1:10,000 at the 30 foot depth, general agreement with H-9525 was excellent.

6. Comparisons

A. Prior Surveys:

Section K of the Descriptive Report adequately describes prior surveys comparisons.

B. Wire Drag:

There is no record of wire drag within the common area at AMC.

D. Published Chart #12204 (^{NOS}NOAA Chart 1229), 19th Edition, dated March 2, 1974 and the 20th Edition, dated March 8, 1975. Comparison with the 19th edition is adequately described in Paragraph L of the Descriptive Report.

(a) Hydrography

The survey depths are in general harmony with the charted depths. The hydrography adequately defines the area.

(b) Aids to Navigation

There are no aids to navigation within the survey limits.

7. Compliance with Instructions

This survey does comply with the Project Instructions.



8. Adequacy of Survey

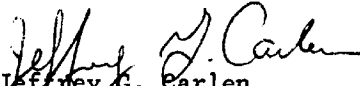

This survey is complete and adequate to supersede prior surveys for charting within the common area.

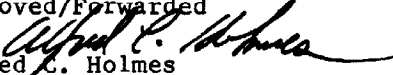
9. Additional Field Work

This is an excellent basic survey. Additional field work is not recommended.

Examined and Approved:
Hydrographic Inspection Team

	
<u>CAPT. Ronald M. Buffington</u> Chief, Operations Division	(for) <u>LT. Gregory R. Bass</u> Chief, Electronic Data Branch

	
<u>CDR. Jeffrey G. Earlen</u> Chief, Processing Division	<u>William L. Jonns</u> Chief, Verification Branch

Approved/Forwarded

 Alfred C. Holmes
 RADM., NOAA
 Director, Atlantic Marine Center



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Rockville, Md. 20852

C323

January 7, 1976

TO: Acting Chief, Marine Surveys Division
THRU: *R.H.C.* Acting Chief, Quality Control Branch
FROM: *R.H. Carstens* R. H. Carstens, Quality Evaluator
SUBJECT: Quality Control Report for H-9530 (1975), Oregon
Inlet, North Carolina

Survey H-9530 was examined with respect to data acquisition methods, corrector determinations, development of the least depths and bottom configuration, adequacy of crossings and junctions, cartographic presentation, processing of data and smooth plotting, verification, and review, and in general was found to conform to National Ocean Survey standards.

Attention is directed to the following deficiencies, which do not seriously affect the quality of this survey:

1. The 6-foot curve should have been drawn continuously instead of in short sections, as its position was adequately defined by the soundings revealing a uniform gradient.
2. The surveys from which the shoreline was transferred should have been identified in the review by survey number, year of survey, class, and stage of processing instead of showing only the survey number and class. The year of the survey shall be the inclusive dates of the year of the earliest photos and the year of field edit. If there is no field edit, the final year may be the year of the last photographs. The class I category shall be supplemented by "reviewed" or "unreviewed" to indicate the stage of the processing. The reviewed survey approved by Coastal Mapping Division should be referred to as the final reviewed manuscript.
3. The item "Comparison with Prior Surveys" shall be completed before submitting the survey to headquarters rather than making reference to Descriptive Report comments. The comparison need be made with only the most recent prior surveys which serve as the source of the charted soundings. A list of the survey numbers, year, and scale, identifying the prior surveys used in the comparison shall precede the text. A superseding statement should conclude the comparison.



The hydrographer had omitted H-8765 (1962) covering the north half of the present survey in making his comparison.

4. No reference need be made regarding a comparison with wire-drag surveys when none fall within the area of the present survey.

5. The comparison with a chart shall conclude with a superseding statement (see headquarter reviews), often modified by exceptions which have been discussed previously in the review. A comparison with NOS surveys and the presurvey review will reveal the source of many charted soundings. Critical charted features whose sources cannot be ascertained should be identified and, if the present survey does not adequately verify or disprove them, they should be referred to the chart compiler for their disposition.

6. The title sheet of the Descriptive Report had not been corrected to reflect correct information for the final smooth sheet. The automated plot was shown as being made by PDP 8/e instead of AMC - CALCOMP 618, and the locality was described as Offshore Oregon Inlet although the survey extended to shore.

7. Lettering of the electronic control station name and number shall be in the color conventional for control stations and not necessarily in the color of the control station arcs.

8. Oregon Inlet CG cupola 1974, Del Norte Station 10, was shown as a triangulation station on H-9530 and as a topographic nonrecoverable station on H-9525. The geographic position corresponds to the navigational light at the Coast Guard station which was determined by photogrammetric methods.

JAN 28 1976

TO: Director, Atlantic Marine Center
FROM: Robert C. Munson *RM* Robert C. Munson
Associate Director
Office of Marine Surveys and Maps
SUBJECT: Survey H-9530 (1:5,000-1975) Oregon Inlet, North Carolina

The smooth sheet and Descriptive Report for the subject survey have been examined. The survey, except as noted in the Quality Evaluator's Report, dated January 7, 1976 (copy attached), is complete and adequate for charting and is in compliance with the project instructions.

Attachment

cc:
CAM11-w/attachment
C323- w/o attachment ✓

