	NOAA Form 76-35A
National	U.S. Department of Commerce Oceanic and Atmospheric Administration National Ocean Survey
]	DESCRIPTIVE REPORT
Type of Survey:	Investigation
Registry Number:	D00191
	LOCALITY
State:	California
General Locality:	San Francisco Bay
Sub-locality:	San Pablo Strait
	2014
	CHIEF OF PARTY Laura Pagano
	LIBRARY & ARCHIVES
Date:	

NOAA FORM 77-28 (11-72)	U.S. DEPARTMENT OF COMMERCE REGISTRY NUMBER: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION			
HYDR	OGRAPHIC TITLE SHEET	D00191		
INSTRUCTION	NS: The Hydrographic Sheet should be accompanied by this form, filled in as completely as possib	ble, when the sheet is forwarded to the Office.		
State:	California			
General Locality:	San Francisco Bay			
Sub-Locality:	San Pablo Strait			
Scale:	1: 10,000			
Dates of Survey:	04/29/2014 to 05/03/2014			
Instructions Dated:	06/03/2014			
Project Number:	S-L930-NRT6-14			
Field Unit:	Navigation Response Team 6			
Chief of Party:	Laura Pagano			
Soundings by:	Multibeam Echo Sounder			
Imagery by:				
Verification by:	Pacific Hydrographic Branch			
Soundings Acquired i	in: meters at Mean Lower Low Water			
H-Cell Compilation U	Units: <i>meters at Mean Lower Low Water</i>			

Remarks:

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. 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 Geophysical Data Center (NGDC) and can be retrieved via <u>http://www.ngdc.noaa.gov/</u>.



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration OFFICE OF COAST SURVEY Silver Spring, Maryland 20910-3282

June 20, 2014

MEMORANDUM FOR: Chief, Pacific Hydrographic Branch

FROM:

Ian Colvert IFC

Acting Team Lead, Navigation Response Team 6

SUBJECT: Submission of Survey D00191

Survey D00191 was conducted by NRT6 in cooperation with United States Coast Guard and the Contra Costa County Sheriff's Office to locate wreckage and victim of a downed plane in the San Pablo Bay. The incident occurred April 27, 2014.

As a result NRT6 located the wreckage during response operations April 29, 2014. After the main fuselage was recovered, NRT6 completed additional operations May 13, 2014, discovering an uncharted feature very near to the crash sight (within 5 meters) that is likely aircraft wreckage.

NRT6 submitted this uncharted feature as a Danger to Navigation to Office of Coast Survey June 17, 2014.

Soundings were reduced to Mean Lower Low Water (MLLW) using verified tides from tide station Richmond (9414863), and the tide zones used is L930NRT62014CORP.zdf.

All survey systems and methods utilized during this survey were as described in the NRT6 2013 DAPR.

This survey does meet charting specifications and is adequate to supersede prior data.





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Meta Data for D00191
 Project: S-L930-NRT6-14
Survey: D00191
State/Locality: California/San Francisco Bay
Sub Locality: San Pablo Strait
Scale of Survey: 1:10,000
Sonars Used: Simrad EM3002
 Horizontal Datum: North American Datum of 1983(NAD83)
Vertical Datum: Mean Lower Low Water(MLLW)
Vertical Datum Correction: L930NRT62014CORP.zdf
Projection: NAD83 - UTM Zone 10
Field Unit: NRT6
Survey Dates: 4/29/2014, 5/13/2014
Chief of Party: Laura Pagano
Submission Date: 7/28/2014





Office Notes:

A Tide Note was not requested for this survey. The data has been reviewed and deemed adequate for charting using the verified tide data.



D00191 DTON REPORT

Registry Number:	D00191
State:	California
Locality:	San Pablo Bay
Sub-locality:	San Pablo Strait
Project Number:	S-L930-NRT6-14
Survey Date:	05/13/2014

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
18654	44th	01/01/2008	1:40,000 (18654_1)	[L]NTM: ?
18649	66th	02/01/2009	1:40,000 (18649_1)	[L]NTM: ?
18652	34th	09/01/2007	1:80,000 (18652_6)	[L]NTM: ?
18640	25th	08/01/2005	1:207,840 (18640_1)	[L]NTM: ?
18680	31st	06/01/2005	1:210,668 (18680_1)	[L]NTM: ?
18010	21st	03/01/2007	1:811,980 (18010_1)	[L]NTM: ?
18022	35th	08/01/2005	1:868,003 (18022_1)	[L]NTM: ?
18007	33rd	02/01/2009	1:1,200,000 (18007_1)	[L]NTM: ?
18020	38th	10/01/2007	1:1,444,000 (18020_1)	[L]NTM: ?
501	12th	11/01/2002	1:3,500,000 (501_1)	[L]NTM: ?
530	32nd	06/01/2007	1:4,860,700 (530_1)	[L]NTM: ?
50	6th	06/01/2003	1:10,000,000 (50_1)	[L]NTM: ?

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

Features

No.	Feature	Survey	Survey	Survey	AWOIS
	Type	Depth	Latitude	Longitude	Item
1.1	Obstruction	2.38 m	37° 59' 27.7" N	122° 24' 21.7" W	

1 - Dangers To Navigation

1.1) Profile/Beam 1561/13 / 0212_20140513_183145

DANGER TO NAVIGATION

Survey Summary

Survey Position:	37° 59' 27.7" N, 122° 24' 21.7" W
Least Depth:	2.38 m (= 7.79 ft = 1.299 fm = 1 fm 1.79 ft)
TPU (±1.96 σ):	THU (TPEh) ±1.963 m ; TVU (TPEv) ±0.142 m
Timestamp:	2014-133.18:32:34.941 (05/13/2014)
Survey Line:	hdcs_data / nrt6_s3003_em3002_2013 / 2014-133 / 0212_20140513_183145
Profile/Beam:	1561/13
Charts Affected:	18649_1, 18654_1, 18652_6, 18640_1, 18680_1, 18010_1, 18022_1, 18007_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

Navigation Response Team 6, as per request from the United States Coast Guard and Contra Costa County Sheriff, assisted with search operations for crash wreckage of an airplane that went down April 27, 2014.

Officials removed the mangled fuselage and victim. However, additional debris was left behind.

An unidentifiable mound was located in MBES bathymetry very near (within 5 meters) where the fuselage and victim was removed. This feature is suspected as wreckage, with height above bottom ~0.6 meters.

Feature Correlation

Source	Feature	Range	Azimuth	Status
0212_20140513_183145	1561/13	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends charting the DTON as an obstruction, least depth known.

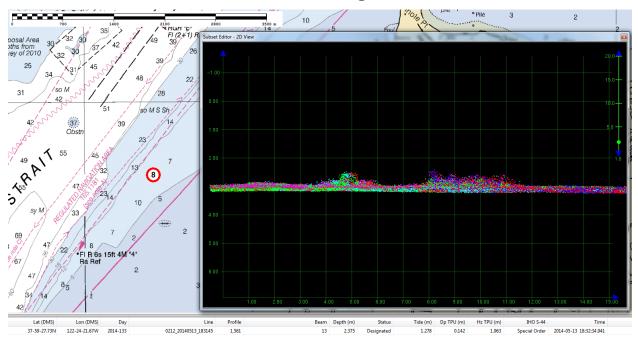
Cartographically-Rounded Depth (Affected Charts):

8ft (18649_1, 18654_1, 18652_6) 1 ¼fm (18640_1, 18680_1, 18010_1, 18022_1, 18007_1, 18020_1, 530_1) 2.4m (501_1, 50_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: CATOBS - 6:foul area QUASOU - 6:least depth known SORDAT - 20140513 SORIND - US,US,graph,D00191 TECSOU - 3:found by multi-beam VALSOU - 2.375 m WATLEV - 3:always under water/submerged



Feature Images

Figure 1.1.1

APPROVAL PAGE

D00191

Data meet or exceed current specifications as certified by the OCS survey acceptance review process. 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

- D00191_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- D00191_GeoImage.pdf

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

Approved:_____

Pete 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:_____

CDR Benjamin K. Evans, NOAA Chief, Pacific Hydrographic Branch