

9954

Diagram No. 1115-3

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. HSB-40-1-81
Office No. H-9954

LOCALITY

State Florida
General Locality Gulf of Mexico
Locality South of Pensacola

1981-82

CHIEF OF PARTY
LT CDR G.W. Jamerson

LIBRARY & ARCHIVES

DATE November 14, 1983

9954

Diagram 4
1115-3
1115-4
1115-5
1115-6
1115-7
1115-8
1115-9
1115-10

INDEX

	Page
Hydrographic Title Sheet.....	1
Boatsheet Layout.....	2
A. Project.....	3
B. Area Surveyed.....	3
C. Sounding Vessel.....	3
D. Sounding Equipment and Corrections to Echo Soundings.....	3-4
E. Hydrographic Sheets.....	5
F. Control Stations.....	5
G. Hydrographic Position Control.....	5-6
H. Shoreline.....	6
I. Crosslines.....	6-7
J. Junctions.....	7
K. Comparison with Prior Surveys.....	7-8
L. Comparison with Chart.....	8-9A
M. Adequacy of Survey.....	9
N. Aids to Navigation.....	10
O. Statistics.....	10
P. Miscellaneous.....	10
Q. Recommendations.....	11
R. Automated Data Processing.....	11
S. Reference to Reports.....	11
Projection Parameters..... <i>removed *</i>	12-13
Field Tide or Water Level Notes.....	14-16
Geographic Names List. <i>(field) removed *</i>	17
Abstract of Corrections to Echo Soundings/TC-TI.....	18-50
Abstract of Corrections to Electronic Position Control.....	51-52
List of Stations (Signal List).....	53
Abstract of Positions.....	54-56
Bottom Samples (NOAA Form 75-44)..... <i>removed *</i>	57-60
Landmarks for Charts (NOAA Form 76-40).....	61-64
Approval Sheet.....	65

* filed with field survey records

HYDROGRAPHIC TITLE SHEET

H - 9954

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.

HSB - 40-1-81

State Florida

General locality Gulf of Mexico - ~~SOUTH OF PENSACOLA BAY~~ Northwest Coast of Florida

Locality South of Pensacola Bay

Scale 1:40,000

Date of survey JUNE 2- SEPT 24, 1981 APRIL 13- SEPT. 1, 1982
June 2, 1981 - Sept. 1, 1982

Instructions dated 13 July 1981

Project No. OPR-J217-HSB-81

Vessel NOAA Launch 1257

Chief of party LT. Cdr. George W. Jamerson, NOAA

Surveyed by Lt. Cdr. Andrew A. Armstrong, NOAA and Lt. Samuel P. De Bow, Jr., NOAA

Soundings taken by echo sounder, ~~hand lead, pole~~ RAYTHEON DE723D

Graphic record scaled by AA, SPD, FEO, GSL, GDH, GLM, MMO, LRN, RAC, PMT

Graphic record checked by SPD, FEO

Protracted by N/A

Field Sheet PDP8/e
Automated plot by AMC Xynetics 1200

Verification by R.R. HILL

Soundings in fathoms ~~feet~~ XXX at MLW ~~MLLW~~ MEAN LOWER Gulf Coast Low Water Datum

REMARKS: AA - Lt. Cdr. Andrew A. Armstrong

SPD - Lt. Samuel P. De Bow

FEO - LT(jg) Franklin E. Ohlinger

GSL - George S. Lloyd

GDH - Glenn D. Hendrix

GLM - Gary L. Merrill

MMO - Maria Mangual-Ortiz

LRN - Linda R. Noyes

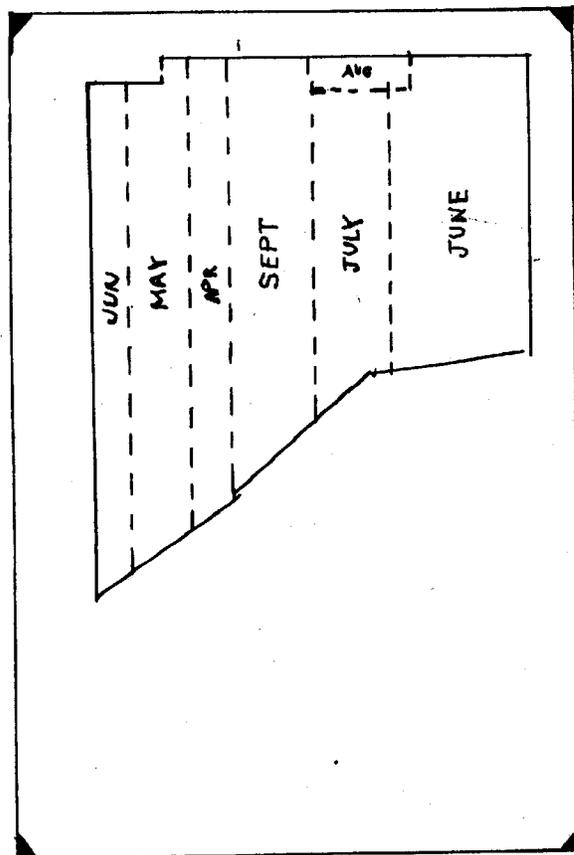
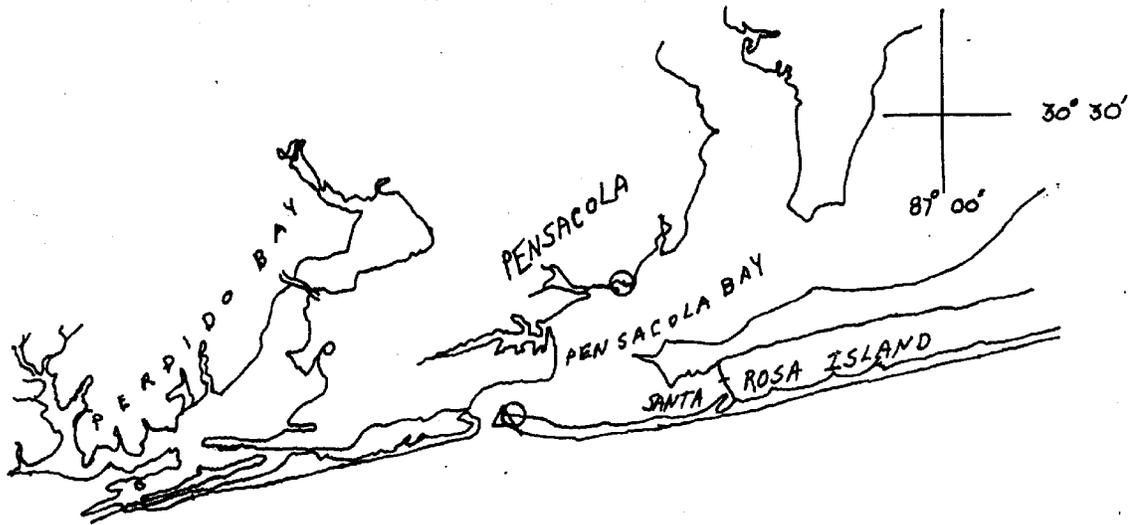
RAC - Robert A. Covey, Canadian Hydrographic Service

PMT - Lt. Peter M. Thomas, Royal Navy

*STANDARDS CTD
11-18-83*

AWOIS - 11/25/83

(1.)



OPR-J217
 HSB 40-I-81
 H-9954
 CHART 11360

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY H-9954 ✓
HSB-40-1-81

Scale: 1:40,000
Chief of Party: Lt. Cdr. George W. Jamerson
Officer in Charge: Lt. Cdr. Andrew A. Armstrong (until 1/8/82)
Lt. Samuel P. De Bow (from 1/8/82) ✓
Hydrographic Surveys Branch, Hydrographic Field Party #1 ✓
Launch 1257

A. PROJECT

This survey was accomplished under Project Instructions OPR-J217-HSB-81, dated July 13, 1981, and amended by :

- Change No. 1, dated July 23, 1981
- Change No. 2, dated October 26, 1981 ✓
- Change No. 3, dated December 23, 1981
- Change No. 4, dated February 10, 1982 and
- Change No. 5, dated March 2, 1982.

B. AREA SURVEYED

The area surveyed was south of Santa Rosa Island and Perdido Key, from approximately eleven nautical miles south of Pensacola Bay Entrance to ^{approximately} the 20 fathom curve offshore ✓ and bounded by the following points:

- Northeast corner, Lat 30°06'00"N, Long 87°10'¹⁶"W
- Southeast corner, Lat 29°55'²⁸"N, Long 87°10'¹⁵"W
- Northwest corner, Lat 30°05'00"N, Long 87°28'00"W
- Southwest corner, Lat 29°47'²⁴"N, Long 87°28'⁰⁰"W

This survey was conducted from June 2, 1981 to September 24, 1981, 1, 1982 (JD 153 ((1981)) to 244) inclusive. AND APRIL 13 TO SEPTEMBER 1, 1982.

C. SOUNDING VESSEL

All soundings ~~obtained~~ on this survey were obtained from NOAA Launch 1257 (EDP #1257). All survey records are annotated ✓ with the vessel number 1257.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

The following Raytheon fathometer equipment was used during the survey:

- JD 153 (1981) - 281 (1982) Recorder Model #DE723D
- Serial #2042 ✓
- ECU Model #DE723D
- Serial #37009
- Digitizer Model #DE723D
- Serial #2772

JD 285

Recorder Model DE723D
Serial#2934

Generally, no problems were encountered with this equipment. The fathometer was monitored continuously while sounding and was under constant adjustment to insure that no initial corrections were necessary except on JD 117¹⁹⁸² when it was noticed that the cycles per second were low on the fathometer, thus producing inaccurate depths. The problem was found in the ECU and rectified. All data for that day was rejected, and later rerun. ~~In addition, on JD 281 the phase coil broke, yielding an intermittent trace. It was replaced by the bridge fatho on JD 285. The last day of hydrography on this survey was JD 244, 1982.~~

Settlement and squat tests on Launch 1257 were run on June 11, 1982 at Pensacola Bay Entrance. The results of these tests are included in the Appendix of this report. Settlement and squat corrections have been applied to the field sheet as dynamic draft on the electronic corrector tape. See section 4b of the Evaluation Report.

Velocity and instrument corrections were determined by barcheck and TDC casts. Barchecks were taken daily, weather permitting, and TDC casts were taken ~~once a week~~^{frequently}. Since at one time four survey sheets were being run concurrently, with the same equipment, barchecks and TDC casts were combined. Common velocity tables, compiled by date, were used for all sheets. Field sheets were plotted using approximate velocity curves developed by moving the TDC curves to coincide with and extend the barcheck curves. Final velocity curves and tables were constructed from the TDC curves.

This is not supported by listing below.

The lengths of the line on the bar were checked on December 15, 1981 and July 30, 1982. The results of this inspection showed that no correction was necessary. The TDC used to obtain velocity corrections was a Martek Instrument Model 101-1, Serial # 477; which was calibrated by EED at Atlantic Marine Center on May 10, 1982.

Velocity corrections were determined by TDC casts taken at the following locations:

<u>JD</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>
121 (1981)	30°08'00"N	86°57'00"W
147	30°09'00"N	87°05'00"W
166	29°55'30"N	87°11'00"W
194	29°55'00"N	87°11'30"W
245	29°53'00"N	87°19'00"W
315	30°13'15"N	87°09'30"W
342	30°12'50"N	87°10'20"W
019 (1982)	30°07'33"N	87°13'36"W
102	30°07'15"N	87°21'00"W
117	29°49'30"N	87°23'30"W
123	29°49'00"N	87°24'00"W
141	30°06'00"N	87°16'50"W
147	29°48'15"N	87°26'00"W
159	29°47'50"N	87°26'20"W
166	29°47'42"N	87°26'48"W
176	29°47'30"N	87°27'40"W
281	29°50'00"N	87°30'00"W

Red lined days do not apply to this survey.

E. SURVEY SHEETS

The field sheets were prepared in the field using a PDP8/e computer and a DP-3 complot plotter. Work sheets, semi-smooth sheets, smooth field sheets, and overlay sheets are included with this survey. Mainscheme hydrography is plotted on the smooth field sheets while crosslines, developments, splits, bottom samples, prior survey soundings, junctions, soundings, charted soundings, and presurvey review items are shown on various overlay sheets. ~~Projection parameter tape listing for the field sheets is included in the Appendix of this report.~~ The final smooth sheet and verification of this survey will be accomplished at the Atlantic Marine Center on the Harris/7 computer and the Xynetics 1201 plotter.

F. CONTROL STATIONS

Control stations used during this survey were either existing third order or better geodetic control stations published by National Geodetic Survey or were established by HFP-1 and Hydrographic Surveys Branch's Support Group to third order or better standards. All stations are referred to the North American 1927 datum. A list of all control stations used during this survey is included in the Appendix of this report.

Horizontal control data were submitted via the National Geodetic Survey computer terminal system. Positions can be verified by the Hydrographic Surveys Branch of Atlantic Marine Center.

G. HYDROGRAPHIC POSITION CONTROL

The method used to control this survey was a Hastings Raydist DR-s system operating in the Range/Range mode. Shore stations were located at :

<u>Control Signal</u>		<u>Julian Dates</u>
<u>Left</u>	<u>Right</u>	
908	900	153 (1981) - 267 (1982)
910	900	103 (1982) - 244 (1982)

Shore Station Equipment:

Left Station: Green(Raydist Model AA-60)
Serial #68 JD 153⁽¹⁹⁸¹⁾ JD 159 (1982)
Serial #69 JD 159 - JD 216 (1982)
Serial #68 JD 216 - JD 244 (1982)

Right Station: Red(Raydist Model AA-60)
Serial #84 JD 153⁽¹⁹⁸¹⁾ JD 216 (1982)
Serial #119 JD 119 - JD 244

Launch Equipment:

Navigator Model ZA 67B - Serial #67
Antenna Loading Coil Model #QB-52 - Serial #81
Transmitter Model TA96 - Serial #87

The system frequency was 3306.4 KHz resulting in a ^aline width of 45.32 meters. The left station was a 100-foot aluminum tower. The right station was a 120-foot tower previously used as a Loran A antenna. The launch antenna was a 35-foot whip located over the fathometer transducer. Problems encountered with the system occurred during the summer months when late afternoon thunderstorms would knock the Raydist signal off line. As a result, all data run on June 3, 1981 (JD 154), June 22, 1981 (JD 173), and positions 509-514 on June 23, 1981 (JD 174) were rejected and rerun at a later date. Additional problems encountered with this system were created mainly due to the close proximity of station 910 (Green Station) to the calibration site, approximately two nautical miles away, in relation to the distance to station 900 (Red Station), about 110 nautical miles to the east. The Green signal would overpower the Red signal when the Launch (Navigator) was too close to station 910. This problem was rectified by placing an attenuator on the Navigator, but the system was more susceptible to thunderstorms because of the reduced signal strength. Consequently, on days when thunderstorms were predicted, the attenuator was taken off.

On June 25, 1982 (JD 176), after morning calibration, fifteen lanes were lost on the Red rate due to the aforementioned problem. The two lines of hydro were rejected and rerun at a later date.

Finally, all hydro run on June 15, 1982 (JD 166), was rejected due to operator error. Apparently the correct Raydist values were not loaded into the Hazlow Interface, and, additionally, the wrong NAVCAL corrector was used on RK112. These two errors effectively offset one another, and made the lines on the boatsheet seem correct. The error was found when the actual partial correctors were applied via the corrector tape during semi-smooth plotting. The lines were rerun on JD 244.

The control equipment was calibrated by three-point sextant fixes with check angles. Calibrations were taken before and after each period of hydrography, with the following exceptions: June 25, 1981 (JD 174), no afternoon calibration was taken due to Raydist lane loss from local thunderstorms; April 15, 1982 (JD 105) when evening calibration was not obtained due to darkness, and finally on August 5, 1982 (JD 217) when an adequate morning calibration was not taken due to poor visibility. Since bottom samples were to be taken ^{on JD 217}, four passes were made on buoy R "4" and precomputed Raydist rates from RK300 were compared to the observed values. Agreement was adequate and final correctors were obtained from a tight three-point fix in the afternoon.

H. SHORELINE

No shoreline was delineated on this survey. This is an offshore survey.

I. CROSSLINES see section 3 of the Evaluation Report

Crosslines constitute seven percent of the mainscheme hydrography. ~~Ninety-four percent (94%)~~ of the crossings

agree within 0-1 feet. ~~No soundings are in disagreement at crossing by more than two three feet. The reasons for the disagreement of sounding at crossline is due to the uneven bottom topography in deep water offshore.~~

J. JUNCTIONS See section 5 of the Evaluation Report .

This survey junctions with the following surveys:

1. H-9798 to the east; HSB-40-2-78
2. H-9943 to the north; HSB-20-2-81
3. H-9971 to the north; HSB-20-5-81
4. H-10041 to the north; HSB-20-2-82
5. H-10001 to the west; WH 40-1-82
6. H-10053 to the west; HSB-40-1-82

Surveys H-10053 and H-10041 are non-overlap surveys produced by the same vessel in the same year.

Agreement with surveys H-9971, H-9943, and H-9798 was good with all of 331 common soundings agreeing to less then two feet.

Agreement with H-10001, an offshore sheet done by the NOAA Ship WHITING in 1982, was good, with all of the 54 common soundings agreeing to less then three feet. The reason for this slight disagreement is believed to be due to the steep bottom topography offshore.

The hydrographer recommends that in the junction^d areas, the soundings from the present survey be charted and that the depth curves be smoothed between two sheets, favoring the shoaler of any two overlapping soundings. See Evaluation Report.

K. COMPARISON WITH PRIOR SURVEYS See Section 6 of the Evaluation Report.

This survey was previously covered by the following surveys:

1. H-6555 (1940), 1:40,000 scale
 2. H-6554 (1940), 1:40,000 scale
 3. H-4139 (1919), 1:80,000 scale
 4. H-6656 (1940), 1:80,000 scale
 5. H-4133 (1920), 1:80,000 scale
- ← covered by H-6554 & H-6555

Comparison with H-6555, 1:40,000, could be considered excellent considering the survey methods at the time the survey was done and the distance control was carried offshore. Of 85 soundings compared, 81 agreed to within less than three feet. The remaining four discrepancies are listed below and can be ascribed to positional or transcription errors less than 100 meters. See Evaluation Report, section 4d regarding scale problem.

<u>H-6555</u>	<u>H-9954</u>	<u>G.P.</u>
117 ft	⁹⁴ 100 ft	30°05.8'N; 87°14.7'W
84 ft	90 ft(88 in vic)	30°04.7'N; 87°11.7'W
92 ft	101 ² ft(93 in vic)	30°02.2'N; 87°18.1'W
110 ft	100 ² ft(105 in vic)	29°55.0'N; 87°21.5'W

Comparisons with H-6554, 1:40,000, is basically similar to that on H-6555. Of the 55 soundings, 50 agreed to within three feet. Four of the remaining soundings are apparent position or transcription errors from 200-400 meters.

<u>H-6554</u>	<u>H-9954</u>	<u>G.P.</u>
98 ft	10 ⁷ ft (99 in vic.)	29°54.1'N; 87°26.5'W
126 ft	10 ⁵³ ft (125 in vic.)	29°57.1'N; 87°27.1'W
94 ft	11 ²⁰ ft (98 in vic.)	29°59.8'N; 87°26.5'W
122 ft	11 ⁵³ ft (123 in vic.)	29°58.6'N; 87°23.8'W

An isolated sounding of 75 feet appears at 30°03.7'N; 87°24.6'W on H-6554 where surrounding depths are ten feet deeper. Comparison of the surrounding depths with the present survey agree to within one foot. Since evidence of this sounding is also not found on other prior surveys, it is the assumption of the hydrographer that the sounding is non-existent. The sounding was probably misread or misplotted by 10 feet. It falls in present survey depths of 85 to 86 feet.

Since H-4139 was a 1:80,000 survey done in 1919-1920, comparison is rather poor with the present survey. Of 109 soundings compared, 65 agree to within four feet. The remaining discrepancies range from 10-30 feet in water 100 to 130 feet deep. Generally, this difference in agreement is at the offshore ends of sounding lines where the 1920 visual control was less than perfect. The following discrepancies are nearer to shore and indicate position error of 400 to 600 meters:

Disregard

<u>H-4139</u>	<u>H-9954</u>	<u>G.P.</u>
125 ft	10 ¹⁸ ft (122 to 125 in vic.)	30°01.7'N; 87°11.3'W
86 ft	9 ⁷⁸ ft (88 in vic.)	30°01.4'N; 87°22.3'W
85 ft	9 ⁸¹ ft (81 in vic.)	30°03.0'N; 87°24.8'W
107 ft	11 ⁷ ft (110 in vic.)	29°57.5'N; 87°26.0'W

An isolated sounding of 78 feet at position 29°59.1'N, 87°17.1'W was shoaler than the present survey soundings by 22 feet. As no indication of shoaling was found at this time or during survey H-6555 in 1940, it is believed to be non-existent.

Although only a small portion of H-4133 and H-6656 overlapped in the survey area, these two surveys were not available in the field for comparison.

When^{re} discrepancies exist, it is recommended that the soundings from the present survey supercede the prior surveys' soundings. Concur.

L. COMPARISON WITH THE CHART See section 7 of the Evaluation Report.

This survey was compared as the survey progressed with Chart 11360, 25th Edition and also with the 26th Edition. Due to the small scale of the chart, comparisons were made by picking the G.P.'s of the soundings off the chart and

transferring them to an overlay. Of 48 common soundings, 44 agreed to within three feet (1/2 fathom). A sounding of ~~84 feet (14 fathoms)~~ at position 30°01.0'N, 87°15.3'W was shoaler by 14 feet from the depths found during the present survey. This sounding is charted ~~as 14 fathoms and arrived on the chart~~ from a small shoal appearing on H-6555 with a least depth of 88 feet. A mainscheme line of hydro from the present survey ran directly over this area and a least depth of 97⁶ feet was observed. It is the opinion of the hydrographer that the sandy bottom has shifted over the years and that the present survey depth is adequate for charting purposes. *Concur* Only one sounding line shows this shoal. Depth ~~was~~ probably read 10 feet too shoal.

Other discrepancies observed were as follows:

<u>Chart 11360</u>	<u>H-9954</u>	<u>G.P.</u>
78 ft (13 fm)	90 ft	30°02.4'N; 87°24.5'W
84 ft (14 fm)	92 ft (89 in area)	29°59.0'N; 87°20.2'W

These soundings are not found on H-6554 or H-6555 and therefore do not represent the present bottom topography.

There were three PSR items ~~of note~~ within the survey area. An unnumbered dashed circle item, a 10-fathom sounding, ^{61 ft. from H-4139 (119-20)} charted at 30°04.5'N; 87°27.3'W was located as 64 feet (10.7 fm) during the present survey. ~~It is the opinion of the hydrographer that the 10 fathoms remain as charted.~~ *Chart present survey depths. See Eval. Report*

PSR #166 and PSR #333 were not resolved during regular hydrography and no further investigation was required. However, Loran rates for PSR #166 have been acquired from a local dive club and a dive by party personnel is planned. Results will be forwarded at that time. *Dive information was not provided.*

^{end}
~~Recommendation:~~ Both items should remain as charted. ~~as non-dangerous wrecks, with doubtful positions.~~

~~Where discrepancies exist,~~ ^I it is recommended that the soundings from the present survey supercede previous charted soundings.

No dangers to navigation were located during the survey. Numerous strays were detected while running mainscheme. These "suspicious traces" are believed to be schools of fish since they were only observed during the warmer months when the hydro was run. In addition, there were numerous occasions where fishermen have been observed towing "junk" (washing machines, tires, car bodies, etc) offshore to create their own fish havens (See enclosed pictures). Since these private havens are usually in deep water, and obviously do not pose a hazard to navigation, extensive investigation was deemed to be a waste of time. *See photographs on page 9A.*

M. ADEQUACY OF SURVEY

This survey is complete and adequate to warrant its use to supercede prior surveys for charting in the common areas. *concur*

N. AIDS TO NAVIGATION

No fixed or floating aids to navigation, cable crossings, or bridges are located within the limits of this survey.

O. STATISTICS

Number of positions -----	2180
Nautical miles of sounding line -----	1938
Nautical miles of crossline -----	128
Nautical miles of development -----	0
Total miles of hydrography -----	2066
Number of bottom samples -----	44
Number of barchecks -----	41
Number of TDC casts -----	10

P. MISCELLANEOUS

On July 4, 1982, a severe thunderstorm hit the Pensacola Beach area with winds gusting to 45 knots, causing one of the processing office trailers to be blown over and destroyed. All of the hydrographic data for this survey was saved intact, however, some of the fathogram records and original Master printouts got wet in the storm. All of the Master data tapes were unharmed. Consequently, the data from the following days had to be dried-out before additional processing was possible:

<u>JD (1981)</u>	<u>JD (1982)</u>
169	105
170	117
177	118
182	137
189	181
194	181
195	
225	
245	
246	
266	

Interpretation of the records was not affected, but most of the problems exist in the handling of the data. Care must be taken when the data is verified so as not to add to this unfortunate situation.

Loran C comparisons were made by recording Loran values simultaneously with Raydist rates at bottom sample sites. These comparisons will be submitted to MOAll on the appropriate forms.

A copy of the smooth sheet should be sent to the following office which is doing an extensive study of the near shore bathymetry:

Gulf Island National Seashore
P. O. Box 100
Gulf Breeze, Florida 32561
Attn: Buck Thackery, Resource Manager

Q. RECOMMENDATIONS See Evaluation Report.

See Sections J, K, L, M, and P for specific recommendations.

R. AUTOMATED DATA PROCESSING

Programs used during field data acquisition and field processing of this survey are as follows:

<u>PROGRAM</u>	<u>DESCRIPTION</u>	<u>VERSION DATE</u>
RK111	Range-range Real Time Hydroplot	1/30/76
RK201	Grid, Signal, and Lattice Plot	4/18/75
RK211	Range-range Non-real Time Plot	1/15/76
RK300	Utility Computations	2/05/76
RK330	Reformat and Data Check	5/04/76
PM360	Electronic Corrector Abstract	2/02/76
RK407	Geodetic Inverse/Direct Computation	9/25/78
AM500	Predicted Tide Generator	11/10/72
RK530	Layer Corrections for Velocity	5/10/76
RK561	H/R Geodetic Calibration	2/19/75
AM602	Elinore-line oriented editor	5/20/75

S. REFERENCE TO REPORTS

Descriptive Report H-9798, 1978, 1:40,000
Descriptive Report H-9971, 1982, 1:20,000
Control Report for OPR-J217, dated 1/12/82

Respectfully submitted,

Samuel P. De Bow, Lt, NOAA

Lt. Samuel P. De Bow, NOAA
OIC, HFP-1

OPR-J217
HSB 40-1-81
H-9954

FIELD TIDE NOTE

Field tide reduction of soundings was based on predicted tides from Pensacola, Fl corrected to Pensacola Bay Entrance, Florida, and were interpolated using a PDP8/e computer and program AM 500.

Smooth tide correctors will be obtained from Pensacola Municipal Pier Station (872-9840), Navarre Beach Station (872-9678), and Dauphin Island Beach Station (873-5180). These stations were installed on: Navarre Beach Station April 20, 1980, Pensacola Municipal Station August 6, 1980, and Dauphin Island Station October 30, 1979. All stations are monitored by contract observers through Chapin & Assoc., Tallahassee, Fl, and operated well through all periods of hydrography.

<u>STATION</u>	<u>LOCATION</u>
872-9840	LAT 30°24.2' N Long 87°12.8' W
872-9678	Lat 30°22.6' N Long 86°51.9' W
872-5180	Lat 30°15.0' N Long 88°04.5' W

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

Tide Station Used (NOAA Form 77-12): 872-9678 Navarre Beach, Florida

Period: June 2, 1981 - September 1, 1982

HYDROGRAPHIC SHEET: H-9954

OPR: J217

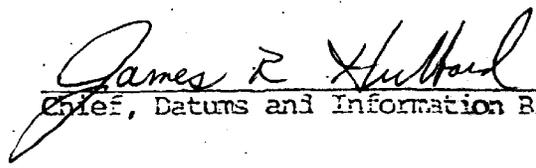
Locality: Offshore Pensacola Bay Entrance, Florida.

Plane of reference (mean lower low water): 25.64 ft.

Height of Mean High Water above Plane of Reference is 1.38 ft.

REMARKS: Recommended Zoning:

Zone Direct.


Chief, Datums and Information Branch

GEOGRAPHIC NAMES

H-9954

Name on Survey	A	B	C	D	E	F	G	H	K
	ON CHART NO. 11360	ON PREVIOUS SURVEY NO.	ON U.S. QUADRANGLE MAPS	FROM LOCAL INFORMATION	ON LOCAL MAPS	P.O. GUIDE OR MAP ATLAS	GRAND McNALLY ATLAS	U.S. LIGHT LIST	

FLORIDA (title block)	X									1
GULF OF MEXICO (title block)	X									2
PENSACOLA BAY (title block)	X									3
										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25

Approved:

Charles E. Harrington
Chief Geographer - N/C62x5

31 Aug. 1983

OPR J217
 HSB 40-1-81
 H-9954
 Verno 1257



Barcheck Abstract

Julian Day (1981)	10'	15'	20'	25'	30'	35'	40'	45'	50'
			Velocity Table # 3			JD 153 - 154			
121	.1	.5	.5	.7	.9	1.0			
135	.1	.5	.5	.6	.9	1.1	1.2	1.3	1.5
Mean	.1	.5	.5	.65	.9	1.15	1.2	1.3	1.5
			Velocity Table # 4			JD 165 - 279			
158	.3	.3	.6	1.1	1.2	1.5	1.7		
169	.2	.5	.7	.9	1.3	1.2			
170	.2	.3	.8	1.0	1.2				
176	.1	.4	.7	.8	1.1	1.2	1.4		
189	-	.3	.5	.7	.9	1.1			
191	.2	.5	.7	1.0	1.1				
195	.3	.5	.9	1.3	1.6				
202	.3	.5	.7	.9	1.1	1.3			
204	.2	.3	.7	.9	1.2	1.4			
223	.3	.5	.9	1.2	1.5	1.7	1.7		
245	.3	.5	.7	.8	1.1	1.5	1.6		
253	.2	.4	.7	.9	1.2	1.3	1.7		
264	.3	.4	.7	.9	1.0	1.3			
Sum	2.9	5.4	9.7	12.4	15.5	13.5	8.1		
Mean	.24	.41	.75	.95	1.19	1.35	1.62		
(1982)			Velocity Table # 6			JD 019 - 106			
102	.15	.4	.7	.65	.9	1.3	1.45	1.6	
105	.1	.2	.5	.7	.7	.8	1.0	1.3	
Sum	.25	.6	1.2	1.35	1.6	2.1	2.45	2.9	
Mean	.12	.3	.6	.68	.8	1.05	1.22	1.45	
				(18.)					



Barcheck Abstract

OPR J217
 HSB 40-1-81
 H-9954
 Vesno 1257

Julian Day (1982)	10'	15'	20'	25'	30'	35'	40'	45'	50'
			Velocity Table # 7		JD	116-142			
118	.25	—	.5	.7	1.1	—	1.45	1.55	
123	.25	.3	.5	.9	.95	1.3	1.45		
124	.3	.5	.75	.8	1.0	1.2			
137	—	.45	.75	.8	.9	1.3	—	1.85	2.0
139	.15	.35	.75	1.1	1.2	1.45	1.65	1.85	
140	.15	.5	.75	.95	1.0	1.3	1.45		
Sum	1.1	2.1	4.0	5.25	6.15	6.55	6.0	5.25	2.0
Mean	.22	.42	.66	.88	1.02	1.31	1.5	1.75	2.0
			Velocity Table # 8		JD	146-160			
147	—	—	.7	.7	1.1	1.2	1.45	1.65	
159	.2	.45	.6	—	.9	1.2	1.5	1.65	
Mean	.2	.45	.65	.7	1.0	1.2	1.48	1.65	
			Velocity Table # 9		JD	164-177			
165	.25	.55	.55	—	1.0	1.2	1.3	1.4	1.8
172	.2	.25	.5	.75	.95	1.1	1.25	1.45	
175	.15	.4	.45	.6	1.0	1.1	1.4	1.5	1.7
176	.15	.3	—	.75	1.1	1.3	1.5		
Sum	.75	1.5	1.5	2.1	4.05	4.7	5.45	4.35	3.5
Mean	.19	.38	.5	.7	1.01	1.18	1.36	1.45	1.75
					(12)				

OPR J217
 HSB 40-1-81
 H-9954
 Vesno 1257

Barcheck

Julian Day (1982)	10'	15'	20'	25'	30'	35'	40'	45'	50'
			Velocity Table # 10			JD 180-226			
183	-	.25	.6	.9	1.0	1.3	1.25	1.7	
203	.2	-	.65	.75	1.1	1.25	1.5	1.55	1.8
207	.1	-	.5	.65	-	1.25	1.4	1.65	1.85
208	-	.2	-	.7	1.1	1.3	1.55	-	2.05
221	.15	.2	.5	.65	.9	.95	1.3	1.5	
224	.2	.3	.5	.75	1.05	1.25	1.3	1.45	1.65
225	-.05	.15	.55	.65	.95	1.2	1.5	1.65	
Sum	.6	1.1	3.3	5.05	6.1	8.5	9.8	9.5	7.35
Mean	.12	.22	.55	.72	1.02	1.21	1.4	1.58	1.84

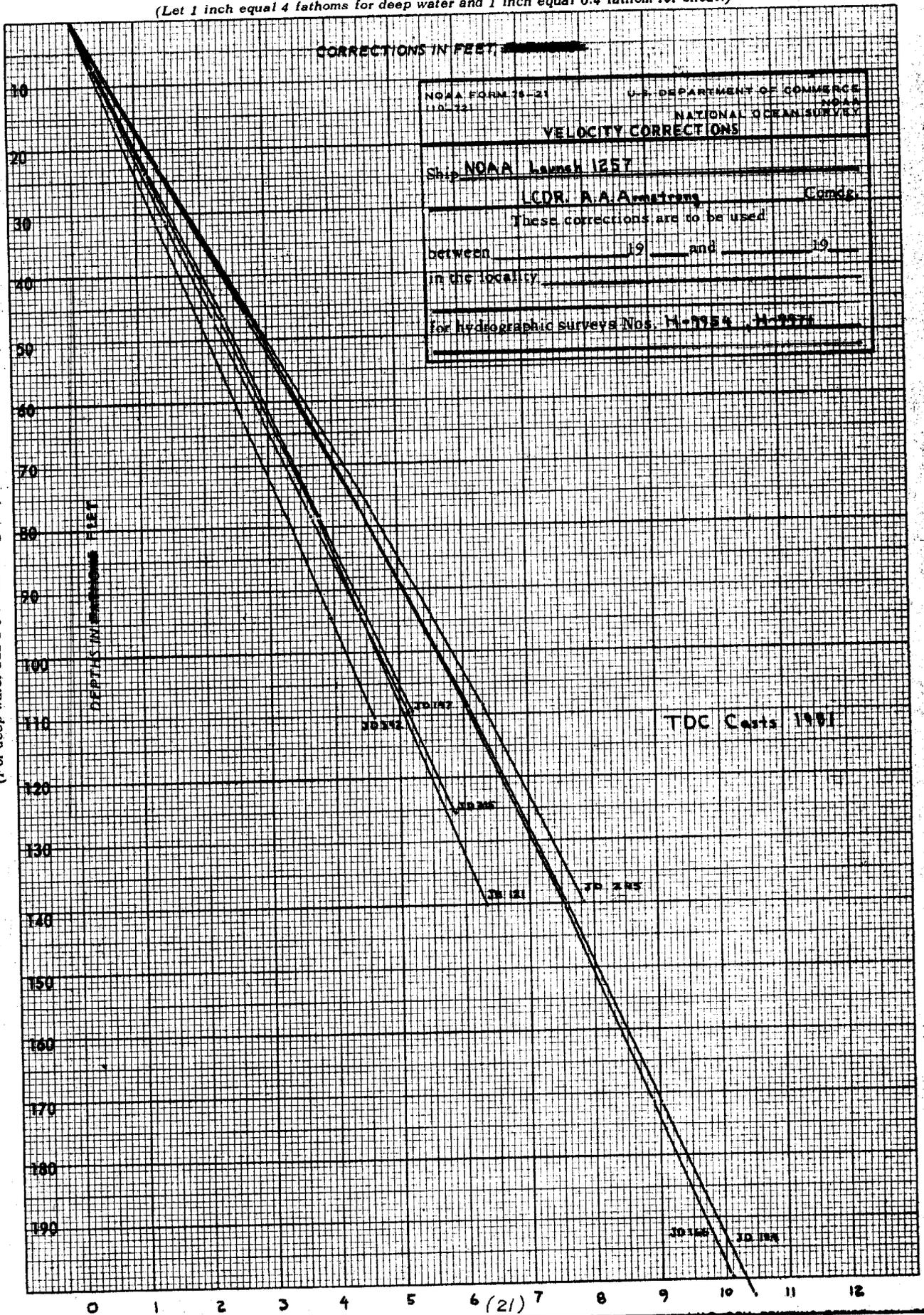
			Velocity Table # 11			JD 243-289			
246	.4	.5	.75	.9	1.15	1.45	1.6	1.75	
258	.35	.5	.7	1.05	1.1	1.45	1.5	1.8	1.95
263	.05	.45	.6	.95	1.0	1.35	1.4	1.85	2.1
270	.1	.3	.65	.85	1.1	-	1.35	1.7	
288	.15	.25	.55	.7	.9	1.3	1.55		
Sum	1.05	2.0	3.25	4.45	5.25	5.55	7.4	7.1	4.05
Mean	.21	.4	.65	.89	1.05	1.39	1.48	1.78	2.02

Note:

All Digital Depth Corrections were graphically plotted to check the velocity correctors against the Barcheck Curve. Those correctors outside of the graphic curve that were .2 feet or greater were rejected to assure an accurate Mean for the Barcheck abstract of each Smooth Velocity Table. ✓

(20.)

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)

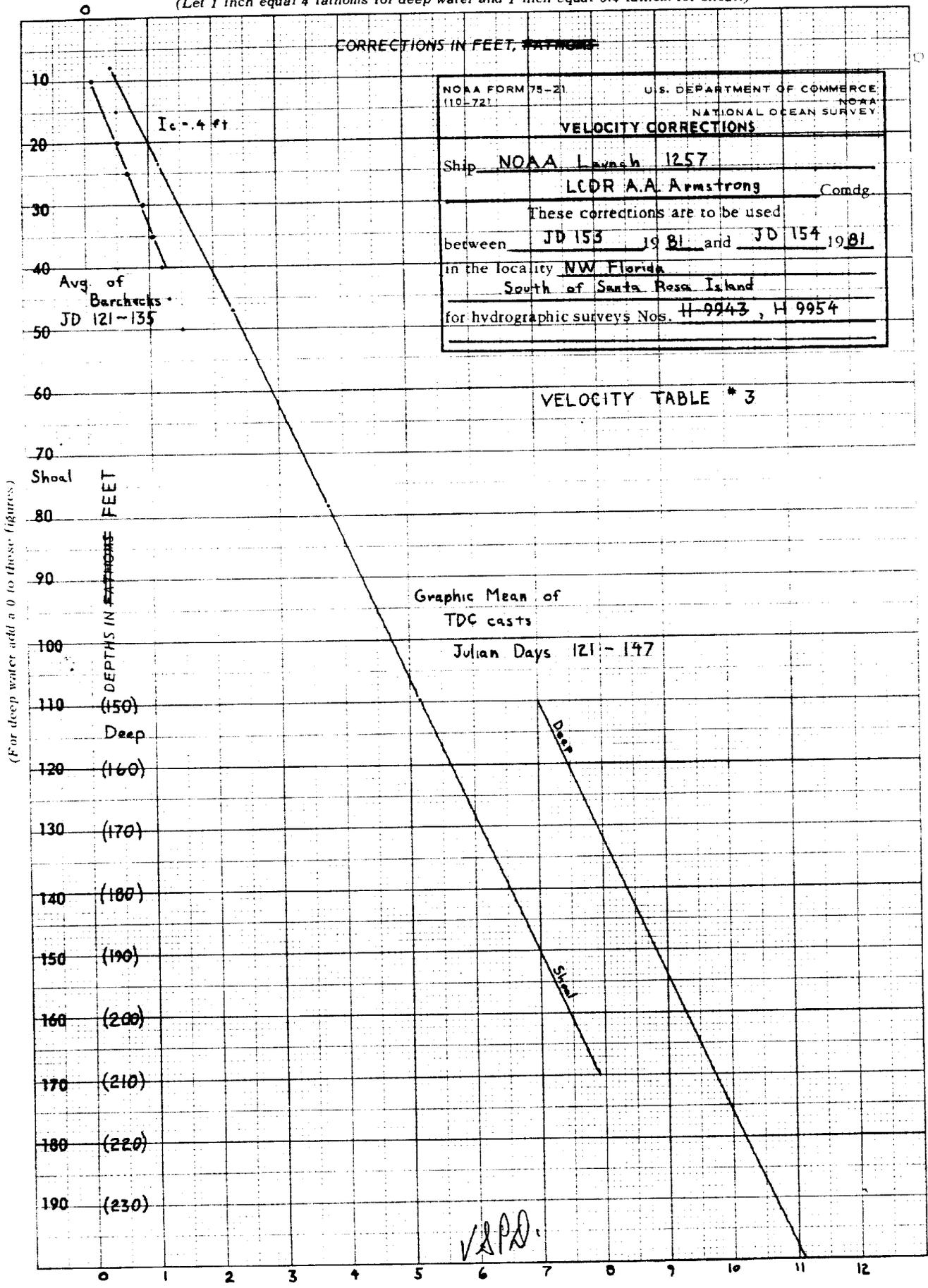


(For deep water add a 0 to these figures)

4 340

20 X 20 TO THE INCH • 7
KEUFFEL & ESSER CO. MADE IN U.S.A.

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)



NOAA FORM 75-21 (10-72)	U.S. DEPARTMENT OF COMMERCE NOAA NATIONAL OCEAN SURVEY
VELOCITY CORRECTIONS	
Ship <u>NOAA Launch 1257</u>	
LCDR A.A. Armstrong Comdg	
These corrections are to be used	
between <u>JD 153 1981</u> and <u>JD 154 1981</u>	
in the locality <u>NW Florida</u>	
<u>South of Santa Rosa Island</u>	
for hydrographic surveys Nos. <u>H-9943, H-9954</u>	

461240

20 X 20 TO THE INCH
KEUFFEL & ESSER CO. INDIANAPOLIS, IND.

V.S.P.D.

SMOOTH VELOCITY TABLE #3

OPR J217

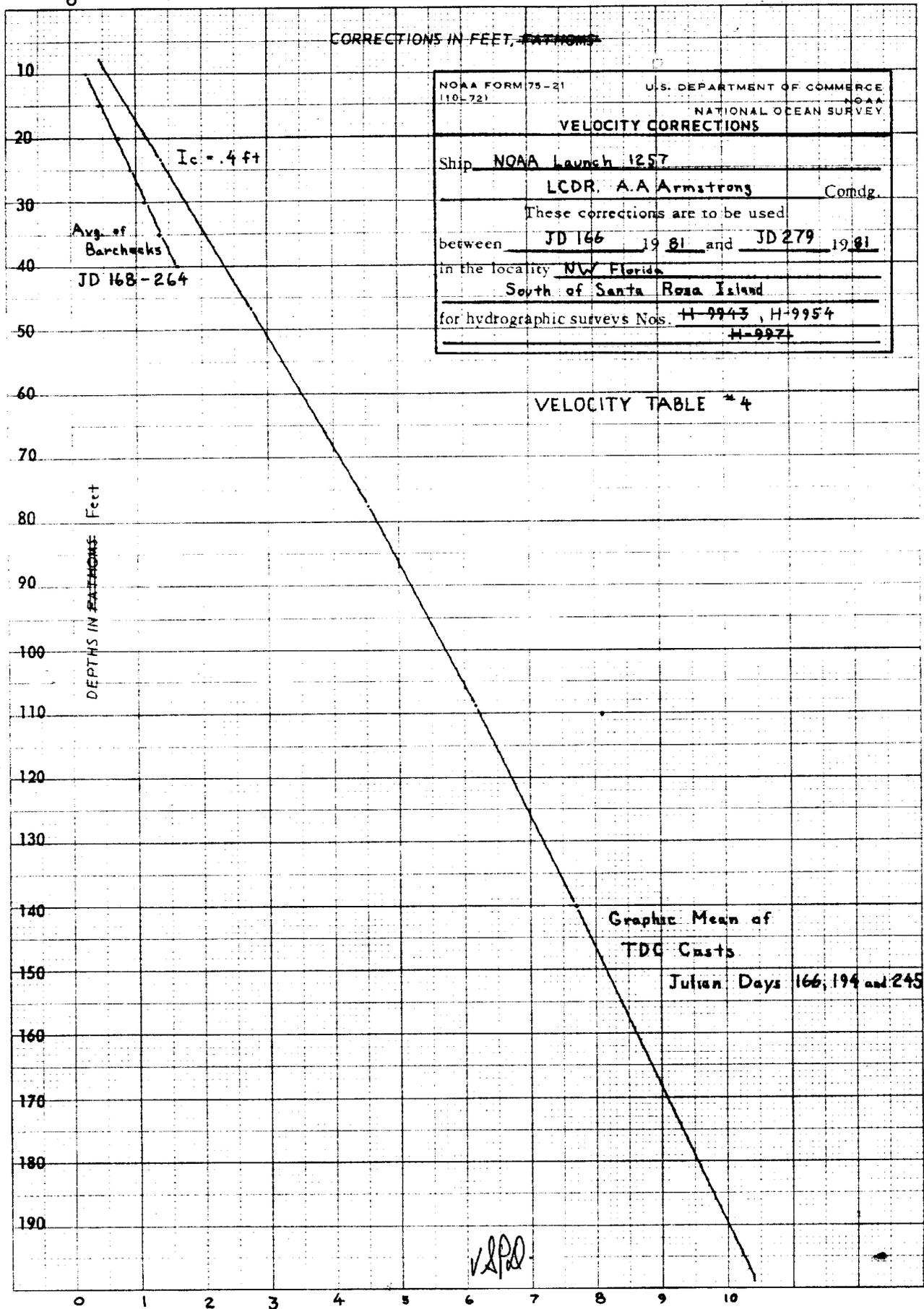
HSB 40-1-81 H-9954

VESNO 1257

000020 0 0000 0003 125700 001981
 000060 0 0002
 000100 0 0004
 000140 0 0006
 000181 0 0008
 000221 0 0010
 000266 0 0012
 000306 0 0014
 000347 0 0016
 000388 0 0018
 000428 0 0020
 000470 0 0022
 000512 0 0024
 000557 0 0026
 000600 0 0028
 000643 0 0030
 000685 0 0032
 000730 0 0034
 000772 0 0036
 000816 0 0038
 000861 0 0040
 000906 0 0042
 000952 0 0044
 000995 0 0046
 001040 0 0048
 001085 0 0050
 001127 0 0052
 001171 0 0054
 001215 0 0056
 001260 0 0058
 001302 0 0060
 001347 0 0062
 001392 0 0064
 001435 0 0066
 001480 0 0068
 001522 0 0070
 001570 0 0072
 001612 0 0074
 001655 0 0076
 001700 0 0078
 001742 0 0080
 001788 0 0082
 001830 0 0084
 001872 0 0086
 001917 0 0088
 001960 0 0090
 002005 0 0092
 002050 0 0094
 002093 0 0096
 002138 0 0098
 002180 0 0100
 002225 0 0102
 002270 0 0104
 002313 0 0106
 002357 0 0108
 002400 0 0110
 999999 0 0112

Used for smooth sheet. ✓

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)



461240

20 X 20 TO THE INCH
 KUBEL A USER CO

SMOOTH VELOCITY TABLE #4

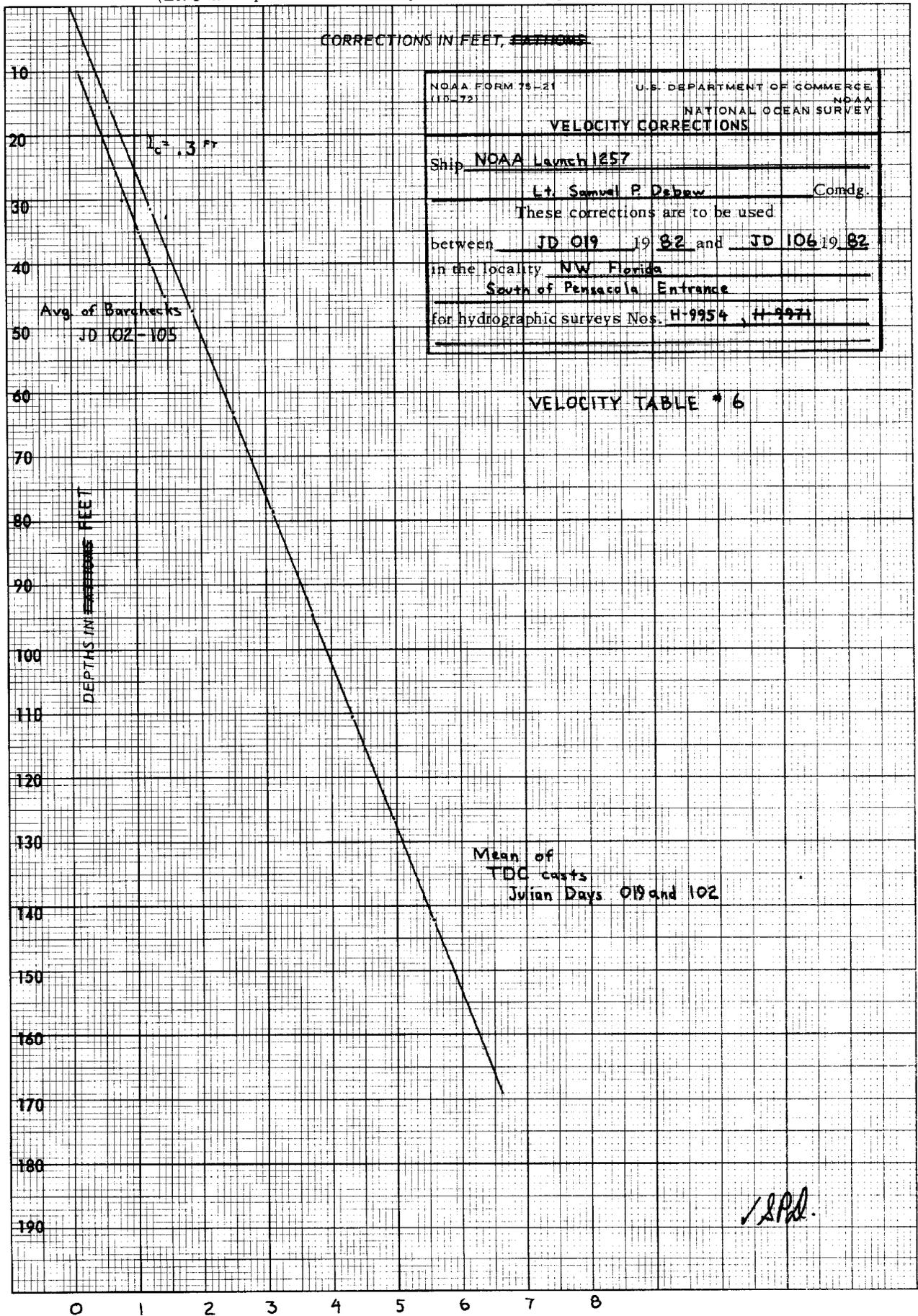
OPR J217

~~HSB 20-5-81 H-9971~~

HSB 40-1-81 H-9954

000020 0 0000 0004 125700 001981
000053 0 0002
000036 0 0004
000120 0 0006
000153 0 0008
000187 0 0010
000220 0 0012
000256 0 0014
000289 0 0016
000324 0 0018
000357 0 0020
000391 0 0022
000427 0 0024
000458 0 0026
000492 0 0028
000526 0 0030
000560 0 0032
000597 0 0034
000632 0 0036
000665 0 0038
000700 0 0040
000733 0 0042
000768 0 0044
000805 0 0046
000845 0 0048
000882 0 0050
000920 0 0052
000960 0 0054
000998 0 0056
001036 0 0058
001072 0 0060
001115 0 0062
001155 0 0064
001197 0 0066
001233 0 0068
001278 0 0070
001320 0 0072
001362 0 0074
001400 0 0076
001446 0 0078
001486 0 0080
001530 0 0082
001575 0 0084
001618 0 0086
001660 0 0088
001703 0 0090
001746 0 0092
001790 0 0094
001833 0 0096
001876 0 0098
001918 0 0100
001963 0 0102
999999 0 0104

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)



(For deep water add a 0 to these figures)

20 X 20 TO THE INCH X 10 INCHES
KEUFFEL & ESSER CO. U.S.A.

61240

SMOOTH VELOCITY TABLE #6

OPR J217

~~HSB 20-5-81 H-9971~~

HSB 40-1-81 H-9954

VESNO 1257

000025 0 0000 0006 125700 001982
000076 0 0002
000126 0 0004
000177 0 0006
000228 0 0008
000278 0 0010
000329 0 0012
000379 0 0014
000430 0 0016
000481 0 0018
000532 0 0020
000583 0 0022
000632 0 0024
000682 0 0026
000735 0 0028
000786 0 0030
000837 0 0032
000888 0 0034
000939 0 0036
000996 0 0038
001047 0 0040
001098 0 0042
001150 0 0044
001201 0 0046
001253 0 0048
001302 0 0050
001353 0 0052
001404 0 0054
001455 0 0056
001557 0 0060
001688 0 0065
999999 0 0070

VSPD.

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)

CORRECTIONS IN FEET, FATHOMS

NOAA FORM 75-21
(10-72)

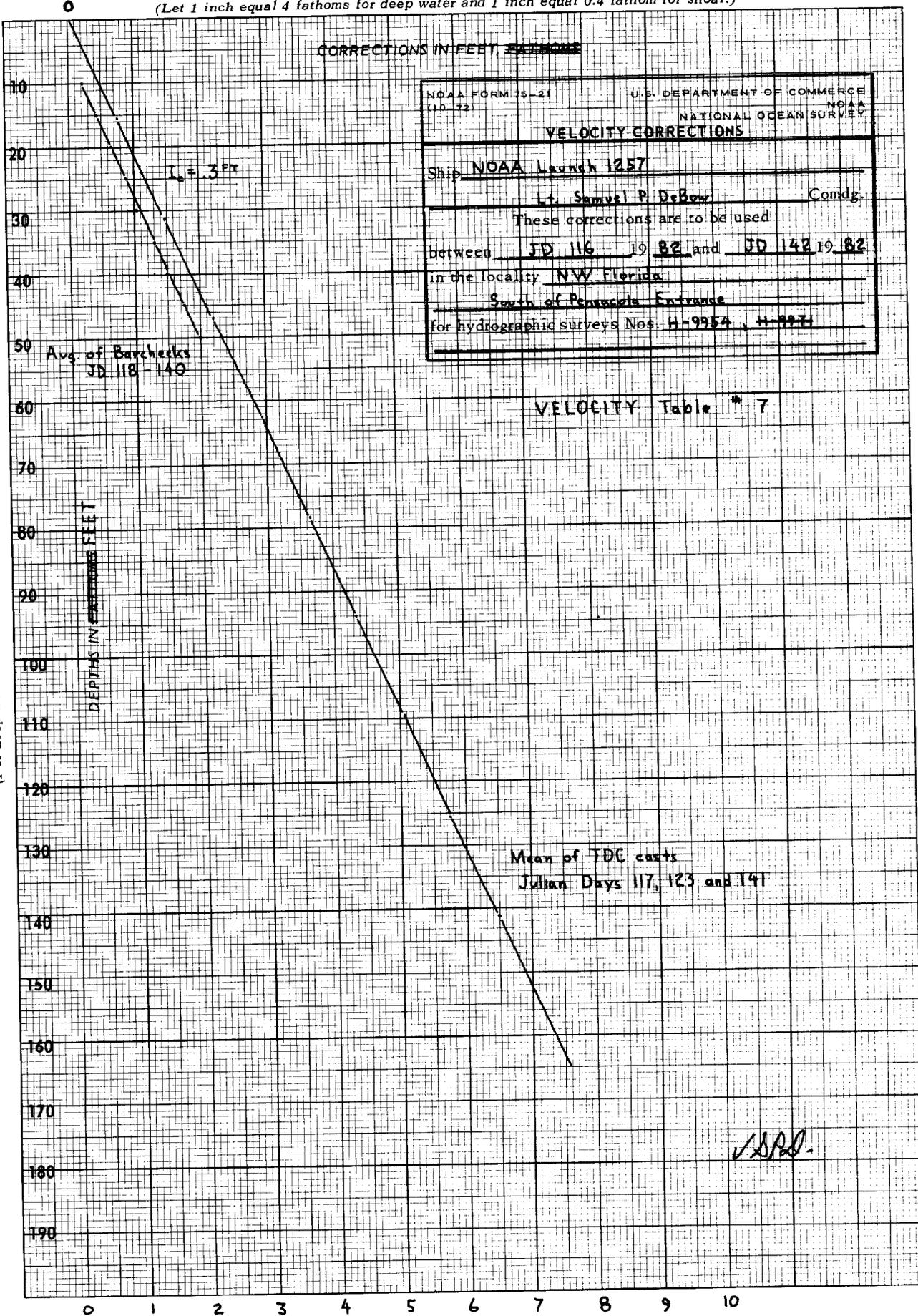
U.S. DEPARTMENT OF COMMERCE
NOAA
NATIONAL OCEAN SURVEY

VELOCITY CORRECTIONS

Ship NOAA Launch 1257
 Lt. Samuel P. DeBow Comdg.
 These corrections are to be used
 between JD 116 19 82 and JD 142 19 82
 in the locality NW Florida
South of Pensacola Entrance
 for hydrographic surveys Nos. H-9954, H-9971

VELOCITY Table * 7

(For deep water add a 0 to these figures)



6 1240

20 X 20 TO THE INCH
KEUFFEL & ESSER CO.
MADE IN U.S.A.

SMOOTH VELOCITY TABLE #7

OPR J217

~~HSB 20-5-81 H-9971~~

HSB 40-1-81 H-9954

VESNO 1257

000018 0 0000 0007 125700 001982
000062 0 0002
000103 0 0004
000150 0 0006
000192 0 0008
000235 0 0010
000280 0 0012
000321 0 0014
000365 0 0016
000410 0 0018
000455 0 0020
000495 0 0022
000537 0 0024
000578 0 0026
000620 0 0028
000663 0 0030
000710 0 0032
000752 0 0034
000798 0 0036
000840 0 0038
000885 0 0040
000930 0 0042
000975 0 0044
001020 0 0046
001062 0 0048
001103 0 0050
001150 0 0052
001195 0 0054
001240 0 0056
001288 0 0058
001330 0 0060
001435 0 0065
001546 0 0070
001652 0 0075
999999 0 0080

VSPD.

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)

CORRECTIONS IN FEET, FATHOMS

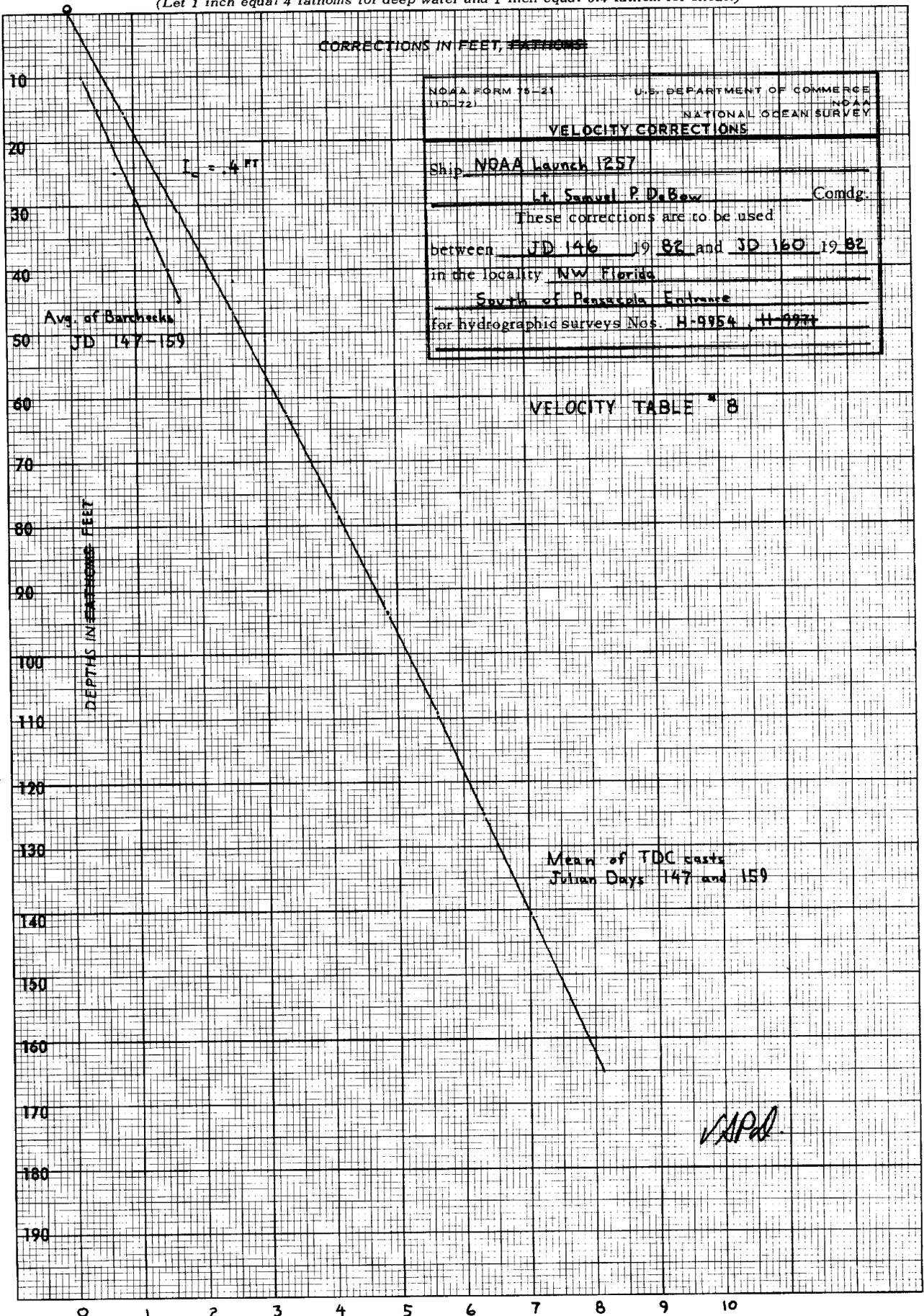
NOAA FORM 75-21 U.S. DEPARTMENT OF COMMERCE
 (11-72) NOAA
 NATIONAL OCEAN SURVEY

VELOCITY CORRECTIONS

Ship NOAA Launch 1257
 Lt. Samuel P. DeBew Comdg.
 These corrections are to be used
 between JD 146 19 82 and JD 160 19 82
 in the locality NW Florida
South of Pensacola Entrance
 for hydrographic surveys Nos. H-9954 H-9977

VELOCITY TABLE # 8

(For deep water add a 0 to these figures)



61240

20 X 20 TO THE INCH KEUFFEL & ESSER CO. IN U.S.A.

SMOOTH VELOCITY TABLE #8

OPR J217

~~HSB 20-5-81 H-9971~~

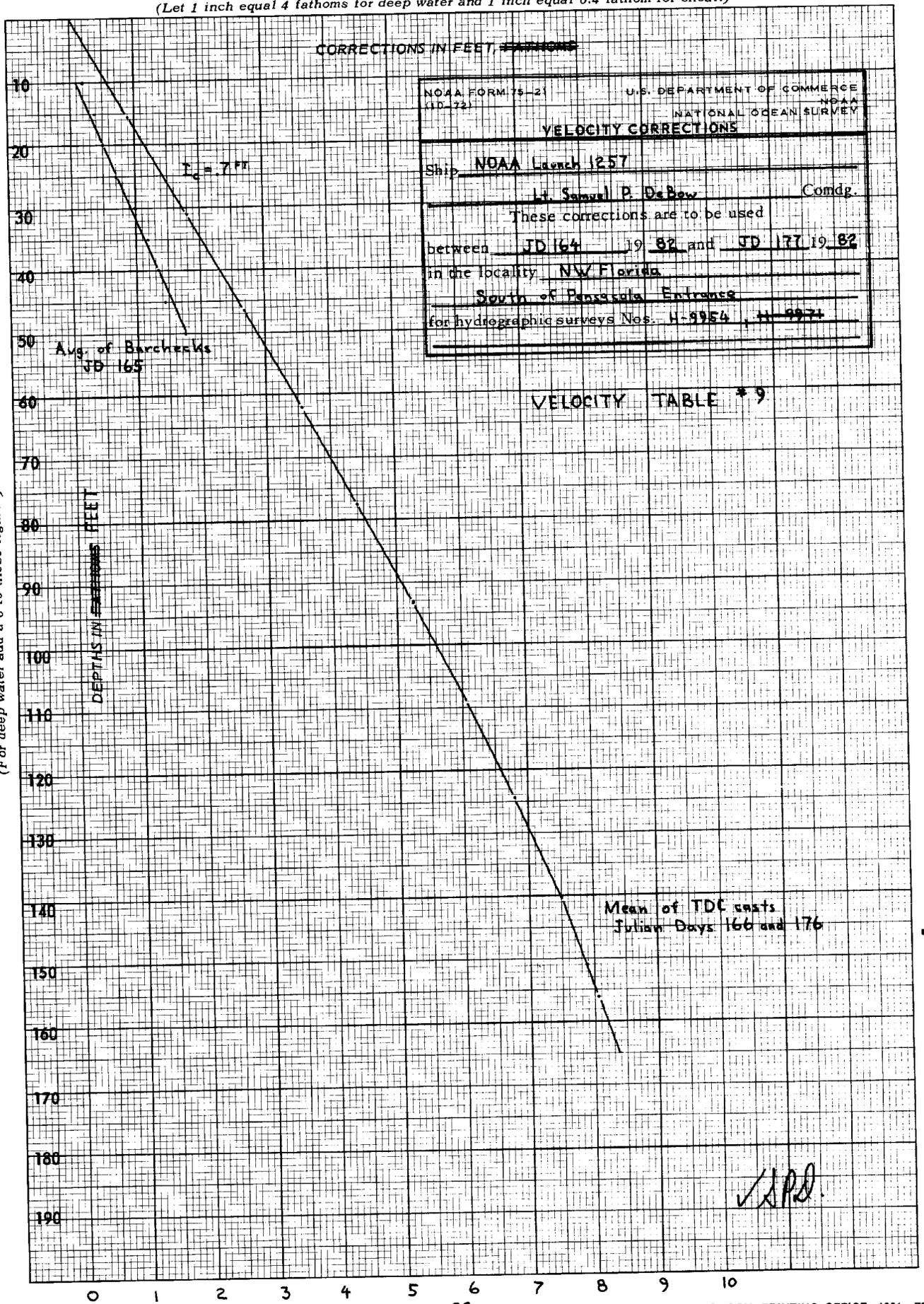
HSB 40-1-81 H-9954

VESNO 1257

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000057 0 0002
000093 0 0004
000130 0 0006
000168 0 0008
000203 0 0010
000242 0 0012
000280 0 0014
000315 0 0016
000353 0 0018
000390 0 0020
000428 0 0022
000467 0 0024
000508 0 0026
000546 0 0028
000585 0 0030
000622 0 0032
000663 0 0034
000703 0 0036
000742 0 0038
000785 0 0040
000825 0 0042
000865 0 0044
000906 0 0046
000948 0 0048
000988 0 0050
001028 0 0052
001072 0 0054
001116 0 0056
001162 0 0058
001205 0 0060
001250 0 0062
001293 0 0064
001338 0 0066
001380 0 0068
001422 0 0070
001534 0 0075
001645 0 0080
999999 0 0085

VSPG.

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)



(For deep water add a 0 to these figures)

61240

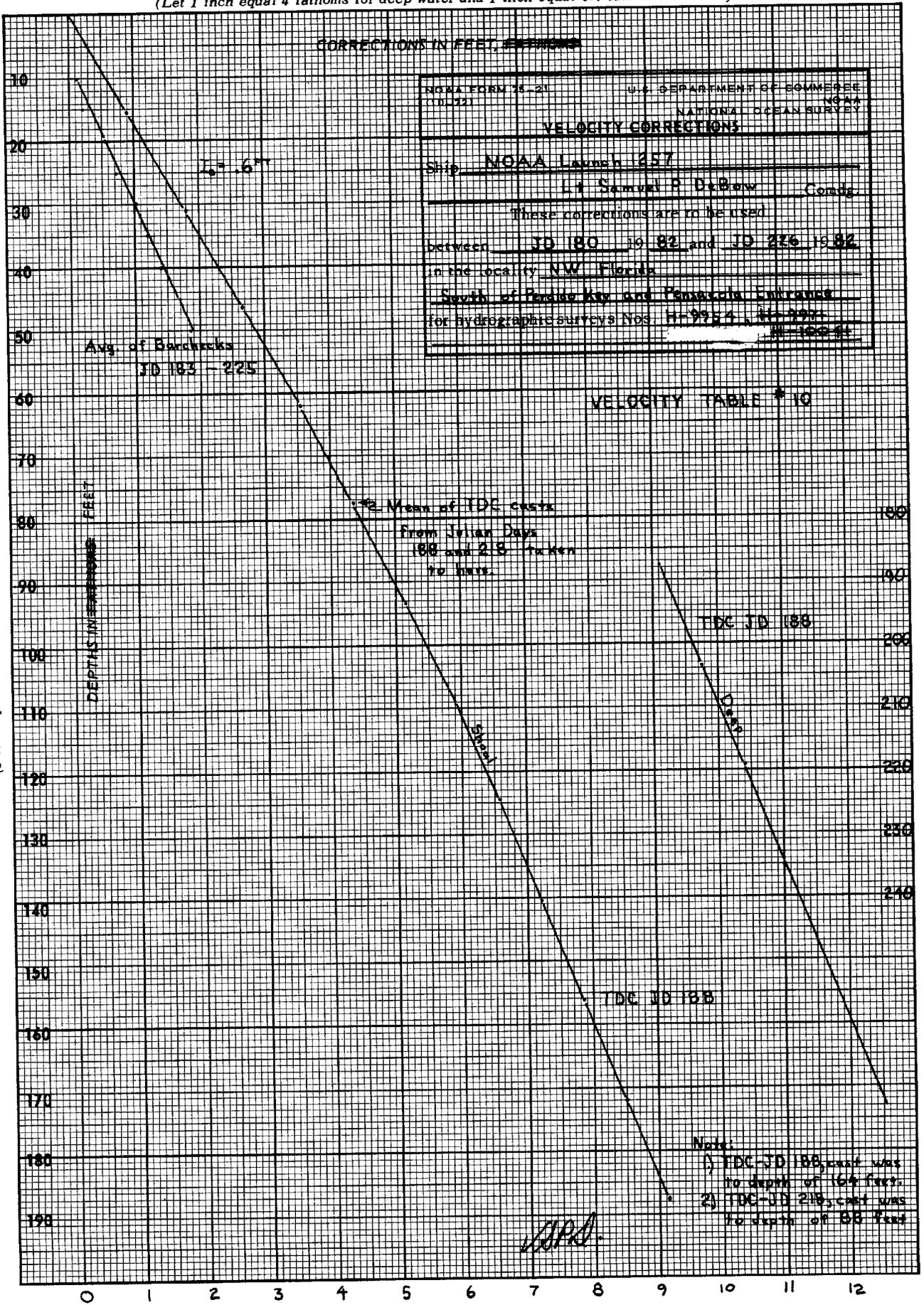
20 X 20 TO THE INCH KEUFFEL & ESSER CO. IN U.S.A.

SMOOTH VELOCITY TABLE #9
 OPR J217
~~HSB 20-5-81 H-9971~~
 HSB 40-1-81 H-9954
 VESNO 1257

000017	0	0000	0009	125700	001982	used for smooth sheet.
000053	0	0002				
000087	0	0004				
000122	0	0006				
000156	0	0008				
000191	0	0010				
000226	0	0012				
000260	0	0014				
000295	0	0016				
000328	0	0018				
000363	0	0020				
000399	0	0022				
000434	0	0024				
000469	0	0026				
000504	0	0028				
000539	0	0030				
000574	0	0032				
000610	0	0034				
000647	0	0036				
000683	0	0038				
000720	0	0040				
000757	0	0042				
000794	0	0044				
000830	0	0046				
000868	0	0048				
000903	0	0050				
000941	0	0052				
000980	0	0054				
001019	0	0056				
001057	0	0058				
001098	0	0060				
001140	0	0062				
001182	0	0064				
001226	0	0066				
001270	0	0068				
001313	0	0070				
001359	0	0072				
001401	0	0074				
001569	0	0080				
999999	0	0085				

VSPD.

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)



(For deep water add a 0 to these figures)

KE 20 X 20 TO THE INCH 46 1240
 7 X 10 INCHES
 MADE IN U.S.A.
 KEUFFEL & ESSER

SMOOTH VELOCITY TABLE #10

OPR J217

~~HSB 20-5-81 H-9971~~

HSB 40-1-81 H-9954

~~HSB 20-2-82 H-10041~~

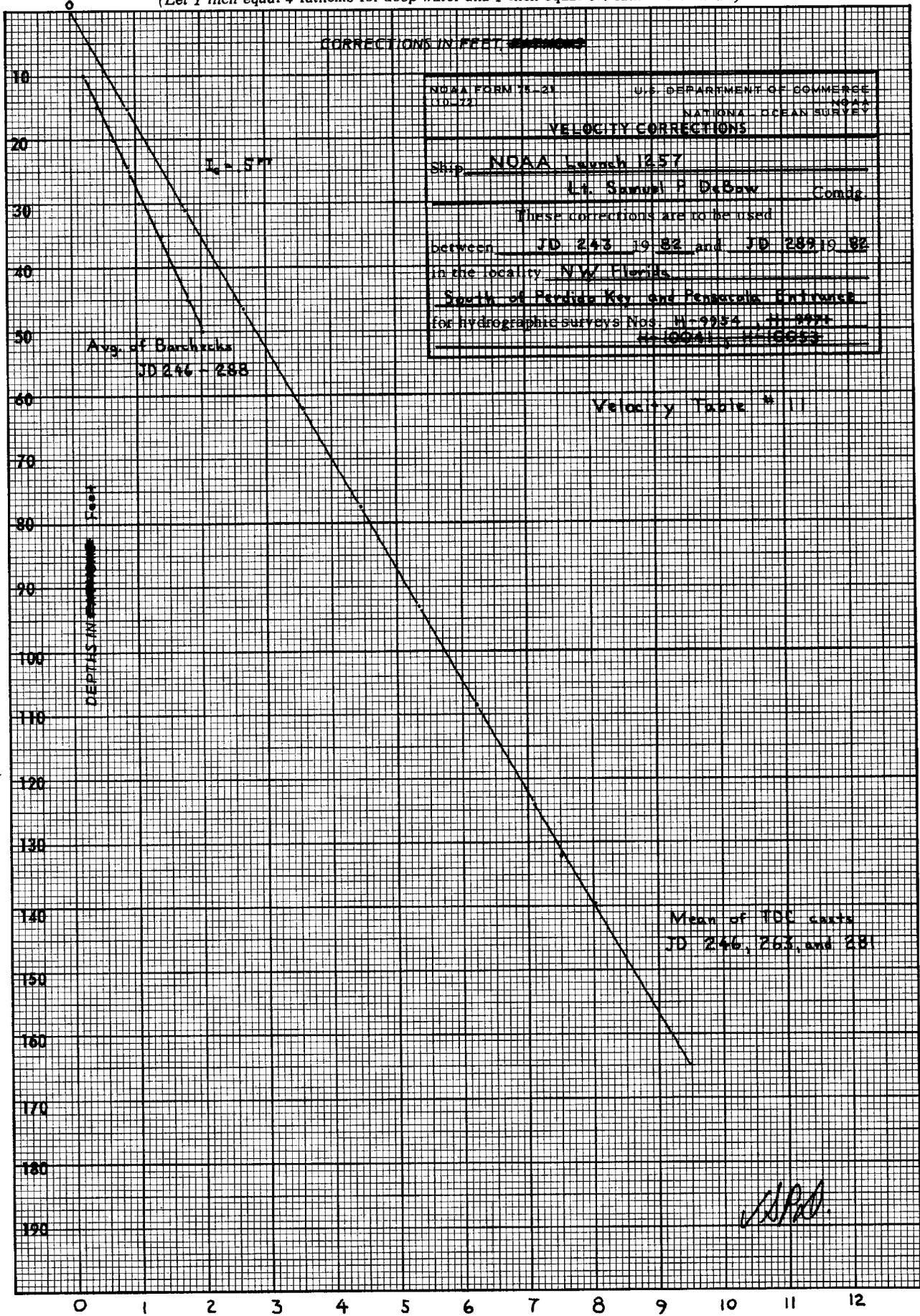
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000122 0 0006
000155 0 0008
000190 0 0010
000225 0 0012
000262 0 0014
000297 0 0016
000330 0 0018
000365 0 0020
000400 0 0022
000437 0 0024
000473 0 0026
000505 0 0028
000542 0 0030
000578 0 0032
000612 0 0034
000653 0 0036
000693 0 0038
000730 0 0040
000768 0 0042
000810 0 0044
000848 0 0046
000885 0 0048
000923 0 0050
000963 0 0052
001008 0 0054
001050 0 0056
001088 0 0058
001136 0 0060
001183 0 0062
001230 0 0064
001277 0 0066
001326 0 0068
001375 0 0070
001500 0 0075
001623 0 0080
001745 0 0085
001866 0 0090
001995 0 0095
002120 0 0100
002242 0 0105
002368 0 0110
999999 0 0115

APD.

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)

CORRECTIONS IN FEET

(For deep water add a 0 to these figures)



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

SMOOTH VELOCITY TABLE #11

OPR J217

~~HSB 20-5-81 H-9971~~

HSB 40-1-81 H-9954

~~HSB 20-2-82 H-10041~~

~~HSB 40-1-82 H-10053~~

VESNO 1257

000018 0 0000 0011 125700 001982
000052 0 0002
000086 0 0004
000122 0 0006
000156 0 0008
000190 0 0010
000228 0 0012
000264 0 0014
000299 0 0016
000334 0 0018
000370 0 0020
000405 0 0022
000440 0 0024
000473 0 0026
000508 0 0028
000543 0 0030
000578 0 0032
000613 0 0034
000646 0 0036
000680 0 0038
000716 0 0040
000749 0 0042
000783 0 0044
000820 0 0046
000855 0 0048
000890 0 0050
000925 0 0052
000960 0 0054
000996 0 0056
001030 0 0058
001065 0 0060
001100 0 0062
001133 0 0064
001172 0 0066
001205 0 0068
001240 0 0070
001276 0 0072
001310 0 0074
001346 0 0076
001379 0 0078
001413 0 0080
001500 0 0085
001583 0 0090
999999 0 0095

✓SPD.

NOAA Launch 1257

Settlement & Squat Corrector Curve

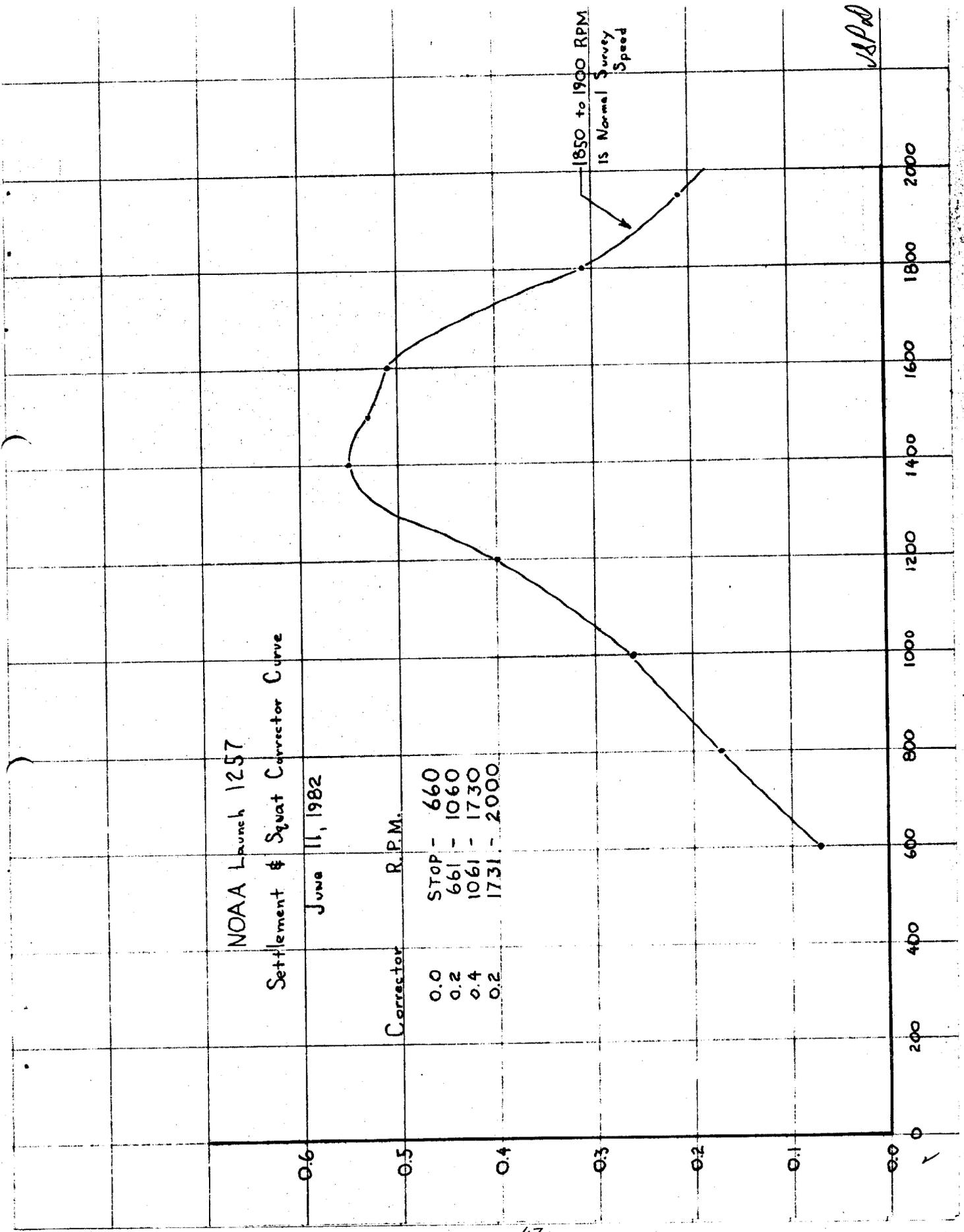
June 11, 1982

Corrector R.P.M.

0.0	STOP - 660
0.2	661 - 1060
0.4	1061 - 1730
0.2	1731 - 2000

1850 to 1900 RPM
is Normal Survey
Speed

ASD



OPR J217
 SOUNDING CORRECTION ABSTRACT

FIELD NO. HSB 40-1-81
 REGISTRY NO. H- 9954

VESSEL 1257

Julian Date	From Time (GMT)	To Time (GMT)	Velocity Corr. Table No.	(Note: TRA Corr. is the algebraic sum of these columns)					TRA Corr. ft/fms	Remarks
				Draft Corr. *	Instrument Error Corr.	Initial Corr.	* S&S Corr.	TRA Corr. ft/fms		
(1981) 153	151630	190931	3	0	-0.4	0	0	0	-0.4	
166	145938		4	0	-0.4	0	0	0	-0.4	
267		211248								
(1982) 103	173705		6	0	-0.3	0	0	0	-0.3	
105		224959								
117	160623		7	0	-0.3	0	0	0	-0.3	
140		205855								
147	151624		8	0	-0.4	0	0	0	-0.4	
159		191220								
172	163432		9	0	-0.7	0	0	0	-0.7	
174		193648								
181	170245		10	0	-0.6	0	0	0	-0.6	
222		171955								
244	161648	183142	11	0	-0.5	0	0	0	-0.5	

* APPLIED VIA [REDACTED] CORRECTOR TAPE.

VSPD

TC/TI TAPE LISTING
HSB 40-1-81
H-9954
VESNO 1257

151630 0 1004 0003 153 125700 001981
145938 0 1004 0004 166 125700 001981
235959 0 1004 0000 267 125700 001981

4

VSPD.

TC/TI TAPE LISTING
HSB 40-1-81
H-9954
VESNO 1257

173705	0	1003	0006	103	125700	001982
160623	0	1003	0007	117	125700	001982
151624	0	1004	0008	147	125700	001982
163432	0	1007	0009	172	125700	001982
170245	0	1006	0010	181	125700	001982
161648	0	1005	0011	244	125700	001982
235959	0	1005	0000	244	125700	001982

✓SPD.

ELECTRONIC CORRECTOR ABSTRACT

VESSEL : 1257

SHEET : HSB-40-1-81

TIME	DAY	PATTERN 1	PATTERN 2
	(1981)		
151630	153	-00010	+00107
145938	166	-00037	+00148
153836	167	-00042	+00154
153029	168	-00042	+00146
153142	169	-00045	+00148
151745	170	-00050	+00146
175259		-00048 50	+00146
145647	177	-00060	+00156
152135	182	+00055	+00174
150536	189	+00031	+00152
155402	194	-00067	-00055
153449	195	+00028	+00150
143950	225	+00029	+00145
170352	245	+00018	+00138
144516	246	+00018	+00138
151029	251	+00017	+00131
152417	266	+00024	+00147
153632	267	+00021	+00145
	(1982)		
173705	103	-00018	+00174
170011	105	+00085	+00184
175551	118	+00080	+00184
161534	123	+00096	+00187
165725	124	+00086	+00189

ELECTRONIC CORRECTOR ABSTRACT

VESSEL : 1257

SHEET : HSB-40-1-81

TIME	DAY	PATTERN 1	PATTERN 2
	(1982)		
163836	137	+00095	+00192
171400	139	+00094	+00188
163854	140	+00090	+00083
151624	147	+00087	+00160
164744	148	+00149	+00154
161859	159	+00082	+00054
163432	172	+00072	+00036
151821	174	+00080	+00132
170245	181	+00065	-00165
152745	188	+00146	+00028
151039	189	+00038	+00227
153124	216	+00046	-00054
153408	217	+00064	+00118
142350	222	+00156	+00119
161648	244	+00052	+00227

SIGNAL TAPE LISTING
 OPR J217
 HSB 40-1-81
 H-9954
 VESNO 1257

106	7	30	21	35305	087	10	56109	139	0000	000000	GULF BREEZE TANK * QUAD 3008721, 1981	calibration
107	7	30	19	07174	087	15	18724	139	0000	000000	PARK RANGERS * ANT POLE, 1981 QUAD 3008721	calibration
109	7	30	19	02194	087	15	26539	139	0000	000000	FIXED NO. 2 * 1942, * 1981 QUAD 3008721	calibration
110	7	30	19	18469	087	17	06198	139	0000	000000	H*73*FL-8 ^{ok} 1981 * QUAD 3008724	calibration
111	7	30	20	47316	087	16	06799	139	0000	000000	PENSACOLA USN AIR STA PWR STK, 1934 QUAD 300872 STATION 1137 ****	calibration
114	7	30	20	45346	087	18	29205	139	0000	000000	PENSACOLA LIGHT- HOUSE CENTER, 1867 QUAD 300872 STATION 1120	calibration
116	7	30	20	12536	087	18	59500	139	0000	000000	CAUCUS CHANNEL * R RNG LT., 1981 QUAD 3008724	calibration
120	3	30	19	30907	087	18	46773	139	0000	000000	FORT MCREE LEADING LT LIGHT, 1981 * QUAD 3008724	calibration
900	7	29	40	09229	085	21	26851	250	0000	330640	CAPE SAN BLAS **** LORAN ^{TOWER} ST, 1956 QUAD 290851 STATION 1018	Elect. cont. sta.
902	7	30	19	15517	087	13	24115	139 250	0000	330640	H*62*01, 1980*** QUAD 3008721	calibration
908	7	30	22	45075	086	52	47698	250	0000	330640	H*4*FL*77, 1980*** QUAD 3008634	Elect. Cont. Sta.
910	7	30	19	45842	087	17	42885	250	0000	330640	H-82-FL, 1982 ** QUAD 3008724	Elect. Cont. Sta.

CONTROL LOCATED BY:

* HYDROGRAPHIC FIELD PARTY #1
 ** HYDROGRAPHIC SURVEYS BRANCH
 *** OPERATIONS DIVISION
 **** NATIONAL GEODETIC SURVEY

POSITION ABSTRACT

OPR - J217

HSB 40-1-81

H - 9954

VESNO 1257

J. D.	POSITIONS		CTRL	S 1	M	S 2	PLOTTER SHEET	REMARKS
	FROM	TO						
1981								
153	0001	0065	04	908	0	900	EAST	MAINScheme
166	0066	0112	"	"	"	"	"	MAINScheme
167	0113	0196	"	"	"	"	"	MAINScheme
168	0197	0284	"	"	"	"	"	MAINScheme
169	0285	0369	"	"	"	"	"	MAINScheme
	0370	0436	"	"	"	"	"	MAINScheme
177	0437	0508	"	"	"	"	"	MAINScheme
	0509	0514						REJECTED
182	0515	0557	"	"	"	"	"	MAINScheme
189	0558	0632	"	"	"	"	"	MAINScheme
	0633	0634						REJECTED
	0635	0643	"	"	"	"	"	MAINScheme
194	0644	0708	"	"	"	"	"	MAINScheme
195	0709	0771	"	"	"	"	"	MAINScheme
225	0772	0831	"	"	"	"	"	MAINScheme
	0832	0857	"	"	"	"	WEST	MAINScheme
245	0858	0860	"	"	"	"	"	MAINScheme
	0861							REJECTED
	0862	0886	"	"	"	"	"	MAINScheme
246	0887	0925	"	"	"	"	"	MAINScheme
	0926	0952	"	"	"	"	EAST	MAINScheme
	0953	0991	"	"	"	"	WEST	MAINScheme
251	0992	1074	"	"	"	"	"	MAINScheme
266	1075	1160	"	"	"	"	"	MAINScheme
267	1161	1250	"	"	"	"	"	MAINScheme
				(54.)				

POSITION ABSTRACT

OPR - J217
 HSB 40-1-81
 H - 9954
 VESNO 1257

J. D.	FROM	TO	CTRL	S 1	M	S 2	PLOTTER SHEET	REMARKS
1982								
103	1251	1281	04	910	0	900	WEST	MAINScheme
105	1282	1373	"	"	"	"	"	MAINScheme
117	1374	1406						REJECTED
118	1407	1408						REJECTED
	1409	1439					"	MAINScheme
123	1440	1471	"	"	"	"	"	MAINScheme
124	1472	1487	"	"	"	"	"	MAINScheme
	1488	1489						REJECTED
	1490	1541					"	MAINScheme
137	1542	1609	"	"	"	"	"	MAINScheme
139	1610	1639	"	"	"	"	"	MAINScheme
	1640	1641						REJECTED
140	1642	1705	"	"	"	"	"	MAINScheme
147	<i>1726 duplicated</i> 1706	1749	"	"	"	"	"	MAINScheme
148	<i>1732 duplicated</i> 1750	1781	"	"	"	"	"	MAINScheme
159	<i>1770 duplicated</i> 1782	1815	"	"	"	"	"	MAINScheme
166	1816	1848						REJECTED
172	1849	1881	"	"	"	"	"	MAINScheme
174	1882	1951	"	"	"	"	"	MAINScheme
176	1952	1985						REJECTED
181	1986	2021	"	"	"	"	"	MAINScheme
188	2021	2078 (2021 Duplicated)			"	"	EAST	CROSSLINES
189	2079	2159	"	"	"	"	WEST	CROSSLINES
				(55)				✓

Replaces C&GS Form 567.
 TO BE CHARTED
 TO BE REVISED
 TO BE DELETED
 REPORTING UNIT: HFP-1
 STATE: FLORIDA
 LOCALITY: ENTRANCE TO PENSACOLA BAY
 DATE: 10/82

The following objects HAVE HAVE NOT been inspected from seaward to determine their value as landmarks.
 OPR PROJECT NO.: OPR-J217
 JOB NUMBER: HSB 40-3-81
 SURVEY NUMBER: H-9954 * See below
 DATUM: NORTH AMERICAN 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	LATITUDE		LONGITUDE		OFFICE	FIELD	CHARTS AFFECTED
		D.M. Meters	° /	D.M. Meters	° /			
LIGHT	Caucus Channel Range Front Lt. LL#1650 (Sig 118) (Caucus channel F. Rng Lt)	53.274	30 19	87 18	52.129		F-3-6-L 10-23-81	11378 11382 11384
LIGHT	Caucus Channel Range Rear Lt LL#1651 (Sig 116) (Caucus Channel R Rng Lt)	12.536	30 20	87 18	59.500		F-3-6-L 10-23-81	11378 11383 11384
LIGHT	Pensacola Light LL#1652 (Sig 114) (Pensacola Lighthouse Center)	45.346	30 20	87 18	29.205		F-6-V Triang Recov 10-19-81	11378 11383 11384
LIGHT	Fort Barrancas Range Front Light LL#1658 (Fort Barrancas F Rng Lt)	34.187	30 20	87 18	29.236		F-3-6-L 9-3-81	11378 11383 11384
LIGHT	Fort Barrancas Range Rear Light LL#1659	44.56	30 20	87 18	29.23		V VIS 12 15 81 Pos. from Chart Listing	11378 11382 11384
LIGHT	Fort McRee Leading Light LL#1661 (Sig 120)	30.907	30 20	87 18	46.774		F-3-6-L 2-27-81	11378 11382
LIGHT	Navy Range Front Light LL#1665 (Navy Front Rng Lt)	03.932	30 20	87 19	03.293		F-3-6-L 9-2-81	11378 11382
LIGHT	Navy Range Rear Light LL#1666 (Navy Rear Rng Lt)	04.313	30 20	87 19	09.058		F-3-6-L 9-2-81	11378 11382
	<i>Dep. 9 L-914 (12) EL-1483 (82)</i>							

* It is not clear from the hydrographer what was usable from the survey area.

NOAA FORM 76-40
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 U.S. DEPARTMENT OF COMMERCE
LANDMARKS FOR CHARTS

Replaces C&GS Form 567.

TO BE CHARTED
 TO BE REVISED
 TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office)
 HFP-1

STATE
 FLORIDA

LOCALITY
 ENTRANCE TO PENSACOLA BAY

DATE
 10/87

The following objects HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS.
 HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS.

OPR PROJECT NO. OPR-J217

JOB NUMBER HSB-30-1-81

SURVEY NUMBER H-9934

DATUM NORTH AMERICAN 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	LATITUDE		LONGITUDE		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED
		° /	'	° /	'	OFFICE	FIELD	
		D.M. Meters	//	D.M. Meters	//			
TANK	Pensacola Beach East Tank (Signal 102)	30 20	26.339	87 05	51.599		F-3-6-L 3/78 2-22-82	11378 11383
TANK	Pensacola Beach Tank (Signal 104)	30 19	55.438	87 08	29.041		F-3-6-L 3/78 2-22-82	11378 11383
TANK	Multi-leg Tank in Gulf Breeze, FL (Signal 106) (Gulf Breeze Tank)	30 21	35.305	87 10	56.109		F-3-6-L 10-19-81	11378 11383
AERO Rot W&G	USNAS Pensacola Sherman Field Aero Beacon. Rotating W & G Light atop steel Skeletal Tower	30 20	49.681	87 18	50.799		F-3-6-L 2-22-82	11369, 11378 11384
TOWER	Steel and Concrete Observation Tower on Fort Pickens National Park (Sig 110) (H-73-FL-80)	30 19	18.469	87 17	06.198		F-2-6-L	11378 11383 11384
TANK	Escambia County Tank (Signal 134)	30 19	08.571	87 25	32.464		F-3-6-L 10-20-81	11360 11382
TANK	Ono Island Tank (Signal 136)	30 17	42.155	87 29	07.651		F-3-6-L 10-20-81	11360 11382
RADOME	Spherical Radar Dome mounted on steel skeletal tower at USNAS Pensacola (Sherman Field Radar Tower)	30 20	48.536	87 18	52.944		F-3-6-L 10-2-81	11378 11383 11384
TANK	NAVY YARD SUPPLY TANK	30 21	48.807	87 16	24.844		F-3-6-L 2-22-82	11378 11382 11383
STACK	Brick Stack on USNAS Pensacola (Pensacola USN Air Sta Pwr Stk) (Sig 111)	30 20	47.316	87 16	06.799		V-VIS Triang Recov 12-15-81	11378 11382 11383

* PRESENTLY NOT CHARTED
 * It is not clear from the hydrographer what is usable from the survey area.
 26-1483 (82)
 26-1483 (82)

NOAA FORM 76-40
 (5-74)
 Replaces C&GS Form 567.

**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 U.S. DEPARTMENT OF COMMERCE
 LANDMARKS FOR CHARTS**

TO BE CHARTED
 TO BE REVISED
 TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office)
 HFP - 1

LOCALITY
 ENTRANCE TO
 PENSACOLA BAY

DATE
 10/82

ORIGINATING ACTIVITY
 HYDROGRAPHIC PARTY
 GEODETIC PARTY
 PHOTO FIELD PARTY
 COMPILATION ACTIVITY
 FINAL REVIEWER
 QUALITY CONTROL & REVIEW GRP.
 COAST PILOT BRANCH
 (See reverse for responsible personnel)

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	DATUM		POSITION		LONGITUDE // D.P. Meters	OFFICE	FIELD	CHARTS AFFECTED
		LATITUDE ° /	LONGITUDE ° /	METHOD AND DATE OF LOCATION (See instructions on reverse side)					
				OFFICE	FIELD				
OPR-J217	HSB 20-f-81	NORTH AMERICAN 1927		NORTH AMERICAN 1927					
TOWER	Skeletal Steel Pilot Lookout Tower (Sig 112)(Bar Pilots Lookout Tower)	30 20	87 17	47.650	87 17	21.236		F 6-V Triang Recov 10.23.81	11378 11382 11384
TANK	Six-legged Tank at Sherman Field on USNAS Pensacola (Sig 124)(Sherman Field Tank)	30 20	87 18	49.163	87 18	37.416		F 3.6-L 10.2.81	11378 11382
RADIO TOWER	East of Three Radio Towers	30 21	87 17	27.80	87 17	00.26		Existance Verified 12/15/81 Pos. From Chart 11383	11378 11382
RADIO TOWER	South of Three Radio Towers	30 21	87 17	24.00	87 17	01.91		List 6-19-81	"
RADIO TOWER	West of Three Radio Towers	30 21	87 17	27.25	87 17	04.87		"	"
TANK	Water Tank in Warrington area	30 23	87 17	12.05	87 17	21.54		"	"
TANK	Water Tank In Warrington Area (Warrington Water Tank)	30 23	87 16	08.714	87 16	46.945		Existance Verified. Triang Recov 6/19/81	11378 11382 11383
	<i>Copy of 6-914(13) & 6-1483(82)</i>								

* It is not clear from the hydrographic what is usable from the survey area.

APPROVAL SHEET
SURVEY H-9954 (HSB-40-1-81)

The hydrographic records transmitted with this report are complete and adequate to supersede prior surveys for charting with no additional field work recommended.

Direct daily supervision was not given by me during the field work.

Approved and forwarded,



George W. Jamerson
Lt. Cdr. NOAA
Chief, Hydrographic Surveys Branch

HYDROGRAPHIC SURVEY STATISTICS

H-9954

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

RECORD DESCRIPTION		AMOUNT		RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		1		SMOOTH OVERLAYS: POS. #1, #2, ARC, EXCESS		3	
DESCRIPTIVE REPORT		1		FIELD SHEETS AND OTHER OVERLAYS		8	
DESCRIPTION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/SOURCE DOCUMENTS		
ACCORDIAN FILES							
ENVELOPES							
VOLUMES							
CAMERS	FOTOGRAMS 3-RAW DATA						
BOXES				Smooth Plots 1-Misc. data			
SHORELINE DATA							
SHORELINE MAPS (List): None							
PHOTOBATHYMETRIC MAPS (List): None							
NOTES TO THE HYDROGRAPHER (List): None							
SPECIAL REPORTS (List):							
NAUTICAL CHARTS (List):							
OFFICE PROCESSING ACTIVITIES							
<i>The following statistics will be submitted with the cartographer's report on the survey</i>							
PROCESSING ACTIVITY				AMOUNTS			
				VERIFICATION	EVALUATION	TOTALS	
POSITIONS ON SHEET						2279	
POSITIONS REVISED				0	0	0	
SOUNDINGS REVISED				21	2	23	
CONTROL STATIONS REVISED				0	0	0	
				TIME - HOURS			
				VERIFICATION	EVALUATION	TOTALS	
PRE-PROCESSING EXAMINATION				16	18	34	
VERIFICATION OF CONTROL				25	0	25	
VERIFICATION OF POSITIONS				114	0	114	
VERIFICATION OF SOUNDINGS				133	0	133	
VERIFICATION OF JUNCTIONS				4	2	6	
APPLICATION OF PHOTOBATHYMETRY				0	0	0	
SHORELINE APPLICATION/VERIFICATION				0	0	0	
COMPILATION OF SMOOTH SHEET				20	0	20	
COMPARISON WITH PRIOR SURVEYS AND CHARTS				0	6	6	
EVALUATION OF SIDESCAN SONAR RECORDS				0	0	0	
EVALUATION OF WIRE DRAGS AND SWEEPS				0	0	0	
EVALUATION REPORT				0	10	10	
OTHER: DIGITIZING, MISC. E & A				8	2	10	
TOTALS				320	38	358	
Pre-processing Examination by R.R. Hill and C.D. Meador				Beginning Date 12/15/82	Ending Date 1/5/83		
Verification of Field Data by M.J. Stewart, R.H. Whitfield, and R.R. Hill				Time (Hours) 296	Ending Date 8/9/83		
Verification Check by G.F. Trefethen, L.G. Cram, and C.D. Meador				Time (Hours) 49	Ending Date 9/10/83		
Evaluation and Analysis by C.D. Meador				Time (Hours) 20	Ending Date 9/13/83		
Inspection by K.Wm. Kieninger and R.D. Sanocki				Time (Hours) 6	Ending Date 9/13/83		

ATLANTIC MARINE CENTER
EVALUATION REPORT

REGISTRY NO.: H-9954

FIELD NO.: HSB-40-1-81

Florida, Gulf of Mexico, South of Pensacola Bay

SURVEYED: June 2 through September 24, 1981 and April 13 through September 1, 1982

SCALE: 1:40,000

Project NO.: OPR-J217-HSB-81

SOUNDINGS: Raytheon DE723D
Fathometer

CONTROL: RAYDIST
(Range/Range)

Chief of Party..... G.W. Jamerson
Surveyed by A.A. Armstrong
..... S.P. DeBow
..... F.E. Ohlinger
..... R.A. Covey (CHS)
..... P.M. Thomas (UKRN)
Automated Plot by Xynetics 1201 Plotter (AMC)

1. INTRODUCTION

- a. No unusual problems were encountered during verification.
- b. Notes in the Descriptive Report were made in red during verification.

2. CONTROL AND SHORELINE

a. The control is adequately described in sections F and G of the Descriptive Report. However, it is unclear in section G on what date the equipment exchange took place for station 900.

- b. This is an offshore survey and no shoreline is shown on the present survey.

3. HYDROGRAPHY

- a. Crosslines on this survey agree with the main scheme sounding lines within the limits prescribed by section 6.3.4.3 of the Hydrographic Manual.
- b. All standard depth curves could be completely drawn. Brown curves were added to better portray the bottom topography.
- c. This survey adequately delineates the bottom configuration and the least depths.

4. CONDITION OF SURVEY

The smooth sheet and accompanying overlays, hydrographic records and reports comply with the requirements of the Hydrographic Manual except as follows:

- a. On some fathogram traces (JD's 166-169), where the sea conditions caused a jagged profile, a penciled curve was drawn along the trace to indicate how the bottom profile would look if the jagged up and down sea state profile was averaged out. Original fathogram records should not be marked in this manner.
- b. ~~Dynamic draft correctors were applied using the corrector tapes rather than the TC/TI tape as required by section V of AMC OPORDER 77.~~
- c. Only 14 of a possible 78 daily bar checks were taken during the course of this survey. However, barchecks taken for other surveys run concurrently with the present survey provided sufficient data for instrument error determination.
- d. The copies of surveys H-6554 and H-6555 used for the comparison with prior surveys were not at the proper scale of 1:40,000. The copy of survey H-6554 was at a scale of 1:44,360 and the one for survey H-6555 was at 1:35,200. This disparity in scales caused erroneous conclusions to be made by the field about the agreement between the present and prior surveys. The field should insure that the proper reference material is available for each survey and the copies being provided by NOS, Headquarters, Rockville, Md. should be checked before shipment for the field units.

5. JUNCTIONS

H-9798 (1979) to the east

H-9943 (1981) to the northeast

H-9971 (1981) to the north

H-10001 (1982) to the southwest

H-10041 (1982-83) to the northwest

H-10053 (1982-83) to the west

The smooth sheet for survey H-9798 is archived at Headquarters and a standard junction was not made. The comparison between a copy of survey H-9798 and the present survey shows excellent agreement in the junctional area and the junctional curves can be completed.

Excellent junctions were made with surveys H-9943 and H-9971. Depths in the junctional areas are such that no standard or supplemental depth curves are required.

An excellent junction was made with survey H-10001 and the junctional curves are complete and need no further consideration.

The junctions with surveys H-10041 and H-10053 will be discussed in their Evaluation Reports.

There are no contemporary junctional surveys to the south of the present survey. The charted depths on Chart 11360 and the soundings along the southern limits of the present survey are in harmony.

6. COMPARISON WITH PRIOR SURVEYS

H-6554 (1940) 1:40,000

H-6555 (1940) 1:40,000

H-6656 (1940) 1:80,000

Soundings on these prior surveys are generally within plus or minus 5 feet of present survey depths. The locations of deeps and highs show excellent agreement between the prior surveys and the present survey. There is better delineation of all features on the present survey because of its greater sounding density. All indications show that this is an extremely stable bottom area and the differences between prior and present survey depths can be attributed to the less accurate sounding methods used in the past.

The present survey is adequate to supersede these prior surveys in the common area.

7. COMPARISON WITH CHART NO. 11360 (25th Edition, February 21, 1981 and 26th Edition, January 30, 1982)

a. Hydrography

Except for one sounding, all of the charted hydrography originates with the previously discussed prior surveys and is adequately discussed under that comparison. The exception is a 10-fathom sounding, shown as an unnumbered full investigation item on the Presurvey Review for OPR-J217, charted in Latitude $30^{\circ}04.5'$, Longitude $87^{\circ}27.3'$. This sounding originates from a 61-foot depth on survey H-4139 (1919-20) which was brought forward to survey H-6554 (1940). Since the 64-foot soundings found in the area on the present survey would chart as 10 fathoms, it is recommended that the present survey supersede this older survey sounding for charting purposes.

Attention is directed to the following:

Two Presurvey Review Information Items (Numbers 166 and 333) fall within the area of the area of the present survey. The Descriptive Report (section L) addresses these items.

Except where noted above, the present survey is adequate to supersede the charted hydrography in the common area.

b. Aids to Navigation

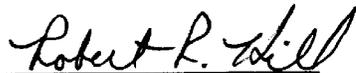
There are no fixed or floating aids to navigation within the area covered by the present survey.

8. COMPLIANCE WITH INSTRUCTIONS

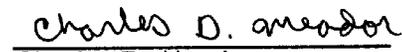
This survey adequately complies with the Project Instructions. It should be noted that the Project Instructions were issued one and a half months after the start of the field work.

9. ADDITIONAL FIELD WORK

This is an excellent basic survey. Future wire-drag or side-scan sonar work should be considered to verify or disprove Presurvey Review Information Items No. 166 and 333.


Robert R. Hill
Cartographic Technician
Verification of Field Data


Guy F. Tréthen
Senior Cartographic Technician
Verification Check


Charles D. Meador
Cartographer
Evaluation and Analysis

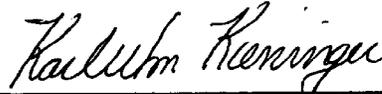
INSPECTION REPORT
H-9954

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproof of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet during survey processing have been entered in the magnetic tape record for this survey. Final control, position, and sounding printouts of the survey have been made. The survey complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected

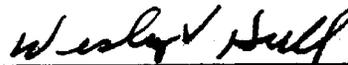


R. D. Sanocki
Chief, Verification Section
Hydrographic Surveys Branch



Karl Wm. Kieninger, CDR, NOAA
Chief, Hydrographic Surveys Branch

Approved 14 September 1983

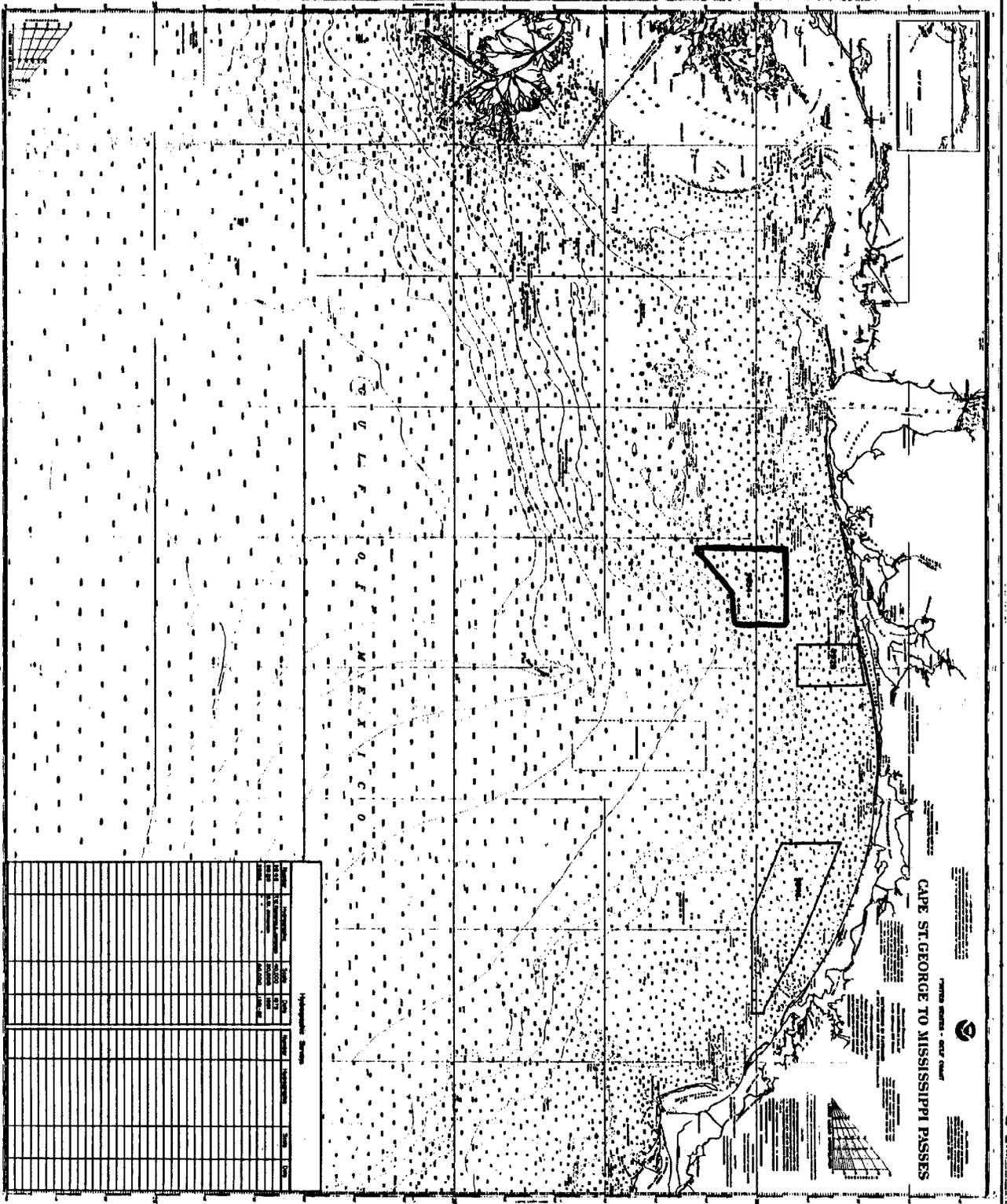


Wesley V. Hull, RADM, NOAA
Director, Atlantic Marine Center

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115-3 (1-8-81)

115-3 (1-8-81)



Hydrographic Sheet

DATE	NO. OF SOUNDINGS	NO. OF OBSERVATIONS	NO. OF FIXES	NO. OF COURSES	NO. OF FIXES				
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115-3 (1-8-81)

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