

9804

Diag. Cht. No. 1265-2

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. HSB-20-1-79
Office No..... H-9804

LOCALITY

State Florida
General Locality Gulf of Mexico
Locality Offshore of Santa Rosa
..... Island

1979

CHIEF OF PARTY
LCDR. Thomas W. Richards

LIBRARY & ARCHIVES

DATE August 29, 1980

9804

Area 4
Cht

11360
11006
11382

H-9804

HYDROGRAPHIC TITLE SHEET

HSB 20-1-79

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

State Florida

General locality ~~Northwest Coast~~ Gulf of Mexico

Locality ~~Approaches To Pensacola Bay~~ Offshore of Santa Rosa Island

Scale 1:20000

Date of survey 1 Feb, 1979 - 8 Aug 1979

Instructions dated Sept. 9. 1977

Project No. OPR-J217-HFP-78

Vessel NOAA LAUNCH 1257

Chief of party LCDR, Thomas W. Richards, NOAA.

Surveyed by LCDR, Michael F. Kolesar, NOAA.

Soundings taken by echo sounder, ~~XXXXXXXXXX~~

Graphic record scaled by MK, GL, GM, GH

Graphic record checked by MK

Protracted by _____

~~Field Sheet PDP/OP~~
Automated plot by AMC XYNINETICS 1200

Verified By. D.V. Mason 8/1/80

Soundings penciled by _____

Soundings in ~~XXXXXX~~ feet at ~~XXXXXXXXXX~~ Gulf Coast Low Water Datum

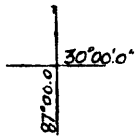
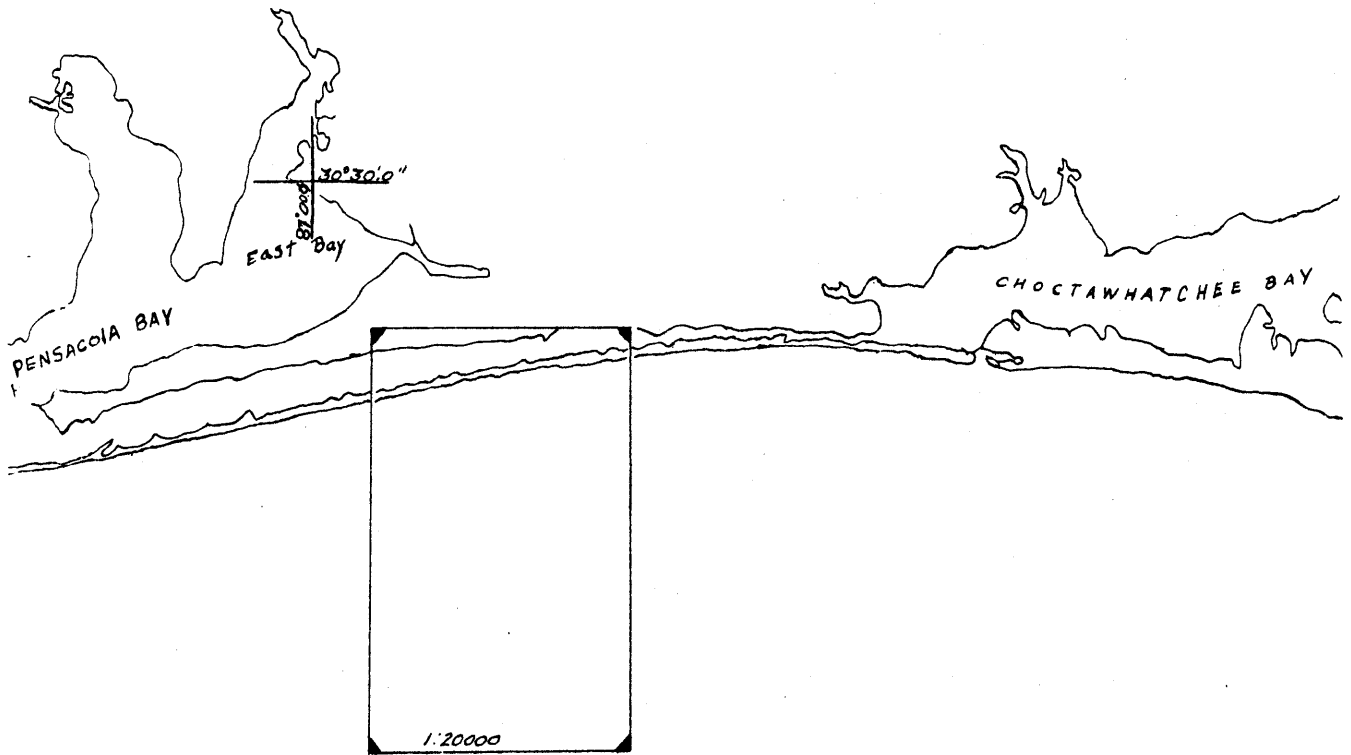
REMARKS: MK- Michael Kolesar

GL- G. Lloyd

GM- G. Merrill

GH- G. Hendrix

Applied to stds 1/27/81
CAE



APPROACHES TO PENSACOLA BAY

CHART : 11382
OPR-J217-HFP-78
HSB-20-1-79
H-9804

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY
HSB 20-1-79 (H-9804)

Scale: 1:20,000

Chief of Party: Thomas W. Richards, LCDR, NOAA
Officer-in-Charge: Michael F. Kolesar, LCDR, NOAA
Hydrographic Surveys Branch, Hydrographic Field Party #1
Launch 1257

A. PROJECT

This survey was accomplished under Project Instructions OPR-J217-HFP-78, Gulf of Mexico, dated September 9, 1977, and amended by:

Change No. 1	9-15-77
Change No. 2	12-21-77
Change No. 3	12-21-77
Change No. 4	6-15-78
Change No. 5	6-21-78
Change No. 6	12-04-78
Change No. 7	12-08-78
Change No. 8	12-19-78
Change No. 9	1-24-79
Change No. 10	2-08-79
Change No. 11	3-07-79
Change No. 12	8-24-79

B. AREA

The area surveyed was south of Santa Rosa Island, Florida from approximately the 3 fathom curve seaward to approximately the 18 fathom curve and bounded by the following points:

1. Latitude $30^{\circ}24.5^{\prime}$ ³⁰	Longitude $86^{\circ}46.2^{\prime}$ ⁷⁰
2. Latitude $30^{\circ}24.5^{\prime}$ ²⁹	Longitude $86^{\circ}57.4^{\prime}$ ⁷¹
3. Latitude $30^{\circ}08.4^{\prime}$ ²⁹	Longitude $86^{\circ}46.1^{\prime}$ ⁷⁰
4. Latitude $30^{\circ}08.4^{\prime}$ ²⁹	Longitude $86^{\circ}57.4^{\prime}$ ⁷¹

The survey was conducted from February 1, 1979 to August 8, 1979.

C. SOUNDING VESSEL

All sounding on this survey was accomplished by NOAA Launch 1257 (VESNO 1257). All survey records are annotated with the vessel number.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

1. Equipment.

The following Raytheon Fathometer equipment was used during the survey:

Recorder	Model #723-40 Serial #2042
ECU	Model #723-42 Serial #1910
DDM	Model #723-41 Serial #2772

No unusual problems were encountered with the sounding equipment.

2. Settlement and Squat.

Settlement and squat were run on January 3, 1979 and April 16, 1979 after modifications to the trim tabs. Results are shown in the appendix. All hydro through day 005 was run at 1875 rpm. All hydro from day 110 on was run at 1925 rpm. In both cases settlement and squat correction was 0. The difference in speed was due to improved plane angle of the launch. All settlement and squat correctors are incorporated into the TRA slot on the corrector tapes.

3. Velocity Corrections.

Velocity corrections were determined by barchecks and TDC casts. Barchecks and TDC casts from this survey and surveys HSB 40-1-78 (H-9786), HSB 20-6-78 (H-9797), HSB 20-8-78 (H-9803), and HSB 40-2-78 (H-9798) were combined as the sheets were adjacent and run concurrently.

Field sheets were plotted using approximately velocity curves developed by moving the TDC curve to extend the barcheck curves. Final velocity curves and tables were constructed from the TDC curves. Instrument Correction is shown on the TRA abstract.

The following TDC was used:

Manufacturer: Martek Instruments
Model number: 167-10
Serial number: 130

Four velocity tables will be used for the smooth plot:

J.D. 346 to 066	Velocity Table #9
J.D. 108 ⁰⁹⁵ to 121	Velocity Table #10
J.D. 135 ⁴ to 197 ⁸	Velocity Table #11
J.D. 219 ¹ to 234 ⁵	Velocity Table #12

Graphs and tables are shown in the appendix.

E. HYDROGRAPHIC SHEETS

The field sheets were prepared on a PDP8/E computer with a DP-3-5 plotter. A work sheet, smooth sheet, and overlay sheet are included with the survey. Mainscheme hydrography and crosslines are plotted on the smooth sheet while developments, holidays, bottom samples, prior survey soundings, junction soundings, charted soundings, ~~pre-survey review items~~ and aids to navigation are shown on the overlay sheet.

Verification and smooth plotting will be done at the Atlantic Marine Center, Norfolk, Virginia. Projection and control parameters are in the Appendix.

F. CONTROL STATIONS

Raydist stations were located at the following geodetic positions:

Left (Green) Station *1955*
Name: Clausen R.M. 3 (Signal #903)
Location: Moreno Point (Destin, Florida)
Position: Latitude $30^{\circ}23'03.963''$
Longitude $86^{\circ}26'50.175''$

Right (Red) Station
Name: H-1-FL-77A (Signal #901)
Location: Cape San Blas
Position: Latitude $29^{\circ}40'29.369''$
Longitude $85^{\circ}21'47.113''$

Field Position
Station H-1-FL-77A was established by field party personnel. Station Clausen R.M. 3 is a reference mark established by USC and GS. *1955*

G. HYDROGRAPHIC POSITION CONTROL

1. Equipment.

Control for this survey was a Hasting-Raydist DR-S system operating in the range-range mode.

Shore station equipment:

Left Station: Green Raydist Model AA-60
S/N 68

Right Station: Red Raydist Model AA-60
S/N 84

Launch equipment:

J.D. 032-065, 183-220

Navigator Model ZA 67B
S/N 67

Ant. Loading Model QB 52
Coil S/N 81

Transmitter Model TA 96
S/N 37

J.D. 110-145

Navigator (Third Party) Model ZA 67B
S/N 110

Transmitter (Third Party) Model TA 96
S/N 86

The system frequency was 3306.40 ~~KHz~~ Shore station antennas were loaded 100 foot aluminum towers. The launch antenna was a 35 foot whip located over the fathometer transducer.

2. Calibrations.

Calibrations consisted of a visual three point sextant fix with a check angle. Calibrations were taken in the morning and evening whenever possible. A strip chart recorder was monitored between calibrations to check lane gains or losses. Strip charts from this survey are included with Survey H-9798 which was run concurrently.

H. SHORELINE

There was no shoreline delineated on this survey.

I. CROSSLINES

Crosslines constituted 8.9% of mainscheme hydrography. Crossline agreement was very good, 0 to 1 foot.

J. JUNCTIONS

This survey junctions with the following surveys:

1. H-9803 to the east.
2. H-9798 to the south.
3. ~~H-6687 to the west.~~

Junction with these contemporary surveys was excellent within 0-1 feet. ~~Survey H-6687 is considered a prior survey and is discussed below.~~

K. COMPARISON WITH PRIOR SURVEYS

This survey was previously covered by the following surveys:

1. H-6687 (1941)
2. H-5033 (1930)
3. H-4604 (1926-27)
4. H-5115 (1930-31)

Comparison with these surveys is at best fair. Position discrepancies of 200-300 meters probably results from the use of survey buoys on these old surveys. The position discrepancies are apparent in areas of rough bottom.

L. COMPARISON WITH CHART

1. General.

This survey is covered by the following charts:

1. Chart 11382, edition 23, 11-19-77 .
2. Chart 11360, edition 22, 4-22-78.

Agreement with the chart is good with differences generally 2 feet or less except where noted below.

2. Pre-survey Review Items.

There were no pre-survey review items on this survey.

3. Miscellaneous Developments:

The following developments were run for various reasons:

Development #1 ✓

Latitude $30^{\circ}20.60'$, Longitude $86^{\circ}47.9'$

This is the center of an isolated shoal with depths to 64 feet outside the 11 fathom curve. 100 meter spacing was run. Nothing shoaler was found. *concur* ✓

Recommendation: Chart the seaward 64 foot sounding. ✓

Development #2 ✓

Latitude $30^{\circ}20.10^{\prime}$, Longitude $86^{\circ}47.8^{\prime}$

This is the shoalest point, ⁴64 feet, on an isolated 11 fathom shoal. 100 meter spacing was run. Nothing shoaler was found. This development abuts development #15 on an adjacent field plotter sheet. Development # 15 displays shoaler soundings.

Recommendation: See Development #15 below. *concur* ✓
61ft depths on #15

Development #3 ✓

Latitude $30^{\circ}20.80^{\prime}$, Longitude $86^{\circ}49.62^{\prime}$

A charted 62 foot sounding which originated from H-5115 is shown at this position. Surveyed depths showed 65-66 feet. 100 meter spacing was run. Least depth found was 64 feet 0.1 miles southwest of the charted sounding. *concur*
63ft is high point of this rise.

Recommendation: Chart soundings from the present survey. *concur* ✓

Development #4 ✓

Latitude $30^{\circ}20.65^{\prime}$ Longitude $86^{\circ}51.50^{\prime}$

This is the center of a detached 11 fathom shoal with depths to 64 feet. 100 meter spacing was run. Least depth found was ~~63~~ ⁶⁴ feet. *concur* ✓

Recommendation: Chart ~~the seaward 63 foot sounding~~ ^{depths as shown on the present survey.}
~~as shown on the field sheet.~~

Development #5 ✓

Latitude $30^{\circ}21.00^{\prime}$ Longitude $86^{\circ}54.30^{\prime}$
(61ft)

This is the center of a detached 10 fathom shoal. 100 meter spacing was run. Nothing shoaler was found. *concur* ✓

Smooth Recommendation: Chart the shoal as shown on the ~~field~~ sheet. ✓

Development #6 ✓

Latitude 30°20.65' Longitude 86°55.15'

A charted 59 foot sounding which originates from H-4604 is shown at this position. Surveyed depths showed 61 feet. 100 meter spacing was run. Least depth found was 60 feet. *Concur*

Recommendation: ~~Chart the shoal as shown on the field sheet.~~ *Plot the seaward 61-foot sounding. ✓*

Development #7 ✓

Latitude 30°22.63' Longitude 86°48.68'

A spike was found at this location between positions 26 and 27. Twenty five meter spacing was run. Fish were found on the trace in the same vicinity. *Concur*

Recommendations: Disregard. *Concur*

Development #8 ✓ ✓

Latitude 30°23.05' Longitude 86°47.02'

A spike was found at this location between positions 91 and 92. 25 meter spacing was run. Nothing was found. ✓

Recommendation: Disregard. *Concur*

Development #9 ✓

Latitude 30°19.85' Longitude 86°54.80'

A shoal with depths to ~~61~~⁶² feet was found at this location. 100 meter spacing was run. Nothing shoaler was found. *Concur*

Recommendation: Chart the ~~61~~⁶² foot sounding. ✓ *Seaward*

Development #10 ✓

Latitude 30°19.25' Longitude 86°54.15'

An isolated 66 foot shoal was found at this location. 100 meter spacing was run. A least depth of ~~65~~⁶⁶ feet was found at the above position. *Concur* ✓

Recommendation: Chart the ~~65~~⁶⁶ foot sounding. ✓

✓
9P5

Development #11 ✓

Latitude $30^{\circ}18.65'$ Longitude $86^{\circ}53.70'$

An isolated 12 fathom shoal with depths to 71 feet was found at this location. The area was split to 100 meters. Nothing shoaler was found. *Concur*

Recommendation: Chart soundings from present survey. *concur*

Development #12 ✓

Latitude $30^{\circ}19.50'$ Longitude $86^{\circ}53.30'$

An isolated 11 fathom shoal was found in this location. 100 meter spacing was run. Least depth found was 656 feet. *Concur*

Recommendation: Chart the seaward 656 foot sounding. ✓

Development #13 ✓

Latitude $30^{\circ}19.23'$ Longitude $86^{\circ}49.52'$ ✓

A 62 foot sounding, the shallow point on an isolated 11 fathom shoal was found at this location. 100 meter spacing was run. Nothing shoaler was found. A 62 foot charted sounding is shown 0.3 miles east of the surveyed soundings. *Concur*

Recommendation: Chart the 62 foot soundings from this survey. ✓

Development #14 ✓

Latitude $30^{\circ}19.76'$ Longitude $86^{\circ}49.18'$

This is another shallow area on the 11 fathom shoal listed above. 100 meter spacing was run. A least depth of 63 feet was found. *Concur*

Recommendation: Chart the 63 foot sounding. ✓

Development #15 ✓

Latitude $30^{\circ}19.60'$ Longitude $86^{\circ}47.68'$

A shoal with depths to 61 feet was found at this location. 100 meter spacing was run. Nothing shoaler was found. *Concur*

Recommendation: Chart the seaward 61 foot sounding. ✓

Development #16 ✓

Latitude 30°⁵⁷⁶17.96' Longitude 86°⁴⁵47.75'

A 75 foot sounding from H-5115 is shown at this location. 100 meter spacing was run. Least depth determined was 78 feet. A comparison of the hydro line on H-5115 shows that none of the soundings on the line match up with this survey. In addition the prior survey sounding from H-6087 which lies 0.11 miles southeast appears to have been transferred from H-5115 to H-6087. The verifier should plot both prior survey lines. *Concur*

Recommendation: Disregard the prior surveys. Chart soundings from ~~this survey as required.~~ *the present survey.*

Development #17 ✓

Latitude 30°18.35' Longitude 86°50.75'

This is a shallow area on a large detached 11 fathom shoal. 100 meter spacing was run. Least depth found was ~~61~~ ⁶² feet. *Concur*

Recommendation: Chart the ~~61~~ ⁶² foot sounding at ~~the above position.~~ *as shown on the present survey.*

Development #18 ✓

Latitude 30°17.80' Longitude 86°51.68'

This is another shallow area on the shoal mentioned in Development #17. 100 meter spacing was run. Least depth found was 62 feet. *Concur* ^{seaward}

Recommendation: Chart the ⁶² foot sounding. ✓

Development #19 ✓

Latitude 30°17.59' Longitude 86°51.14'

This is another shallow area on the shoal mentioned in Development #17. 100 meter spacing was run. Least depth found was 62 feet. *Concur*

Recommendation: Chart the 62 foot sounding. ✓

Development #20 ✓

Latitude 30°17.00' Longitude 86°52.20'

This is an isolated 66 foot shoal. 100 meter spacing was run. Least depth found was 66 feet. *concur*

Recommendation: Chart any of the ^{65 ✓ 65 ✓}66 foot soundings on the shoal. *concur*

Development #21 ✓

Latitude 30°16.75' Longitude 86°53.00'

This is the shallowest point on an isolated 12 fathom shoal. 100 meter spacing was run. Least depth found was 71 feet. *concur*

Recommendation: Chart the ^{seaward}71 foot sounding. ✓

Development #22 ✓

Latitude 30°16.22' Longitude 86°53.50'

Depths of 69 feet in surrounding water of 72-73 feet were found in this area. 100 meter spacing was run. Least depth ^{ere}found was 68 feet. *concur* ✓

Recommendation: Chart the 68 foot sounding. ✓

Development #23 ✓

Latitude 30°15.20' Longitude 80°53.30'

Two isolated twelve fathom shoals were found in this area. 100 meter spacing was run. Least depths of 70 of 71 feet were found on ~~both~~ shoals. *concur*

Recommendation: Chart ^{as shown on the present survey} ~~the seaward 71 foot~~ sounding. ✓

Development #24 ✓

Latitude 30°15.15' Longitude 86°51.50'

This is the shoalest point on a detached 12 fathom shoal. 100 meter spacing was run. Least depth found was 66 feet. *concur* ✓

Recommendation: Chart the 66 foot sounding. ✓

Development #25 ✓

Latitude 30°15.50' Longitude 86°52.70'

✓
705

A detached 11 fathom shoal was found at this location. 100 meter spacing was run. Least depth found was 65 feet. *Concur* ✓

Recommendation: Chart the ^{seaward} 65 foot sounding ✓

Development #26 ✓

Latitude $30^{\circ}17.15'$ Longitude $86^{\circ}51.30'$

A charted 70 foot sounding and prior 69 foot sounding from H-5115 are shown in this vicinity. 100 meter spacing was run. Least depth found was 71 feet. *Concur*

Recommendation: Chart soundings from this survey. *concur*

Development #27 ✓

Latitude $30^{\circ}15.80'$ Longitude $86^{\circ}50.65'$

An isolated 11 fathom shoal was found at this location. 100 meter spacing was run. Least depth found was 65 feet. *Concur* ✓

Recommendation: Chart the 65 foot sounding. *concur*

Development #28 ✓

Latitude $30^{\circ}15.70'$ Longitude $86^{\circ}49.36'$

A prior survey sounding of 68 feet from H-5115 is shown at this position. 100 meter spacing was run. Least depth found was 69 feet. *Concur* ✓

Recommendation: Shoaler soundings exist east of the area and they are more significant. This 69 foot depth need not be charted ✓

Development #29 ✓

Latitude $30^{\circ}15.70'$ Longitude $86^{\circ}48.03'$

This the southeast end of a detached 12 fathom shoal. 100 meter spacing was run. Least depth found was 69 feet. *Concur* ✓
70 ✓

Recommendation: Chart the ⁷⁰ ~~69~~ foot sounding. ✓

Development #30 ✓

Latitude $30^{\circ}16.25'$ Longitude $86^{\circ}48.40'$

✓ 7PS

This is the northwest end of the shoal mentioned in Development #29. 100 meter spacing was run. Least depth found was 70 feet. *Common* ✓

Recommendation: Chart the 70 foot sounding. ✓

Development #31 ✓

Latitude $30^{\circ}20.06'$ Longitude $86^{\circ}49.11'$

~~An isolated ⁶⁷60 foot sounding^{ere} was found at this location. 100 meter spacing was run. Nothing shoaler was found. *Common*~~

Recommendation: Chart the ~~60~~ ⁶⁷foot sounding. *area as shown on the present survey.*
^{Two} 63 foot soundings exist .25 miles south (See Development #14). 67 ft sdgs. are part of the shoal with least depths of 63 ft.

Development #32 ✓

Latitude $30^{\circ}20.06'$ Longitude $86^{\circ}52.15'$

~~An isolated ⁶⁸66 foot sounding^{ere} was found at this location. 100 meter spacing was run. Nothing shoaler was found. *Common*~~

Recommendation: Chart the ~~66~~ ⁶⁸foot sounding. ✓

Development #33 ✓

Latitude $30^{\circ}20.06'$ Longitude $86^{\circ}53.28'$

This was originally thought to be an isolated 11 fathom shoal with depths to ~~64~~ ⁶⁵feet. 100 meter spacing was run. The shoal was found to be connected to the area within 11 the fathom curve. *Common*

Recommendation: Chart the ~~64~~ ⁶⁵foot sounding. ✓

Development #34 ✓

Latitude $30^{\circ}20.10'$ Longitude $86^{\circ}55.30'$

Disregard. ✓ Small rise here to 66 ft depths

Development #35 ✓

Latitude $30^{\circ}15.20'$ Longitude $86^{\circ}55.70'$

✓7PS

A detached 12 fathom shoal was found at this location. 100 meter spacing was run. Least depth found was 70 feet. *Concur*

Recommendation: Chart the seaward 70 foot sounding. ✓✓

Development #36 ✓

Latitude $30^{\circ}14.75'$ Longitude $86^{\circ}54.40'$, $86^{\circ}54.60'$

Several
~~Two~~ 69 foot soundings on an isolated 12 fathom shoal were found at this location. 100 meter spacing was run. Nothing shoaler was found. *Concur*

Recommendation: Chart either of the 69 foot soundings (See Development #41). ✓

Development #37 ✓

Latitude $30^{\circ}16.40'$ Longitude $86^{\circ}47.18'$

This is a detached 12 fathom shoal. 100 meter spacing was run. Least depth found was 67 feet. *Concur*

Recommendation: Chart the 67 foot soundings ✓

Development #38 ✓

Latitude $30^{\circ}17.95'$ Longitude $86^{\circ}48.70'$

This is the end of a 12 fathom finger off the main depth curve. 100 meter spacing was run. Least depth found was 70 feet. *Concur*

Recommendation: Chart the 70-foot sounding. ✓

Development #39 ✓

Latitude $30^{\circ}19.23'$ Longitude $86^{\circ}48.87'$

in vicinity
An isolated 66 foot sounding was found at this location. 100 meter spacing was run. Nothing shoaler was found. *Concur*

Recommendation: Chart shoaler soundings which lie just west of the area. (62 ft sdgs - west)

Development #40 ✓

Latitude $30^{\circ}18.40'$ Longitude $86^{\circ}52.45'$

✓
7PS

^{Some}
~~Numerous~~ 71 and 72 foot soundings with surrounding depths of 75 to 85⁴ feet were found in this area. 100 meter spacing was run. Nothing shoaler was found. *Concur*

Recommendation: Chart the seaward 71 foot soundings ✓

Development #41 ✓

Latitude 30°14.50' Longitude 86°54.30'

This is a continuation of Development #36. Numerous least depths of 69 feet were found. *Concur* ✓

Recommendation: Chart the seaward 69 foot sounding ✓

Development #42 ✓

Latitude 30°14.23' Longitude 86°51.63'

An isolated 72[✓] foot sounding was found at this position. 100 meter spacing was run. Nothing shoaler was found. *Concur* ✓

Recommendation: Chart the 72 foot shoal. ✓

Development #43 ✓

Latitude 30°14.40' Longitude 86°49.30'

An isolated 72^{sdq,} foot ~~shoal~~ was found at this location. 100 meter spacing was run. ~~Nothing shoaler was found. *Concur*~~

Recommendation: Chart the seaward ~~72 foot soundings.~~ *area as shown on the present survey.* ✓

M. ADEQUACY OF SURVEY.

This survey is adequate to supersede prior surveys for charting. *Concur* ✓ ✓ JPS

N. AIDS TO NAVIGATION.

There are no aids to navigation within the survey area. ✓

O. STATISTICS

Number of positions	2499
Nautical miles of sounding line	1010.3
Nautical miles of crossline	90.1
Nautical miles of development	47.3
Total miles of hydrography	1147.7

Number of bottom samples	92
Number of barchecks	14
Number of TDC casts	5

P. MISCELLANEOUS

1. Lines were run parallel to shore to better intersect the contours. *They don't intersect contours, they are parallel to the 30 ft. depth curve.*
2. The significant item on this survey is the extremely irregular bottom seaward of the 10 fathom curve. ✓

Q. RECOMMENDATIONS

The 15 fathom curve has been deleted on Chart 11382. It is recommended that it be replaced. ✓

R. AUTOMATED DATA PROCESSING

The following computer programs were used in processing data for this survey.

Program	Program Name	Version Date
RK 111	R/R Real Time Plot	1-30-76
RK 211	R/R Non-Real Time Plot	4-18-75
RD 201	Grid, Signal and Lattice Plot	9-23-77
RK 300	Utility Computations	2-10-76
PM 360	Electronic Corrector Abstract	2-02-76
AM 500	Predicted Tide Generator	11-10-72
AM 602	Elinore	5-21-75
RK 530	Velocity Corrections Computations	5-10-76
RK 561	H/R Geodetic Calibration	2-19-75

S. REFERENCE TO REPORTS

Horizontal Control Report OPR-J217; AMC-HSB-HFPI-OCT 1978.

Respectfully submitted,



Michael F. Kolesar, LCDR, NOAA
Officer-in-Charge, NOAA Launch 1257

GEOGRAPHIC NAMES

H-9804

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
	ON CHART NO.	ON PREVIOUS SURVEY NO.	ON U.S. QUADRANGLE MAPS	FROM LOCAL INFORMATION	ON LOCAL MAPS	P.O. GUIDE OR MAP	RAND McNALLY ATLAS	U.S. LIGHT LIST			
Santa Rosa Island											1
Lower Pritchard Long Pt.											2
Upper Pritchard Long Pt.											3
Wynne Haven Beach											4
FLORIDA											5
NAVARRE BEACH (topo name)											6
GULF OF MEXICO											7
											8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25

Approved:

Chas. B. Harrington

Chief Geographer - C3x5

24 Sept. 1980

(23.)

ABSTRACT OF BARCHECKS

JULIAN DAY	DEPTH									
	10	15	20	25	30	35	40	45	50	
346		.4	.5	.6	.8	.9	1.1			
015			.2	.5	.6	.8	.9			
017			.1	.6	.7	.7	.9			#9
029		.3	.4	.5	.7	.7	.7			
032		.2	.3	.4	.6	.6	.6			
044		.1	.3	.4	.6	.7	.9			
058		.3	.5	.6	.6	.7	.9			
AVG.		.3	.3	.5	.6	.7	.8			
108		.1	.4	.7	.9	1.1	1.3			#10
135		.2	.4	.7	.9	1.0	1.4			
169		.3	.4	.6	.9	1.1	1.2			
191		.3	.4	.8	.8	1.3				
AVG.		.3	.4	.7	.9	1.1	1.3			#11
219		.4	.8	.8	1.1	1.4	1.6			
221		.4	.9	1.1	1.4	1.7	1.7			
226		.6	.7	1.0	1.3	1.5	1.5			
234		.8	.8	1.1	1.2	1.4	1.7			
AVG.		.5	.8	1.0	1.2	1.5	1.6			#12

(Let W mean figure 4 tables for deep water and w mean equal volume tables for shoal.)

CORRECTIONS IN FEET, ~~TABLES~~

NOAA FORM 75-21 (11-77)	U.S. DEPARTMENT OF COMMERCE NOAA NATIONAL OCEAN SURVEY
VELOCITY CORRECTIONS	
Ship <u>NOAA LAUNCH 1257</u>	
Commander <u>LCDR. M.F. KOLESAR</u>	
These corrections are to be used	
between <u>JD 346 1978</u> and <u>JD 066 1979</u>	
in the locality <u>N.W. FLA. COAST</u>	
<u>SOUTH OF SANTA ROSA IS.</u>	
for hydrographic surveys Nos <u>H-9803 AND H-9804</u>	

(For deep water add a 0 to these

DEPTHS IN ~~TABLES~~ FEET

AVG. OF
BARCHECKS
JD 346 058

$K = 0.3 FT$

TIDE GAST
JD 010

VEL TAB. #9
TAKEN FROM THESE
GRAPHS

CORRECTION IN FT

Checked BY GSC

(25)

0 1 2 3 4 5 6 7 8

KEUFFEL & ESSER CO.

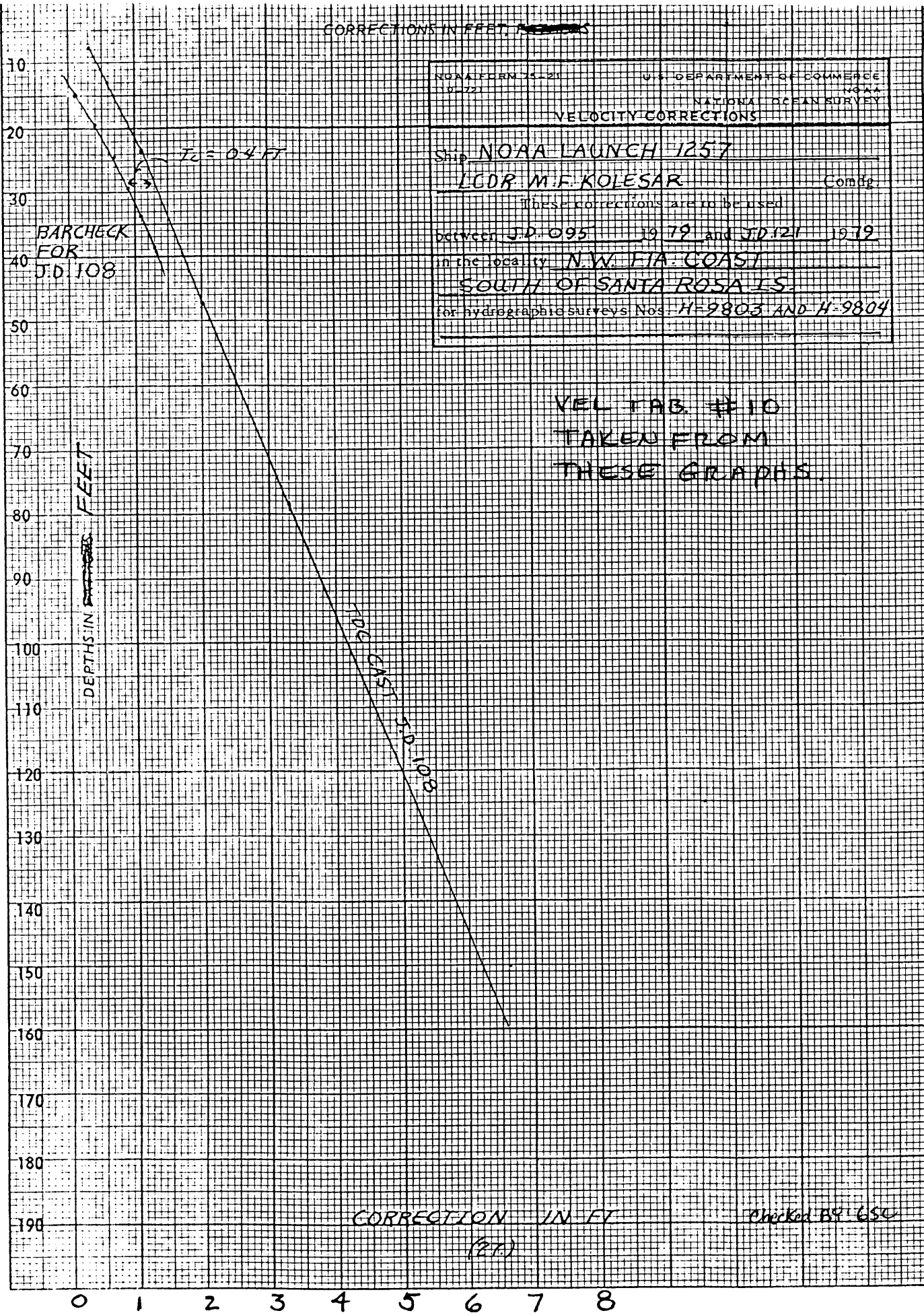
VELOCITY TABLE #9
VESNO 1257
OPR-J217-HFP-78
HSB 20-1-79
H-9804

000100	0	0002	0009	125700	009804
000150	0	0004			
000208	0	0006			
000268	0	0008			
000325	0	0010			
000383	0	0012			
000442	0	0014			
000500	0	0016			
000559	0	0018			
000616	0	0020			
000675	0	0022			
000733	0	0024			
000792	0	0026			
000850	0	0028			
000910	0	0030			
000968	0	0032			
001025	0	0034			
001083	0	0036			
001140	0	0038			
001198	0	0040			
001258	0	0042			
001316	0	0044			
001372	0	0046			
999999	0	0048			

CORRECTIONS IN FEET ~~IN METERS~~

NOAA FORM 15-21 10-72	U.S. DEPARTMENT OF COMMERCE NOAA NATIONAL OCEAN SURVEY
VELOCITY CORRECTIONS	
Ship <u>NOAA LAUNCH 1257</u>	
Comdr. <u>LCDR M.F. KOLESAR</u>	
These corrections are to be used	
between J.D. 095 19 72 and J.D. 121 19 72	
in the locality <u>N.W. FIA COAST</u>	
<u>SOUTH OF SANTA ROSA IS.</u>	
for hydrographic surveys Nos. <u>H-9803 AND H-9804</u>	

(For deep water add a 0 to these res)



BARCHECK FOR J.D. 108

Tc = 0.4 FT

DEPTH IN FEET

CORRECTION IN FT

(27)

Checked BY GSC

VEL TAB #10
TAKEN FROM
THESE GRAPHS.

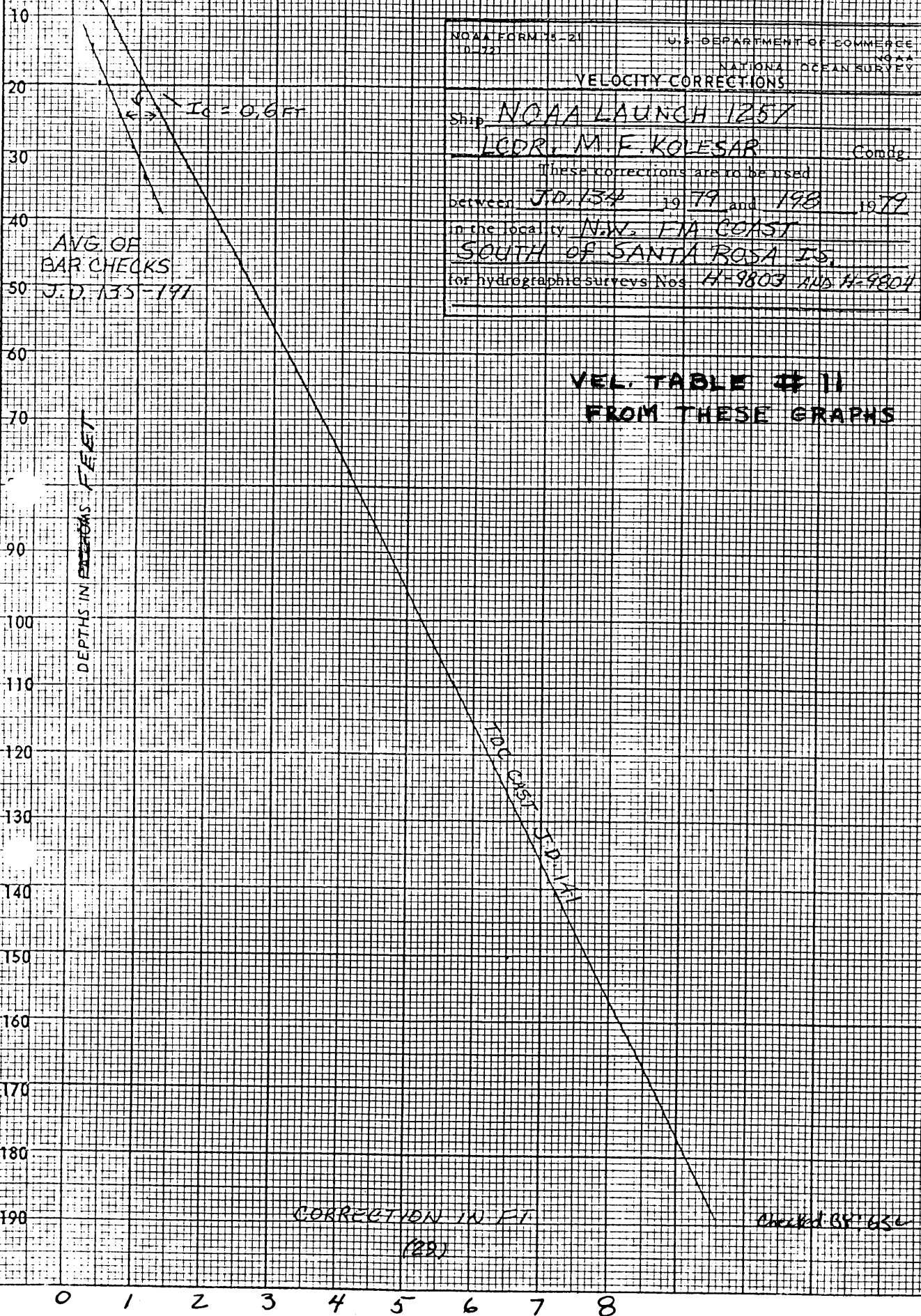
KEUFFEL & ESSER CO.

VELOCITY TABLE #10
VESNO 1257
OPR-J217-HFP-78
HSB-20-1-79
H- 9804

000112 0 0004 0010 125700 009804
000158 0 0006
000205 0 0008
000251 0 0010
000300 0 0012
000348 0 0014
000395 0 0016
000445 0 0018
000493 0 0020
000542 0 0022
000593 0 0024
000643 0 0026
000692 0 0028
000740 0 0030
000790 0 0032
000840 0 0034
000890 0 0036
000940 0 0038
000990 0 0040
001040 0 0042
001090 0 0044
001140 0 0046
001190 0 0048
001240 0 0050
001290 0 0052
001340 0 0054
999999 0 0056

CORRECTIONS IN FEET, FATHOMS

NOAA FORM 5-21 (11-77)	U.S. DEPARTMENT OF COMMERCE NOAA NATIONAL OCEAN SURVEY	
VELOCITY CORRECTIONS		
Ship	NOAA LAUNCH 1257	
	LCDR. M. F. KOLESAR	
These corrections are to be used		
between	J.D. 134	39 79 and 198 1979
in the locality	N.W. FLA COAST SOUTH OF SANTA ROSA IS.	
for hydrographic surveys Nos.	H-9803 AND H-9804	



(For deep water add a 0 to these figures)

VELOCITY TABLE #11
VESNO 1257
OPR-J217-HFP-78
HSB 20-1-79
H-9804

000168	0	0008	0011	125700	009804
000204	0	0010			
000240	0	0012			
000278	0	0014			
000316	0	0016			
000353	0	0018			
000392	0	0020			
000430	0	0022			
000470	0	0024			
000508	0	0026			
000543	0	0028			
000581	0	0030			
000620	0	0032			
000658	0	0034			
000697	0	0036			
000736	0	0038			
000774	0	0040			
000818	0	0042			
000857	0	0044			
000897	0	0046			
000937	0	0048			
000975	0	0050			
001014	0	0052			
001065	0	0054			
001095	0	0056			
001133	0	0058			
001174	0	0060			
001201	0	0062			
001260	0	0064			
001300	0	0066			
001340	0	0068			
001380	0	0070			
001420	0	0072			
999999	0	0074			

CORRECTIONS IN FEET, FATHOMS

NOAA FORM 15-21 6-72	U.S. DEPARTMENT OF COMMERCE NOAA NATIONAL OCEAN SURVEY
VELOCITY CORRECTIONS	
Ship <u>NOAA LAUNCH 1257</u>	
<u>LCDR. M.F. KOLESAR</u> Comdg.	
These corrections are to be used	
between <u>JD 211 19 79</u> and <u>JD 235 19 79</u>	
in the locality <u>N.W. FIA COAST</u>	
<u>SOUTH OF SANTA ROSA IS.</u>	
for hydrographic surveys Nos. <u>H-9803 AND H-9804</u>	
<u>H-9840</u>	

AVG. OF
BARCHECKS
JD 219-234

FEET
DEPTHS IN FATHOMS

VEL. TABLE #12
FROM THESE GRAPHS

TDR
CAST
S.D. 7410

$T_L = 0.4 ft$

CORRECTION IN FT.

(3A)

Checked by 1650

(For deep water add a 0 to these figures)

0 1 2 3 4 5 6 7 8

VELOCITY TABLE #12
VESNO 1257
OPR-J217-HFP-78
HSB 20-1-79
H-9804

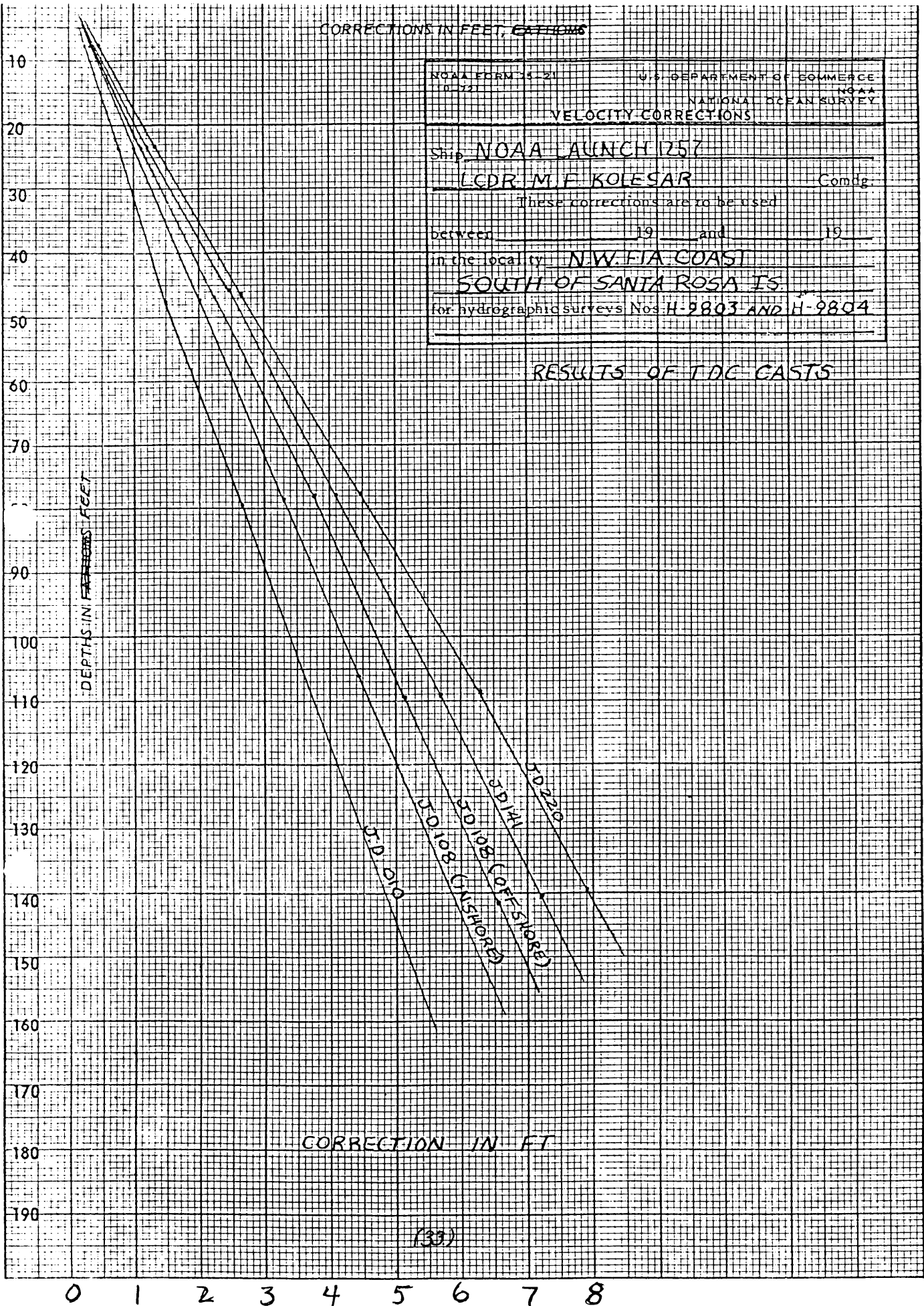
000158 0 0008 0012 125700 009804
000190 0 0010
000225 0 0012
000262 0 0014
000298 0 0016
000330 0 0018
000367 0 0020
000400 0 0022
000436 0 0024
000470 0 0026
000505 0 0028
000540 0 0030
000572 0 0032
000608 0 0034
000642 0 0036
000678 0 0038
000712 0 0040
000748 0 0042
000782 0 0044
000818 0 0046
000850 0 0048
000882 0 0050
000918 0 0052
000952 0 0054
000983 0 0056
001018 0 0058
001052 0 0060
001086 0 0062
001125 0 0064
001162 0 0066
001202 0 0068
001240 0 0070
001277 0 0072
001314 0 0074
001352 0 0076
001390 0 0078
001430 0 0080
999999 0 0082

CORRECTIONS IN FEET, ~~ATIONS~~

NOAA FORM 5-21 10-721	U.S. DEPARTMENT OF COMMERCE NOAA NATIONAL OCEAN SURVEY
VELOCITY CORRECTIONS	
Ship <u>NOAA LAUNCH 1257</u>	Comdg. <u>LCDR M. F. KOLESAR</u>
These corrections are to be used	
between <u>19</u> and <u>19</u>	
in the locality <u>N.W. FIA COAST</u> <u>SOUTH OF SANTA ROSA IS.</u>	
for hydrographic surveys Nos. <u>H-9803 AND H-9804</u>	

RESULTS OF T.D.C. CASTS

(For deep water, add a 0 to these figures)

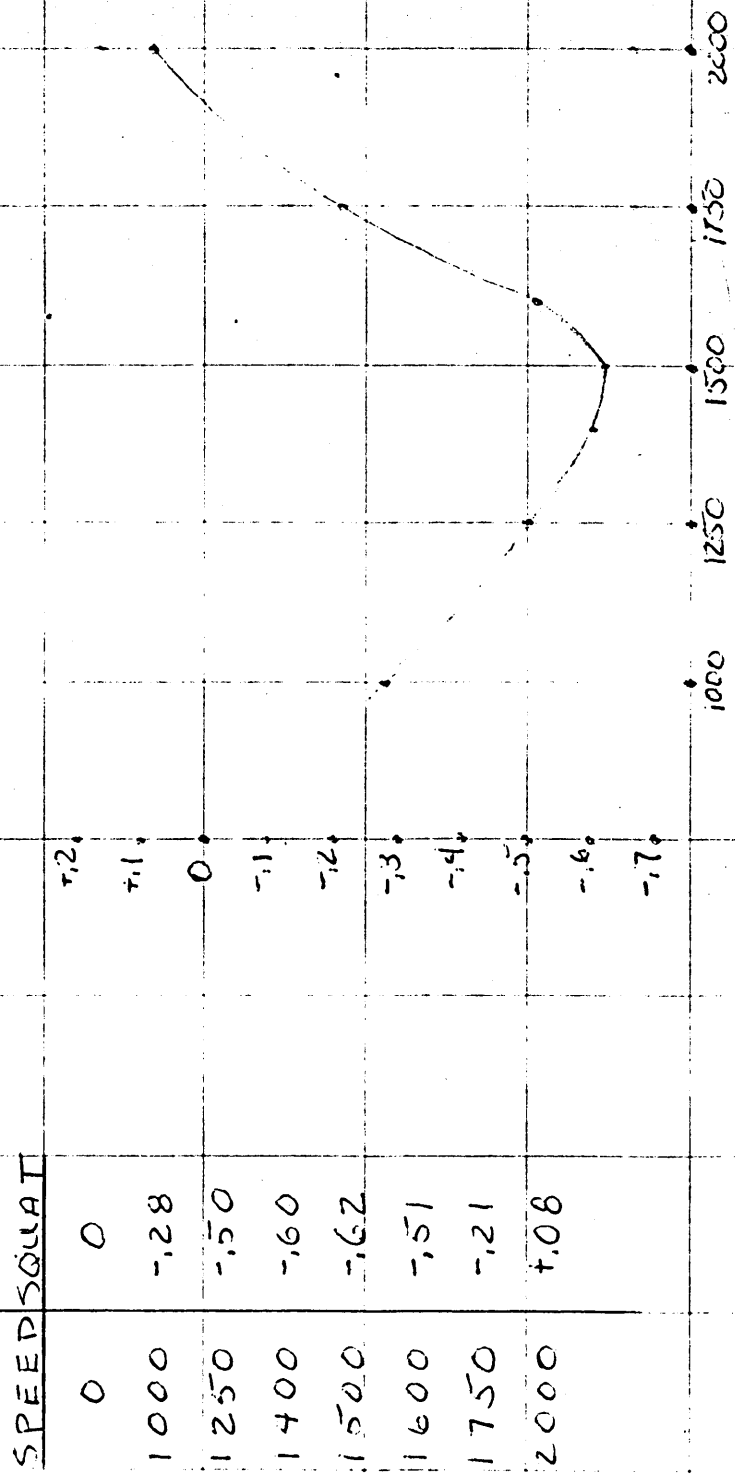


(33)

SETTLEMENT AND SQUAT

NOAA LAUNCH 1257

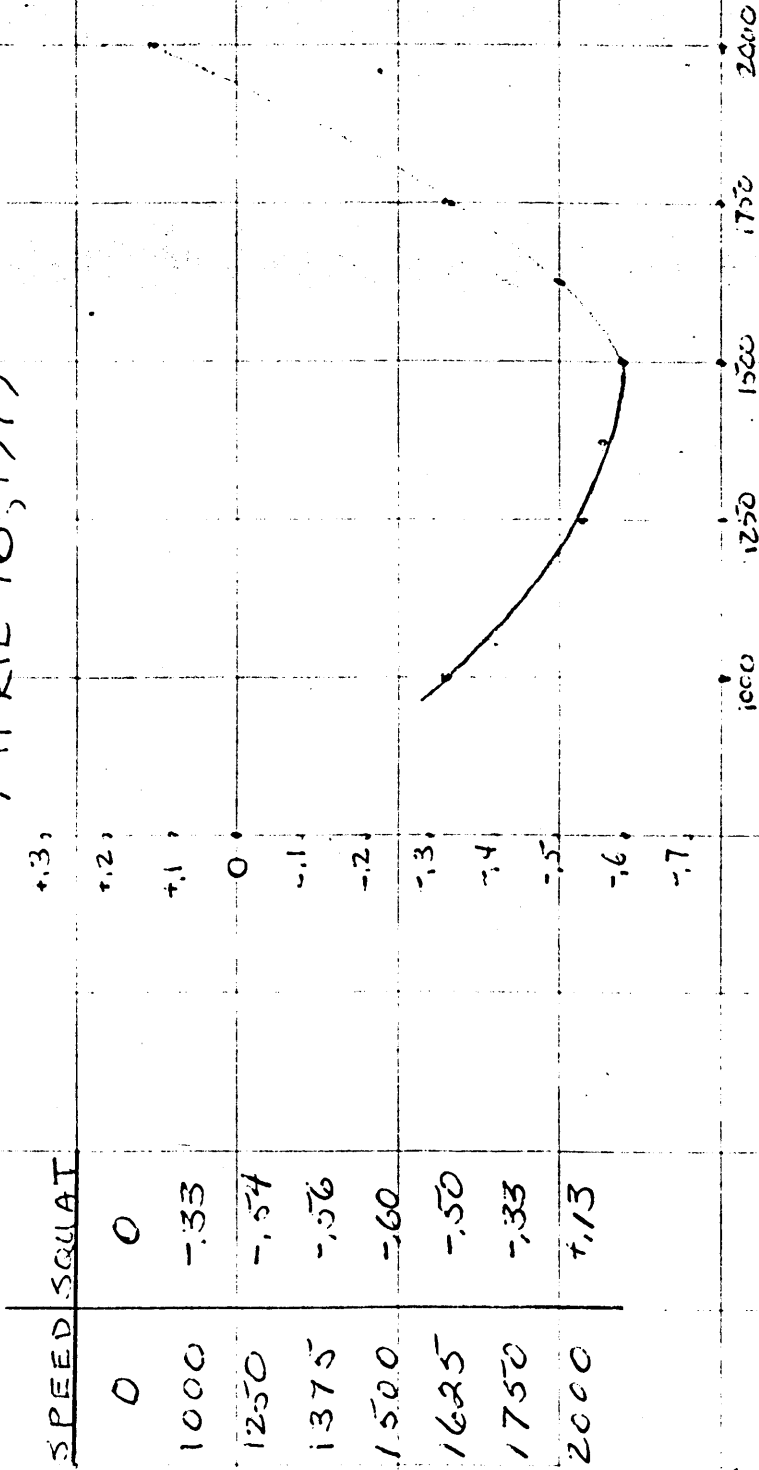
JAN. 3, 1979



SETTLEMENT AND SQUAT

NOAA LAUNCH 1257

APRIL 16, 1979



SIGNAL LIST

OPR J217-HFP-78
 HSB 20-1-79
 H-9804

029	7	30	22	38576	086	18	29107	139	0000	000000	CENTEL MICRO TWR	**
031	7	30	23	31999	086	28	48224	139	0000	000000	DESTIN E. TANK	**
032	7	30	23	41160	086	29	44045	139	0000	000000	DESTIN W. TANK	**
033	7	30	23	28583	086	33	27274	139	0000	000000	MICRO TWR SITE A-3	**
034	7	30	23	48543	086	35	23047	139	0000	000000	OKALOOSA CTY TANK	**
035	7	30	24	20602	086	36	39361	139	0000	000000	FT. WALTON S. TANK	*
036	7	30	25	09067	086	36	42369	139	0000	000000	FT WALTON N. TANK	*
71	7	29	40	29369	085	21	47113	250	0000	330640	CAPE SAN BLAS RAYD	**
922	7	30	19	15519	087	13	24119	250	0000	330640	PENSACOLA BCH RAYD	***
903	7	30	23	03963	086	26	50475	250	0000	330640	CLAUSEN RM 3 RAYD	* 1755
904	7	29	40	29369	085	21	47113	250	0000	330649	CAPE SAN BLAS RAYD	**
905	7	30	23	03963	086	26	50475	250	0000	330649	CLAUSEN RM 3 RAYD	* 1955

* NGS published
 ** HFP-1
 *** Tibbetts

APPROVAL SHEET
SURVEY H-9804 (HSB-20-1-79)

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,



Thomas W. Richards

Lt. Cdr., NOAA

Chief, Hydrographic Surveys Branch

November 6, 1979

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, FL

Period: February 1 - August 8, 1979

HYDROGRAPHIC SHEET: H-9804

OPR: J217

Locality: West Coast of Florida

(Gulf Coast Low Water Datum): 25.57 ft.
Plane of reference (~~mean lower low water~~):

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

REMARKS: Zone direct.


Chief, Datums and Information Branch

APPROVAL SHEET
FOR
SURVEY H- 9804

- A. All revisions and additions made on the smooth sheet during verification have been entered in the magnetic tape records for this survey. A new final position printout has/~~has not~~ been made. A new final sounding printout has/~~has not~~ been made.
- B. The verified smooth sheet has been inspected, is complete, and meets the requirements of the Hydrographic Manual. Exceptions are listed in the Verifier's Report.

Date: 8/14/80

Signed:



Title: Chief, Verification Branch

HYDROGRAPHIC SURVEY STATISTICS

H-9804

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		1	BOAT SHEETS & PRELIMINARY OVERLAYS		60	
DESCRIPTIVE REPORT		1	SMOOTH OVERLAYS: POS. JARC, EXCESS		3	
DESCRIP-TION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES						1-misc.
CAHIERS	2- with raw printouts					
VOLUMES	1- in vol.					
BOXES			1- Smooth			

T-SHEET PRINTS (List)

SPECIAL REPORTS (List)

1- Cht. blow-up, 1- Cht mark-up, 1- junction strip

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS		
	PRE-VERIFICATION	VERIFICATION	TOTALS
POSITIONS ON SHEET			2591
POSITIONS CHECKED		300	
POSITIONS REVISED		5	
SOUNDINGS REVISED		244	
SOUNDINGS ERRONEOUSLY SPACED		0	
SIGNALS (CONTROL) ERRONEOUSLY PLOTTED		0	
	TIME - HOURS		
CRITIQUE OF FIELD DATA PACKAGE (PRE-VERIFICATION)	3		
VERIFICATION OF CONTROL			
VERIFICATION OF POSITIONS		15	
VERIFICATION OF SOUNDINGS		112	
COMPILATION OF SMOOTH SHEET		60	
APPLICATION OF TOPOGRAPHY		0	
APPLICATION OF PHOTOBATHYMETRY		0	
JUNCTIONS		10	
COMPARISON WITH PRIOR SURVEYS & CHARTS		24	
VERIFIER'S REPORT		10	
OTHER		8	
TOTALS	3	239	242

Pre-Verification by Sharon Kelley	Beginning Date 01/22/80	Ending Date 01/22/80
Verification by S. Kelley, F. Laminson, D. Mason	Beginning Date 03/15/80	Ending Date 08/01/80
Verification Check by Harry R. Smith	Time (Hours) 8	Date 08/05/80
Marine Center Inspection by Hydrographic Inspection Team (AMC)	Time (Hours) 10	Date 08/08/80
Quality Control Inspection by F.P. SAULSBURY	Time (Hours) 2	Date 9/23/80
Requirements Evaluation by J. Baumgardner	Time (Hours) 2	Date 12/18/80

J. Meyer 140. 12/10/80

REGISTRY NO. H-9804

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. _____

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

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

MAGNETIC TAPE CORRECTED

DATE _____ TIME REQUIRED _____ INITIALS _____

REMARKS:

ATLANTIC MARINE CENTER
VERIFIER'S REPORT

REGISTRY NO. H-9804

FIELD NO. HSB-20-1-79

Florida, Gulf of Mexico, Offshore of Santa Rosa Island

SURVEYED: February 1, 1979 through August 8, 1979

SCALE: 1:20,000

PROJECT NO. OPR-J217

SOUNDINGS: Raytheon DE-723D

CONTROL: Raydist. (Rang^e/Range)

Chief of Party

T. W. Richards

Surveyed by

M.F. Kolesar

G. Hendrix

G. Lloyd

G. Merrill

Automated Plot by

Xynetics 1201 Plotter (AMC)

Verified and Inked by

D.V. Mason

Date

August 4, 1980

INTRODUCTION

During verification of this survey no unusual problems were encountered^{re}. All red notes in the Descriptive Report were made by the Verifier.

2. CONTROL AND SHORELINE

The source of control is adequately described under sections F. and G. of the ✓
Descriptive Report.

- b. There is no contemporary shoreline in the survey area. ✓
S.L. was added during Q.C.I. from TP-00549 & TP-00550 (1978-79)
JRS

3. HYDROGRAPHY

- a. Depth curves at crossings are in good agreement. ✓

b. The standard depth curves were adequately delineated, with the inclusion of the 90 foot brown curve to better help delineate the bottom configuration. Also, the brown curve was used to show the irregular nature of the bottom in numerous areas between the 60 and 90 foot contours on this survey. ✓

c. The development of the bottom configuration and the investigation of least depths are considered adequate. ✓

4. CONDITION OF SURVEY

The smooth sheet and accompanying overlays hydrographic records and reports are adequate and conform to the requirements of the hydrographic manual with the following exceptions:

- a. Analog position records (sawtooth records) were not filed with the graphic depth records of this survey as prescribed under section 4.8.6 of the ✓
Hydrographic Manual. These records are filed with survey records for H-9798 (1978).

- b. The Descriptive Report was not signed by the hydrographer. ✓
- c. Landmarks from seaward were not evaluated by the hydrographer. ✓
 Landmark form 7640 was not furnished in the survey records.
 No elevations accompany landmarks.
 Landmarks were transferred from TP-00549-50 (1978-79)

5. JUNCTIONS

a. Adequate junctions have been effected with the following surveys:

- H-9803 (1978⁻⁷⁹) 1:20,000 to the east ✓ O.K. FPS
- H-9798 (1978) 1:40,000 to the south ✓ O.K. FPS

Changes on the above surveys will have to be made by Quality Control Branch, C352, since the above mentioned surveys have been verified and mailed to Rockville. ~~The 69-foot brown curve on H-9803 is not need, and should be deleted.~~ Changes were accomplished during Q.C.I. Junctions are adequate.

6. COMPARISON WITH PRIOR SURVEYS

- H-1309 1875-76 1:40,000 ✓
- H-4604 1926-27 1:40,000 ✓
- H-5033 1930 1:20,000 ✓
- H-5115 1930-31 1:40,000 ✓
- H-6687 1941 1:40,000 ✓

The above prior surveys taken together cover the area of the present survey. A comparison between the present and prior surveys reveals that the present survey is from 10 feet shoaler to 10 feet deeper with differences generally ^{of} +3 feet. These depth differences are attributed to natural changes in the bottom

configuration and less detailed and less accurate methods employed on the prior ✓
surveys.

The present survey is adequate to supersede the prior surveys within the ✓
common area. *This does not include the area inshore of this
survey,*

7. COMPARISON WITH CHART #1138² (23rd) Edition November 19, 1977

a. HYDROGRAPHY

The charted hydrography originates with the previously discussed prior
surveys which require no further consideration.

Attention is directed to the following:

1) Numerous developments were run to prove the existence of shoal ✓
soundings, *& to acquire least depths over rises*
these developments are adequately described under Section L of the
Descriptive Report.

2) The hydrographer recommends the delineation of the 90-foot
brown curve on chart 11382. The delineation of this curve should be left up to the
chart compiler. *A.C. concurs with the hydrographer's recommendation*

The present survey is adequate to supersede^r the charted hydrography. *concur*_^

b. Aids To Navigation

There are no aids to navigation within the limits of the present survey area. ✓

8. COMPLIANCE WITH INSTRUCTIONS

This survey adequately complies with the Project Instructions.

Project Instructions requested development inshore to 12 ft. depths. Survey was developed inshore to 19 to 29 ft. depths

9. ADDITIONAL FIELD WORK

This is an excellent basic survey and no additional work is recommended at this time. Concur

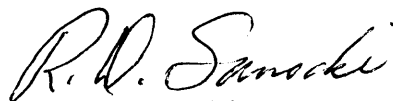
INSPECTION REPORT
H-9804

The completed survey has been inspected by the Hydrographic Inspection Team with regard to survey coverage, cartographic symbolization, and verification or disproval of charted data. The Verification Report has presented the facts accurately and properly, the procedures used were appropriate, and the recommendations are logical and justifiable. The survey records comply with NOS requirements except where noted in the Verification Report. The Hydrographic Inspection Team concurs with the verifier's findings, actions, and recommendations.

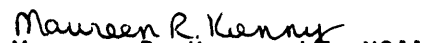
Examined and Approved
Hydrographic Inspection Team
DATE: August 8, 1980



Karl Wm. Kieninger, CDR, NOAA
Chief, Processing Division



R. D. Sanocki
Technical Assistant, Processing Division



Maureen R. Kenny, LT, NOAA
Chief, Electronic Data
Processing Branch



Robert G. Roberson
Team Leader
Verification Branch

Approved/Forwarded



Richard H. Houlder, RADM, NOAA
Director, Atlantic Marine Center



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

OA/C352:FPS

September 23, 1980

TO: Glen R. Schaefer *See for*
Chief, Hydrographic Surveys Division

THRU: Chief, Quality Control Branch *gmc*

FROM: *F. P. Saulsbury*
Quality Evaluator

SUBJECT: Quality Control Report for H-9804 (1979), Florida, Gulf of Mexico,
Offshore of Santa Rosa Island

A quality control inspection of H-9804 was accomplished to monitor the survey for adequacy with respect to data acquisition, delineation of the bottom, determination of least depths, navigational hazards, junctions, sounding line crossings, shoreline transfer, smooth plotting, decisions and actions taken by the verifier, and the cartographic presentation of data. In general, it was found to conform to the National Ocean Survey's standards and requirements except as stated in the Descriptive Report.

cc:
OA/C351





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

DEC 30 1980

OA/C351:SR

TO: OA/CAM - Richard H. Houlder

FROM:  OA/C3 - Roger F. Lanier

SUBJECT: H-9804 (1979), OPR-J217-HFP-78, Florida, Gulf of Mexico, Offshore of Santa Rosa Island, Report of Compliance with Project Instructions

The smooth sheet and Descriptive Report for the subject survey have been examined. This survey, except as noted in the Quality Control Report, dated September 23, 1980 (copy attached), is complete and adequate for the purposes intended and is in compliance with Project Instructions OPR-J217-HFP-78, dated September 9, 1977.

Attachment

cc:
OA/C352 w/o att.



10TH ANNIVERSARY 1970-1980

National Oceanic and Atmospheric Administration

A young agency with a historic

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

National Ocean Survey
Rockville, Maryland

Hydrographic Index No. 85 F

