

H12196

NOAA FORM 76-35A	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Type of Survey:	Navigable Area
Registry Number:	H12196
LOCALITY	
State:	Florida
General Locality:	Gulf of Mexico
Sub-locality:	10 NM North of Marquesas Keys, FL
2010	
CHIEF OF PARTY CDR Shepard M. Smith NOAA	
DATE	LIBRARY & ARCHIVES

NOAA FORM 77-28 DEPARTMENT OF COMMERCE (11-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	U.S.	REGISTRY NUMBER: H12196
HYDROGRAPHIC TITLE SHEET		

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:	Gulf of Mexico		
Sub-Locality:	10 NM North of Marquesas Keys, FL		
Scale:	1:40,000	Date of Survey:	7/8/10 to 8/25/10
Instructions Dated:	07 June 2010	Project Number:	OPR-H355-TJ-10
Vessel:	NOAA Ship <i>Thomas Jefferson</i>		
Chief of Party:	CDR Shepard M. Smith, NOAA		
Surveyed by:	<i>Thomas Jefferson</i> Personnel		
Soundings by:	Reson 7125 multibeam echosounder		
Graphic record scaled by:	N/A		
Graphic record checked by:	N/A		
Protracted by:	N/A	Automated Plot:	N/A
Verification by:	<i>Atlantic Hydrographic Branch</i>		
Soundings in:	Meters at MLLW		

Remarks: ***Bold, Italic, Red notes in the Descriptive Report were made during office processing.***
1) All Times are in UTC.
2) This is a Navigable Area Hydrographic Survey.
3) Projection is NAD83, UTM Zone 17.

Table of Contents

A. AREA SURVEYED.....4

B. DATA ACQUISITION AND PROCESSING.....6

 B.1 EQUIPMENT AND VESSELS.....6

 B.2 QUALITY CONTROL.....6

 Sounding Coverage.....6

 Systematic Errors.....8

 B.3 CORRECTIONS TO ECHO SOUNDINGS.....9

 B.4 DATA PROCESSING.....9

C. HORIZONTAL AND VERTICAL CONTROL.....11

D. RESULTS AND RECOMMENDATIONS.....12

 D.1 CHART COMPARISON.....12

 D.2 ADDITIONAL RESULTS.....12

E. APPROVAL SHEETS.....15

Appendix I DANGER TO NAVIGATION REPORTS

Appendix II SURVEY FEATURES REPORT

Appendix III FINAL PROGRESS SKETCH AND SURVEY OUTLINE

Appendix IV TIDES AND WATER LEVELS

Appendix V SUPPLEMENTAL SURVEY RECORDS & CORRESPONDENCE

List of Tables

Table 1 Hydrographic Survey Statistics.....4

Table 2 Dates of Multibeam Data Acquisition in Calendar and Julian Days.....5

Table 3 TPE Parameters.....10

Table 4 BASE Surfaces.....10

List of Figures

Figure 1 Survey Limits5

Figure 2 Junction Surveys.....7

Figure 3 Tide Problem.....8

Figure 4 Outer Beam Flareups8

Figure 5 Final Tide Zoning.....9

Project OPR-H355-TJ-10
 Gulf of Mexico
 10 NM North of Marquesas Key, FL
 Scale 1:40,000
 8 July – 25 August 2010
NOAA Ship *Thomas Jefferson*

A. AREA SURVEYED

This hydrographic survey was completed as specified by Hydrographic Survey Letter Instructions OPR-H355-TJ-10, dated 07 June 2010.

Northern Limit	Southern Limit	Western Limit	Eastern Limit
24° 46' 22.57" N	24° 42' 44.32" N	082° 12' 56.44" W	081° 59' 46.97" W

Data acquisition was conducted from 8 July – 25 August 2010.

This project is being conducted in support of the Office of Coast Survey (OCS) and the Office of National Marine Sanctuary (ONMS) to provide contemporary bathymetric and imagery data of critical benthic habitats within the boundaries of the Florida Keys National Marine Sanctuary (FKNMS) in the Northwest approaches to Key West, FL. Bathymetric and imagery data from this project will be collected utilizing Scan Sonar (SSS), Vertical Beam Echosounder (VBES), Multibeam sonar (MB) systems and will be further utilized by OCS to update the nautical charts and products in this area. ** Do not concur. Vertical Beam Echosounder (VBES) data was acquired but not submitted. See also DR section B.2.2, Sounding Coverage.*

	Linear Nautical Miles
LNM Single beam mainscheme only	0
LNM Multibeam mainscheme only	952.75
LNM Lidar mainscheme only	N/A
LNM Side Scan Sonar mainscheme only	900.02
Lineal nautical miles of any combination of the above techniques	952.75
LNM Crosslines	51.57
LNM Lidar Crosslines	N/A
LNM development lines non mainscheme	7.64
LNM shoreline/nearshore investigations	N/A
Number of Bottom Samples	11
Number of items investigated that required additional time/effort in the field beyond the above survey operations	N/A
Total number of square nautical miles	38.65

Table 1: Hydrographic Survey Statistics

Survey limits of H12196 (Figures 1) are shown below.

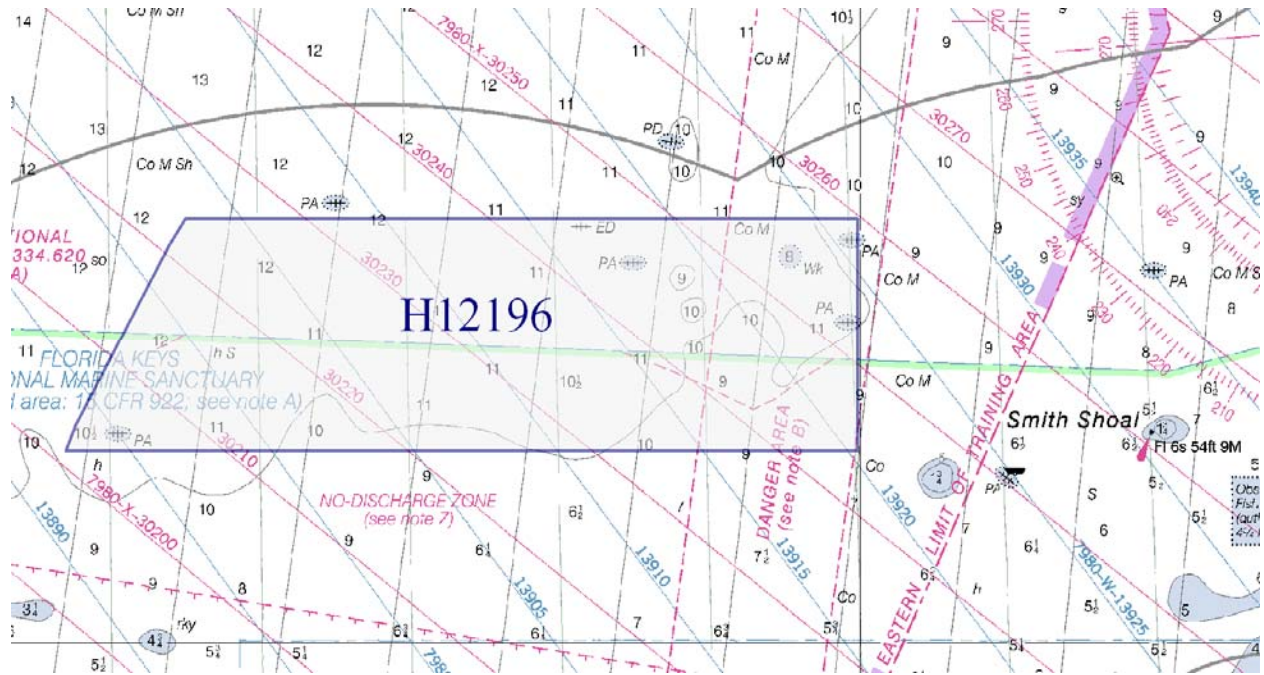


Figure 1: Survey Limits

Calendar Date	Julian Day
8 July 2010	189
16 July 2010	197
17 July 2010	198
1 Aug 2010	213
2 Aug 2010	214
3 Aug 2010	215
4 Aug 2010	216
5 Aug 2010	217
6 Aug 2010	218
10 Aug 2010	222
11 Aug 2010	223
12 Aug 2010	224
13 Aug 2010	225
14 Aug 2010	226
18 Aug 2010	230
24 Aug 2010	236
25 Aug 2010	237

Table 2: Dates of Multibeam Data Acquisition in Calendar and Julian Day

B. DATA ACQUISITION AND PROCESSING

Refer to *OPR-H355-TJ-10 Data Acquisition and Processing Report (DAPR)* for a complete description of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods. Additional information to supplement sounding and survey data, and any deviations from the DAPR are included in this descriptive report.

B 1. EQUIPMENT AND VESSELS

Data were acquired by NOAA Ship *Thomas Jefferson* and Hydrographic Survey Launch 3101. NOAA Ship *Thomas Jefferson* acquired Reson 7125 multibeam echosounder soundings (MBES), side scan sonar (SSS), and sound velocity profiles. Launch 3101 acquired vertical beam echosounder (VBES) soundings, side scan sonar (SSS), and sound velocity profiles. Vessel configurations, equipment operation, and data acquisition and processing were consistent with specifications described in the *DAPR*. ** Concur with clarification. Vertical Beam Echosounder (VBES) data was acquired but not submitted. See also DR section B.2.2, Sounding Coverage.*

B 2. QUALITY CONTROL

B 2.1 System Certification and Calibration

Refer to NOAA Ship *Thomas Jefferson* DAPR and Hydrographic Systems Readiness Report (HSRR) for a complete description of system integration and initial calibration results for equipment and sensors used for this survey.

B.2.2 Sounding Coverage

As per the Letter Instructions, this survey was conducted using 200% SSS coverage with concurrent MBES bathymetry with object detection MBES development over navigationally significant features.

A gap in the 200% Side Scan coverage exists where overlap with the 100% was not fully achieved. This extends from the southeast corner to approximately the middle of the survey. The gap generally does not exceed ½ of a swath width at any point. The 100% was scanned for features and none were found. Object detection multibeam data were also acquired over the same area and no significant features were identified. *Do not concur. No gap in coverage is apparent.*

VBES data were acquired but not used, as the area was subsequently acquired with MBES data.

B 2.3 Crosslines

Multibeam echosounder cross-lines totaling 51.57 lineal nautical miles, comprising 5.37% of hydrography, were acquired during the course of the survey. As per the HSSD 2010, section

5.2.4.3 the quality control check was done using the standard deviation layer of the survey’s uncertainty surface. Areas of unusually high standard deviation were investigated and resolved in processing, except where caused by areas of high bathymetric relief or features or as described in Section 2.5 Systematic Errors.

B 2.4 Junctions and Prior Surveys

The following surveys junction with H12196, see figure 2.

Registry #	Scale	Date	Field Party	Junction side
H12192	1:40,000	2010	<i>Thomas Jefferson</i>	Southeast
H12193	1:40,000	2010	<i>Thomas Jefferson</i>	Northeast
H12194	1:40,000	2010	<i>Thomas Jefferson</i>	South
H12197	1:40,000	2010	<i>Thomas Jefferson</i>	North

Survey H12192 junctions with H12196 in the Southeast. The difference in soundings between the two surveys is no greater than one foot.

Survey H12193 junctions with H12196 in the Northeast. The difference in soundings between the two surveys is no greater than one foot.

Survey H12194 junctions with H12196 in the South. The difference in soundings between the two surveys is no greater than one foot.

Survey H12197 junctions with H12196 in the North. The difference in soundings between the two surveys is generally no greater than one foot. The east side has some differences of up to two feet. This is caused by the tides in the area.

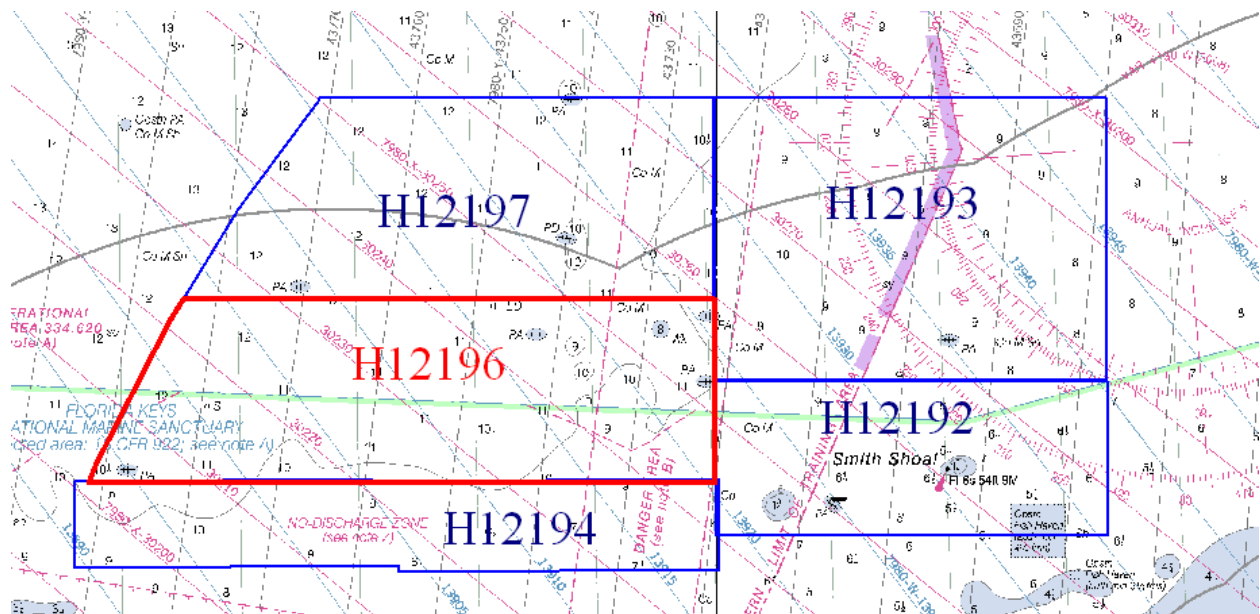


Figure 2: Junction Surveys

B 2.5 Systematic Errors

A tide problem exists with many of the lines in the survey area. The tide error generally does not exceed 0.3meters. The survey area is about 10 kilometers from the tide gauge. It appears the zoning cannot adequately resolve the diurnal and semidiurnal tides farther from the gauge. Refer to the project DAPR for a complete discussion of this issue.

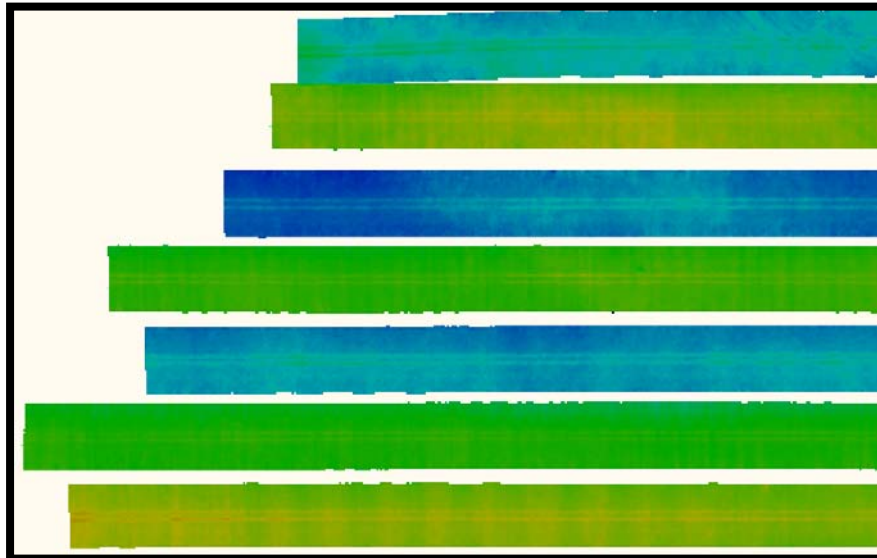


Figure 3: Tide Problem

On 22 July 2010 (DN 203) a dive was performed on the ship and it was found that there was a blister on the bottom of the 7125 projector. A second dive was performed on 08 August 2010 (DN 220) to replace the faulty 7125 projector. Prior to the change, a flare up of outside beams was observed. Probable cause was the damaged sensor. Outer beams were filtered to reduce the effect of this error, the number dependent on depth and severity of the error.

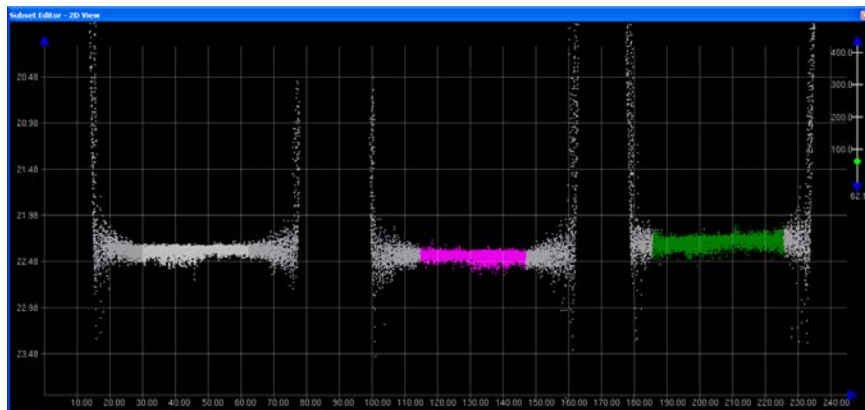


Figure 4. Outer Beam Flare ups

B 3. CORRECTIONS TO ECHO SOUNDING

HDCS sounding data were reduced to mean lower-low water (MLLW) using verified tides from Smith Shoal Light, FL (872-4671) with final tide zoning applied as provided by CO-OPS in the Tide Note dated 15 December 2010 and illustrated in Figure 7. The Key West, FL (872-4580) tide gauge mentioned in the project instructions was not used for final tides.

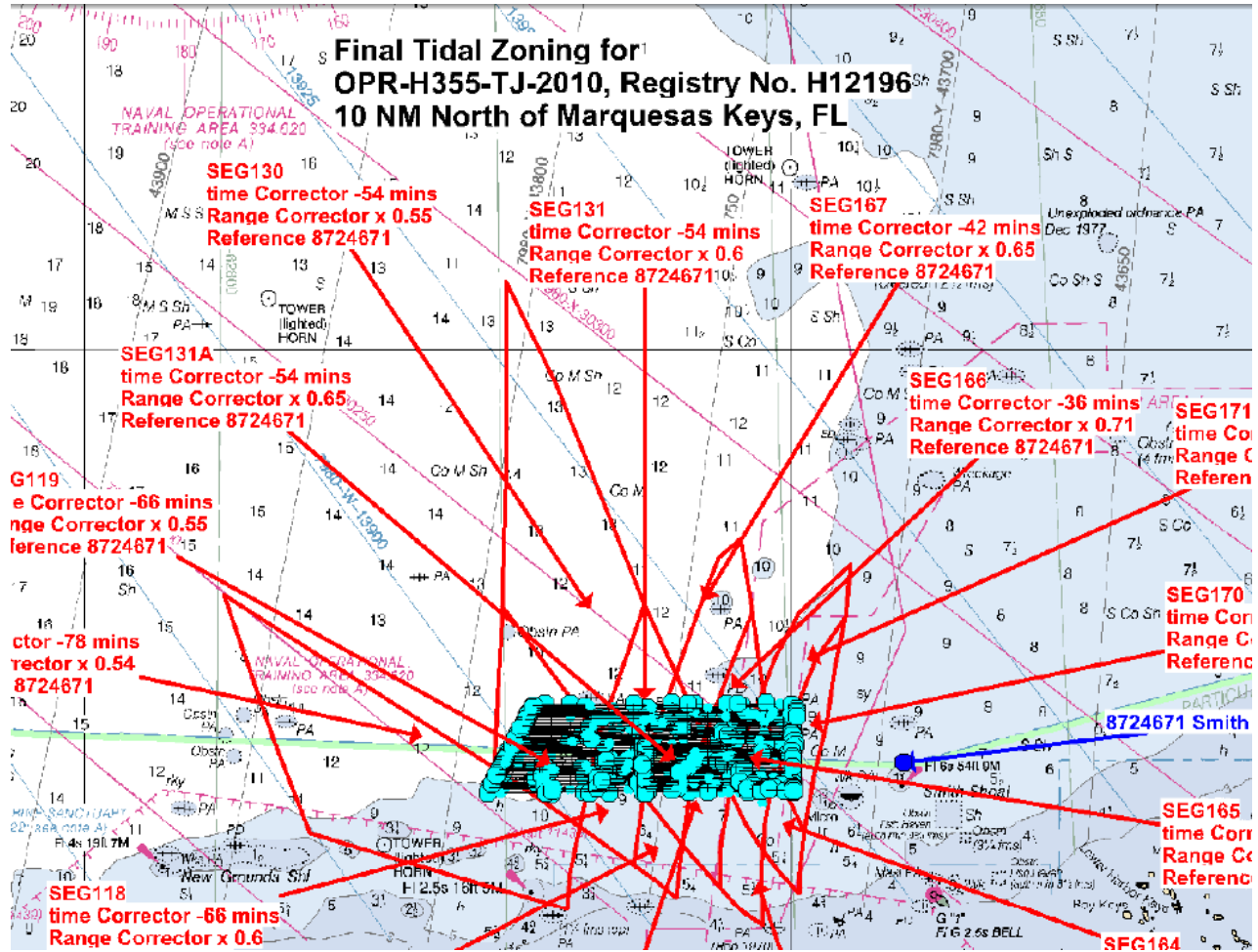


Figure 5: Final Tide Zoning

All other datum reduction procedures conform to those outlined in the DAPR.

All methods and instruments used for sound velocity correction were as described in the DAPR. A table detailing all sound velocity casts is located in Separate II of this Descriptive Report.

B 4. DATA PROCESSING

SVP casts were loaded using nearest in time with the exception of lines 218_2337, 219_2226, and 223_1724 which used nearest in distance. SVP casts used for DN190 were acquired on the adjacent survey H12197 and applied to the MBES data on H12196 for that day and time.

B 4.1 Total Propagated Uncertainty

For the 2010 field season, Total Propagated Uncertainty (TPU) parameters for sound speed and tides are calculated separately for each project. The tide values parameters for OPR-H355-TJ-10, Survey H12196 are estimated values, and were not provided by CO-OPS.

Vessel	Tide Values		Sound Speed Values	
	Measured	Zoning	Measured	Surface
S222	0.05 m	0.22 m	1 m/s	0.2 m/s
3101	0.05 m	0.22 m	4 m/s	0.2 m/s

Table 3: TPE Parameters

These values were used as inputs to the TPE calculation for all MBES data immediately following CARIS Merge.

B 4.2 BASE Surfaces and Mosaics

The following table describes all BASE Surfaces submitted as part of Survey H12196:

Name of Surfaces and /or Mosaics	Resolution	Type	Purpose
H12196_MB_Cube_MLLW_2m_1_Final	2m	CUBE	Sounding Coverage
H12196_MB_Cube_MLLW_2m_2_Final	2m	CUBE	Sounding Coverage
H12196_MB_Cube_MLLW_2m_3_Final	2m	CUBE	Sounding Coverage
H12196_MB_50cm_CUBE_MLLW_1of8_Final	0.5m	CUBE	Object Detection
H12196_MB_50cm_CUBE_MLLW_2of8_Final	0.5m	CUBE	Object Detection
H12196_MB_50cm_CUBE_MLLW_3of8_Final	0.5m	CUBE	Object Detection
H12196_MB_50cm_CUBE_MLLW_4of8_Final	0.5m	CUBE	Object Detection
H12196_MB_50cm_CUBE_MLLW_5of8_Final	0.5m	CUBE	Object Detection
H12196_MB_50cm_CUBE_MLLW_5of8_Final	0.5m	CUBE	Object Detection
H12196_MB_50cm_CUBE_MLLW_7of8_Final	0.5m	CUBE	Object Detection
H12196_MB_50cm_CUBE_MLLW_8of8_Final	0.5m	CUBE	Object Detection
H12196_SS100_1m	1m	SSS	Imagery

		Mosaic	
H12196_SS200_1m	1m	SSS Mosaic	Imagery

Table 4: BASE Surfaces

This survey was processed using the Combined Uncertainty and Bathymetry Estimator (CUBE) algorithm. The CUBE configurations were set to NOAA_0.5m, and NOAA_2m, as required for each of the various surface resolutions. Refer to the 2010 Data Acquisition and Processing Report, 2010 Field Procedures Manual, and CARIS HIPS and SIPS 7.0 manual for further discussion.

B 4.3 Data Cleaning

The survey data were cleaned using the swath and subset editor tools in CARIS. All areas of the BASE surface that indicated a high standard deviation were examined and cleaned as required such that no residual errors exist in the surface that exceed the IHO order 1 depth accuracy requirements.

C. HORIZONTAL AND VERTICAL CONTROL

As per FPM section 5.2.3.2.3 a HVCR report was not filed as no horizontal and vertical control stations were established by the field party for this survey. A summary of horizontal and vertical control for this survey follows.

C 1.1 Horizontal Control

The horizontal datum for this project is the North American Datum of 1983 (NAD83). Differential GPS (DGPS) was the sole method of positioning. Differential corrections from U.S. Coast Guard beacons at Key West (286 kHz), and Miami (322 kHz), were used during this survey.

No horizontal control stations were established by the field party for this survey.

C 1.2 Vertical Control

The vertical datum for this project is Mean Lower-Low Water (MLLW). The operating National Water Level Observation Network (NWLON) station at Smith Shoal Light, FL (872-4671), will serve as datum control for H12196. Verified tides with Final zoning were applied to all sounding data.

A request for delivery of final approved (verified) tides for this survey was forwarded to N/OPS1 on 27 August 2010 in accordance with the FPM and project letter instructions. Final smooth tide letter is dated 15 December 2010.

D. RESULTS AND RECOMMENDATIONS

D.1 Chart Comparison *See Appendix II for final charting recommendation.*

Survey H12196 was compared to Chart 11434, (28th Ed., June 2008, 1:180,000), chart 11439 (26th Ed.; July 2004, 1:80,000), and ENC's US4FL92M and US3FL90M. Chart comparisons were performed in CARIS Base Editor.

D 1.1 Chart 11434 Comparison

In general the soundings agree within ½ fathom. Where there are differences, survey depths are deeper.

D 1.2 Chart 11439 Comparison

In general the soundings agree within 2 feet. Where there are differences, survey depths are deeper.

D 1.3 ENC US4FL92M Comparison

In general the soundings agree within 1 meter. Where there are differences surveyed depths tend to be deeper.

D 1.4 ENC US3FL90M Comparison

In general the soundings agree within ½ meter.

D.2 Additional Results

D.2.1 Automated Wreck and Obstruction Information Service (AWOIS) Items

A total of six assigned AWOIS items were located within the limits of H12196 and investigated during this survey. AWOIS items were investigated with complete 200% SSS sonar and object detection multibeam. All AWOIS items are described in detail in Appendix II of this report.

D.2.4 Shoreline

There is no shoreline within the sheet limits of survey H12196.

D.2.5 Charted Features

D.2.6 Charted Pipelines and Cables

There are no charted cables within survey area.

There are no charted pipelines within the survey area.

D.2.7 Bridges, Ferry Routes, and Overhead Cables

There are no ferry routes, bridges, or overhead cable crossings within the limits of the survey.

D.3 Dangers to Navigation and Shoals

D 3.1 Dangers to Navigation

There are no dangers to navigation within the survey limits of H12196.

D 3.2 Shoals

There were no significant uncharted shoals discovered during this survey.

D.4 Aids to Navigation

There are no charted Aids to Navigation (ATON) within the limits of H12196.

D.5 Coast Pilot Information

The relevant Coast Pilot sections were reviewed and no changes were noted. A memo detailing this finding was submitted to NSD's Coast Pilot Branch via email on 22 November 2010 in accordance with FPM Section 5.2.3.2.5. See Appendix V for correspondence.

D.6 Miscellaneous

Bottom Samples

Bottom samples were collected throughout the survey area. A total of 11 bottom samples were acquired with this survey in accordance with section 7.1 of the NOS Hydrographic Survey Specifications and Deliverables, dated April 2010. A feature file (H12196_Bottomsamples.hob) of all bottom samples acquired during Survey H12196 is provided in this survey's Pydro PSS folder. A listing of bottom samples is contained in Appendix V.

Additional Tasks

Side scan data were acquired as per the FKNMS special requirements. Specifically, the survey was conducted so that all 100% SSS survey data were acquired in the same azimuth and all 200% SSS in an opposing azimuth, in order to aid in benthic habitat classification using GEO-CODER.

Additionally, the SSS imagery trace was scanned for identification of placed casitas/fish traps, and a target was placed within the data acquisition software (SonarPro®) for all observed and potential casitas. The target files, as well as standard raw and processed bathymetric and imagery

data should be provided to the Office of National Marine Sanctuaries, upon availability from OCS. See project instructions for specific contact information.

Environmental Conditions and Notes

No significant environmental conditions occurred during the survey.

D.7 Adequacy of Survey

This survey is considered complete and adequate to supersede charted depths within the common area as per requirements specified in the Project Letter Instructions.

Summary and Recommendations for Additional Work

No additional work is needed to complete this survey. No changes significant to navigation have been noted and it is recommended that this survey receive normal processing priority.


E . APPROVAL

As Lead Hydrographer, I have ensured that standard field surveying and processing procedures were followed in producing this examination in accordance with the Office of Coast Survey Hydrographic Surveys Division’s *Field Procedures Manual*, and NOS *Hydrographic Surveys Specifications and Deliverables*. Field operations for this basic hydrographic survey were conducted under my daily supervision with frequent checks of progress and adequacy.

All field sheets, this Descriptive Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to N/CS33, Atlantic Hydrographic Branch.

The Data Acquisition and Processing Report for OPR-K371-TJ-10 is submitted separately and contains additional information relevant to this survey.

Approved and Forwarded:

 Mark Blankenship
2011.04.16
23:34:56 -04'00'


 Digitally signed by Shepard Smith
Date: 2011.04.17 11:53:16 -04'00'

LT Mark A. Blankenship, NOAA
Field Operations Officer

CDR Shepard M. Smith, NOAA
Commanding Officer

In addition, the following individuals were also responsible for overseeing data acquisition and processing of this survey:

Survey Managers:

 Lindsay Morrison
2011.04.16
23:43:28 -04'00'

ENS Lindsay Morrison, NOAA

Appendix I

Dangers to Navigation

-None reported

Appendix II
Survey Features Report

1. AWOIS Items

-six

2. Uncharted Features

-one

3. Charted Features

-none

H12196_DR_AWOIS

Registry Number: H12196
State: Florida
Locality: Eastern Gulf of Mexico
Sub-locality: 10 NM North of the Marquesas Keys
Project Number: OPR-H355-TJ-10
Survey Date: 07/09/2010

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11439	26th	07/01/2004	1:80,000 (11439_1)	USCG LNM: 11/24/2009 (02/16/2010) NGA NTM: 10/02/1999 (02/27/2010)
11434	28th	06/01/2008	1:180,000 (11434_1)	USCG LNM: 10/12/2010 (12/7/2010) NGA NTM: 10/2/1999 (12/25/2010)
1113A	28th	07/01/2005	1:470,940 (1113A_1)	[L]NTM: ?
11420	28th	07/01/2005	1:470,940 (11420_1)	[L]NTM: ?
11451	33rd	09/01/2007	1:495,362 (11451_17) 1:495,362 (11451_16)	[L]NTM: ?
11006	32nd	08/01/2005	1:875,000 (11006_1)	[L]NTM: ?
11013	47th	02/01/2008	1:1,200,000 (11013_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_1)	[L]NTM: ?

* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	AWOIS "2673" Sturtevant	Wreck	15.05 m	24° 45' 47.7" N	082° 01' 10.3" W	2673
1.2	CATERPILLAR	AWOIS	[no data]	[no data]	[no data]	---
1.3	GEMINI II	AWOIS	[no data]	[no data]	[no data]	---
1.4	WRECK	AWOIS	[no data]	[no data]	[no data]	---
1.5	WRECK	AWOIS	[no data]	[no data]	[no data]	---
1.6	WRECK	AWOIS	[no data]	[no data]	[no data]	---

1 - AWOIS

1.1) AWOIS "2673" Sturtevant

Primary Feature for AWOIS Item #2673

Search Position: 24° 45' 49.5" N, 082° 01' 11.3" W
Historical Depth: 14.33 m
Search Radius: 500
Search Technique: SSS, MB, SB
Technique Notes: [None]

History Notes:

02673

HISTORY

CL347/58--US NAVY WK LIST, NO.698; DESTROYER, 1190 GT, SUNK 4/26/42 BY NAVY MINE; POS.24-45N, 82-01W; LOCATED 4/11/45; REPORTED THRU GULF SEA FRONTIER 12/23/42.

CL706/61--LTR. SHIP HYDROGRAPHER TO HQ, 7/17/61; INVESTIGATION OF PSR ITEM 12 WK LOCATED, 47 FT LD.

CL783/61--LTR SHIP HYDROGRAPHER TO HQ 8/2/61; (SAME AS CL706/61 BUT COPY OF SOUNDING PLOT OVER WK INCLUDED)

NM33/61--SEE CL706/61

(GP CHART SCALED AT 1:80000)

Survey Summary

Survey Position: 24° 45' 47.7" N, 082° 01' 10.3" W
Least Depth: 15.05 m (= 49.39 ft = 8.231 fm = 8 fm 1.39 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 1.008 m ; TVU (TPEv) ± 0.517 m
Timestamp: 2010-190.17:36:15.683 (07/09/2010)
Survey Line: h12196 / tj_s222_reson7125_stbd / 2010-190 / 607_1735
Profile/Beam: 371/415
Charts Affected: 11439_1, 11434_1, 1113A_1, 11420_1, 11451_16, 11451_17, 11006_1, 11013_1, 411_1

Remarks:

AWOIS #2673, charted "Wk" found with 200% Klein 5000 side scan sonar. A least depth was acquired with Reson 7125 multibeam. Soundings were corrected to MLLW.

Feature Correlation

Source	Feature	Range	Azimuth	Status
607_1735	371/415	0.00	000.0	Primary
168_100802030300	0002	1.04	248.2	Secondary
168_100802030300	0001	1.54	297.8	Secondary (grouped)
169_100801230500	0001	3.71	203.5	Secondary (grouped)
167_100803055200	0001	39.06	027.9	Secondary (grouped)
AWOIS_EXPORT	AWOIS # 2673	63.11	151.0	Secondary (grouped)
170_100802053700	0001	73.16	139.2	Secondary (grouped)
165_100803031300	0001	248.09	017.6	Secondary (grouped)
166_100803052400	0001	254.94	016.9	Secondary (grouped)

Hydrographer Recommendations

Modify chart

Cartographically-Rounded Depth (Affected Charts):

49ft (11439_1, 11451_16, 11451_17)

8 ¼fm (11434_1, 1113A_1, 11420_1, 11006_1, 11013_1, 411_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: NINFOM - Chart wreck at survey position
 OBJNAM - AWOIS 2673 'Sturtevant'
 QUASOU - 6:least depth known
 SORDAT - 20100825
 SORIND - US,US,graph,H12196
 VALSOU - 15.053 m
 WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Wreck found and validated. Update depth and location.

COMPILE NOTES: Delete charted wreck. Chart 49 ft wreck at survey position.

Feature Images

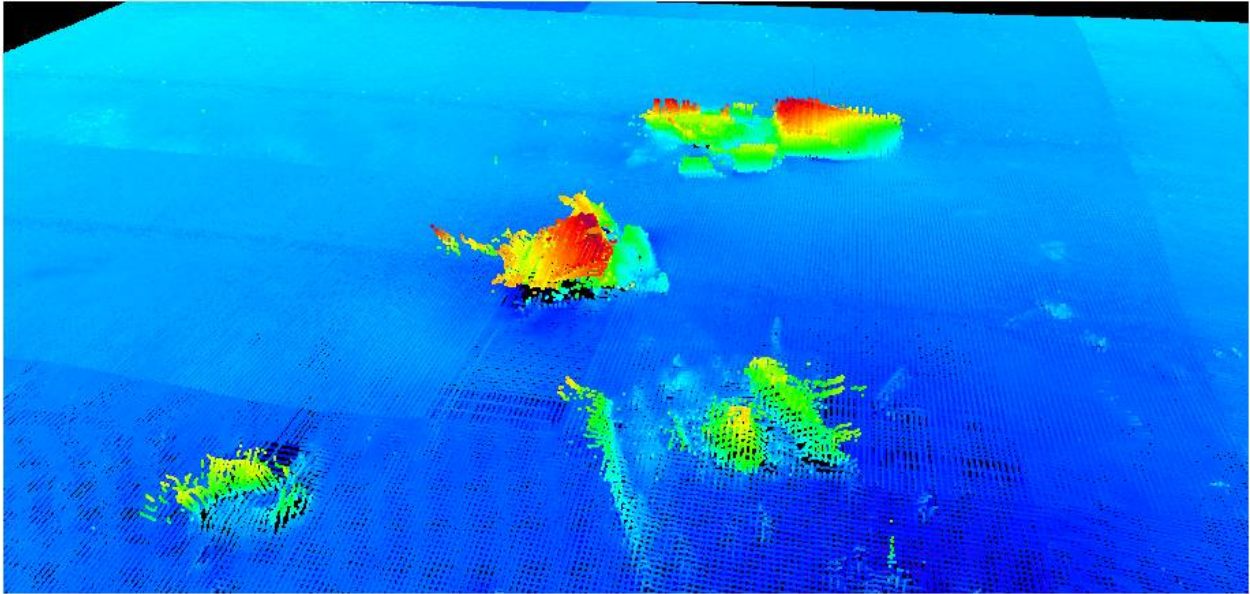


Figure 1.1.1



Figure 1.1.2



Figure 1.1.3

1.2) AWOIS #63 - CATERPILLAR

No Primary Survey Feature for this AWOIS Item

Search Position: 24° 46' 07.5" N, 082° 04' 29.4" W
Historical Depth: 18.29 m
Search Radius: 1000
Search Technique: SSS, MB, SB
Technique Notes: [None]

History Notes:

00063

HISTORY

NM DATED 7/25/55

DESCRIPTION

24 NO.1637; TRAWLER; SUNK 1955; POSITION ACCURACY 1-3 MILES

Survey Summary

Charts Affected: 11439_1, 11434_1, 1113A_1, 11420_1, 11451_16, 11451_17, 11006_1, 11013_1, 411_1

Remarks:

AWOIS #63 search radius was covered by 200% SSS and skunk stripe MB on sheet H12196. No evidence of the item was found on sheet H12196. The top third of area of search radius for this AWOIS lies on sheet H12197. The 200% SSS and skunk stripe from H12197 were evaluated. No evidence of the item was found on sheet H12197.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 63	0.00	000.0	Primary

Hydrographer Recommendations

Remove disproved

S-57 Data

[None]

Office Notes

SAR NOTE: Item not found. Considered disproved 200% SSS. Also reference H12197 DR and SAR Report.

COMPILE NOTES: Delete charted wreck ED.

1.3) AWOIS #14761 - GEMINI II

No Primary Survey Feature for this AWOIS Item

Search Position: 24° 43' 00.0" N, 082° 12' 00.0" W
Historical Depth: 20.12 m
Search Radius: 500
Search Technique: SSS, MB, SB
Technique Notes: [None]

History Notes:

L-1189-77; The fishing vessel GEMINI II sank in 1977 in 11 fathoms of water in approximate position 24° 43' 00" N / 082° 12' 00" W. (PTT, 3/3/10)

Survey Summary

Charts Affected: 11439_1, 11434_1, 1113A_1, 11420_1, 11451_16, 11451_17, 11006_1, 11013_1, 411_1

Remarks:

AWOIS #14761 search radius was covered by 200% SSS and skunk stripe MB. No evidence of the item was found. A selected side scan contact within the radius was developed and found to be both insignificant and unlikely to be the AWOIS item.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14761	0.00	000.0	Primary

Hydrographer Recommendations

Remove disproved

S-57 Data

[None]

Office Notes

SAR NOTE: Item not found. The entirety of the search radius wasn't fully developed. The bottom section of the radius was lacking 21m (69ft) from the southern end of the radius to the coverage in the 100% SSS and lacking 103m (338ft). H12194 is the sheet directly to the south of H12196. At the time of review, this data was not available. It is unlikely that this item is located within the radius circle based on the data.

COMPILE NOTES: Delete charted Wreck PA.

1.4) AWOIS #14766 - WRECK

No Primary Survey Feature for this AWOIS Item

Search Position: 24° 44' 44.6" N, 082° 00' 11.5" W
Historical Depth: 18.29 m
Search Radius: 500
Search Technique: SSS, MB, SB
Technique Notes: [None]

History Notes:

L-906-75, BP-92353; This one of a series of wrecks added to chart 11434 from BP-92353 and referenced in L-906-75. Uncharted wreck located during NOAA survey OPR-511-PE-75 from NOAA Vessel PEIRCE in roughly 10 fathoms of water in approximate position: 24 44 44.6N / 082 00 11.5W. (PTT 3/4/10).

Survey Summary

Charts Affected: 11439_1, 11434_1, 1113A_1, 11420_1, 11451_16, 11451_17, 11006_1, 11013_1, 411_1

Remarks:

AWOIS #14766 search radius was covered by 200% SSS and skunk stripe MB. No evidence of the item was found.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14766	0.00	000.0	Primary

Hydrographer Recommendations

Remove disproved

S-57 Data

[None]

Office Notes

SAR NOTE: Item not found. Considered disproved 200% SSS.

COMPILE NOTES: Remove Wreck PA from chart.

1.5) AWOIS #14767 - WRECK

No Primary Survey Feature for this AWOIS Item

Search Position: 24° 45' 37.7" N, 082° 03' 39.9" W
Historical Depth: 16.46 m
Search Radius: 500
Search Technique: SSS, MB, SB
Technique Notes: [None]

History Notes:

L-906-75, BP-92353; This one of a series of wrecks added to chart 11434 from BP-92353 and referenced in L-906-75. Uncharted wreck located during NOAA survey OPR-511-PE-75 from NOAA Vessel PEIRCE in roughly 9 fathoms of water in approximate position: 24 45 37.7N / 082 03 39.9W. (PTT 3/4/10).

Survey Summary

Charts Affected: 11439_1, 11434_1, 1113A_1, 11420_1, 11451_16, 11451_17, 11006_1, 11013_1, 411_1

Remarks:

AWOIS #14767 search radius was covered by 200% SSS and skunk stripe MB. No evidence of the item was found.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14767	0.00	000.0	Primary

Hydrographer Recommendations

Remove disproved

S-57 Data

[None]

Office Notes

SAR NOTE: Item not found. Considered disproved 200% SSS.

COMPILE NOTES: Delete charted wreck PA.

1.6) AWOIS #14768 - WRECK

No Primary Survey Feature for this AWOIS Item

Search Position: 24° 45' 57.7" N, 082° 00' 07.7" W
Historical Depth: 16.46 m
Search Radius: 500
Search Technique: SSS, MB, SB
Technique Notes: [None]

History Notes:

L-906-75, BP-92353; This one of a series of wrecks added to chart 11434 from BP-92353 and referenced in L-906-75. Uncharted wreck located during NOAA survey OPR-511-PE-75 from NOAA Vessel PEIRCE in roughly 9 fathoms of water in approximate position: 24 45 57.7N / 082 00 07.7W. (PTT 3/4/10).

Survey Summary

Charts Affected: 11439_1, 11434_1, 1113A_1, 11420_1, 11451_16, 11451_17, 11006_1, 11013_1, 411_1

Remarks:

AWOIS #14768 search radius was covered by 200% SSS and skunk stripe MB. No evidence of the item was found.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14768	0.00	000.0	Primary

Hydrographer Recommendations

Remove disproved

S-57 Data

[None]

Office Notes

SAR NOTE: Item not found. Considered disproved 200% SSS.

COMPILE NOTES: Delete charted wreck PA.

H12196_DR_Uncharted

Registry Number: H12196
State: Florida
Locality: Eastern Gulf of Mexico
Sub-locality: 10 NM North of the Marquesas Keys
Project Number: OPR-H355-TJ-10
Survey Date: 08/24/2010

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11439	26th	07/01/2004	1:80,000 (11439_1)	USCG LNM: 11/24/2009 (02/16/2010) NGA NTM: 10/02/1999 (02/27/2010)
11434	28th	06/01/2008	1:180,000 (11434_1)	USCG LNM: 10/12/2010 (12/7/2010) NGA NTM: 10/2/1999 (12/25/2010)
1113A	28th	07/01/2005	1:470,940 (1113A_1)	[L]NTM: ?
11420	28th	07/01/2005	1:470,940 (11420_1)	[L]NTM: ?
11451	33rd	09/01/2007	1:495,362 (11451_17) 1:495,362 (11451_16)	[L]NTM: ?
11006	32nd	08/01/2005	1:875,000 (11006_1)	[L]NTM: ?
11013	47th	02/01/2008	1:1,200,000 (11013_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_1)	[L]NTM: ?

* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	56 ft OBSTRN 231/321	Obstruction	17.27 m	24° 43' 02.0" N	082° 05' 11.0" W	---

1 - Uncharted

1.1) 56 ft OBSTRN 231/321

Survey Summary

Survey Position: 24° 43' 02.0" N, 082° 05' 11.0" W
Least Depth: 17.27 m (= 56.67 ft = 9.446 fm = 9 fm 2.67 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 1.007 m ; TVU (TPEv) ± 0.515 m
Timestamp: 2010-236.08:50:32.124 (08/24/2010)
Survey Line: h12196 / tj_s222_reson7125_stbd / 2010-236 / 642_0850
Profile/Beam: 231/321
Charts Affected: 11439_1, 11434_1, 1113A_1, 11420_1, 11451_16, 11451_17, 11006_1, 11013_1, 411_1

Remarks:

Uncharted obstruction was found with 200% Klein side scan sonar. A least depth was acquired with Reson 7125 multibeam. Soundings were corrected to MLLW.

Feature Correlation

Source	Feature	Range	Azimuth	Status
642_0850	231/321	0.00	000.0	Primary
105_100813172100	0001	1.37	242.8	Secondary
106_100813173700	0001	7.34	088.8	Secondary

Hydrographer Recommendations

Add obstruction

Cartographically-Rounded Depth (Affected Charts):

56ft (11439_1, 11451_16, 11451_17)

9 ½fm (11434_1, 1113A_1, 11420_1, 11006_1, 11013_1, 411_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: INFORM - Chart obstruction
 NINFOM - OBSTRN
 OBJNAM - 56ft OBSTRN
 QUASOU - 6:least depth known

SORDAT - 20100825

SORIND - US,US,graph,H12196

TECSOU - 3:found by multi-beam

VALSOU - 17.274 m

WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: OBSTRN confirmed as existing. Feature rises above the sea floor approximately 1.17m.

COMPILE NOTES: Chart 56 ft obstruction at survey position.

Feature Images

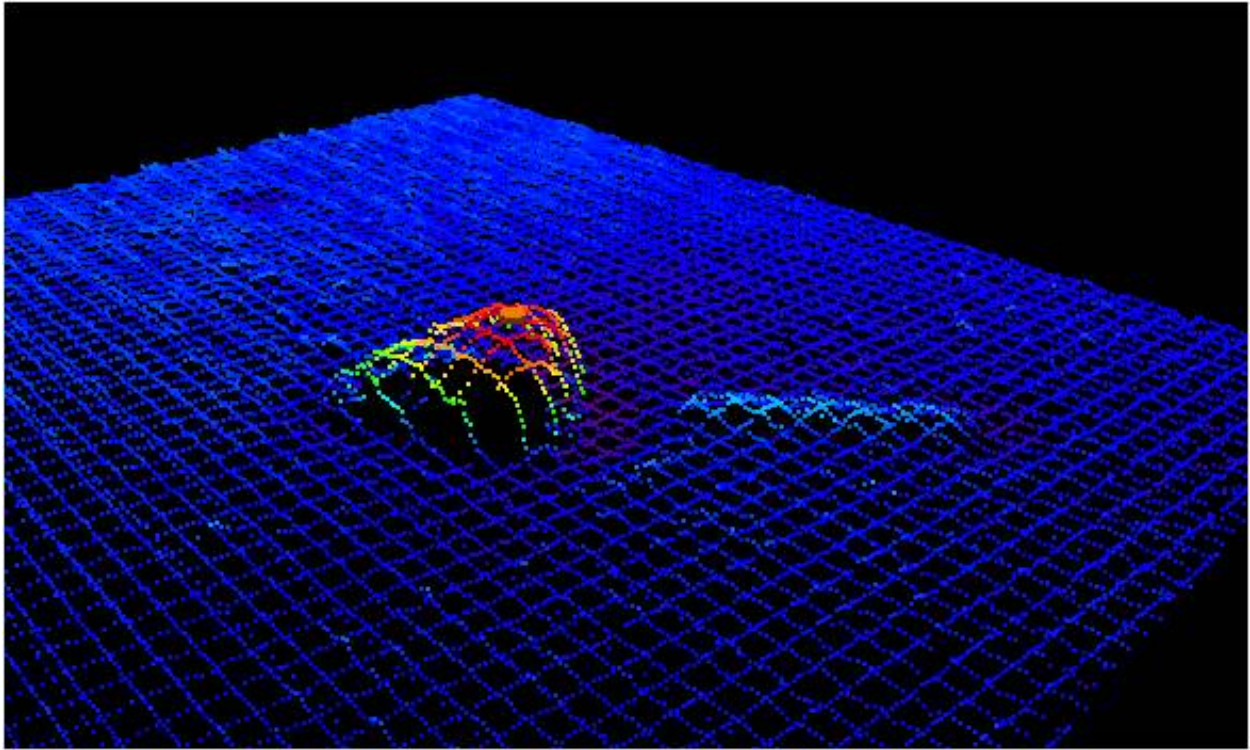


Figure 1.1.1

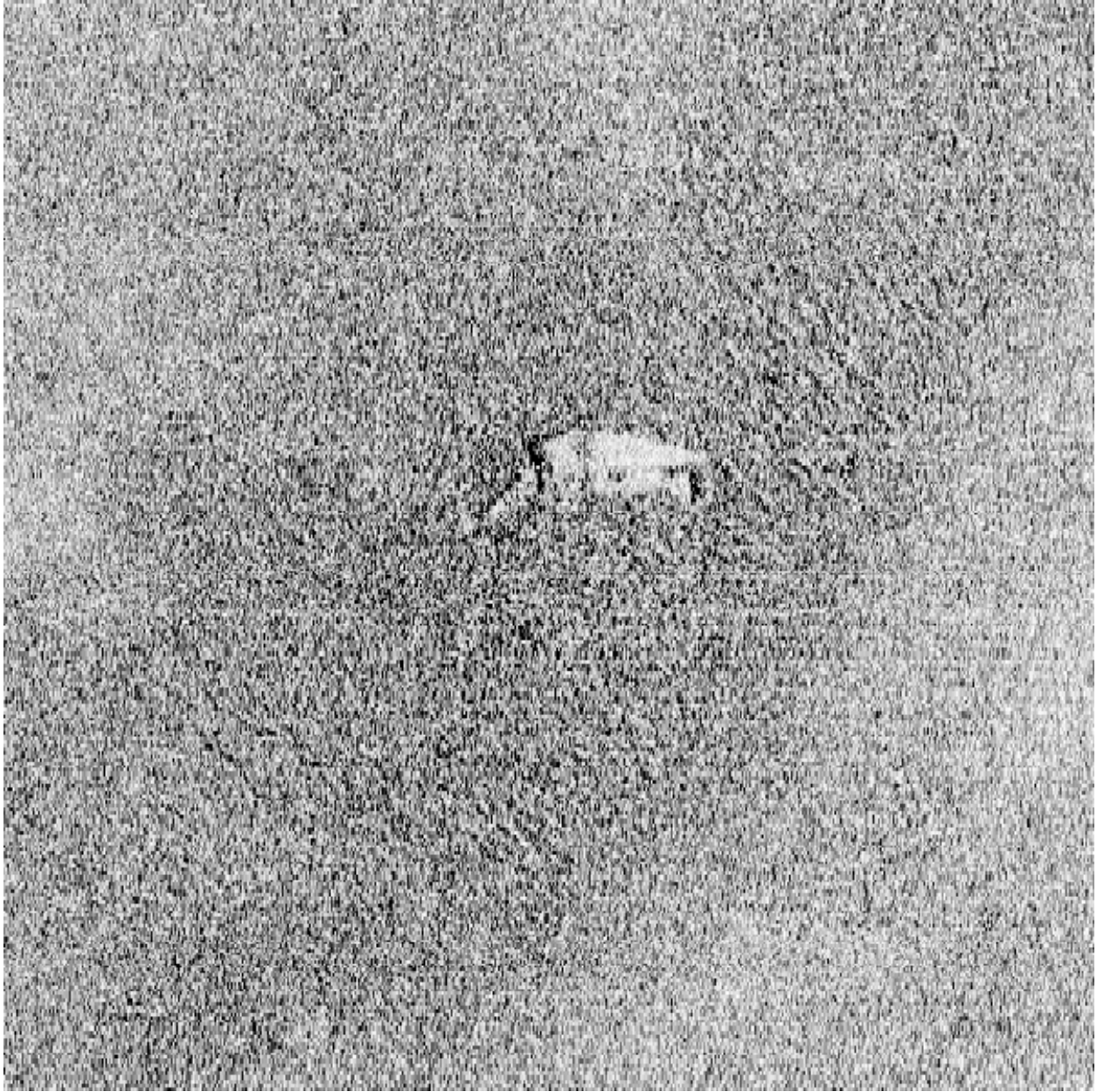
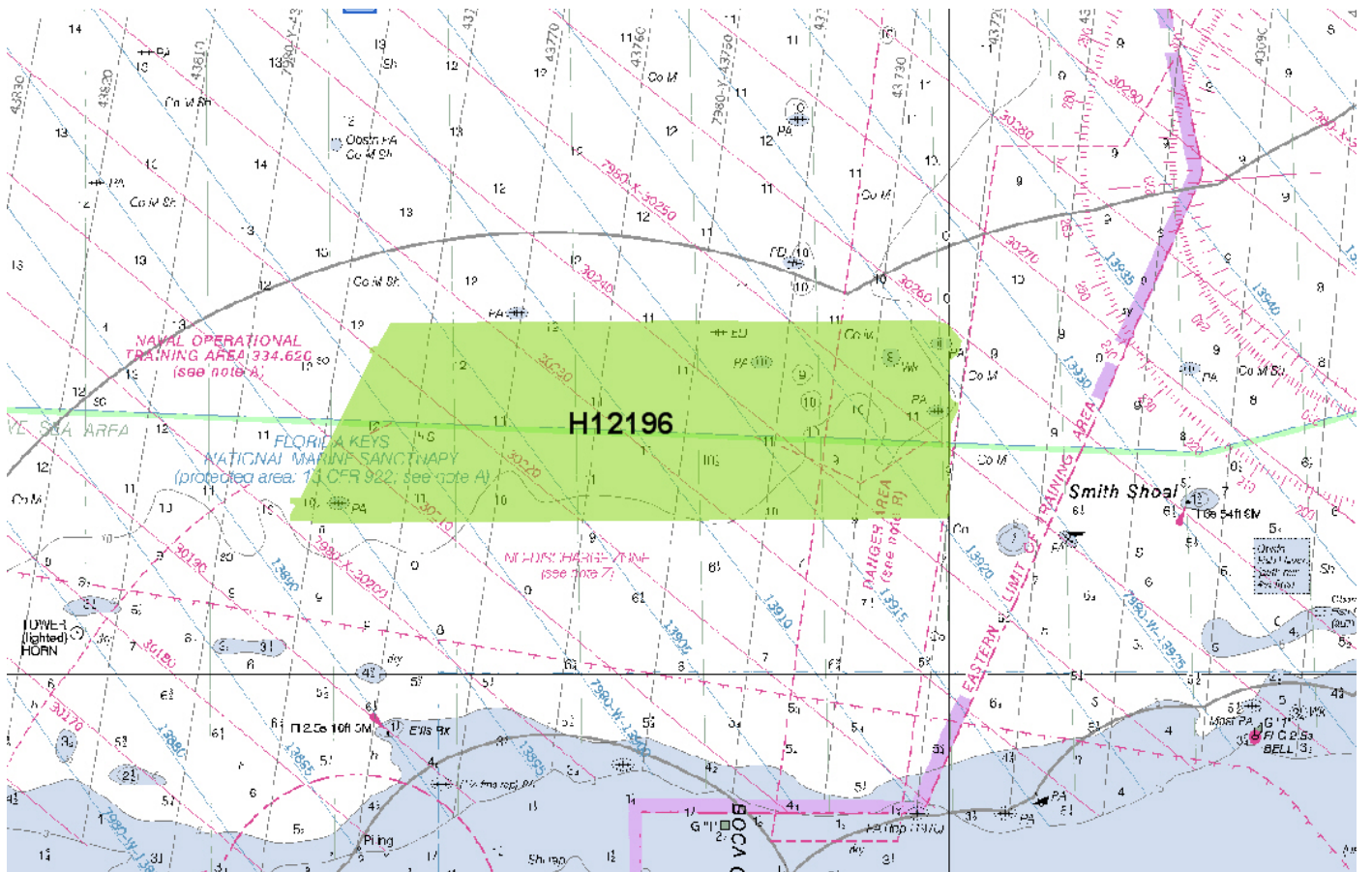


Figure 1.1.2

Appendix III Progress Sketch



Project Number and Name	Sheet Identifier	Registry Number	HQ Estimated SNM	SNM Completed Survey Outline	Date Field Work Began	Date Field Work Completed	Final Tides Request Date	Final Tides Received Date	Estimated Date of Survey Submission	March Cumulative % Complete	April Cumulative % Complete	May Cumulative % Complete	June Cumulative % Complete	July Cumulative % Complete	August Cumulative % Complete	September Cumulative % Complete
OPR-H355, NW App to Key West, FL	1	H12191	28		7/2/10	8/24/10	8/25/10	12/17/10						48%	100%	
	2	H12192	28		8/9/10	8/24/10	8/28/10	12/17/10							100%	
	3	H12193	28		7/9/10	8/24/10	8/28/10	12/17/10						95%	100%	
	4	H12194	28		8/2/10	8/25/10	8/27/10	12/17/10							100%	
	5	H12195	28												0% (consolidated into H12194)	
	6	H12196	46		7/16/10	8/24/10	8/25/10	12/17/10						5%	100%	
	7	H12197	48		7/8/10	8/24/10	8/10/10	12/17/10	9/17/10					98%	100%	
	8	H12198	46		7/16/10	7/31/10	8/5/10	12/17/10	9/17/10					20% squared off	100%	
	9	H12199	48													
	10	F06955			7/1/10	8/23/10	8/25/10	10/20/10								100%

Appendix IV

Tides and Water Levels

- 1. Request for Approved Tides**
- 2. Final Tide Notes**



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NOAA Ship THOMAS JEFFERSON (MOA-TJ)
439 West York St
Norfolk, VA 23510-1145

August 27, 2010

MEMORANDUM FOR: Chief, Requirements and Development Division, N/OPS1

FROM: CDR Shepard M. Smith, NOAA Ship THOMAS JEFFERSON (MOA-TJ)

SUBJECT: Request for Approved Tides/Water Levels

Please provide the following data:

1. Tide Note
2. Final zoning in MapInfo and .MIX format
3. Six Minute Water Level data (Co-ops web site)

Transmit data to the following:

NOAA/NOS/Atlantic Hydrographic Branch
N/CS33, Building #2
439 West York Street
Norfolk, VA 23510
ATTN: Chief AHB

NOAA Ship Thomas Jefferson
439 W. York St.
Norfolk, VA 23510
ATTN: Commanding Officer

These data are required for the processing of the following hydrographic survey:

Project No.: OPR-H355-TJ-10
Registry No.: H12196
State: Florida
Locality: Gulf of Mexico
Sublocality: 10 NM North of Marquesas Keys

Attachments containing:

- 1) an Abstract of Times of Hydrography,
- 2) digital MID MIF files of the track lines from Pydro

cc: N/CS33
MOA/TJ



Year_DOY	Min Time	Max Time
2010_197	13:13:02	15:22:25
2010_198	13:08:57	22:44:45
2010_213	22:26:12	23:56:05
2010_214	01:56:22	11:59:48
2010_215	00:29:31	09:44:15
2010_216	00:29:11	23:48:08
2010_217	00:21:20	23:56:50
2010_218	00:16:13	03:10:46
2010_222	11:19:04	23:31:01
2010_223	01:12:45	23:57:01
2010_224	00:17:48	23:57:06
2010_225	00:15:37	21:34:12
2010_226	00:06:17	14:35:34



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : December 15, 2010

HYDROGRAPHIC BRANCH: Atlantic
HYDROGRAPHIC PROJECT: OPR-H355-TJ-2010
HYDROGRAPHIC SHEET: H12196

LOCALITY: 10 NM North of Marquesas Keys, FL
TIME PERIOD: July 16 - August 14, 2010

TIDE STATION USED: 872-4671 Smith Shoal Light, FL
Lat. 24° 43.1'N Long. 81° 55.3' W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.002 meters

REMARKS: RECOMMENDED ZONING

Use zone(s) identified as: SEG118, SEG118A, SEG119, SEG130, SEG131, SEG131A, SEG132, SEG133, SEG164, SEG165, SEG166, SEG167, SEG170, SEG171, and SEG501

Refer to attachments for zoning information.

Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the 1983-2001 National Tidal Datum Epoch (NTDE).

Note 2: The datum at 8724671 Smith Shoal Light will not be accepted. Accordingly, six-minute data cannot be retrieved from the opendap.co-ops.nos.noaa.gov website relative to MLLW. It must be retrieved relative to Station Datum. Please apply a correction of 1.451 meters to account for the STND - MLLW separation when retrieving the data.

Peter J. Stone

Digitally signed by Peter J. Stone
DN: cn=Peter J. Stone, o=NOAA/NOS/CO-OPS,
ou=Oceanographic Division,
email=peter.stone@noaa.gov, c=US
Date: 2010.12.17 12:44:05 -05'00'

CHIEF, OCEANOGRAPHIC DIVISION



Final Tidal Zoning for OPR-H355-TJ-2010, Registry No. H12196SH 10 NM North of Marquesas Keys, FL

SEG130
time Corrector -54 mins
Range Corrector x 0.55
Reference 8724671

SEG131
time Corrector -54 mins
Range Corrector x 0.6
Reference 8724671

SEG167
time Corrector -42 mins
Range Corrector x 0.65
Reference 8724671

SEG166
time Corrector -36 mins
Range Corrector x 0.71
Reference 8724671

SEG170
time Corrector -24 mins
Range Corrector x 0.82
Reference 8724671

SEG171
time Corrector -24 mins
Range Corrector x 0.77
Reference 8724671

SEG165
time Corrector -36 mins
Range Corrector x 0.77
Reference 8724671

SEG164
time Corrector -36 mins
Range Corrector x 0.82
Reference 8724671

SEG133
time Corrector -54 mins
Range Corrector x 0.71
Reference 8724671

SEG132
time Corrector -54 mins
Range Corrector x 0.61
Reference 8724671

SEG118
time Corrector -66 mins
Range Corrector x 0.65
Reference 8724671

SEG119
time Corrector -66 mins
Range Corrector x 0.55
Reference 8724671

SEG501
time Corrector -78 mins
Range Corrector x 0.54
Reference 8724671

SEG131A
time Corrector -54 mins
Range Corrector x 0.65
Reference 8724671

SEG132A
time Corrector -54 mins
Range Corrector x 0.61
Reference 8724671

SEG168
time Corrector -36 mins
Range Corrector x 0.71
Reference 8724671

SEG170
time Corrector -24 mins
Range Corrector x 0.82
Reference 8724671

SEG171
time Corrector -24 mins
Range Corrector x 0.77
Reference 8724671

SEG165
time Corrector -36 mins
Range Corrector x 0.77
Reference 8724671

SEG164
time Corrector -36 mins
Range Corrector x 0.82
Reference 8724671

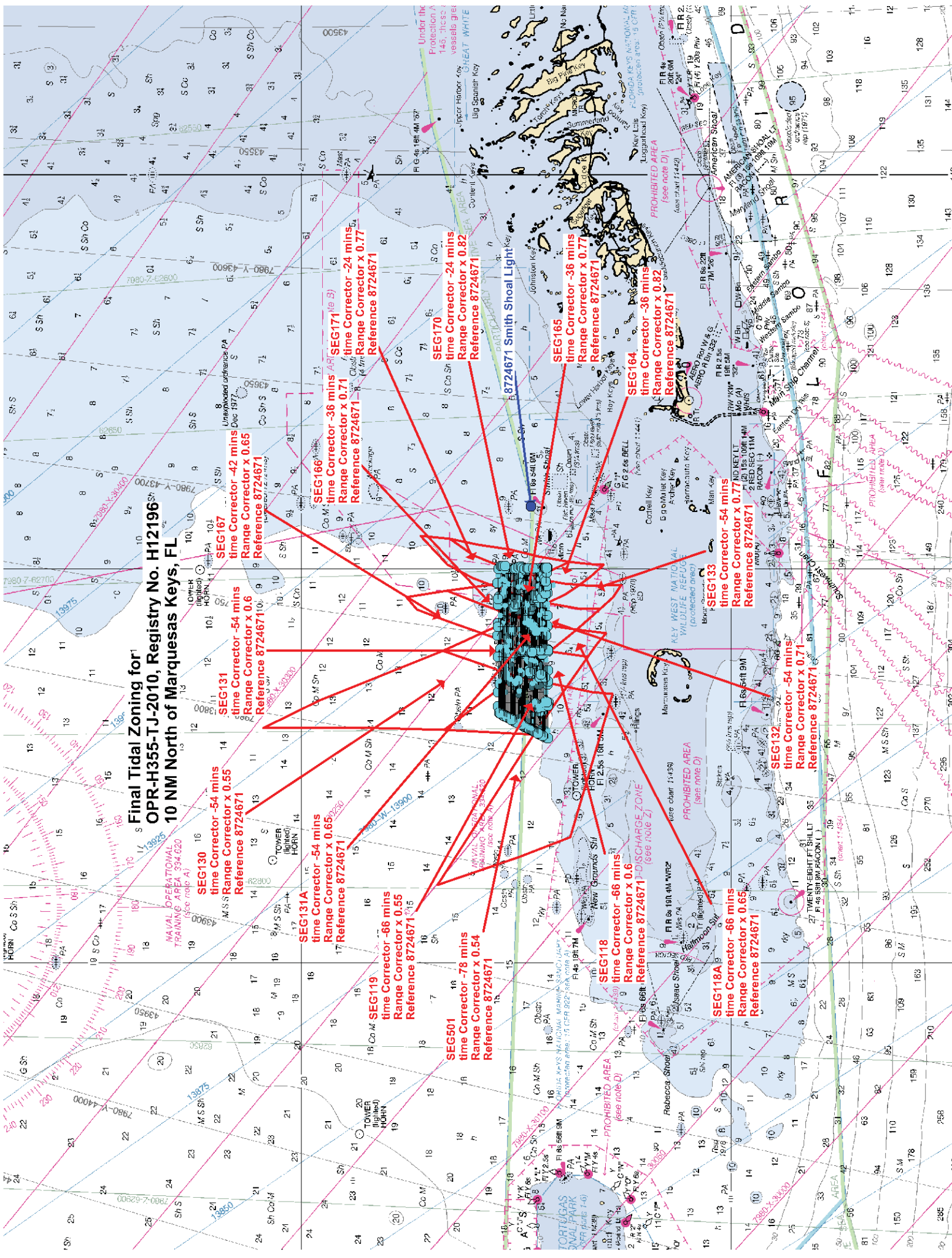
SEG133
time Corrector -54 mins
Range Corrector x 0.71
Reference 8724671

SEG132
time Corrector -54 mins
Range Corrector x 0.61
Reference 8724671

SEG118
time Corrector -66 mins
Range Corrector x 0.65
Reference 8724671

SEG119
time Corrector -66 mins
Range Corrector x 0.55
Reference 8724671

SEG501
time Corrector -78 mins
Range Corrector x 0.54
Reference 8724671



Appendix V
Supplemental Survey Records & Correspondence

Subject: Re: Crossline comparison

From: Chris van Westendorp <Christiaan.VanWestendorp@noaa.gov>

Date: Thu, 10 Sep 2009 13:00:35 -0400

To: "mark.blankenship" <Mark.Blankenship@noaa.gov>

CC: LCDR Rick Brennan <Richard.T.Brennan@noaa.gov>, Castle Parker <Castle.E.Parker@noaa.gov>, Edward Owens <Edward.Owens@noaa.gov>, LT Jasper Schaer <jasper.schaer@noaa.gov>, CDR Shep Smith <Shep.Smith@noaa.gov>, Daniel Wright <Daniel.Wright@noaa.gov>

Mark,

Per 5.1.4.3 of the HSSD, AHB authorizes TJ to use the Standard Deviation layer to conduct surface difference comparison and analysis on future survey submissions of multibeam data. This meets the crossline comparison requirement laid out in HSSD.

Please let me know if you have any questions or need for further clarification.

R/

LCDR Chris van Westendorp, NOAA

mark.blankenship wrote:

Chris,

You mentioned in the meeting today that AHB was not going to require the multiple CUBE surface comparison, instead allowing us to use a single surface standard deviation layer to do our checks with. Is there any memo coming out for that?

Mark

LCDR Chris van Westendorp <christiaan.vanwestendorp@noaa.gov>

Atlantic Hydrographic Branch

NOAA OCS

Subject: Re: Bottom Sample submission

From: Gene Parker <Castle.E.Parker@noaa.gov>

Date: Mon, 31 Jan 2011 11:47:48 -0500

To: "ops.thomas.jefferson" <OPS.Thomas.Jefferson@noaa.gov>

Good day Mark,

Submit both. HSSD specifies both in two areas of the document. First one needs to comply with HSSD; if the TJ wants to make the Hob file, then they have gone beyond the minimum requirements. If the TJ doesn't do it, then AHB would have to as long as the BS is within the Pydro PSS. Reference HSSD Section 8.2 S57 Feature File, paragraph 6:

The S-57 feature file contains all the attributed information on specific objects that cannot be portrayed in a simple depth grid. Features to include in the S-57 feature file include; wrecks, obstructions, shoreline, rocks, islets, oil platforms, nature of seabed (bottom samples) and all other objects that may need to be compiled to a navigational product and require additional information that cannot be included in the BAG.

The Pydro PSS is in lieu of the S57 format file.

We could make the hob from the table, but since the TJ has done this, submit both the Hob file and the table contained in DR Appendix 5. Place the Hob file in the PSS directory which has contained all features in NOAA PSS format as in the past. If the TJ is going to submit the hob file, the source would be the table, so HSSD specifies delivery of both. If the TJ only submitted the table, AHB would have to generate the feature objects. If the TJ creates the hob file, then submit it.

gene

ops.thomas.jefferson wrote:

Gene,

We will be submitting .HOB files for the bottom samples in addition to the summary table found in the supplemental survey records and correspondence section of the DR. It is my understanding that the table is only used to create the .HOB anyways. A recommendation will need to be made that either the table either be omitted or be used in place of the .hob file. Only the summary table is mention in the HSSD april 2010 version. If there are any other issues with this idea please let us know.

Mark

Castle Eugene Parker <castle.e.parker@noaa.gov>

Physical Scientist - Hydrographic Team Lead

Atlantic Hydrographic Branch

NOAA Office of Coast Survey

From	David Wolcott <David.Wolcott@noaa.gov>	
Sent	Friday, December 17, 2010 9:28 pm	
To	Norris A Wike <Norris.A.Wike@noaa.gov> , _OMAO MOA OPS Thomas Jefferson <OPS.Thomas.Jefferson@noaa.gov>	
Cc	Kyle Ward <Kyle.Ward@noaa.gov> , " NOS.CO-OPS.HTP" <NOS.COOPS.HPT@noaa.gov>	
Bcc		
Subject	Final Tide Note for OPR-H355-TJ-2010, Registry No. H12196	
Attachments	H12196.zip	518K

Dear Norris,

Attached is a zipped folder containing all of the final tide files for project OPR-H355-TJ-2010, Registry No. H12196. Below is a description of those files. If you have any problems retrieving any of the information please give me a call. The following files are included in the zipped attachment H12196.zip for project OPR-H355-TJ-2010:

H12196.pdf
H12196CORF.zdf

There is one (1) final tide note for H12196 in this email. Tide station data for Smith Shoal Light, FL (872-4671) may be retrieved via the Internet from the CO-OPS SOAP web services at <http://opendap.co-ops.nos.noaa.gov/axis/text.html> . [NOTE: The datum at Smith Shoal Light may not be accepted. Accordingly, data can only be retrieved relative to station datum. Please apply a correction of 1.451m to account for the STND-MLLW difference when retrieving the data.] The *.pdf file is the tide note in Adobe Acrobat format with the graphic.

The following files are the MapInfo zoning files:

H12196CORF.DAT
H12196CORF.ID
H12196CORF.MAP
H12196CORF.TAB
H12196LABF.DAT
H12196LABF.MAP
H12196LABF.TAB
H12196LABF.ID
H12196STNF.DAT
H12196STNF.ID
H12196STNF.IND
H12196STNF.MAP
H12196STNF.TAB

Please e-mail me when you have captured all files successfully. Call me at (301)713-2890 x153, if there are any problems.

--

David Wolcott
Hydrographic Planning Team
NOS/CO-OPS
p: (310) 713-2890 x 153



UNITED STATES DEPARTMENT COMMERCE

National Oceanic and Atmospheric Administration
Office of Marine and Aviation Operations
NOAA Ship *Thomas Jefferson* S-222
439 West York Street
Norfolk, VA 23510-1114

November 9, 2010

Memorandum For: Nautical Data Branch

From: CDR Shepard M. Smith, NOAA
 Commanding Officer, NOAA Ship *Thomas Jefferson*

Subject: Coast Pilot Report, H12196

We reviewed the Coast Pilot as might be affected by this survey, and have no comments to forward as a result.

The general comments about the area will be reviewed as part of one of the other surveys in this project.

Castle Parker

Gene,

I reviewed the survey submission for H12197 after receiving your call this afternoon. Attached is an email that should have been included in Appendix V that directs us to use Full MB coverage (without the 100% SSS requirement) on H12193, H12197, and H12198 (also included H12199, but we didn't get to that one...).

We have 50cm grids in all areas less than 20m and we have 2m grids for the entire area greater than 20m, with a sufficient overlap on the shallow side to prevent thresholding/grid resolution issues. There may still be the question about the requirement for OD to 22m instead of 20m. This is a valid point. However, the intent of the change to HSSD in 2010 was to correct the overlap issues in the overlap areas that are experienced in steep and deep areas. The intent wasn't to burden operations by making the object detection requirements more stringent, but this was the result if we followed the 2010 specs as written. The 2011 HSSD have corrected this issue and have the overlap on the shoal side where it should be. I looked back through emails to see if HSD Ops approved our use of 20m, but didn't find anything from CDR Crocker. I know it was discussed during phone calls and we got concurrence to use 20m instead. I will look further to see if the concurrence came from Jeff Ferguson or someone else instead of CDR Crocker if necessary.

If you would like to discuss this further, feel free to give me a call.

Thanks,
Mike

Subject:

Re: H355 questions

From:

"Paul.Turner" <Paul.Turner@noaa.gov>

Date:

7/1/2010 10:48 AM

To:

"daniel.wright" <Daniel.Wright@noaa.gov>

CC:

James M Crocker <James.M.Crocker@noaa.gov>, "ops.thomas.jefferson" <OPS.Thomas.Jefferson@noaa.gov>

Hi Dan-

In regards to the coverage requirements:

For the sheets within the Florida Keys National Marine Sanctuary (H12191, H12192, H12194, H12195, H12196) run 200% SSS with either concurrent SB, or MB (skunk stripe) following the Additional Tasks requirements from page 7 of the Project Instructions.

For the offshore sheets (H12193, H12197, H12198, H12199) run EITHER 200% SSS with concurrent SB or MB; OR Complete MB - which ever method is most efficient for the ship.

You are correct in regards to the Casitas/Fish Trap development - ONMS would also like to utilize the SSS imagery from this project for benthic habitat classification in GEO-CODER and has indicated that it is most beneficial to run the survey lines for 100% all in the same azimuth and all the 200% in an opposing azimuth (for example - all the 100% towards the East and all the 200% towards the West.)

I will get back to you about the bottom samples in the Prohibited Area - I would like to double check with the Sanctuary folks.

Paul
daniel.wright wrote:
> Hi Paul,
>
> Could you clarify a couple items in the project instructions for H355?
>
> 1.) Coverage requirements call out for SS for all types, SB, complete MB and object detection. Is this a requirement for the habitat mapping, and if so would backscatter be a substitute if we acquired object detection?
>
> 2.) The Casitas/Fish trap development reads 100% SS in one azimuth and 200% in opposing, which I take to mean we run them in opposite directions? (eg 100% at 90, 200% at 270)
>
> 3.If I read the cruise instructions correctly, no bottom samples are to be taken in the "Prohibited area"?.
>
>

Attachments:
OPR_H355_TJ_10_updated_coverage_guidance.pdf 15.5 KB
Re: H355 questions.eml 1.7 KB