

**F00679**

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

**DESCRIPTIVE REPORT**

Type of Survey: Navigable Area

Registry Number: F00679

**LOCALITY**

State(s): North Carolina

General Locality: Approaches to  
Wilmington

Sub-locality: Cape Fear

**2016**

CHIEF OF PARTY  
Matthew Jaskoski,  
LCDR/NOAA

**LIBRARY & ARCHIVES**

Date:

**HYDROGRAPHIC TITLE SHEET**

**F00679**

**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(s): **North Carolina**

General Locality: **Approaches to Wilmington**

Sub-Locality: **Cape Fear**

Scale: **1:40,000**

Dates of Survey: **08/17/2016 - 08/18/2016**

Project Number: **OPR-G309-FH-16**

Data Source: **NOAA SHIP FERDINAND HASSLER**

Chief of Party: **Matthew Jaskoski, LCDR/NOAA**

Soundings by: **multibeam**

Imagery by: **multibeam**

Verification by: **Atlantic Hydrographic Branch Meters at**

Soundings Acquired in: **Mean Lower Low Water**

**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 Centers for Environmental Information (NCEI) and can be retrieved via <http://www.ncei.noaa.gov/>.*

*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 Centers for Environmental Information (NCEI) and can be retrieved via <https://www.ncei.noaa.gov/>.*



## DESCRIPTIVE REPORT MEMO

September 15, 2017

**MEMORANDUM FOR:** Atlantic Hydrographic Branch

**FROM:** Matthew Jaskoski, LCDR/NOAA  
Chief of Party, NOAA SHIP FERDINAND HASSLER

**SUBJECT:** Submission of Suvey F00679

Survey F00679 was conducted by NOAA Ship Ferdinand Hassler in order to provide additional data verification in the form of cross-lines and developments to better assess the suitability of an outside source dataset (W00310) for application to navigation products. Survey operations were completed on August 18, 2016.

NOAA Ship Ferdinand Hassler provided raw (ie: s7k), processed (ie: HDCS), and ancillary (ie: POS, SBET, RMS, SVP, Tides, FFF) data to the Atlantic Hydrographic Branch. Surfaces were also submitted to the Atlantic Hydrographic Branch including: 1m, 2m, 4m Base surfaces; 1m, 2m, 4m Finalized surfaces; and a 4m difference surface.

Soundings were reduced to Mean Lower Low Water (MLLW) using a VDatum separation model after 5P processing solution was applied via SBETs and RMS files.

All survey systems and methods utilized during this survey were as described in OPR-G309-FH-16\_DAPR.

All data was reviewed for DTON and none were found.

All data were acquired by a NOAA or NOAA Contractor field unit

Soundings generated from preliminary F00679 grids generally coincide with the charted depths from RNCs 11520 and 11536 within 1-3 feet. Soundings generated from W00310 grids vary in agreement with charted depths but are generally within 1-3 feet. Where data from W00310 are free of artifacts, soundings agree well with the chart. Most disagreement with charted depths are the result of erroneous soundings (fliers) or uncorrected attitude artifacts which are present on numerous lines. Statistics from the difference surface (F00679 minus W00310) showed a mean of 0.20m, 1-sigma of 0.47m (2-sigma = 0.92m), and 95% of nodes were within +/- 0.63m of the mean.

The survey is partially adequate to supersede previous data. If W00310 data with attitude artifacts are wholly removed from the dataset, or heavily filtered, and erroneous soundings are removed - then the data from W00310 could be used for application to the chart. Statistics run on the difference surface show that W00310



is shallower by 20cm; mean difference and standard deviation fall within NOAA specifications. There is no empirical reason the data cannot be used.

Survey data should be archived at NCEI and the DR memo forwarded to HSD.

<b>Metadata for Survey F00679</b>	
Project	OPR-G309-FH-16
Survey	F00679
State	North Carolina
Locality	Approaches to Wilmington
Sub-Locality	Cape Fear
Scale of Survey	1:40000
Sonars Used	Reson 7125 MBES 400kHz
Horizontal Datum	World Geodetic System of 1984 (WGS84)
Vertical Datum	Mean Lower Low Water
Vertical Datum Correction	VDatum
Projection	UTM Zone 18N
Field Unit	NOAA SHIP FERDINAND HASSLER
Survey Dates	NOAA SHIP FERDINAND HASSLER
Survey Dates	08/17/2016 - 08/18/2016
Chief of Party	Matthew Jaskoski, LCDR/NOAA
Submission Date	09/15/2017

APPENDIX I  
TIDES AND WATER LEVELS



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NOAA Ship FERDINAND R. HASSLER (MOA-FH)  
29 Wentworth Road  
New Castle, NH 03854

September 09, 2016

MEMORANDUM FOR: Gerald Hovis, Chief, Products and Services Branch, N/OPS3

FROM: LCDR Matthew J. Jaskoski, NOAA Ship FERDINAND R. HASSLER (MOA-FH)

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:

Atlantic Hydrographic Branch (N/CS33)  
439 West York St  
Norfolk, VA 23510

NOAA Ship Ferdinand R. Hassler  
UNH Judd Gregg Marine Research Complex  
29 Wentworth Rd  
New Castle, NH 03854

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

Project No.: OPR-G309-FH-16  
Registry No.: F00679  
State: North Carolina  
Locality: Approaches to Wilmington  
Sublocality: Cape Fear

Attachments containing:

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

cc: N/CS33



Year_DOY	Min Time	Max Time
2016_230	07:56:06	23:52:08
2016_231	00:20:19	04:15:54





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

**TIDE NOTE FOR HYDROGRAPHIC SURVEY**

**DATE :** October 13, 2016

**HYDROGRAPHIC BRANCH:** Atlantic  
**HYDROGRAPHIC PROJECT:** OPR-G309-FH-2016  
**HYDROGRAPHIC SHEET:** F00679

**LOCALITY:** Cape Fear, Approaches to Wilmington  
**TIME PERIOD:** August 17-18, 2016

**TIDE STATION USED:** 8661070 Springmaid Pier, SC  
Lat. 33° 39.3'N Long. 78° 55'W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 meters  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 1.588 meters

**ESTIMATED ZONING ERROR:** 0.400 meters

**REMARKS: RECOMMENDED ZONING**

**Use zone(s) identified as:** SA88, SA107, and SA108

**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).

**HOVIS.GERALD.THOMAS.JR.1365860250**

Digitally signed by  
HOVIS.GERALD.THOMAS.JR.1365860250  
DN: c=US, o=U.S. Government, ou=DoD,  
ou=PKI, ou=OTHER,  
cn=HOVIS.GERALD.THOMAS.JR.1365860250  
Date: 2016.10.13 13:40:50 -04'00'

CHIEF, PRODUCTS AND SERVICES BRANCH



**Final Tidal Zoning for  
OPR-G309-FH-2016, Registry No. F00679  
Cape Fear, Approaches to Wilmington**

**8661070 SPRINGMAID PIER**

**SA107  
Reference 8661070**

**SA88  
Reference 8661070**

**SA108  
Reference 8661070**



## APPENDIX II

# SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCE



OPS.Ferdinand Hassler - NOAA Service Account <ops.ferdinand.hassler@noaa.gov>

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## NOAA Ship Hassler SV Correct

4 messages

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**Richard Brennan - NOAA Federal** <richard.t.brennan@noaa.gov>

Wed, Feb 15, 2017 at 10:11 AM

To: Briana Welton <Briana.Welton@noaa.gov>, Benjamin K Evans <benjamin.k.evans@noaa.gov>, CO HASSLER <CO.Ferdinand.Hassler@noaa.gov>, "OPS. Ferdinand Hassler" <OPS.Ferdinand.Hassler@noaa.gov>, Russell Quintero - NOAA Federal <Russell.Quintero@noaa.gov>, Samuel Greenaway - NOAA Service Account <Samuel.Greenaway@noaa.gov>, Lorraine Robidoux - NOAA Federal <lorraine.robidoux@noaa.gov>

LCDR Jaskoski,

I have reviewed the technical details associated with the situation surrounding the Hassler surveys that are currently in question. As currently understood, there are approximately 16 surveys between AHB and Hassler. The issue, as I understand it in general terms, is that the data in question was not SVP corrected after SBET computation and application to the data. Based on my technical review I would like the current remediation:

1. Pick one survey to serve as a representative example of this set. Save the current BASE surface with the SVP applied *before* SBET application as `_OLD`. Then, re-apply SVP and recompute a *new* grid. Do a difference surface and compute the min, max, average, and standard deviation for this difference surface.

Based on my review the SBET process does no change the roll, pitch, or yaw nor the location of the transducer in the water column - or at least not in a meaningful way. This representative data set should confirm that.

2. Please report the finding of this analysis. Assuming it is exceedingly small, I think the next steps are:

- Create a revised DAPR that can be used for all surveys that describes the problem and the analysis. I expect that you will work with AHB to arrange this documentation is properly included with all surveys.
- I will provide a waiver in light of this analysis that authorizes the data to proceed using the current process.
- Include both the waiver and this email in the separates for all theses surveys to document the action taken.
- Ensure Hassler SOPs are updated to ensure this process is corrected.

3. If the analysis shows anything more than a 5cm difference, please advise me. We will discuss how to proceed from there.

It is my expectation that we will manage similar problems encountered with other field units or our contractors in a similar and consistent fashion. If there are any questions, concerns, or details I have not addressed I expect you or LCDR Welton will contact me with that information.

Rick

**CAPT Rick Brennan, NOAA**

Chief, Hydrographic Surveys Division

1315 East-West Highway, SSMC3 Room 6823

Silver Spring, MD 20910

Work: [301-713-2700](tel:301-713-2700)

Cell: [443-994-3301](tel:443-994-3301)

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**OPS.Ferdinand Hassler - NOAA Service Account** <ops.ferdinand.hassler@noaa.gov>

Wed, Feb 15, 2017 at 10:36 AM

To: James J Miller <james.j.miller@noaa.gov>, Patrick Debrousse - NOAA Federal <patrick.j.debrousse@noaa.gov>, Jonathan French - NOAA Federal <jonathan.r.french@noaa.gov>

Field Operations Officer, NOAA Ship *Ferdinand R. Hassler*  
29 Wentworth Road  
New Castle, NH, 03854



OPS.Ferdinand Hassler - NOAA Service Account <ops.ferdinand.hassler@noaa.gov>

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## OPR-G309-FH-16 ERS Capability Memo

1 message

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**OPS.Ferdinand Hassler - NOAA Service Account** <ops.ferdinand.hassler@noaa.gov> Wed, Feb 15, 2017 at 9:05 AM

To: \_NOS OCS HSD ERS Deliverables <ers.deliverables@noaa.gov>

Cc: Starla Robinson - NOAA Federal <Starla.Robinson@noaa.gov>, CO HASSLER <co.ferdinand.hassler@noaa.gov>, James J Miller <james.j.miller@noaa.gov>, Jonathan French - NOAA Federal <jonathan.r.french@noaa.gov>

Please find the attached ERS Capability Memo for project OPR-G309-FH-16 Approaches to Wilmington.

V/r  
LT Morgan

Field Operations Officer, NOAA Ship *Ferdinand R. Hassler*  
29 Wentworth Road  
New Castle, NH, 03854

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 **OPR-G309-FH-16\_ERS\_Capability\_Memo.pdf**  
1111K



OPS.Ferdinand Hassler - NOAA Service Account <ops.ferdinand.hassler@noaa.gov>

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## Request for Final Tides OPR-G309-FH-16 Approaches to Wilmington; F00679

1 message

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**OPS.Ferdinand Hassler - NOAA Service Account** <ops.ferdinand.hassler@noaa.gov> Fri, Sep 9, 2016 at 11:05 AM

To: Final Tides - NOAA Service Account <Final.Tides@noaa.gov>

Cc: Jonathan French - NOAA Federal <jonathan.r.french@noaa.gov>, Starla Robinson - NOAA Federal <Starla.Robinson@noaa.gov>, "CO.Ferdinand Hassler - NOAA Service Account" <co.ferdinand.hassler@noaa.gov>

Good Morning,


Please find attached the final tide request for OPR-G309-FH-16: survey sheet F00679.

Thank you,  
LT Nick Morgan

Field Operations Officer, NOAA Ship *Ferdinand R. Hassler*  
29 Wentworth Road  
New Castle, NH, 03854

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### 2 attachments

 **F00679\_Final\_Tides\_Request.pdf**  
34K

 **F00679\_Final\_Tides\_Request.zip**  
56K



OPS.Ferdinand Hassler - NOAA Service Account &lt;ops.ferdinand.hassler@noaa.gov&gt;

**Re: Survey Tracker for OPR-G309-FH-16 Wilmington, NC**

10 messages

**Briana Hillstrom - NOAA Federal** <briana.hillstrom@noaa.gov>

Tue, Jul 25, 2017 at 2:14 PM

To: Starla Robinson - NOAA Federal &lt;starla.robinson@noaa.gov&gt;

Cc: Erin Weller - NOAA Federal &lt;erin.weller@noaa.gov&gt;, Megan Greenaway - NOAA Federal &lt;megan.greenaway@noaa.gov&gt;, Briana Welton - NOAA Federal &lt;briana.welton@noaa.gov&gt;, CO HASSLER &lt;CO.Ferdinand.Hassler@noaa.gov&gt;, "OPS.Ferdinand Hassler" &lt;ops.ferdinand.hassler@noaa.gov&gt;

Starla (cc FH OPS and CO),

AHB has not officially received either survey. According to my personal notes from FH, John Doroba was the F00679 sheet manager and I'm not sure if H12927 was ever opened.

Let us know,

Bri

On Tue, Jul 25, 2017 at 1:39 PM, Starla Robinson - NOAA Federal &lt;starla.robinson@noaa.gov&gt; wrote:

They are from the Hassler. I heard that they were at the branch at the beginning of the year.

On Tue, Jul 25, 2017 at 11:02 AM, Erin Weller - NOAA Federal &lt;erin.weller@noaa.gov&gt; wrote:

The date is added by the data manager when the data is received at the branch. I don't show a record of them being delivered to the branch. Where do these surveys currently reside?

Erin C. Weller  
Physical Scientist/Acting Data Manager  
NOAA's National Ocean Service  
Office of Coast Survey, Hydrographic Survey Division  
Atlantic Hydrographic Branch  
[757.364.7704](tel:757.364.7704)

On Mon, Jul 24, 2017 at 5:51 PM, Starla Robinson - NOAA Federal &lt;starla.robinson@noaa.gov&gt; wrote:

Hello Erin,

Headquarters are updating our metrics and we noticed a few surveys with the Survey status *Field Work* that should be in the *Initial Review* stage. We think this is triggered by the *received at PC* date. What is the procedure for updating that date?

I am tracking F00679 and H12927, which are both irregular surveys. F00679 is traveling through the pipeline with W00310, and H12927 is an investigation of an obstruction beside another outside source survey. Does that effect their status?

Thanks,  
Starla

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*Starla D. Robinson, Physical Scientist*  
*NOS - OCS - Hydrographic Survey Division - Operations Branch*  
*National Oceanic Atmospheric Administration*  
*Office: 240-533-0034 (Updated 6/13/17)*  
*Cell: 360-689-1431*  
*Website: [HSD Planned Hydrographic Surveys](#)*

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*Starla D. Robinson, Physical Scientist*  
*NOS - OCS - Hydrographic Survey Division - Operations Branch*  
*National Oceanic Atmospheric Administration*  
*Office: 240-533-0034 (Updated 6/13/17)*  
*Cell: 360-689-1431*  
*Website: [HSD Planned Hydrographic Surveys](#)*

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LCDR Briana Welton Hillstrom, NOAA  
Office of Coast Survey  
Chief, Atlantic Hydrographic Branch  
439 W York St, Norfolk, VA 23510  
office: **NEW OFFICE PHONE #: 757-364-7460** (old: 757-441-6746, ext 200)  
cell: 520-227-9269

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**Starla Robinson - NOAA Federal** <starla.robinson@noaa.gov>

Wed, Jul 26, 2017 at 6:55 PM

To: Briana Hillstrom - NOAA Federal <briana.hillstrom@noaa.gov>, James Miller - NOAA Federal <james.j.miller@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>

Cc: Erin Weller - NOAA Federal <erin.weller@noaa.gov>, CO HASSLER <CO.Ferdinand.Hassler@noaa.gov>, "OPS.Ferdinand Hassler" <ops.ferdinand.hassler@noaa.gov>

Folk (adding James Miller),

Looking back through my emails I have a note that H12927 was combined with H12929, so I will cancel that survey.

Could F00679 be traveling down the pipe in the guise of W00310? I think James Miller was working on that.

Thanks,  
Starla

[Quoted text hidden]

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**James J. Miller** <james.j.miller@noaa.gov>

Thu, Jul 27, 2017 at 10:08 AM

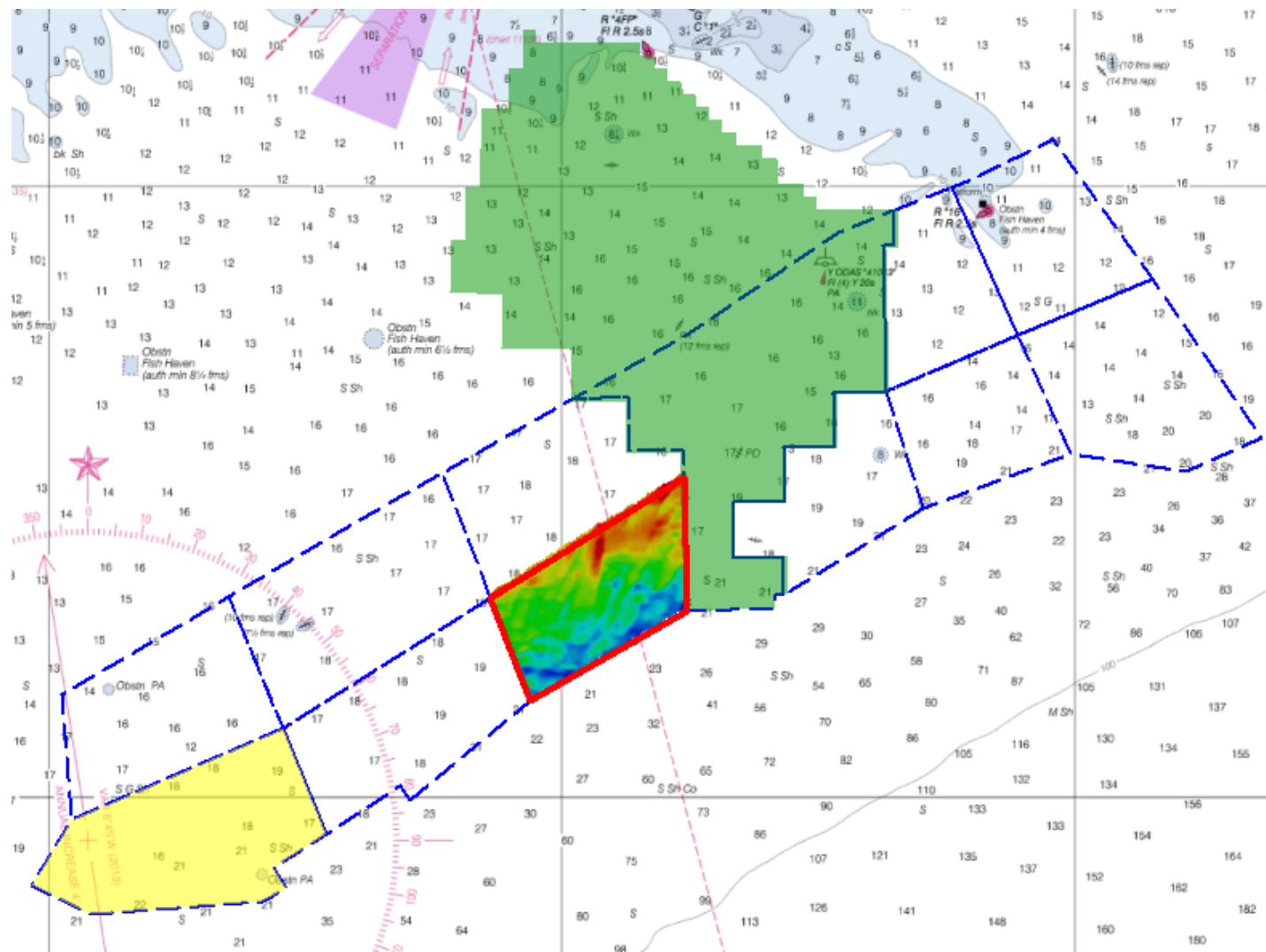
To: Starla Robinson - NOAA Federal <starla.robinson@noaa.gov>, CO HASSLER <CO.Ferdinand.Hassler@noaa.gov>

Cc: "OPS.Ferdinand Hassler" <ops.ferdinand.hassler@noaa.gov>, Briana Hillstrom - NOAA Federal <briana.hillstrom@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Erin Weller - NOAA Federal <erin.weller@noaa.gov>, Castle Parker <castle.e.parker@noaa.gov>

Starla, CO,

After reviewing the data that was received for survey H12929, it does not appear to have been combined with H12927. In the image below, W00310 is shown in green, H12929 is outlined in red, and the planned survey outline of H12927 is shown in yellow. The planned survey extents are from the PRF (dated 05/18/2016 and accessed from \\nos.noaa\ocs\HSD\Project Instruction Archive\CY2016\OPR-G309-FH-16-Approaches\_To\_Wilmington.zip). I recall the acquired extents of H12927 being much smaller and limited to a feature investigation. Either way, it appears H12927 was not combined with H12929.





To my knowledge, survey F00679 has not been submitted to AHB. Survey F00679 was acquired to complement and accompany W00310, but they are registered separately and the data should not be combined. After F00679 is received and SAR'd, AHB is planning to apply HCell chart updates for F00679 and W00310 at the same time (AHB has W00310 ready to go).

Can the Hassler confirm whether this is all correct? I may be mistaken on the status of H12927 and F00679.

Respectfully,  
James

James J. Miller  
Physical Scientist  
NOAA Office of Coast Survey  
Atlantic Hydrographic Branch  
439 W York St | Norfolk, VA | 23510  
[757-364-7465](tel:757-364-7465)  
[Quoted text hidden]

**Briana Hillstrom - NOAA Federal** <briana.hillstrom@noaa.gov>

Thu, Aug 17, 2017 at 9:59 AM

To: "James J. Miller" <james.j.miller@noaa.gov>

Cc: Starla Robinson - NOAA Federal <starla.robinson@noaa.gov>, CO HASSLER <CO.Ferdinand.Hassler@noaa.gov>, "OPS.Ferdinand Hassler" <ops.ferdinand.hassler@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Erin Weller - NOAA Federal <erin.weller@noaa.gov>, Castle Parker <castle.e.parker@noaa.gov>, James Burkitt - NOAA Affiliate <james.w.burkitt@noaa.gov>, John Doroba - NOAA Federal <john.doroba@noaa.gov>

All (adding John Doroba),

My last communication with Nick Morgan regarding PS sheet managers indicates John Doroba was last working on F00649 (see emails below from Nov 2016). Any other thoughts? Jim might be help wrap it up if you still have it on board. According to Survey Tracker, it has not been officially submitted to AHB yet.

**AHB Chief - NOAA Service Account** <ahb.chief@noaa.gov>

11/4/16 ☆

Reply ▾

to OPS.Ferdinand, CO.Ferdinand, Jasmine, Castle ▾

Nick,

Vanessa is going to do the International Affairs RAP for FY17 so she won't be able to work on F00679. Also, Tyanne is going to PHB, and our new hires won't be aboard until after January. How's Cody working out? Is this something he might be able to handle?

Let me know what you think.

Thanks,

Bri

...

**OPS.Ferdinand Hassler - NOAA Service Account** <ops.ferd

11/5/16 ☆

Reply ▾

to me, CO.Ferdinand, Jasmine, Castle ▾

Hi Bri,

Since we've had some time alongside this past week I thought it would be a good thing for **John Doroba** to handle while he's here. He's made good progress on it and I think will basically have it ready for review by the time he's gone.

Cody has been doing well. It was a little tough initially getting him worked into much more than just a sonar operator because we were doing so many bottom samples and holidays that it was taking a lot of his attention. Since we've been alongside he's been pushing through the DR on H12932 and it looks like he's made good progress. He's been getting familiar with all the Pydro tools and generating statistics so I think he's getting a decent idea of the process.

V/r  
Nick

...

[Quoted text hidden]

**John Doroba - NOAA Federal** <john.doroba@noaa.gov>

Thu, Aug 17, 2017 at 11:30 AM

To: Briana Hillstrom - NOAA Federal &lt;briana.hillstrom@noaa.gov&gt;

Cc: "James J. Miller" <james.j.miller@noaa.gov>, Starla Robinson - NOAA Federal <starla.robinson@noaa.gov>, CO HASSLER <CO.Ferdinand.Hassler@noaa.gov>, "OPS.Ferdinand Hassler" <ops.ferdinand.hassler@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Erin Weller - NOAA Federal <erin.weller@noaa.gov>, Castle Parker <castle.e.parker@noaa.gov>, James Burkitt - NOAA Affiliate <james.w.burkitt@noaa.gov>

Bri,  
I wrote a F00679 DR memo for CO review and Matt approved. OPS was going to look at it, package it up, and send out. Nick or maybe it was French, as I recall, was aware of that and was taking care of the submission. Things got a little messy on that leg, as there were some ship problems and OPS had personal things to attend to and would explain how it may have been overlooked. It's been awhile so FH might recall that differently. Let me know if you have any other questions and I'll do my best to help.

VR,  
John

[Quoted text hidden]

--

John Doroba

Physical Scientist

Hydrographic Systems and Technology Branch

1315 East West Highway, SSMC3

Silver Spring, MD 20910

301-713-2653 x145

[john.doroba@noaa.gov](mailto:john.doroba@noaa.gov)**Megan Greenaway - NOAA Federal** <megan.greenaway@noaa.gov>

Wed, Aug 23, 2017 at 5:46 PM

To: John Doroba - NOAA Federal &lt;john.doroba@noaa.gov&gt;

Cc: Briana Hillstrom - NOAA Federal <briana.hillstrom@noaa.gov>, "James J. Miller" <james.j.miller@noaa.gov>, Starla Robinson - NOAA Federal <starla.robinson@noaa.gov>, CO HASSLER <CO.Ferdinand.Hassler@noaa.gov>, "OPS.Ferdinand Hassler" <ops.ferdinand.hassler@noaa.gov>, Erin Weller - NOAA Federal <erin.weller@noaa.gov>, Castle Parker <castle.e.parker@noaa.gov>, James Burkitt - NOAA Affiliate <james.w.burkitt@noaa.gov>

All,  
I printed out the Survey Delivery Status and Surveys in the Field Dashboards (see [Hydroforum>Metrics>Survey Delivery](#)) and noted the FH surveys are still pending. After re-reading this email thread here is my understanding. Please correct me if I am wrong:

- F00679 is complete and approved by FH CO. However, the survey is still on the FH and needs to be packaged up and shipped to AHB?
- H12927 is about 50% complete with processing (according to FH Monthly Productivity report) and is on the FH?
- H12976 is about 90% complete with processing and is on the FH?

Thanks,  
Megan

[Quoted text hidden]

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**OPS.Ferdinand Hassler - NOAA Service Account** <ops.ferdinand.hassler@noaa.gov> Wed, Aug 23, 2017 at 6:41 PM  
To: Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>  
Cc: John Doroba - NOAA Federal <john.doroba@noaa.gov>, Briana Hillstrom - NOAA Federal <briana.hillstrom@noaa.gov>, "James J. Miller" <james.j.miller@noaa.gov>, Starla Robinson - NOAA Federal <starla.robinson@noaa.gov>, CO HASSLER <CO.Ferdinand.Hassler@noaa.gov>, Erin Weller - NOAA Federal <erin.weller@noaa.gov>, Castle Parker <castle.e.parker@noaa.gov>, James Burkitt - NOAA Affiliate <james.w.burkitt@noaa.gov>

Megan,

Almost correct.

F00679 is indeed on the ship and was approved by the CO a while ago. Just was never submitted. I need to package it up and submit H12927 was a place holder designation for a quick PA wreck investigation. Working with my CO to determine what we want to do with this data.

H12976 was actually submitted last weekend. So you will see 100% for this months productivity report, coming soon...

LT John Kidd  
Field Operations Officer, NOAA Ship *Ferdinand R. Hassler*  
29 Wentworth Road  
New Castle, NH, 03854

[Quoted text hidden]

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**OPS.Ferdinand Hassler - NOAA Service Account** <ops.ferdinand.hassler@noaa.gov> Wed, Aug 23, 2017 at 8:07 PM  
To: Starla Robinson - NOAA Federal <Starla.Robinson@noaa.gov>

Hey Starla,

Hope all is well with you!

I am attaching some correspondence you had with OPS when F00679 was tasked. You mention that a FFF is required for submission. May I ask what the purpose of this was, seems like it is a bit overkill for what the F-survey was indented to do, to validate the W-survey data. I have F00679 packaged up and ready to go, with exception to the FFF, because it doesn't exist. Would like some feedback from you guys before moving forward.

LT John Kidd  
Field Operations Officer, NOAA Ship *Ferdinand R. Hassler*  
29 Wentworth Road  
New Castle, NH, 03854

[Quoted text hidden]

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 **SURVEY F00679 REPORTING GUIDANCE.pdf**  
375K

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**Starla Robinson - NOAA Federal** <starla.robinson@noaa.gov> Thu, Aug 24, 2017 at 10:36 AM  
To: "OPS.Ferdinand Hassler - NOAA Service Account" <ops.ferdinand.hassler@noaa.gov>  
Cc: Corey Allen - NOAA Federal <corey.allen@noaa.gov>

Good morning Kidd,

Thanks for looking that up. I am going to send this to the group as well because I want to remind AHB why the two surveys compliment each other. I am going to add Corey because I want to keep him in the loop. FYI Jasko was there for all of this as CO and Chief of AHB.

The reason a FFF is important is because the survey also addressed holes and questions about the features. W00310 Cape Fear is not a hydro survey, so they were looking for habitat contacts not features, and did not provide a final features file.

Vanessa Miller reviewed the sidescan data in house to provide a draft for the ship to build on. When I was on board we were populating all of the features in a project level FFF. I believe I have that FFF we populated during the survey. It may need to be broken out and reviewed. I will see if I have the file on me otherwise, it is on the network at work because I was using it for the bottom samples project.

F00679 brings the are up to a higher level of confidence in the features their and takes care of the gaps. That is why it makes sense to treat W00310 and F00679 as a pair. With that final due diligence, we can mark the 330 SNM of seafloor off as good.

For your information, 330 SNM would cost about \$9.9 million to acquire based on average KR rates for this region so I am very excited to see this all come together. It looks like we are close to finishing this as a significant win.

I hope all is well with you too! Congrats on your anniversary!

Thanks,

Starla

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**Megan Greenaway - NOAA Federal** <megan.greenaway@noaa.gov>

Thu, Aug 24, 2017 at 5:13 PM

To: "OPS.Ferdinand Hassler - NOAA Service Account" <ops.ferdinand.hassler@noaa.gov>

Cc: John Doroba - NOAA Federal <john.doroba@noaa.gov>, Briana Hillstrom - NOAA Federal <briana.hillstrom@noaa.gov>, "James J. Miller" <james.j.miller@noaa.gov>, Starla Robinson - NOAA Federal <starla.robinson@noaa.gov>, CO HASSLER <CO.Ferdinand.Hassler@noaa.gov>, Erin Weller - NOAA Federal <erin.weller@noaa.gov>, Castle Parker <castle.e.parker@noaa.gov>, James Burkitt - NOAA Affiliate <james.w.burkitt@noaa.gov>

Thanks for the update John.  
Megan

On Wed, Aug 23, 2017 at 6:41 PM, OPS.Ferdinand Hassler - NOAA Service Account <ops.ferdinand.hassler@noaa.gov> wrote:

[Quoted text hidden]



OPS.Ferdinand Hassler - NOAA Service Account <ops.ferdinand.hassler@noaa.gov>

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## SURVEY F00679 REPORTING GUIDANCE

1 message

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**Starla Robinson - NOAA Federal** <starla.robinson@noaa.gov> Tue, Nov 1, 2016 at 5:29 PM  
To: "CO.Ferdinand Hassler - NOAA Service Account" <co.ferdinand.hassler@noaa.gov>, "OPS.Ferdinand Hassler - NOAA Service Account" <ops.ferdinand.hassler@noaa.gov>, "russell.quintero" <russell.quintero@noaa.gov>  
Cc: Briana Welton - NOAA Federal <briana.welton@noaa.gov>, Matthew Jaskoski - NOAA Federal <Matthew.Jaskoski@noaa.gov>, Nicholas Morgan - NOAA Federal <nicholas.morgan@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, Vanessa Miller - NOAA Federal <vanessa.self@noaa.gov>, John Doroba - NOAA Federal <john.doroba@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>

REPORTING GUIDANCE FOR SURVEY F00679, Cape Fear

To assess the internal consistency and positioning accuracy of W00310, please do a difference surface and feature comparison with F00679. Discuss your findings in a DR Memo in accordance with HTD 2013-5.

Please copy this guidance into the survey's correspondence folder.

Thank you,  
Starla Robinson

On Mon, Aug 15, 2016 at 4:59 PM, Starla Robinson - NOAA Federal <starla.robinson@noaa.gov> wrote:  
ADDITIONAL GUIDANCE FOR SURVEY F00679, Cape Fear.

Run MBES crosslines and acquire MBES over the assigned features in the composite source file (CSF), and the assigned SILTNK areas in the project reference file (PRF). The updated PRF and CSF include assigned features outside the original bounds of F00679. These will be used for quality assurance for the joint submittal of survey W00310 and survey F00679. The updated CSF and PRF are attached for reference and have been hand delivered.

Disproval radii are assigned: 240 meters for "PD", and 160 meters for all other features assigned from survey W00310.

Run at least 4 well geographically distributed crosslines for comparison with W00310.

Collect data over the wreck southeast of W00310, using a 250 meter search radius.

Submit a Final Feature File in accordance with Section 7 of the HSSD. Please contact me if there are any questions regarding feature assignments and feature management.

Please copy this guidance into the surveys correspondence folder.

Thank you,  
Starla Robinson



- 1) W00310\_ExternalDataEvaluationReport\_AHB (SSS analysis report)
- 2) W00310\_FFF\_AHB.000 (S-57 file containing charted and uncharted bathymetric features)
- 3) W00310\_Possible\_Contacts (S-57 file containing possible features found in SSS data)
- 4) W00310\_Possible\_Developments (S-57 file containing possible field unit developments)

Numerous files were created during the SSS verification including 4 composite mosaics. These mosaics are too large to include in an email attachment and must be delivered in a hard data format.

It is recommended that the analysis of SSS correlate with MBES data analysis. The format of the submitted file required a considerable amount of time was taken manipulating the bathymetric data to verify intensities noted in the SSS imagery. To reduce duplicate effort, SSS and MBES data should be verified concurrently.

#### FINAL DATA RECOMMENDATIONS

The data does not meet 100% full bottom ensonification standards however; CATZOC B does not require a full bottom search. Per CATZOC B specifications, the data must be at an integrity that demonstrates hazardous surface navigation is not expected. The analysis of the submitted SSS data concludes that hazards to surface navigation are not expected within the survey limits. Similarly, several non-charted features were identified within the survey limits. These features are deep features and do not meet the DTON criteria. HSD OPS should proceed with survey planning with the knowledge that all Side Scan Sonar data submitted in correlation with survey W00310 should be classified as CATZOC B data. Additional details are outlined in the attached evaluation report.

Respectfully,

*Vanessa Self Miller*  
*Hydrographer/Physical Scientist*  
*Atlantic Hydrographic Branch*  
*439 West York St.*  
*Norfolk, VA 23510*  
*757-441-6746 x102*

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*Starla D. Robinson, Physical Scientist*  
*NOS - OCS - Hydrographic Survey Division - Operations Branch*  
*National Oceanic Atmospheric Administration*  
*Office: 301-713-2702 x125*  
*Cell: 360-689-1431*  
*Website: [In-House Planned Hydrographic Surveys -2016](#)*

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11/2/2016

National Oceanic and Atmospheric Administration Mail - SURVEY F00679 REPORTING GUIDANCE

*Starla D. Robinson, Physical Scientist*

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*National Oceanic Atmospheric Administration*

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*Website: [In-House Planned Hydrographic Surveys -2016](#)*



APPROVAL PAGE

F00679

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 NCEI for archive

- Descriptive Report Memo
- Data Acquisition and Processing Report
- Collection of Bathymetric Attributed Grids (BAGs)
- Processed survey data and records
- GeoPDF of survey products
- Collection of Backscatter mosaics

The survey evaluation and verification has been conducted according current OCS Specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: \_\_\_\_\_

**Lieutenant Commander Ryan Wartick, NOAA**  
Chief, Atlantic Hydrographic Branch