8327
WIRE DRAG

Diag. Cht. Nos. 1251-2 and 1252-2

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey WIRE DRAG

Field No. HY 1356WD Office No. H-8327 W.D.

LOCALITY

State FLORIDA

General locality KEY WEST

Locality SOUTHWEST CHANNEL

1956

CHIEF OF PARTY

J. C. Partington

COMM-DC 61300

8327
WIRE DRAG

Form 537
(Ed. June 1946)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

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

REGISTER No. H-8327 WD

Field No. HY 1356WD

State FLORIDA

General locality KEY WEST

Locality SOUTHWEST CHANNEL

Scale 1:20,000 Date of survey 4/16/56 - 5/27/56

Instructions dated 3/20/52 and 12/29/55

Vessel Launches 114 and 117

Chief of party J. C. Partington

Surveyed by J. E. Waugh, E. K. McCaffrey, R. J. Black

Soundings taken by ~~fathometer~~, graphic recorder, hand lead, ~~wire~~

Fathograms scaled by E. T. Hannon, J. J. Curley, L. C. Smith

Fathograms checked by R. J. Black, E. K. McCaffrey

Protracted by A. M. Cook

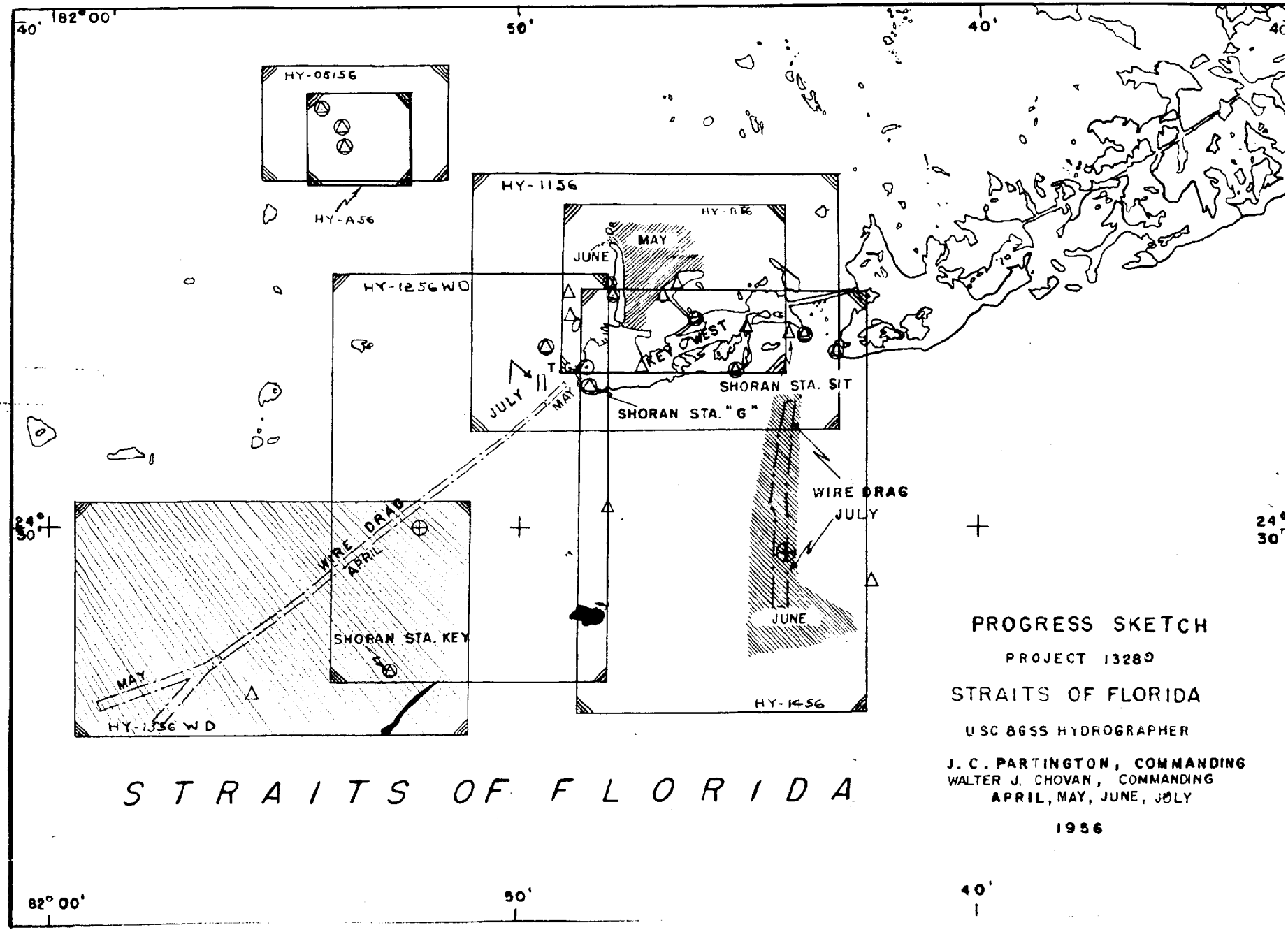
Soundings penciled ~~by~~ and wire drag strips by A. M. Cook

Soundings in ~~fathoms~~ feet at MLW ~~MLLW~~

REMARKS: This is a wire drag survey. Any soundings are to supplement the wire drag work

Verification was limited to soundings, hangs and clearances only. This information was inked and appropriately annotated on the smooth and A + D sheets (See typed listing of verified information included in this D. R.) The cleared areas on the A + D sheet, as well as the pencilled information remaining on the present smooth sheet, should not be regarded as fully verified and are to be used for reference purposes only. No further processing of the present survey is planned K.W.W. 8-23-76 R.D.C.

U. S. GOVERNMENT PRINTING OFFICE 16—66520-1



PROGRESS SKETCH

PROJECT 13289

STRAITS OF FLORIDA

USC BGSS HYDROGRAPHER

J. C. PARTINGTON, COMMANDING
WALTER J. CHOVAN, COMMANDING
APRIL, MAY, JUNE, JULY

1956

DESCRIPTIVE REPORT

To Accompany

Hydrographic Survey H- (Field No. HY-1356WD)

Scale: 1:10,000

Chiefs of Party: J. C. Partington
Walter J. Chovan

A. PROJECT:

This survey was a part of project 13280. The original instructions for this project were issued on 20 March 1952; 22/MEK, S-2-HY.

The wire drag was accomplished under paragraphs 6 and 7, Supplementary Instructions - Project 13280, dated 29 December 1955, 222/MEK, S-2-HY.

B. SURVEY LIMITS AND DATES:

The wire drag part of this survey extends from the junction of Survey H- (Field No. 1356) 1956, scale 1:10,000, Latitude 24° 30' 15", Longitude 81° 52' 30", in a southwesterly direction to Latitude 24° 26' 40", Longitude 81° 58' 50". At Latitude 24° 27' 30", Longitude 81° 56' 45" another channel was surveyed to Latitude 24° 26' 30", Longitude 81° 57' 45". This survey does not join any other contemporary surveys.

The field work was begun 16 April 1956 and was completed 27 May 1956. The progress on the wire drag part of the survey was slow and tedious. It was necessary to work with misfit launches. The only launch obtainable from the Navy was too large, poorly arranged for our purpose, and was hard to handle. Weather conditions were unfavorable throughout the survey. Occasionally field operations were prevented due to bad weather conditions.

The hydrography accomplished was a field investigation of shoals found by the wire drag. No junction was made with any other survey.

C. VESSEL AND EQUIPMENT:

The party operated in launches from the Ship HYDROGRAPHER, anchored on the working grounds. Launch CS117 was used as the guide launch throughout the survey. Launch CS114 was used as the end launch.

The Tender was on loan from the Navy. For A-day through C-day, it was a LCPR - 36 feet long. For D-day through H-day it was a 38 foot picket boat.

Due to the size of the Ship's launches, it was impossible to rig them for satisfactory handling of the drag. It was necessary to set-out and take-in the drag from the Ship and tow it sometimes several miles, to the working area. Whenever the drag grounded on coral formations considerable time was lost in freeing the drag. The hangs encountered were numerous each time the drag was stopped in coral and the damage to the ground wire and uprights was excessive. Although some repairs were made on the working grounds it was necessary to return the drag to the ship for any major repairs.

The hydrographic investigation of the hangs was made from the tender with lead line and/or from the guide launch, acting as a tender, with the graphic depth recorders.

The hydrographic investigation of the shoals found were made using Launch CS117 and CS114. Type 808 depth recorders were used. Recorder No. 153SPX was used in Launch CS117. Recorder No. 105S was used in Launch CS114. These recorders, calibrated for a speed of 820 fms/sec., were used for soundings in all depths. Bar checks were taken throughout the depths sounded.

D. TIDE AND CURRENT STATIONS:

A tide gage at Key West, Florida was used for the reduction of the Data. It was at the same location as the Standard Tide Gage at Key West. The MLW on the staff was determined by reference to the bench marks for the standard station. A time correction of one hour was applied throughout the survey. (See letter from the Director dated 3/16/56; 36-122-982h). No Current Stations were observed within the limits of this survey.

E. SMOOTH SHEET:

The projection for the smooth sheet was made in the Washington Office on the ruling machine. The shoran distance arcs for station EPI G were plotted in the Office. The arcs from station KEY were plotted in the field by the ship's personnel.

F. CONTROL STATIONS:

The entire survey was controlled by shoran distance arcs from an eccentric position determined by this party, of triangulation station SAND KEY LIGHTHOUSE, 1853, J.T., Chief of Party; and from triangulation station EPI G, 1954, L. S. Hubbard, Chief of Party. These stations were plotted from their Geographic positions. The buoys were located by shoran fixes from the control stations and plotted on the smooth sheet.

H. SOUNDINGS:

The soundings for the hydrography were obtained with portable type 808 depth recorders Nos. 153SPX and 105S. All soundings were taken on the "A" scale. The correctors applied have been discussed under a separate report.

I. CONTROL:

The survey was controlled by shoran distance arcs from two triangulation stations. The corrections applied have been discussed under a separate report.

J. ADEQUACY OF SURVEY:

The wire drag survey was made to determine a 200 yard channel clear to 23 feet in the area known as SOUTHWEST CHANNEL. A channel clear to 23 feet was found to exist. A satisfactory junction is obtained with Survey No. H- (HY-1256WD) on the northeast. Near Southwest Channel Shoal Buoy 2A an attempt was made to locate a channel on an azimuth of 220° T to pass east of Satan Shoal. This area was cleared to 20 feet. A satisfactory alternate channel was found to the northwest on an approximate azimuth of 246°. (Refer to COAST PILOT SECTION for the recommended channel).

The groundings along the edge of the drag strip have not necessarily been cleared to a lesser depth. The additional work necessary to accomplish this was not believed warranted as the desired width channel was found.

L. & M. COMPARISON WITH PRIOR CHARTS AND SURVEYS:

No disagreement was found with any of the surveys of this area. A detail comparison was made with Chart No. 584, scale 1:30,000, print date 5/3/54, and Chart 1351, scale 1:180,000, print date 4/26/54.

N. DANGERS AND SHOALS:

The shoals shown in the area of this survey were verified, but the least depth was not at all times determined due to the nature of this survey. No new dangers or shoals were found.

O. COAST PILOT INFORMATION:

As a result of this survey the following sailing directions are recommended when entering SOUTHWEST CHANNEL from the seaward. The recommended channel below has been laid out in reference to the survey position of the buoys. The differences between the survey position and the charted position follows:

NAME	AZIMUTH SURVEY POSITION TO CHARTED POSITION	DISTANCE YARDS
VESTAL SHOAL BUOY	166° T	105
SOUTHWEST CHANNEL SHOAL BUOY 2A	263° T	70
SOUTHWEST CHANNEL BUOY 4	297° T	45
PARSONAGE SHOAL BUOY	172° T	180
SOUTHWEST CHANNEL LIGHTED BUOY 6	192° T	190

From a point approximately 3/4 mile south and east of VESTAL SHOAL BUOY, with WESTERN DRY ROCKS DAYBEACON K on range with SAND KEY LIGHT and the western tangent of WOMAN KEY bearing 000°, steer a course of 000° until WESTERN DRY ROCKS DAYBEACON K bears 088° - the vessel will be entering the swept channel at this point - change course to 066° and follow this course for approximately 2.25 miles to a point 300 yards, 156° from the survey position of SOUTHWEST CHANNEL SHOAL BUOY 2A; with the buoy on starboard beam change course to 058° and follow this course for approximately 1.8 miles, passing 225 yards northwest of the survey position for SOUTHWEST CHANNEL BUOY 4; when survey position of SOUTHWEST CHANNEL BUOY 4 bears 180°, distance 260 yards, change course to 050°, passing 210 yards southeast of the survey position of PARSONAGE SHOAL BUOY, and continue on a course of 050° for an approximate distance of 2.4 miles to a point 150 yards, 140° from the survey position of SOUTHWEST CHANNEL LIGHTED BUOY 6, bearing to KEY WEST LIGHT 056°; change course to 056° and follow this course for approximately 4.4 miles; when the KEY WEST HARBOR RANGE (bearing 024°) has been crossed change course to enter the MAIN SHIP CHANNEL approximately midway between KEY WEST MAIN CHANNEL BUOY 9 and KEY WEST MAIN CHANNEL BUOY 11.

P. AIDS TO NAVIGATION:

The position of the fixed aids to navigation determined in the survey were forwarded under separate cover. Floating aids to navigation located in this survey are as follows:

Name of Aid	Lat. and Longitude	Depth of Water	Pos. No.	Date of Location
SOUTHWEST CHANNEL LIGHTED BUOY 6	24° 30!01 81° 52!83	44.5 ft.	1a'	16 April 1956
SOUTHWEST CHANNEL LIGHTED BUOY 7	24° 30!23 81° 53!10	41.8	2a'	16 April 1956
SOUTHWEST CHANNEL BUOY 4	24° 28!34 81° 54!88	29.8	4a'	16 April 1956
SOUTHWEST CHANNEL BUOY 5	24° 28!88 81° 51!88	31.0	5a'	16 April 1956
PARSONAGE SHOAL BUOY	24° 28!73 81° 54!73	39.8	3a'	16 April 1956
SOUTHWEST CHANNEL BUOY 3	24° 28!42 81° 57!12	34.0	6a'	16 April 1956
SOUTHWEST CHANNEL SHOAL BUOY 2A	24° 27!43 81° 56!49	26.0	6c'	24 April 1956
SATAN SHOAL BUOY 1	24° 26!73 81° 57!87	29.6	5d'	25 April 1956
VESTAL SHOAL BUOY 1	24° 26!75 81° 59!58	27.4	6e'	15 May 1956

Q. LANDMARKS FOR CHARTS:

There are no landmarks for charts.

R. GEOGRAPHIC NAMES:

No investigation was made of Geographic Names.

U. MISCELLANEOUS:

The guide launch used blue day letters; the end launch, green day letters. Capital letters in alphabetical order were used for the wire drag. On days when either or both launches supplemented the wire drag with tender operations or hydrographic operations, small case letters were used. The positions for both launches were numbered consecutively in the tender volumes. On j' and k' days (25 May and 27 May 1956) there was no wire drag. The positions are numbered separately for each launch.

The wire drag for D day (25 April 1956) was necessarily rejected and supplemented by d' day hydrographic operations. On 14 May 1956 wire drag was again attempted on D day, but necessarily rejected and supplemented by dd' hydrographic operations. The wire drag resumed on E day, 15 May 1956.

Z. TABULATION OF APPLICABLE DATA:

1. Landmarks to Charts dated 7/29/56.
2. Fixed Aids to Navigation dated 7/29/56.
3. Report on Shoran Corrections - forwarded 30 August 1956, summary attached.
4. Tide Marigrams to be forwarded.

Arthur M. Cook

Arthur M. Cook
ENS, C&GS

STATISTICS FOR SURVEY H- (HY-1356)

Date	Day Letter	Vol. No.	No. Posit.	No. HL Sdgs	Naut. Miles
			WIRE DRAG - Guide Launch		
19 April 1956	A	1	18		1.1
23 April	B	1	39		3.1
24 April	C	1	48		3.3
15 May	E	1	22		1.7
16 May	F	1	28		1.2
17 May	G	2	10		0.6
18 May	H	2	46		4.0
	TOTAL:		211		15.0

Area Surveyed: 2.2 sq. n. mi.

			- Tender		
16 April 1956	a'	3	7	7	
23 April	b'	3	10		
24 April	c'	3	6	1	
25 April	d'	3	51		3.6
14 May	dd'	3	8		
15 May	e'	3	7	1	
16 May	f'	3	12	2	
17 May	g'	3&4	113		10.1
18 May	h'	4	5	2	
25 May (blue)	j'	4	54		5.4
25 May (green)	j'	5	73		11.0
27 May (blue)	k'	4	62		6.4
27 May (green)	k'	5	78		10.6

Area Surveyed: 1.7 sq. n. mi.

SHORAN CORRECTORS

For a Zero Set of 99.770 - 99.820

Sheets HY-1256 and HY-1356WD

Launch CS-114

16 April 1956 - Corrections and Distances in statute miles.

Rate (KEY) Correction	Distances	Drift (EPI-G) Correction	Distances
+ 0.024	4.1 - 4.9	- 0.002	0.0 - 0.8
+ 0.022	4.9 - 5.5	- 0.004	0.8 - 1.8
+ 0.020	5.5 - 6.3	- 0.006	1.8 - 2.8
+ 0.018	6.3 - 6.9	- 0.008	2.8 - 3.8
+ 0.016	6.9 - 7.6		
+ 0.014	7.6 - 8.2		

18 and 19 April 1956

Rate (KEY) Correction	Distances	Drift (EPI-G) Correction	Distances
+ 0.020	2.1 - 3.2	- 0.002	1.4 - 2.5
+ 0.018	3.2 - 4.3	- 0.004	2.5 - 3.8
+ 0.016	4.3 - 5.3	- 0.006	3.8 - 5.0
+ 0.014	5.3 - 6.3	- 0.008	5.0 - 6.2
+ 0.012	6.3 - 7.3	- 0.010	6.2 - 7.5

23 and 24 April 1956

Rate (KEY) Correction	Distances	Drift (EPI-G) Correction	Distances
+ 0.020	1.7 - 2.1	- 0.004	3.9 - 5.7
+ 0.018	2.1 - 2.5	- 0.006	5.7 - 7.4
+ 0.016	2.5 - 3.1	- 0.008	7.4 - 8.2
+ 0.014	3.1 - 3.8	- 0.010	8.2 - 8.8
+ 0.012	3.8 - 4.9	- 0.012	8.8 - 9.3
		- 0.014	9.3 - 10.0
		- 0.016	10.0 - 10.6
		- 0.018	10.6 - 11.0

SHORAN CORRECTORS (Cont.)
Launch CS-114

14 through 27 May 1956

Rate (KEY)		Drift (EPL-G	
Correction	Distances	Correction	Distances
+ 0.008	1.7 - 2.1	- 0.002	5.0 - 5.5
+ 0.006	2.1 - 3.5	- 0.004	5.5 - 6.3
+ 0.004	3.5 - 4.8	- 0.006	6.3 - 6.8
+ 0.002	4.8 - 6.2	- 0.008	6.8 - 7.3
0.000	6.2 - 7.8	- 0.010	7.3 - 7.7
		- 0.012	7.7 - 8.1
		- 0.014	8.1 - 8.5
		- 0.016	8.5 - 8.9
		- 0.018	8.9 - 9.3
		- 0.020	9.3 - 9.7
		- 0.022	9.7 - 10.1
		- 0.024	10.1 - 10.5
		- 0.026	10.5 - 11.0
		- 0.028	11.0 - 11.3
		- 0.030	11.3 - 11.8
		- 0.032	11.8 - 12.2

SHORAN CORRECTORS

For a Zero Set of 99.770 - 99.820

Sheets HY-1256 and HY-1356WD

Launch CS-117

16 April 1956 - Corrections and Distances in statute miles

Rate (KEY)		Drift (EPI-G)	
Correction	Distance	Correction	Distance
+ 0.012	2.5 - 3.6	- 0.014	4.9 - 5.6
+ 0.010	3.6 - 5.3	- 0.016	5.6 - 6.3
+ 0.008	5.3 - 7.1	- 0.018	6.3 - 7.0
		- 0.020	7.0 - 7.8
		- 0.022	7.8 - 8.5
		- 0.024	8.5 - 9.2
		- 0.026	9.2 - 10.0

18 and 19 April 1956

Rate (KEY)		Drift (EPI-G)	
Correction	Distance	Correction	Distance
+ 0.010	3.6 - 5.3	0.000	0.5 - 1.3
+ 0.008	5.3 - 7.1	- 0.002	1.3 - 2.1
		- 0.004	2.1 - 2.9
		- 0.006	2.9 - 3.7
		- 0.008	3.7 - 4.6
		- 0.010	4.6 - 5.3

23 through 25 April 1956

Rate (KEY)		Drift (EPI-G)	
Correction	Distance	Correction	Distance
+ 0.012	2.5 - 3.6	- 0.002	3.5 - 5.1
+ 0.010	3.6 - 5.3	- 0.004	5.1 - 6.7
+ 0.008	5.3 - 7.1	- 0.006	6.7 - 7.7
		- 0.008	7.7 - 8.3
		- 0.010	8.3 - 8.9
		- 0.012	8.9 - 9.4
		- 0.014	9.4 - 10.0
		- 0.016	10.0 - 10.6
		- 0.018	10.6 - 11.2
		- 0.020	11.2 - 11.7
		- 0.022	11.7 - 12.3
		- 0.024	12.3 - 13.0
		- 0.026	13.0 - 13.5

SHORAN CORRECTORS (Cont.)

Launch CS-117

14 through 27 May 1956

Rate (KEY)		Drift (EPI-G)	
Correction	Distance	Correction	Distance
+ 0.014	2.0 - 2.5	- 0.010	5.3 - 6.2
+ 0.012	2.5 - 3.6	- 0.012	6.2 - 6.8
+ 0.010	3.6 - 5.3	- 0.014	6.8 - 7.4
+ 0.008	5.3 - 7.1	- 0.016	7.4 - 7.9
		- 0.018	7.9 - 8.5
		- 0.020	8.5 - 9.0
		- 0.022	9.0 - 9.6
		- 0.024	9.6 - 10.2
		- 0.026	10.2 - 10.8
		- 0.028	10.8 - 11.3
		- 0.030	11.3 - 11.9
		- 0.032	11.9 - 12.5
		- 0.034	12.5 - 13.0

SUMMARY OF VELOCITY CORRECTIONS

Survey H- (HY1356) - Depth Recorder 153SPX

Date	Day	Depth (feet)	Corrn. (feet)
23 Apr 1956	b'	0 - 20' =	+ 0.4
		20 - 26' =	+ 0.6
		26 - "A" scale =	+ 0.8
25 Apr 1956	d'	0 - 20' =	+ 0.4
		20 - 26' =	+ 0.6
		26 - "A" scale =	+ 0.8
14 May 1956	dd'	0 - 38' =	+ 0.6
		38 - "A" scale =	+ 0.4
15 May 1956	e'	0 - 38' =	+ 0.6
		38 - "A" scale =	+ 0.4
17 May 1956	g'	0 - 38' =	+ 0.6
		38 - "A" scale =	+ 0.4
18 May 1956	h'	0 - 38' =	+ 0.6
		38 - "A" scale =	+ 0.4
25 May 1956	j'	0 - 20' =	+ 0.2
		20 - 24 =	+ 0.4
		24 - 26 =	+ 0.6
		26 - 28 =	+ 0.8
		28 - 34 =	+ 1.0
		34 - "A" scale =	+ 1.2
27 May 1956	k'	0 - 20' =	+ 0.2
		20 - 24 =	+ 0.4
		24 - 26 =	+ 0.6
		26 - 28 =	+ 0.8
		28 - 34 =	+ 1.0
		34 - "A" scale =	+ 1.2

SUMMARY OF VELOCITY CORRECTIONS

Survey H- (HY1356) - Depth Recorder 105S

Date	Day	Depth (feet)	Corrn (feet
15 May 1956	e'	use 0.0 for all depths	
16 May 1956	f'	use 0.0 for all depths	
17 May 1956	g'	0 - 15 =	0.0
		15 - 40 =	-0.2
		40 - "A" scale =	-0.4
25 May 1956	j'	0 - 16.5 =	0.0
		16.5- "A" scale =	-0.2
27 May 1956	k'	0 - 16.5 =	0.0
		16.5- "A" scale =	-0.2

TIDE NOTE

to accompany

Hydrographic Survey H- (HY-1356WD)

Tide Station:	Key West, Florida
Latitude:	24° 33'.2 N
Longitude	21° 48'.5 W
Plane of Reference:	MLW=3.1 ft. on staff (Director's ltr 36-159-982H dtd 4/13/56)
Time Correction:	Minus (-) one hour (Director's ltr 36-122-982h dtd 3/16/56)
Height Correction:	None

This station was established 5 April 1956 and discontinued 19 July 1956. Heights from the gage were used to reduce all drag depths and soundings taken during the survey.

SHIP HYDROGRAPHER
c/o General Delivery
Key West, Florida

7 April 1956

To: The Director
Coast and Geodetic Survey
Washington, D. C.

Subject: Tide Gage - Key West

Reference: Supplemental Instructions for Project 1328 dtd 1/26/56, 3/1/56 and 3/16/56.

The operation of the standard tide gage at Key West was checked with the Public Works Department at the Naval Station. It is and has been operating satisfactorily since the annual inspection by Lt. Tucker in February.

In order to expedite the processing of the field records for the several special surveys in the area it is planned to operate a portable gage at this station also. The MLW on the staff for this portable gage has been determined to be 3.1 feet by levels from existing bench marks. Please verify this value.

Please also advise the height of MLW on the staff of the standard gage.

/s/ J. C. Partington
J. C. Partington
CAPT, C&GS
Comdg., Ship HYDROGRAPHER

DEPARTMENT OF COMMERCE
Coast and Geodetic Survey
Washington 25

36-159-982H

13 April 1956

To: Commanding Officer
USC&GSS HYDROGRAPHER
c/o General Delivery
Key West, Florida

Subject: Tide Gage, Key West

Reference is made to your letter of 7 April 1956.

The value of mean low water on the staff of the portable tide gage has been verified.

Mean low water on the staff of the standard tide gage corresponds to a reading of 5.9 feet.

/s/ Robert W. Knox

Acting Director

APPROVAL

The records, smooth sheet and boat sheets for Survey HY-1356 are approved as submitted. All field work was performed under the supervision of CAPT J. C. Partington prior to my assuming command on 1 June. The plotting of the smooth sheet was followed from day to day as it progressed, the records being inspected frequently. The survey is believed to be complete and adequate for the purpose as outlined in the instructions.

Walter J. Chovan
CAPT, C&GS
Commanding Officer
Ship HYDROGRAPHER

H-8327 WD N.C. - Not cleared

Soundings, hangs, and cleared depths verified during preverification processing.

Sounding or hang depth (ft.)	Lat.	Long.	Position No.	Cleared depth (ft.)	Position No.
42	24°30.24'	81°53.09'	2a'	N.C.	--
44	24°30.02'	81°52.81'	1a'	N.C.	--
23	24°29.52'	81°53.46'	15B	23	42-43 H
24	24°29.44'	81°53.64'	19A	23	20-21 B
19	24°29.04'	81°54.30'	1b	17	32-33 B
40	24°28.75'	81°54.73'	3a'	N.C.	--
24	24°28.72'	81°54.72'	30H		
24	24°28.70'	81°54.70'	6b'	19	9-10 C
23	24°28.54'	81°54.64'	9b'	14	9-10 C
30	24°28.37'	81°54.88'	4a'	N.C.	--
31	24°28.91'	81°55.88'	5a'	N.C.	--
24	24°27.56'	81°56.28'	37C	N.C.	--
34	24°28.47'	81°57.11'	6a'	N.C.	--
26	24°27.43'	81°56.48'	6c'	N.C.	--
24	24°27.29'	81°56.91'	4F	20	14-15 H
22	24°27.19'	81°56.97'	11H	20	14-15 H
26	24°27.28'	81°57.03'	6E	24	9-10 F
27	24°27.37'	81°57.13'	1e	24	9-11 F
24	24°27.18'	81°57.32'	15F	24	16-18 F
24	24°27.24'	81°57.70'	22F	N.C.	--
24	24°27.16'	81°57.76'	27F	N.C.	--
25	24°27.17'	81°57.85'	22E	24	26-28 F
21	24°27.03'	81°58.27'	15E	N.C.	--
24	24°26.63'	81°57.62'	7G	N.C.	--
24	24°26.64'	81°57.57'	75g	21	3-4 H
26	24° 27.33'	81° 56.98'	6F	26	4-6 E

K.W.W

8-23-76

RHC

Form 712
(11-30-55)

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens 2 January 1957

Plane of reference approved in
5 volumes of sounding ~~records for~~ and wire drag records, for

HYDROGRAPHIC SHEET 8327

Locality Key West, Florida

Chief of Party: (J. C. Partington) (W. J. Chovan) in 1956

Plane of reference is mean low water, reading

3.1 ft. on tide staff at Key West (Portable Gage)

8.8 ft. below B.M. 29 (1923)

Height of mean high water above plane of reference is 1.3 feet.

Condition of records satisfactory except as noted below:

William Shafnos
Signature

Chief, Tides Branch

Comm-DC 34330

GEOGRAPHIC NAMES

Survey No. H-8327 W.D.

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	
Florida									BHM	1
Key West			(tide station)						"	2
Southwest Channel										3
										4
										5
										6
										7
										8
										9
				Names approved						10
				12-19-56. L. Heck						11
										12
										13
										14
										15
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										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8327.W.D.

Records accompanying survey:

Boat sheets ..2..; sounding vols. ..3..; wire drag vols. ..2...;

bomb vols. .....; graphic recorder rolls 4-Envelopes

special reports, etc. 1-Smooth Sheet, 1-Area-Depth Diagram, 1-Hydrographic Overlay to Accompany Smooth Sheet, 5-Overlays to Accompany Boat Sheet, and 1-A&D Overlay.....

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

Number of positions on sheet		..908..
Number of positions checked		...59...
Number of positions revised		.....
Number of soundings revised (refers to depth only)		.....
Number of soundings erroneously spaced		.....
Number of signals erroneously plotted or transferred		.....
Topographic details	Time	.....
Junctions	Time	.....
Verification of soundings ~~from graphic record~~ hangs and clearances	Time	..55 hr

Pre-Verification by K.W. Wellman.....Total time ..55 hr Date ..8-23-76

Reviewed by..... Time ..... Date .....

Compton, 3hr 8/30/76

M-2232-1

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H- 8327 W.D.

The verifier should deal with the present hydrographic survey only, as the reviewer considers its relation to previous surveys and published charts. He should be thoroughly familiar with Chapters 3, 7 and 9 of the Hydrographic Manual.

1. The descriptive report was consulted and appropriate notes were made in soft pencil regarding action taken.

2. Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude.

3. All reference to survey sheets mentioned in the descriptive report include the registry number and year.

4. Geographic names of hydrographic features if on sheet are in slanting lettering and of topographic features in vertical lettering.

5. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken.

6. All positions verified instrumentally were check marked in the sounding records.

7. All critical soundings are clear and legible and are a little larger than the adjacent soundings.

8. The metal protractor has been checked within the last three months.

9. The protracting and plotting of all bad crossings were verified.

10. All detached positions locating critical soundings, rocks or buoys were verified.

11. The boat sheet was compared with the smooth sheet.

12. The spacing of soundings as recorded in the records was closely followed.

13. The bottom characteristics were shown on outstanding shoals.

14. The reduction and plotting of doubtful soundings were checked.

15. The transfer of contemporary topographic information was carefully examined.

16. All junctions were transferred and overlapping curves made identical.

17. The notation "JOINS H- (19--)" was added in ink for all contemporary adjoining or overlapping sheets now registered. Those not verified are shown in pencil.

18. The depth curves have been inspected before inking.

19. All triangulation stations and transfer of topographic and hydrographic signals were checked.

20. Heights of rocks were checked against range of tide.

21. Rocks transferred from topographic surveys have a dotted curve where shown thereon. Rocks located accurately by hydrographer are encircled by dotted red curve.

22. Unnecessary pencil notes have been removed.

23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet.

24. The low water line and delineation of shoal areas have been properly shown.

25. Degree and minutes values and symbols have been checked.

26. Questionable soundings have been checked on the fathograms.

27. Source of shoreline and signals (when not given in report).

28. All notes on sheet are in accordance with figure 171 in the Hydrographic Manual.

29. All aids located, with those on contemporary topographic sheets, have been shown on survey.

30. Depth curves were satisfactory except as follows:

31. Sounding line crossings were satisfactory except as follows:

32. Junctions with contemporary surveys were satisfactory except as follows:

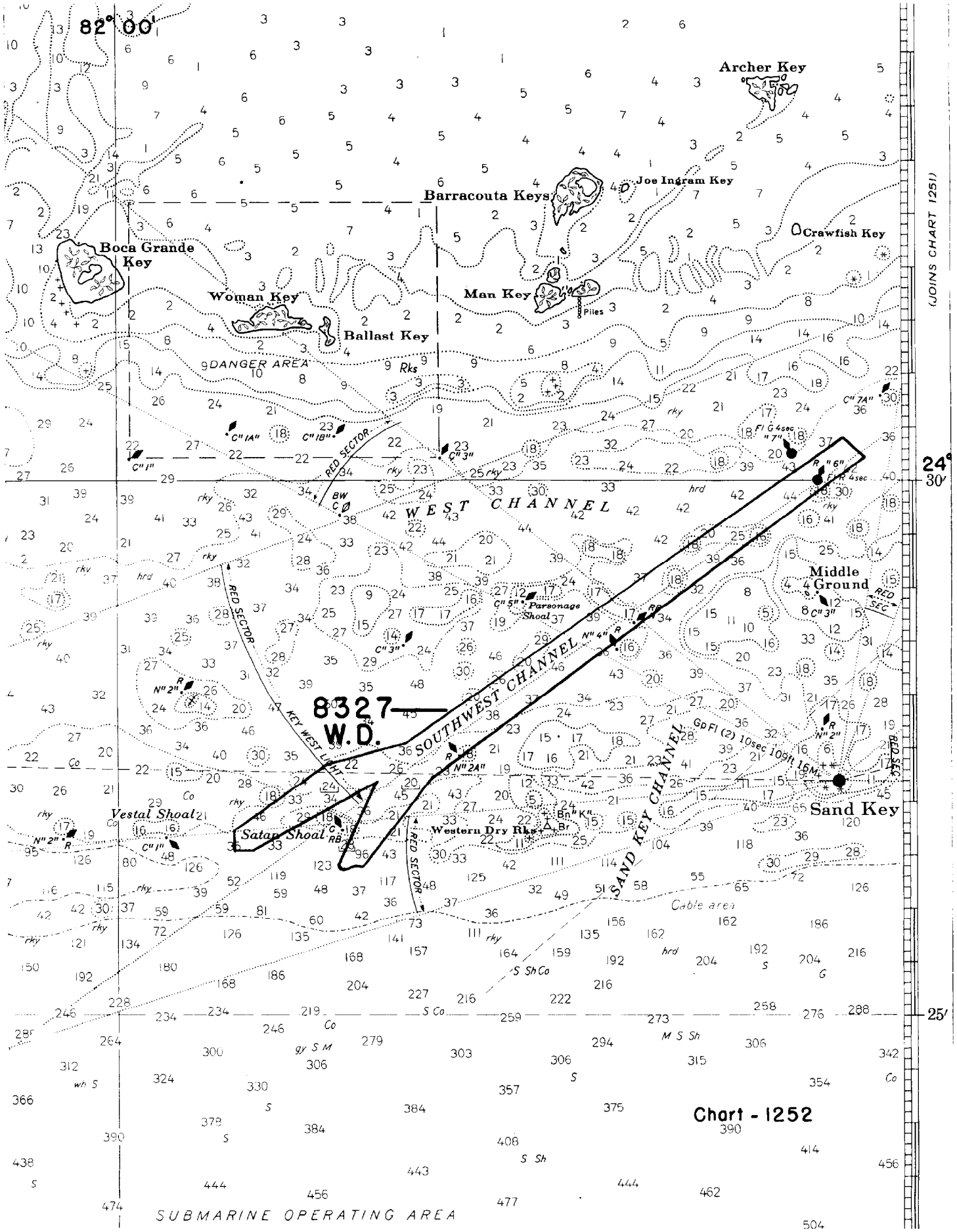
33. Condition of sounding records was satisfactory except as follows:

34. The protracting was satisfactory except as follows:

35. The field plotting of soundings was satisfactory except as follows:

36. Notes to reviewer:

Verified by Date


82° 00'
Archer Key
Joe Ingram Key
Barracouta Keys
Crawfish Key
Boca Grande Key
Woman Key
Man Key
Piles
Ballast Key
DANGER AREA
Rks
RED SECTOR
WEST CHANNEL
Middle Ground
Parsonage Shoal
SOUTHWEST CHANNEL
8327 W.D.
KEY WEST LIGHT
SAND KEY CHANNEL
Gp Fl (2) 10sec 109ft 15M
Sand Key
Vestal Shoal
Satan Shoal
Western Dry Rks
Cable area
S Sh Co
S Co
M S Sh
gy S M
wh S
S Sh
SUBMARINE OPERATING AREA
Chart - 1252
24° 30'
25'
(JOINS CHART 1251)

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8327 W.D.

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
12/4/56	584	C.R.W.	Before ~~After~~ Verification and Review
			Partially applied
1/7/57	1251	F.A.McGann	Before ~~After~~ Verification and Review
4/1/57	584	M. Rogers	Before ~~After~~ Verification and Review Limits of wire
			drag partially appld. Partially applied.
7 Aug. 57	1252	H.E. MacEwen	Before ~~[redacted]~~ Verification and Review 3MA
			(note: this work was already on the drg. probably applied by DeFauldec)
6/10/58	854	J.P. Walker	Before ~~After~~ Verification and Review
			Partially thru Ch 584
8/20/90	11441	Betty Szatkowski	Before After Verification and Review
			Applied
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

Wire Drag & overlay applied to chart 584 12/4/56 (RW) (Before Rev. printing)