9583

Diag. Cht. Nos. 1114, 1258 & 1259

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey HYDROGRAPHIC

Field No. AHP-40-2-75

Office No. H-9583

LOCALITY

State FLORIDA

General Locality WEST COAST

Locality WEST OF CRYSTAL RIVER

1975-76

CHIEF OF PARTY
John O. Rolland

LIBRARY & ARCHIVES

DATE Sept. 21, 1977

☆ U.S. GOV. PRINTING OFFICE: 1975—668-353

9583

Area 4
Charts
11400-1114
11408-1259
11409-1258

NOAA FORM 77-28 (11-72)

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

HYDROGRAPHIC TITLE SHEET

REGISTER NO. H-9583

FIELD NO. AHP 40-2-75

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: West Coast

Locality: West of Crystal River

Scale: 1:40,000 Date of survey: 19 Nov 75 - 5 Feb 76

Instructions dated: August 20, 1974 Project No.: OPR 508-AHP-75

Vessel: Atlantic Hydrographic Party NOAA Launches 1255 & 1257

Chief of party: LCDR John O. Rolland

Surveyed by: LCDR D. M. Wilson, LT R.P.Floyd, LT(jg) C.P.Berg, LT D. Drake, ENS S.R.Ellis

Soundings taken by echo sounder, hand lead, pole

Graphic record scaled by: Digital Fathometer

Graphic record checked by: DMW, RPF, ELM, GSL

Protracted by: N/A Automated plot by: COMPLOT - 618

Verification by: J. Scott Bradford

Soundings in fathoms feet at MLW MLLW

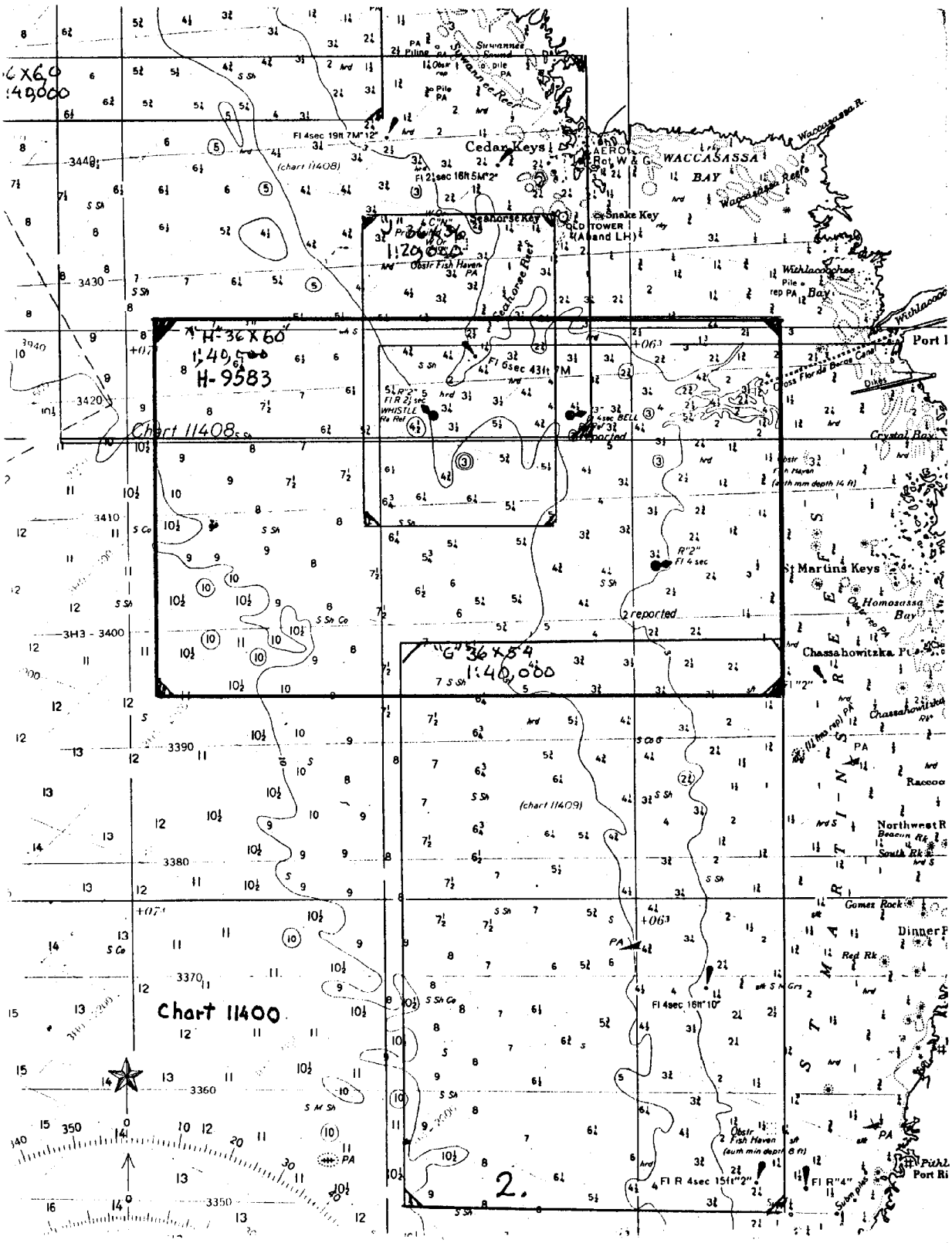
REMARKS: Miscellaneous data field with field records.

Applied to stats 4/20/78 CAB

1

NOAA FORM 77-28 SUPERSEDES FORM C&GS-537.

☆ U.S. GPO: 1974-0-768-081/1207



Cedar Keys
WACCASASSA BAY
Waccasassa R.
Waccasassa Reefs
Seahorse Key
Snake Key
Withlacoochee Bay
Port I
Cross Florida Barge Canal
Crystal Bay
St Martins Keys
Homosassa Bay
Chassahowitzka Pt
Northwest R
Gomez Rock
Dinner P
Red Rk
Port Ri
Chart 11408
Chart 11400
H-36X60
1:40,000
H-9583
"G" 36X54
1:40,000
(chart 11408)
(chart 11409)
2.

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY H-9583 (AHP-40-2-75)

SCALE: 1:40,000 1975
VESSEL: Atlantic Hydrographic Party Chief of Party: John O. Rolland

A. Project

This project was accomplished under the following Project Instructions: OPR-508-AHP-75, Northwest Coast of Florida, dated 20 August 1974, Change #1, Amendment to Instructions, dated 14 April 1975.

B. Area Surveyed

The area encompassed by the survey was offshore from Crystal River. Lines between the following points form the irregular survey boundary:

Point	Latitude	Longitude
A	28°56.5'N	83°21.5'W
B	28°56.5'N	83°11.0'W
C	28°59.5'N	82°54.5'W
D	28°42.0'N	82°54.5'W
E	28°42.0'N	83°08.5'W
F	28°45.0'N	83°08.5'W

This survey was accomplished between 19 November 1975 and 5 February 1976.

C. Sounding Vessel

All sounding on this survey was accomplished by NOAA Launch 1255 (EDP 1255) and NOAA Launch 1257 (EDP 1257). All survey records are annotated with vessel numbers. In addition, NOAA 1255 has labels in blue, NOAA 1257, in black.

D. Sounding Equipment and Corrections to Echo Soundings

NOAA 1255 used the following equipment for all soundings obtained during this survey:

Raytheon Fathometer, Model DE-723, Unit 723-40, S/N 2924
Raytheon Digital Depth Monitor, Model DE-723-D, Unit 723-41, S/N 1045
Raytheon Electronic Cabinet Unit, Model DE-723, Unit 723-42, S/N 2781

NOAA 1257 used the following equipment for all sounding obtained during this survey:

Raytheon Fathometer, Model DE-723, Unit 723-40, S/N 37024
Raytheon Digital Depth Monitor, Model 723-41, S/N 2772
Raytheon Electronic Cabinet Unit, Model DE-723, Unit 723-42, S/N 1910

Depths on this survey range from 8 to ~~54~~ 51 feet. Approximate velocity corrections were applied to the off-line plot. These corrections were determined using data obtained in previous surveys and are included in the Appendix. Actual velocity corrections were determined from bar checks. No TDC or STD measurements were taken during this survey.

Both launches used the same bar check and cables prior to J.D. 340 (1975). The marks on the bar check lines were measured to determine accuracy and found to be in error of about 1.4%. On Day 340, the lines were remarked. For bar check data obtained on Launch 1257, the (bar) depth was corrected to actual depth equipped with a new bar on Day 340 (1975). As with Launch 1257 bar check data, the actual depths on all bar checks taken previously to Day 340 were corrected before velocity corrections were computed. A summary of the corrected bar depths is located in the Appendix. Even though adjusted bar depths were used, velocity corrections determined from data obtained from the mismarked bar check are widely scattered and are believed to be of poor quality.

Corrections to soundings from bar check data were determined in accordance with Section 4.9.5.1.3 of the provisional Hydro Manual. One minor deviation in procedure did not affect the results. Namely, effects of static draft were removed from the bar check data by subtracting the draft from the true depth rather than adding the draft to the mean instrument depths. Then the instrument depth was subtracted from the true depth from the transducer, to obtain the velocity correction. The sounding correction curve was constructed by plotting average corrections versus observed depths as stated in the Hydro Manual. Observed depths were obtained by subtracting the average corrections from their corresponding bar depths (actual depths from surface).

Variations in instrument initial and other instrument corrections were made by applying an analog to digital correction while scanning the fathograms. The analog to digital correction was determined periodically while scanning by making several comparisons between exact analog depths and corresponding depths on the master printout.

Settlement and squat was determined for Launch 1255 on 16 January 1975 using the standard rod and level method. Results are included in the appendix. On Launch 1257, previously determined settlement and squat corrections were used (see Descriptive Report H-9344). However, because the propellers' pitch and diameter were changed in November 1975 a check of the previously run settlement and squat was run on Julian day 124. To maintain a speed of 18 knots, engine rpm was increased from 1850 to 1950 rpm after the repitched propellers were installed. The results of the new settlement and squat determination indicated that at a speed of 18 knots, settlement and squat remained constant regardless of engine rpm. (-0.3 standard hydro speed). Settlement and squat (-0.3 feet at standard hydro speed) was combined with the static draft (2.7 feet) and applied to soundings via the corrector tape for both launches. Settlement and squat of -0.3 feet at 1850 rpm is incorrect for Launch 1255 data; the actual value is 0.0 feet. Therefore, a TRA of +0.3 feet has been applied to the TC/TI tape TRA. This corrects the erroneous TRA of 2.4 feet on Launch 1255 corrector tapes.

E. Hydrographic Sheets

The field sheets were prepared aboard the survey vessels using the hydroplot system. Verification and smooth plotting will be performed at the Atlantic Marine Center, Norfolk, Virginia. Projection and electronic control parameters are included in the appendix of this report.

F. Control Stations

Left (red) Station: H-AMC-5-FL-1975
Right (green) Station: Level, 1975

Electronic station location was accomplished by Mr. Jim Shea of Operations Division, Atlantic Marine Center, Norfolk, Virginia, using third order methods.

G. Hydrographic Position Control

Control used for this survey was the Hastings Raydist DR-S system operating in Range-Range mode. No known difficulties were experienced with the control system that may have degraded the expected position accuracy.

Left Station: H-AMC-FL-1975
Red Raydist, Model AA60, S/N 55

Right Station: Level, 1975
Green Raydist, Model AA60A, S/N 119

Equipment Aboard Launch 1255:

Antenna Loading Unit, Model QB52C, S/N 194 (Day 323-029),
S/N 119 (Day 030-036)
DR-S System Navigator, Model ZA67A, S/N 58
Transmitter, Model TA-96, S/N 45
Strip Chart Recorder, Model RB-15, S/N 13

Equipment Aboard Launch 1257:

Antenna Loading Unit, Model QB52B, S/N 143
DR-S System Navigator, Model ZA-67B, S/N 67
Transmitter, Model TA-96B, S/N 86
Strip Chart Recorder, Model RO-8Z, S/N 9296

Calibration was accomplished at fixed aids to navigation, located by means of third-order methods by Mr. Jim Shea. NAD 1927 was used for all position computation.

These calibrations are considered adequate for position data throughout the survey area. An abstract of corrections to be applied to the observed data is included in the appendix.

H. Shoreline

There was no shoreline delineated on this survey.

I. Crosslines

Crosslines were run to the extent of 11% of the basic survey of sounding lines.

Crosslines and adjacent sounding lines have very poor agreement (2-3 feet differences) in some cases. In all probability, this is due to poorly predicted tides. Since actual tides are not available in the field at the time this report is being written, a concrete answer to the problem is not evident. The following observations might be helpful in resolving the problem once actual tides are available.

Predicted tides for the off-line plot were taken from St. Marks River entrance corrected to the Withlacoochee River entrance. Proceeding down the coast from the Steinhatchee River entrance, through Pepperfish Keys, the Suwannee River entrance, Cedar Key, the Withlacoochee River entrance, and Bayport, the correction for time of high water gradually increases from minus 25 minutes to minus 59 minutes. Except for the Withlacoochee River entrance, corrections for times of low water vary from minus 11

minutes to minus 45 minutes, increasing as the distance from St. Marks River increases. The low water time correction of plus 20 minutes for the Withlacoochee River entrance is out of line. This might be one source of error. Perhaps zoning is required between Bayport and Cedar Key.

No consistent source of error in predicted tides could be found. Two examples are cited below:

1. On Day 335, it is possible that actual tides did not reach the predicted height by a considerable amount. Basic lines were run on that day which agree poorly with basic lines run adjacent to them on Day 336. They also agree poorly with crosslines run on Day 324. Specific areas are as follows: Day 335, PN 1259 to 1262; Day 336, PN 1263-1265; Day 335, PN 1184 to 1185; Day 324, PN 176 to 177.

2. On Day 346, low tide was predicted at 1.4 feet above MLW. The line run on Day 349 adjacent to this work junctions poorly.

   In comparing plotted depths from PN 1919 to 1920 with those from 1935 to 1936, it appears that low water on Day 346 was actually about zero feet above MLW rather than 1.4 feet.

Hopefully, these inconsistencies will be cleared up when actual tides are applied for the smooth plot. In any case, it is unknown at this point how to correct them.
Smooth tides have corrected this inconsistancy -

J. Junctions

This survey junctions with prior survey H-7792 and contemporary survey H-9511. Soundings agree very well with those from H-7792 which joins this survey on the west. Agreement with survey H-9511, which joins on the south is naturally excellent as it was completed by NOAA Launches 1255 and 1257 in 1975 under the same project instructions as this survey.

K. Comparison with Prior Surveys

Prior surveys of this area are:

H-424 (1854) H-7792 (1948)
H-1770 (1887)
H-1771 (1887)
H-2853 (1902)

Soundings agree very well (0-2 feet in most cases) with those on H-1771. For the most part, the same is true with comparison with H-1770; however, some soundings are as much as 8 feet deeper than those previously surveyed, largest discrepancy being noted primarily in the southwest corner of the survey.

A 44' depth shown on H-1770 at 28°52.7'N, 83°16.0'W is not representative of the area where depths 37-38' soundings were found.

Soundings where disagreement with H-1770 is greater than or equal to five feet, those from H-9583 being deeper are as follow:

LOCATION		H-1770 Depth	H-9583 Depth
Lat.	Long.	(Feet)	(Feet)
28°54.9'N	83°07.7'W	25	31, 32 day 006 pos. 2571
28°52.5'N	83°14.8'W	36	41
28°49.7'N	83°11.2'W	36	39-41-~~43~~
28°42.4'N	83°06.6'W	28	34, 35
28°42.5'N	83°09.2'W	30	38-40
28°42.4'N	83°05.9'W	27	31-33-~~34~~
28°42.4'N	83°03.7'W	22	28-30-~~29~~-~~31~~

Presurvey Review Items 3, 4, 5, and 6 fall within the boundaries of the survey. All these items are depths reported in the early 1900's by captains of British steamers after running aground in the reported positions. In the hydrographer's opinion, very little credence should be placed in these positions. The areas were developed extensively and results are as follows:

PSI	Depth of PSI (ft.) * positions	Remarks Prior soundings discredited
3 CL 250/1910	day 007 12 pos. 2463-64	Not found, least depth 19'
4 NM 1/1908	day 036 18 pos. 4286-87	Not found, least depth 31'
5 CL 140/1904	day 035 18 pos. 4171-72	Not found, least depth 24'
6 NM 22/1907	day 035 18 pos 4123-24	Least depth 20', found at 28°55'46", 82°58'29"

Chart present survey depths.

In addition, a dashed circled 28-foot item was not located at 28°54.8'N, 83°12.8'W. However, two 28-foot depths were found in the vicinity. One is 0.3 nm NE and the other, 0.4 nm S of the charted position. Chart present survey depths.

* PSR		
3	28°44.96'	83°00.45'
4	28°52.84'	83°09.9'
5	28°54.3'	83°03.33'
6	28°55.7'	82°58.82'

L. Comparison with the Chart

The largest scale chart encompassing the survey area is Chart 11409, 11th Edition, May 18, 1974.

Most survey depths compare well with the chart (0-3 feet in most cases). Depths where soundings were found relatively shoaler than what the chart indicated are as listed below:

1. The charted 37' depth at 28°51.4'N, 83°12.5'W is not representative of an area with 28'-36' soundings.

2. The 37' depth charted at 28°49.8'N, 83°09.8'W lies in an area with 31'-~~33~~' soundings.

3. A ~~30~~ 28' depth at 28°44.2'N, 83°0~~8~~7.~~0~~6'W is previously uncharted.

4. 2~~9~~8' foot depths in the vicinity of 28°44.~~6~~8'N, 83°06.~~6~~8'W are previously uncharted.

Depths significantly deeper on H-9583 are found as follows:

1. A 22' charted depth at 28°42.4'N, 83°03.2'W was not found. A least depth of 27' was found in the vicinity.

2. A 31' charted depth at 28°47.2'N, 83°08.4'W was not located. A least depth of 3~~6~~5' was found in the vicinity.
Chart present depths

M. Adequacy of Survey

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

N. Aids to Navigation

Detached positions were taken on all Aids to Navigation in the survey area. They were as follows:

D.P. #24, "3" Fl 4 sec BELL, Ra Ref

Latitude	28°55'10.86"N
Longitude	83°03'42.34"W

D.P. #89, Fl G 4 sec 10 ft., "3"

Latitude	28°55'48.38"N
Longitude	82°55'34.66"W

D.P. #92, R "4"

Latitude	28°55'46.19"N
Longitude	82°55'02.83"W

D.P. #96, Fl 2 1/2 sec 10 ft., "2"

Latitude	28°55'10.66"N
Longitude	82°56'29.80"W

D.P. #97, "1"

Latitude	28°55'28.99"N
Longitude	82°56'47.98"W

D.P. #165, R "2", Fl 4 sec

Latitude	28°47'41.06"N
Longitude	82°58'13.72"W

D.P. #234, Fl R 4 sec 10 ft., "6"

Latitude	28°56'13.56"N
Longitude	82°54'01.63"W

This position is 275 meters east of charted position.

D.P. #5023, R "2", Fl R 2 1/2 sec WHISTLE, Ra Ref

Latitude	28°55'14.58"N
Longitude	83°11'38.99"W

In addition, Seahorse Reef Light, an aid used for calibration was found to actually be located at

Latitude	28°58'30.02"N
Longitude	83°09'15.24"W

rather than at the charted position which is slightly different than this.

O. Statistics

	1255	1257	Total
Total Number of Positions	4343	1499	5742
Total Nautical Miles of Hydro	2420	791	3211
Square Nautical Miles	217	58	275
N.M. Sounding Line	2113	569	2682
Crossline	102	183	290
N.M. Development	200	39	239
Bottom Samples	16	25	41

P. Miscellaneous

An area of fairly rough bottom was found in the northeast corner of the survey area. The area is predominantly flat with respect to shoaler depths, however, deeps are dispersed in a "trench" or pit-like fashion. See off-line plot overlay for development of this area.

Q. Recommendations

None

R. Automated Data Processing

The following programs were used for this survey:

Program #	Program Name	Version Date
RK 111	Realtime R/R	8/7/74
RK 201	Grid, Lattice, Signal Plot	4/18/75
RK 211	Non-Realtime R/R	8/16/74
RK 300	Utility Computations	5/22/75

Program #	Program Name	Version Date
MI 335	Data Tape Time Change	4/5/73
PM 360	Electronic Corrector Abstract	3/21/74
AM 500	Predicted Tide Generator	11/10/72
AM 602	Elinore	5/21/75

S. References to Reports

None

Respectfully submitted:

for John O. Pollard

LCDR David Wilson
OIC, Launch 1257

7/19/76

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for Form 362

Tide Station Used (NOAA Form 77-12): Cedar Key

Period: November 19, 1975 - February 5, 1976

HYDROGRAPHIC SHEET: H-9583

OPR: 508

Locality: Off the west coast of Florida, south of Cedar Keys

Plane of reference (mean ~~lower~~ diurnal low water): 1.75 ft.

Height of Mean High Water above Plane of Reference:

3.2 ft. - Cedar Key

Remarks: Recommended zoning:

	Time Correction	Range Ratio
(1) East of 83°05'	-15 min.	Direct
(2) West of 83°05'	-30 min.	x0.92

for James R. Hubbard
Chief, Tides Branch

21

SIGNAL TAPE

OPR-508 AHP-75

AHP 40-2-75

H-9583

NOAA LAUNCH 1257

```
001 7  29 07 43520 083 03 07558  250 0000 330640 H-AMC-5-FL1975 RAYDIST
002 7  28 58 13283 082 38 11244  250 0000 330640 LEVEL RAYDIST 1975
100 7  29 03 59367 083 04 33399  139 0000 000000 LIGHT 1, FI.W., 4s, 1975
101 7  28 58 30019 083 09 15238  139 0000 000000 SEAHORSE REEF LIGHT 1975
```

SIGNAL TAPE

OPR-508-AHP-75

AHP 40-2-75

H-9583

NOAA LAUNCH 1255

001	7	29	07	43520	083	03	07558	250	0000	330652	H-AWC-5-FL 1975 RAYDIST
002	7	28	58	13283	082	38	11244	250	0000	330652	LEVEL RAYDIST 1975
100	7	29	03	59367	083	04	33399	139	0000	000000	LIGHT 1, Fl. W., 4s, 1975
101	7	28	58	30019	083	09	15238	139	0000	000000	SEAHORSE REEF LIGHT, 1975

Velocity & TC/TI
NOAA Launch 1255
OPR-508-AHP-75
AHP-40-2-75

H-9583

Velocity Table #2

```
000072 1 0002 0002 000 125500 009583
000130 0 0000
000168 0 0002
000212 0 0004
000343 0 0006
000398 0 0008
000432 0 0010
001000 0 0012
999999 0 0012
```

TC/TI - Launch 1255

```
143454 0 0003 0002 323 125500 001975
000000 0 0003 0002 001 125500 001976
235959 0 0003 0002 036 125500 001976
```

Velocity & TC/TI
NOAA Launch 1257
OPR-508-AHP-75
AHP-40-2-75
H-9583

Velocity Table #1

```
000072 1 0002 0001 000 125700 009583
000120 0 0000
000158 0 0002
000198 0 0004
000342 0 0006
000390 0 0008
000480 0 0010
001000 0 0012
999999 0 0012
```

TC/TI - Launch 1257

```
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000000 0 0000 0001 001 125700 001976
235959 0 0000 0001 036 125700 001976
```
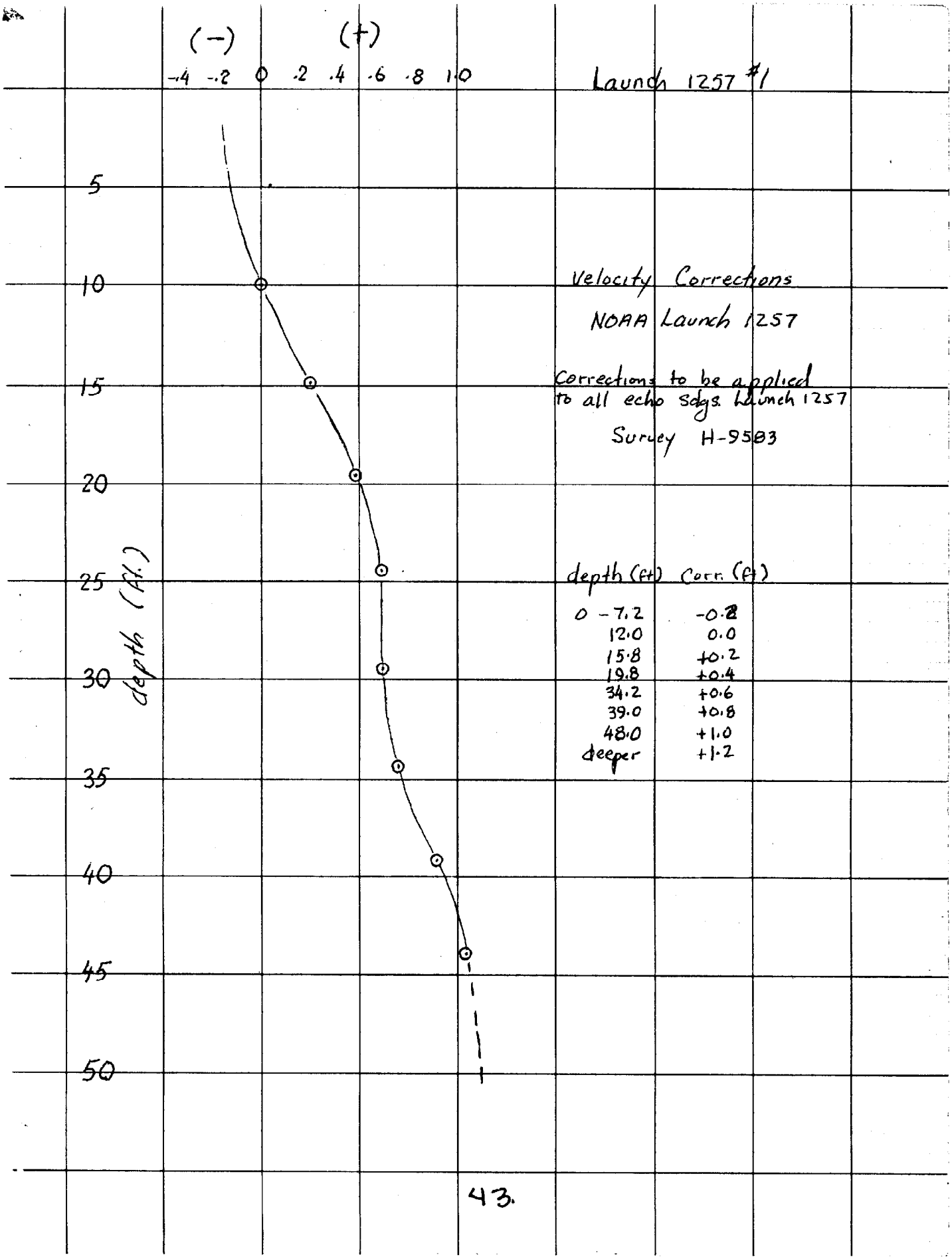
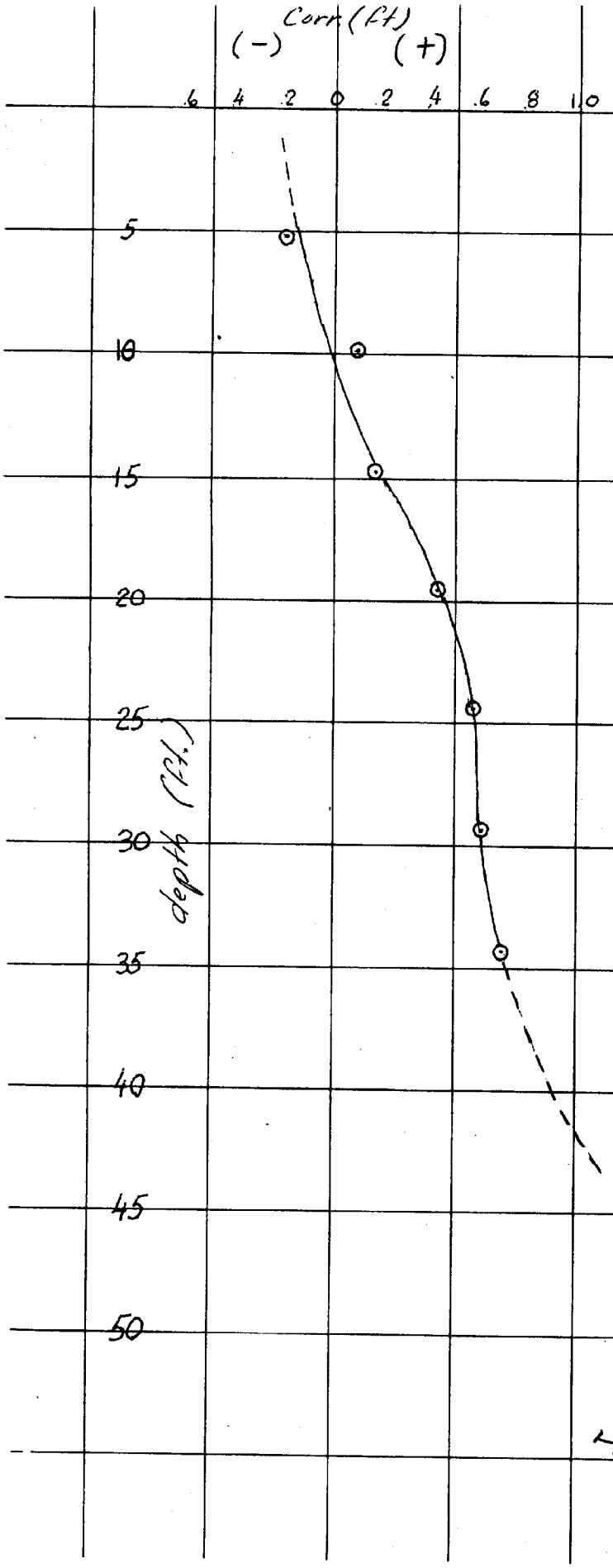


(−)
(+)
-.4 -.2 0 .2 .4 .6 .8 1.0
Launch 1257 #1
5
10
15
20
25
30
35
40
45
50
depth (ft.)
Velocity Corrections
NOAA Launch 1257
Corrections to be applied
to all echo sdgs. Launch 1257
Survey H-9583
depth (ft) Corr. (ft)
0 - 7.2 -0.2
12.0 0.0
15.8 +0.2
19.8 +0.4
34.2 +0.6
39.0 +0.8
48.0 +1.0
deeper +1.2



Launch 1255 Table #2

Velocity Corrections
NOAA Launch 1255

Corrections to be applied to all echo soundings - Launch 1255
Survey H-9583

depth (Ft.)	Corr. (Ft.)
0 - 7.2	-0.2
13.0	0.0
16.8	0.2
21.2	0.4
34.3	0.6
39.8	0.8
43.2	1.0
deeper	1.2

ABSTRACT OF BAR CHECK LINE CORRECTIONS

	Left Side	Right Side
Marked Depth	75	70
Actual Depth	74.0	69.3

ADJUSTED VALUES OF MARKS

Marked Depth	Actual Depth
5	4.95
10	9.90
15	14.85
20	19.75
25	24.70
30	29.65
35	34.60
40	39.55
45	44.50

Note: Error in length was linear

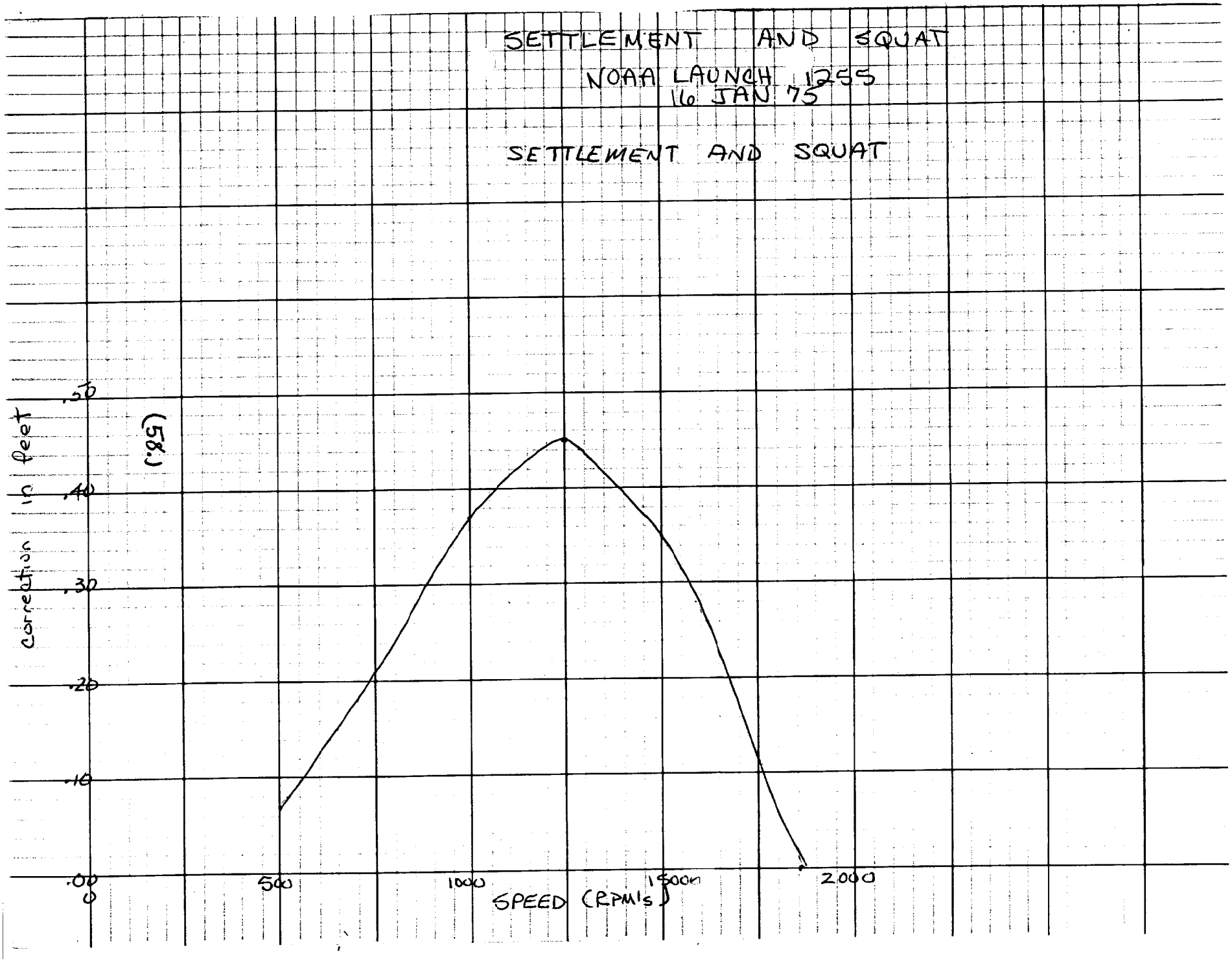
SETTLEMENT AND SQUAT DETERMINATION
NOAA LAUNCH 1255
16 Jan 75
EGMONT KEY, FLORIDA

	RPM's	STOP	OUT	BACK	STOP	AVE STOP	AVE AT SPEED	S&SQ
(IDLE)	500	2.36	2.43	2.40	2.33	2.34	2.41	+0.07
	1000	2.33	2.68	2.70	2.32	2.32	2.69	+0.37
	1250	2.32	2.76	2.74	2.27	2.30	2.75	+0.45
	1500	2.27	2.60	2.64	2.28	2.27	2.62	+0.35
ULL)	1850	2.27	2.33	2.35	2.26	2.26	2.34	+0.08

SETTLEMENT AND SQUAT CORRECTIONS
NOAA LAUNCH 1257
3 MAY 1976
(LEVEL METHOD)

RPM		Correction
600		+.03
1100		+.41
1950	(Standard Hydro)	-.28

SETTLEMENT AND SQUAT
NOAA LAUNCH 1255
16 JAN 75



APPROVAL SHEET

SURVEY H-9583 (AHP-40-2-75)

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

for John O. Rolland
CDR , NOAA
Chief, AHP

NOAA FORM 76-155
(11-72)

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

GEOGRAPHIC NAMES

SURVEY NUMBER

H-9583

Name on Survey	A ON CHART NO.	B ON PREVIOUS SURVEY NO.	C ON U.S. QUADRANGLE MAPS	D FROM LOCAL INFORMATION	E ON LOCAL MAPS	F P.O. GUIDE OR MAP	G RAND MCNALLY ATLAS	H U.S. LIGHT LIST	K	
CRYSTAL RIVER (TITLE)										1
										2
										3
										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
						APPROVED				18
						Chas. E. Harrington				19
						STAFF GEOGRAPHER - C51x2				20
						21 Sept. 1977				21
										22
										23
										24
										25

APPROVAL SHEET
FOR
SURVEY H- 9583

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 Provisional Hydrographic Manual. Exceptions are listed in the Verifier's Report.

Date: August 23,1977

Signed: William L Jones

Title: Chief, Verification Branch

NOAA FORM 77-27 (5-77) U. S. DEPARTMENT OF COMMERCE NOAA

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NUMBER: H-9583

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	BOAT SHEETS & PRELIMINARY OVERLAYS (5 parts)	9 ~~1~~
DESCRIPTIVE REPORT	1	SMOOTH OVERLAYS: POS. ARC, EXCESS	3

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES	2					1
CAHIERS	3		with depth			
VOLUMES						2
BOXES			1-Smooth			

T-SHEET PRINTS (List)

SPECIAL REPORTS (List)

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

PROCESSING ACTIVITY	AMOUNTS PRE-VERIFICATION	VERIFICATION	TOTALS
POSITIONS ON SHEET			6499
POSITIONS CHECKED		552	552
POSITIONS REVISED		0	0
SOUNDINGS REVISED		508	508
SOUNDINGS ERRONEOUSLY SPACED		1	1
SIGNALS (CONTROL) ERRONEOUSLY PLOTTED		0	0
	TIME – HOURS		
CRITIQUE OF FIELD DATA PACKAGE (PRE-VERIFICATION)	8		8
VERIFICATION OF CONTROL		1	1
VERIFICATION OF POSITIONS		26	26
VERIFICATION OF SOUNDINGS	13	155	168
COMPILATION OF SMOOTH SHEET		46	46
APPLICATION OF TOPOGRAPHY	0	0	0
APPLICATION OF PHOTOBATHYMETRY	0	0	0
JUNCTIONS		2	2
COMPARISON WITH PRIOR SURVEYS & CHARTS		7	7
VERIFIER'S REPORT		5	5
OTHER		6	6
TOTALS	21	248	269

Pre-Verification by: M. Johnson	Beginning Date: 07/15/76	Ending Date: 07/16/76
Verification by: B. Stephenson, F. Lamison, J. Bradford	Beginning Date: 09/15/76	Ending Date: 08/15/77
Verification Check by: W.L. Jonns	Time (Hours): 6	Date: 08/17/77
Marine Center Inspection by: Hydrographic Inspection Team (AMC)	Time (Hours): 15	Date: 08/24/77
Quality Control Inspection by: R.W. DerGazarian	Time (Hours): 36	Date: 11/8/77
Requirements Evaluation by: D.J. Hill	Time (Hours): 3	Date: 4/5/78

Insp Carstens 4 hr 3/29/78

Reg. No. 9583

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 REQ'D _____ INITIALS _____

REMARKS:
pos. 5308
117

Reg. No. H-9583

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 3/31/80 TIME REQ'D. _____ INITIALS JHC

REMARKS:

H-9583

Information for Future Presurvey Reviews

Future surveys should expect to find some changes in the bottom attributed to natural causes.

Position Index Lat.	Long.	Bottom Change Index	Use Index	Resurvey Cycle
285	830	4	2	25 years
285	831	3	2	50 years
285	832	3	2	50 years
284	830	3	2	50 years
284	831	3	2	50 years
284	832	2	2	50 years

ATLANTIC MARINE CENTER
VERIFIER'S REPORT

REGISTRY NO. H-9583 FIELD NO. AHP-40-2-75

West of Crystal River, Florida

SURVEYED: November 19, 1975 through February 5, 1976

SCALE: 1:40,000 PROJECT NO.: OPR-508

SOUNDINGS: Raytheon DE-723 CONTROL: Raydist

Chief of Party ..... LCDR J. O. Rolland
Surveyed by ..... LCDR D. M. Wilson
..... LT R. P. Floyd
..... LTJG C. P. Berg
..... LT D. Drake
..... ENS S. R. Ellis
Automated Plot by ..... Calcomp Plotter #618 (AMC)
Verified and Inked by ..... J. S. Bradford
August 8, 1977

1. Introduction

No unusual problems were encountered during verification. The red changes in the Descriptive Report were made by the verifier. The projection parameters have been revised and inserted in the Descriptive Report.

2. Control and Shoreline

a. The control is adequately described in Sections F and G of the Descriptive Report.

b. There is no shoreline within the limits of this survey.

3. Hydrography

a. Depths at crossings are in good agreement, with the exception of the northeastern portion of the survey area. One to three foot differences are noted. The hydrography in this area was extensively developed and revealed a very irregular bottom configuration.

b. The standard depth curves are adequately delineated, with the inclusion of several dashed ~~curves~~ and brown curves.

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

4. Condition of Survey

The sounding records, automated plotting, and the Descriptive Report are adequate and conform to the requirements of the Provisional Hydrographic Manual.

5. Junctions

An adequate junction was effected with the following contemporary surveys:

H-9588 (1976) 1:40,000 to the northwest
H-9511 (1975) 1:40,000 to the south

No other contemporary surveys junction with H-9583.

6. Comparison With Prior Surveys

H-424 (1854) 1:20,000 Not covered by present survey.
H-1770 (1887) 1:40,000
H-1771 (1887) 1:40,000
H-2553 (1902) 1:20,000
H-7792 (1948) 1:100,000

These surveys, taken together, cover the common area of the present survey. Differences between H-9583 and the most recent prior surveys (H-1770 and H-1771) are adequately described in Section K of the Descriptive Report.

The present survey is adequate to supersede the above prior surveys within the common area.

7. Comparison With Charts 11409 (1258) (13th Edition, February 21, 197~~7~~6)
11408 (1259) (13th Ed. JUNE 7, 1975)

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys and reported depths which were adequately disposed of in Section K, "Comparison With Prior Surveys", in the Descriptive Report and requires no further consideration.

The present survey is adequate to supersede the charted hydrography within the common area.

b. Aids to Navigation

The aids to navigation on the present survey are in agreement with their charted positions, with the exception of Cross-Florida Barge Canal Light #6 which was located 275 meters east of its charted position.

8. Compliance With Instructions

This survey adequately complies with the Projection Instructions.

9. Additional Field Work

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

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Atlantic Marine Center
439 West York Street
Norfolk, Virginia 23510

File No: D6-5
Ser. No: 77-113

August 24, 1977

CAM3/RAT

TO: RADM Robert C. Munson
Director, Atlantic Marine Center

FROM: CDR Robert A. Trauschke
Chief, Processing Division

SUBJECT: Hydrographic Inspection Team Report, H-9583 (1976)

This survey was accomplished by NOAA Launches 1255 and 1257 as part of Project OPR-508, West Coast of Florida. The survey is in general compliance with Project Instructions dated August 20, 1974.

FIELD WORK

The data is generally of excellent quality. The Project Instructions call for the area in the vicinity of Seahorse Reef be done at a 1:20,000 scale. The approved sheet layout strongly suggests that the "vicinity of Seahorse Reef" includes a portion of this survey.

VERIFICATION

A number of dashed depth curves and brown depth curves were added during HIT. Also, the HIT Team suggested that a number of suspicious looking soundings be investigated by the verifier.

Due to irregularities in the bottom and also considering the Cross-Florida Barge Canal, it is the opinion of the Hydrographic Inspection Team that the northeast quadrant of this sheet should have been accomplished at a 1:20,000 scale.

All of these OPR-508 surveys are now being done at a 1:40,000 scale with 200 meter spacing. This makes for a very cluttered and congested survey. This area is not featureless and cannot be described at 1:40,000. It is recommended that all subsequent work on OPR-508 be done at a 1:20,000 scale.

A re-excessed plot was made at a 1:80,000 scale and sent directly to the Marine Chart Division.

HIT devoted 15 hours to this survey.

Survey H-9583
Examined and Approved:
Hydrographic Inspection Team
Date: August 23, 1977

CDR Robert A. Trauschke, NOAA
Chief, Processing Division

CDR Charles H. Nixon
Chief, Operations Division

C. Douglas Mason, LT, NOAA *
Chief, EDP Branch

R. D. Sanocki
Technical Assistant
Processing Division

Guy F. Trefethen
Verification Branch

*Absent TDY

Approved/Forwarded

Robert C. Munson
RADM, NOAA
Director, Atlantic Marine Center

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

C352/RWD

November 8, 1977

TO: A. J. Patrick
Chief, Marine Surveys Division

THRU: Chief, Quality Control Branch

FROM: R. W. DerKazarian
Quality Evaluator

SUBJECT: Quality Control Report for H-9583 (1975-76), West of Crystal River, West Coast Florida

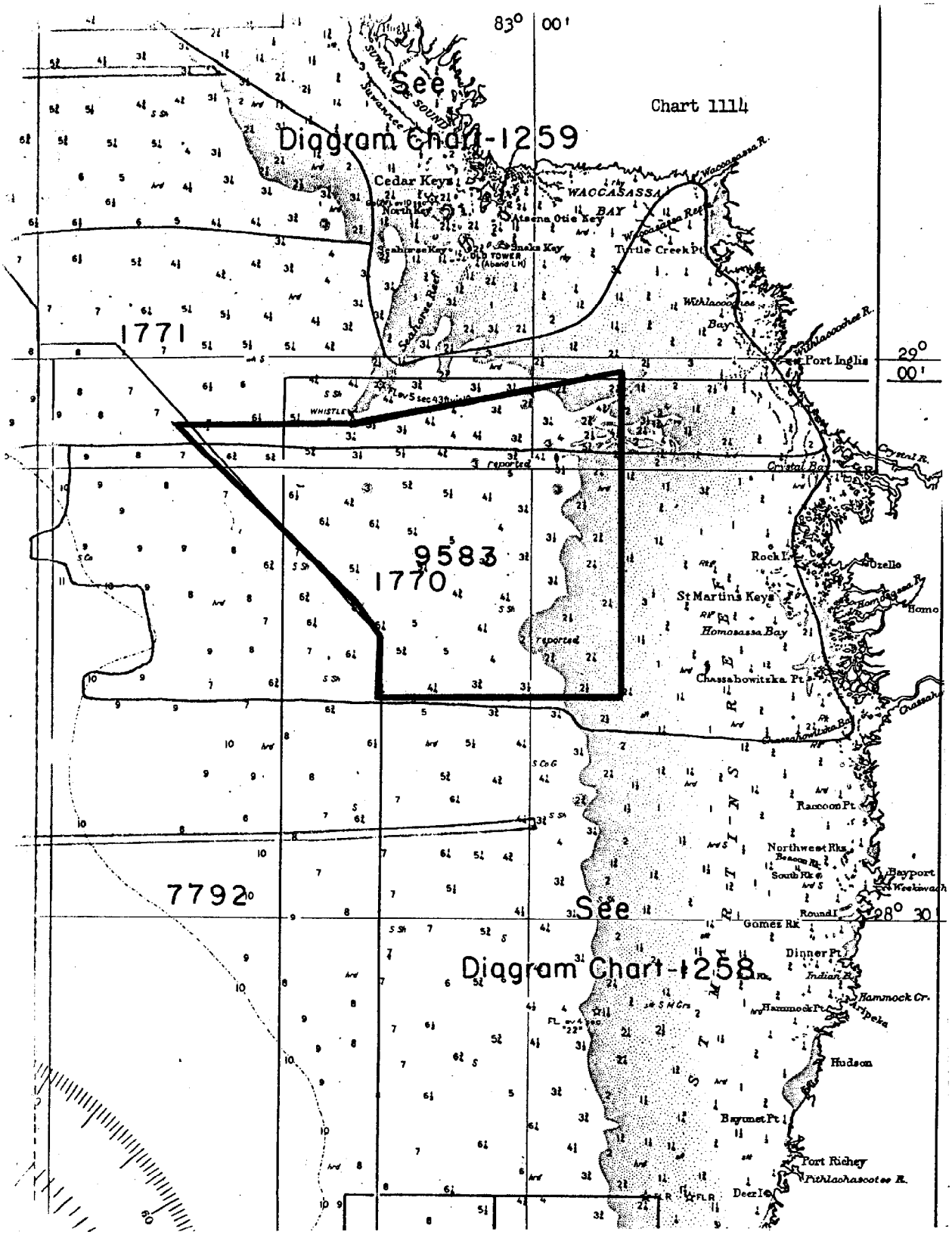
Survey H-9583 was inspected to evaluate the accuracy and adequacy of the survey with respect to data acquisition, delineation of the bottom, determination of least depths, navigational hazards, junctions, sounding line crossings, smooth plotting, decisions and actions taken by the verifier, and the cartographic presentation of data.

Junctional survey H-9588 (1976) on the north has not been received at Headquarters as of the date of this report. The adequacy of that junction will be considered at the time of the quality evaluation of that survey.

It should be noted under "Comparison with Prior Surveys" that the differences in depths between the present and prior work is attributed to the differences in survey methods, lead line on the prior work versus depth recorder soundings on the present.

In general, the survey was found to conform to the National Ocean Survey's standards and requirements except as stated in the report by the verifier and the Hydrographic Inspection Team and for the addition of a few detached brown curves. A minimum amount of revision was required during the quality control inspection.

cc:
C351


83° 00'
See
Diagram Chart-1259
Chart 1114
Cedar Keys
WACCASASSA
BAY
Atsena Otie Key
Snake Key
Turtle Creek Pt
1771
Port Inglis
29°
00'
Crystal Bay
9583
1770
Rock I.
Ozello
St Martins Keys
Homosassa Bay
Chassahowitzka Pt
Raccoon Pt
Northwest Rks
Bayport
7792
See
Diagram Chart-1258
28° 30'
Gomez Rk
Dinner Pt
Hammock Pt
Hammock Cr.
Hudson
Bayonet Pt
Port Richey
Pithlachascotee R.
Deer I.

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. 9583

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
1258	3-24-78	O. Williams	~~Full~~ Part ~~Before~~ After Verification ~~Review Inspection Signed Via~~
~~1259~~	~~3-24-78~~	~~B. Fernandez~~	Drawing No. 25
1259	3-24-78	B Fernandez	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via
			Drawing No.
1259	6-20-78	D. Wylie	Full ~~Part~~ ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. 26
1258	1/15/79	R Richter	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 26
11400	9/4/79	O. Williams	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 29
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8558-P63