

F00634

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: F00634

LOCALITY

State: Florida

General Locality: Fort Pierce

Sub-locality: Taylor Creek

2013

CHIEF OF PARTY
Erik Anderson

LIBRARY & ARCHIVES

Date:

NOAA FORM 77-28 (11-72)		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBER:
HYDROGRAPHIC TITLE SHEET			F00634
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:	Fort Pierce		
Sub-Locality:	Taylor Creek		
Scale:	1: 5000		
Dates of Survey:	06/04/2013 to 06/04/2013		
Instructions Dated:	06/04/2013		
Project Number:	S-H918-NRT2-13		
Field Unit:	Navigation Response Team 2		
Chief of Party:	Erik Anderson		
Soundings by:	Multibeam Echo Sounder		
Imagery by:			
Verification by:	Pacific Hydrographic Branch		
Soundings Acquired in:	meters at Mean Lower Low Water		
H-Cell Compilation Units:	<i>meters at Mean Lower Low Water</i>		
Remarks:	<p><i>The purpose of this survey is to provide contemporary surveys to update National Ocean Service (NOS) nautical charts. All separates are filed with the hydrographic data. Notes in red were generated during office processing. The processing branch concurs with all information and recommendations in the DR unless otherwise noted. Page numbering may be interrupted or non-sequential. All pertinent records for this survey, including the Descriptive Report, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via http://www.ngdc.noaa.gov/.</i></p>		

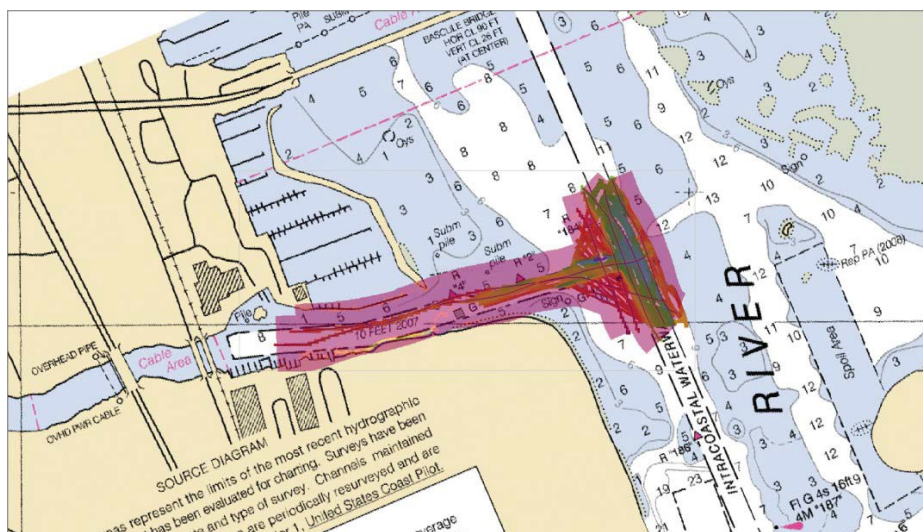
Descriptive Report Summary to Accompany S-H918-NRT2_2013	
Project	S-H918-NRT2-2013
Survey	F00634
State	Florida
Locality	Fort Pierce
Sub Locality	Taylor Creek
Scale of Survey	1:5000
Sonars Used	Klein 3000, R2 Sonic, Odom CV2
Horizontal Datum	North American Datum of 1983 (NAD83)
Vertical Datum	Mean Lower Low Water (MLLW)
Vertical Datum Correction	Verified Observed Tides
Projection	Latitude-Longitude (NAD83) - UTM Zone 17N
Field Unit	NRT2
Survey Dates	6/4/2013
Chief of Party	Erik H. Anderson

A. Area Surveyed

This hydrographic survey was acquired in accordance with the requirements defined in the Project Instruction S-H918-NRT2-2013.¹

Data was acquired within the following survey limits:

Northeast Limit	Southwest Limit
27 28 09.42 N	27 27 57.63 N
080 19 44.45 W	080 19 16.23 W



B. Survey Purpose

This survey is in response to a USCG report of a possible submerged object in the channel in the vicinity of Taylor Creek and ICWW in Fort Pierce, FL. Rip rap for a nearby construction project is being loaded onto barges in Taylor Creek and towed around to the construction site. A local charter boat captain reported hitting an object near the edge of the channel in Taylor Creek and expressed concern that rip rap may have fallen off of one of the barges operating out of Taylor Creek. Following USCG, USACE, and NOAA coordination efforts, it was determined that NOAA was best suited to respond to the potential DTON.

C. Intended Use of Survey

This survey is for informational purposes only and is not adequate to supersede prior data. It is not intended for chart compilation.²

D. Data Acquisition and Processing

Please reference Data Acquisition and Processing Report (S_G902_NRT2_13_DAPR.xml) for a complete description of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods.³

E. Results and Recommendations

The following are the largest scale RNC and ENC, which cover the survey area:

Chart	Scale	Edition	Edition Date	LNK Date	NM Date
11475	10000	19	06/2009	05/21/2013	05/25/2013
ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US5FL88M	10000	19	10/20/2011	04/30/2013	NO

NRT2 located a small obstruction outside of the marked channel, near the route taken by the reporting vessel. The obstruction, located at 27 28 02.5410N 080 19 21.4318W, has a least depth of 1.98m and is 25cm shoaler than surrounding bottom. The nearest charted sounding is 8ft which is deeper than our survey shows. It may be prudent to add some type of aid nearer the south junction of Taylor Creek and ICWW to discourage mariners from cutting the corner.⁴ A GeoPDF was created and submitted to USCG and ACOE.⁵

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
F00634_MBES_50cm	CUBE	50cm	1.45-5.94m	NOAA_Cube_50cm	Bathy/ Object Detection
F00634_VBES_4m	CUBE	4m	1.78-5.91m	NOAA_Cube_4m	Bathymetry
F00634_SSS_1m	Mosaic	1m	N/A	N/A	Imagery

F. Vertical and Horizontal Control

The vertical datum for this project is Mean Lower Low Water. Discrete Zoning was the vertical control method used. The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

Station Name	Station ID
Trident Pier	8721604

The horizontal datum for this project is North American Datum of 1983 (NAD83). Differential GPS (DGPS) was the sole method of positioning. The following DGPS Stations were used for horizontal control:

DGPS Stations
Cape Canaveral

G. Additional Results

Heavy boat traffic in the ICW and strong current flushing out of Taylor Creek created some artificial noise in MBES data.

H. Approval

As Chief of Party, field operations for this hydrographic survey were conducted under my direct supervision, with frequent personal checks of progress and adequacy. I have reviewed the attached survey data and reports. All field sheets, this Survey Summary Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to the Processing Branch.

The survey data meets or exceeds requirements as set forth in the NOS Hydrographic Surveys and Specifications Deliverables Manual, Field Procedures Manual, Standing and Letter Instructions, and all HSD Technical Directives.⁶ These data are not intended to supersede charted data in their common areas. This survey is complete and no additional work is required with the exception of deficiencies noted in the Survey Summary Report.

Approver Name	Approver Title	Approval Date	Signature
&S JL) "OEFSTPO	5FBN -FBE	6/16/2013	ANDERSON.ERIK.HA NS.1388637370 <small>Signature of ERIK H. ANDERSON, Chief of Party, Hydrographic Survey, NOS, NOAA, 1388637370, 6/16/2013</small>

Revisions and Corrections performed during office processing and certification

¹ The field unit completed side scan sonar coverage of the area shaded in pink in the figure, and multibeam echosounder coverage of the area covered by the colored relief model.

² It was determined during PHB review that bathymetric data in the portion of the area surveyed with multibeam echosounder was adequate to supersede charted data. The side scan sonar coverage was reviewed only to ensure the absence of significant features in the multibeam coverage holidays. There is insufficient data in the area surveyed exclusively with side scan to support chart updates.

³ A project specific DAPR was not written as the survey was not initially intended to be used for charting. The DAPR noted is the most relevant report for survey F00634.

⁴ Existing Aids to Navigation in the surveyed area were not investigated by the field unit, but are presumed to be on station and serving their intended purpose.

⁵ The obstruction was recommended for charting in the chart update product.

⁶ This survey was not originally intended for chart application, and does not meet all applicable specifications. However, as noted above, the multibeam echosounder portion of the dataset is of sufficient quality to supersede the chart.

APPROVAL PAGE

F00634

Data meet or exceed current specifications as certified by the OCS survey acceptance review process, with the exception of the discrepancies noted in this report and office notes. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NGDC for archive

- F00634_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- F00634_GeoImage.pdf

The survey evaluation and verification has been conducted according current OCS Specifications.

Approved: _____

Peter Holmberg

Cartographic Team Lead, Pacific Hydrographic Branch

The survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: _____

LCDR Benjamin K. Evans, NOAA

Chief, Pacific Hydrographic Branch