D00195

NOAA Form 76-35A

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Survey

DESCRIPTIVE REPORT

Type of Survey: Investigation

Registry Number: D00195

LOCALITY

State: Maine

General Locality: Petit Manan Bar

Sub-locality: Petit Manan Bar

2015

CHIEF OF PARTY
Andrew Clos

LIBRARY & ARCHIVES

Date:

NOAA FORM 77-28 (11-72)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBER:
HYDROGRAPHIC TITLE SHEET		**D00195**

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:	**Maine**
General Locality:	**Petit Manan Bar**
Sub-Locality:	**Petit Manan Bar**
Scale:	1: **20,000**
Date of Survey:	**3/6/2015**
Instructions Dated:	**3/3/2015**
Project Number:	**S-A913-NRT5-15**
Field Unit:	**USCG vessel TANB**
Chief of Party:	**Andrew Clos**
Soundings by:	**Singlebeam Echo Sounder**
Imagery by:	**Side Scan Sonar**
Verification by:	**Pacific Hydrographic Branch**
Soundings Acquired in:	**meters at Mean Lower Low Water**
H-Cell Compilation Units:	**N/A**

Remarks:

The purpose of this survey was to investigate an obstruction reported by the USCG. All separates are filed with the hydrographic data. Any revisions to the Descriptive Report (DR) generated during office processing are shown in bold red italic text. The processing branch maintains the DR as a field unit product, therefore, all information and recommendations within the body of the DR are considered preliminary unless otherwise noted. The final disposition of surveyed features is represented in the OCS nautical chart update products. All pertinent records for this survey, including the DR, are archived at the National Centers for Envitronmental Information (NCEI) and can be retrieved via http://www.ncei.noaa.gov/.

UNITED STATES DEPARTMENT COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Office of Coast Survey
Silver Spring, Maryland 20910-3282

27 April 2016

MEMORANDUM FOR: Commander Benjamin K. Evans, NOAA
Chief, Pacific Hydrographic Branch

FROM: Lieutenant Junior Grade Andrew R. Clos, NOAA
Team Lead, Navigation Response Team 5

SUBJECT: Submission of Survey D00195

The purpose of this survey was to respond to a United States Coast Guard (USCG) request for a hydrographic survey to investigate a possible obstruction or shoaling in the area of the Petit Manan Bar, Maine. This project was carried out using the Mobile Integrated Survey Team (MIST) kit aboard a USCG 26 foot TANB vessel. Data from this survey is not intended to update the nautical chart. Data was collected to Object Detection standards using 200% side scan with concurrent single beam. Detailed coverage analysis, cleaning and final tide application was not performed since the data will not be charted.

NRT5 processed the data it acquired and then provided the USCG with a printout of the chart, overlaid with survey scale soundings and side scan mosaic imagery. The purpose of this product was to allow for assessment of any uncharted feature or evidence of shoaling in the area immediately surrounding the Petit Manan Bar. Refer to the Constituent Products folder and the following files for reference: D00195_SBES_ZonedTides_3.pdf, D00195_SSS100_coverage.pdf, D00195_SSS200_covereage.pdf.

Soundings were reduced to Mean Lower Low Water (MLLW) using preliminary observed tides from tide station: 8413320 (Bar Harbor, ME).

No Data Acquisition and Processing Report (DAPR) or Hydrographic Systems Readiness Review (HSRR) was performed prior to the acquisition of this survey. A detailed report describing the deployment of the MIST kit aboard the TANB 26 is included in the correspondence section.

MBES data was initially processed in CARIS HIPS/SIPS 8.1.7, but was later upgraded to HIPS/SIPS 8.1.10.

All data was reviewed for Dangers to Navigation, and one was found. A copy of the DtoN report is included with this survey submission.

This survey does not meet charting specifications and is not adequate to supersede prior data.

	Metadata
Project	S-A913-NRT5-15
Survey	D00195
State	Maine
Locality	Petit Manan Bar, Maine
Sub Locality	Petit Manan Bar
Scale of Survey	1:20000
Sonars Used	Odom Echotrac CV200
Horizontal Datum	North American Datum of 1983 (NAD83)
Vertical Datum	Mean Lower Low Water (MLLW)
Vertical Datum Correction	Preliminary Observed Tides from Gauge 8413320
Projection	Latitude-Longitude (NAD83) - UTM Zone 19N
Field Unit	NRT5
Survey Dates	3/6/2015
Chief of Party	Andrew Clos
Submission Date	4/27/2016

D00195 DtoN Report

Registry Number: D00195

State: Maine

Locality: Petit Manan Bar

Sub-locality: Petit Manan Bar

Project Number: A-913-NRT5-2015

Survey Date: 03/06/2015

Surveyed with Mobile Integrated Survey Team (MIST) kit.

The following limitations apply to this data:

-No heave sensor is used with this survey equipment, but sea conditions were calm on the day of survey and little heave was noticed in the data.

-A sound velocity profile was not conducted and a default sound speed of 1500 meters per second was applied to the data.

-Final tides were received and zoned tides were applied to the data.

-Waterline and offset measurements were conducted with a tape measure.

-The system received no formal calibration after installation.

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
13324	15th	03/01/2013	1:40,000 (13324_1)	USCG LNM: 3/25/2014 (2/17/2015) CHS NTM: None (1/30/2015) NGA NTM: None (2/28/2015)
13312	22nd	08/01/2006	1:80,000 (13312_1)	[L]NTM: ?
13325	15th	08/01/2004	1:80,000 (13325_1)	[L]NTM: ?
13260	40th	05/01/2007	1:378,838 (13260_1)	[L]NTM: ?
13006	34th	05/01/2007	1:675,000 (13006_1)	[L]NTM: ?
13003	49th	04/01/2007	1:1,200,000 (13003_1)	[L]NTM: ?

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

Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Shoal	2.88 m	44° 22' 55.0" N	067° 52' 49.3" W	---

Generated by Pydro v14.6(r5001) on Fri Mar 20 18:56:36 2015 [UTC]

1 - Dangers To Navigation

1.1) 1119/1

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 22' 55.0" N, 067° 52' 49.3" W
Least Depth:	2.88 m (= 9.46 ft = 1.576 fm = 1 fm 3.46 ft)
TPU (±1.96σ):	**THU (TPEh)** ±0.000 m ; **TVU (TPEv)** ±0.062 m
Timestamp:	2015-065.17:23:10.177 (03/06/2015)
Survey Line:	d00195 / tanb26 / 2015-065 / 202_1721
Profile/Beam:	1119/1
Charts Affected:	13324_1, 13312_1, 13325_1, 13260_1, 13006_1, 13003_1

Remarks:

Surveyed with Mobile Integrated Survey Team (MIST) kit.

Feature Correlation

Source	Feature	Range	Azimuth	Status
202_1721	1119/1	0.00	000.0	Primary

Hydrographer Recommendations

Recommend adding a "Reported" 9 foot sounding to the chart.

Cartographically-Rounded Depth (Affected Charts):

9ft (13324_1, 13312_1, 13325_1)

1 ½fm (13260_1, 13006_1, 13003_1)

S-57 Data

Geo object 1:	Sounding (SOUNDG)
Attributes:	EXPSOU - 2:shoaler than range of depth of the surrounding depth area
	QUASOU - 1:depth known
	SORDAT - 20150306
	SORIND - US,US,graph,D00195
	TECSOU - 1:found by echo-sounder

Feature Images

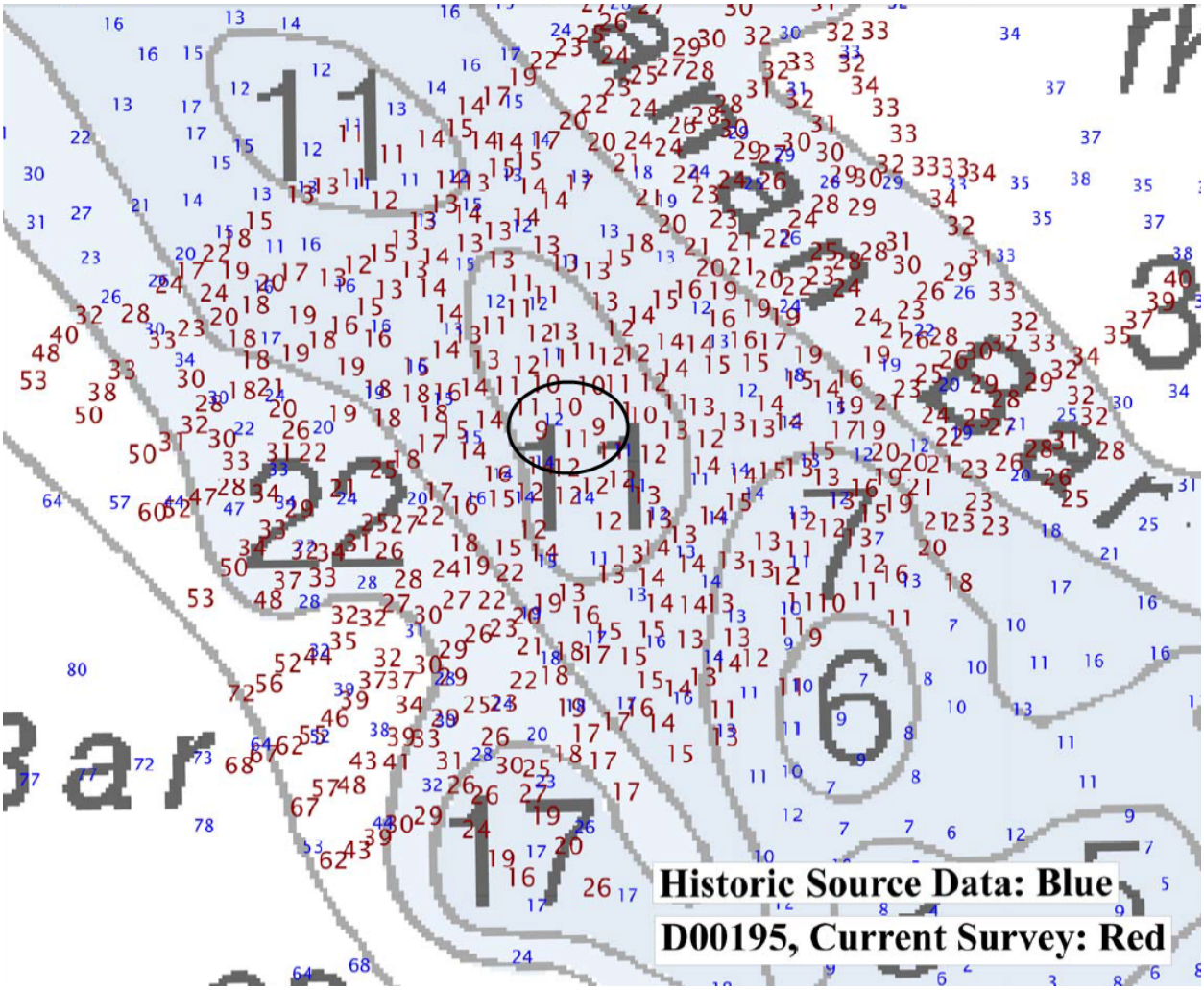

Figure 1.1.1

APPROVAL PAGE

D00195

Survey D00195 was not planned to support a full chart update product and does not meet NOAA charting specifications. With the exception of the DTON submitted to MCD on April 3, 2015, the survey will not be applied to NOAA charting products.

The following products will be sent to NGDC for archive:

- D00195_DR_Memo.pdf
- Processed survey data and records
- D00195_GeoImage.pdf

The survey evaluation and verification has been conducted according to current OCS specifications and procedures.

Approved: WOZUMI.TOSHI.1365866291 2016.09.28 11:05:28 -07'00'

Toshi Wozumi
Acting Hydrographic Team Lead, Pacific Hydrographic Branch

The survey has not been approved for chart updates. The data will be archived at NGDC so that it can be made available for other uses.

Approved: EVANS.BENJAMIN.K.1237217094 2016.09.28 15:32:37 -07'00'

CDR Ben Evans, NOAA
Chief, Pacific Hydrographic Branch