

D00266

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

DESCRIPTIVE REPORT

Type of Survey: Reconnaissance

Registry Number: D00266

LOCALITY

State(s): Alaska

General Locality: Kodiak

Sub-locality: Entrance to Womens Bay

2019

CHIEF OF PARTY
Benjamin K. Evans, CAPT/NOAA

LIBRARY & ARCHIVES

Date:

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION		REGISTRY NUMBER:
HYDROGRAPHIC TITLE SHEET		D00266
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):	Alaska	
General Locality:	Kodiak	
Sub-Locality:	Entrance to Womens Bay	
Scale:	20000	
Dates of Survey:	05/20/2019 to 05/20/2019	
Instructions Dated:	03/31/2019	
Project Number:	OPR-P136-RA-19	
Field Unit:	NOAA Ship <i>Rainier</i>	
Chief of Party:	Benjamin K. Evans, CAPT/NOAA	
Soundings by:	Kongsberg Maritime EM 2040 (MBES)	
Imagery by:	Kongsberg Maritime EM 2040 (MBES Backscatter)	
Verification by:	Pacific Hydrographic Branch	
Soundings Acquired in:	meters at Mean Lower Low Water	
Remarks: Recon survey at request of USCG. Added to OPR-P136-RA-19 but not included in original Project Instructions. <i>Any revisions to the Descriptive Report (DR) applied during office processing are shown in red italic text. The DR is maintained as a field unit product, therefore all information and recommendations within this report are considered preliminary unless otherwise noted. The final disposition of survey data is represented in the NOAA nautical chart products. All pertinent records for this survey are archived at the National Centers for Environmental Information (NCEI) and can be retrieved via https://www.ncei.noaa.gov/. Products created during office processing were generated in NAD83 UTM 5N, MLLW. All references to other horizontal or vertical datums in this report are applicable to the processed hydrographic data provided by the field unit.</i>		

DESCRIPTIVE REPORT MEMO

June 21, 2019

MEMORANDUM FOR: Chief, Pacific Hydrographic Branch

THROUGH: Benjamin K. Evans, CAPT/NOAA
Chief Hydrographer, NOAA Ship *Rainier*

FROM: B.D. Jackson
Senior Survey Technician, NOAA Ship *Rainier*

SUBJECT: Submission of Survey D00266

D00266 was performed at the request of the Commanding Officer of United States Coast Guard (USCG) Base Kodiak. The Base Kodiak Facilities Engineering group is exploring the possibility of deepening the entrance to Womens Bay to permit the future Polar Security Cutter to use the port. The Coast Guard asked RAINIER if our data could be used to determine if the channel could be dredged. RAINIER offered to survey the shoalest portion of the channel to collect high-resolution bathymetry and backscatter data to assist in this effort. The survey was performed on a not-to-interfere basis with OPR-P136-RA-19 during RAINIER's scheduled port calls at USCG Base Kodiak.

A georeferenced Portable Document Format (PDF) file of the survey, including selected soundings, MBES surface and backscatter mosaics, was delivered to the facility engineer at USCG Base Kodiak. A metadata file was attached to the PDF file.

All soundings were reduced to Mean Lower Low Water using VDatum. The horizontal datum for this project is North American Datum of 1983 (NAD 83). The projection used for this project is Universal Transverse Mercator (UTM) Zone 5.

Soundings were reduced to Mean Lower Low Water (MLLW) using ERS via the ellipsoidally-referenced tidal datum model (ERTDM) "P136RA2019_ERTDM_NAD83-MLLW.csar" provided by NOAA Hydrographic Systems Technologies Branch (HSTB).

All survey systems and methods utilized during this survey were as described in 2019 RAINIER Data Acquisition and Processing Report (DAPR) with the exception of the acquisition of crosslines which were deemed unnecessary for this reconnaissance survey. Note that two survey vessels were used to acquire bathymetry and that their overlapping data was in good agreement.

There were no DTONs created for this survey.

D00266 selected soundings indicate that depths within Womens Bay channel are generally deeper than 28 feet as shown on Chart 16595 (Figure 1). A rounding issue with the processing software used for this survey caused a slightly shoaler than actual depth: 5-fathom, 1-foot, rather than 5-fathom, 2-feet over the charted obstruction located at the north end of the channel (Figure 2). The MBES derived surface of the channel seafloor appears to indicate undulating bottom topography consistent with sand waves (Figure 3). D00266 Multibeam acoustic backscatter data displays a uniform gray scale, indicating a consistent intensity of signal return strength. This information supports a theory that the seafloor within the channel is comprised of a similar material, likely sand (Figure 4).

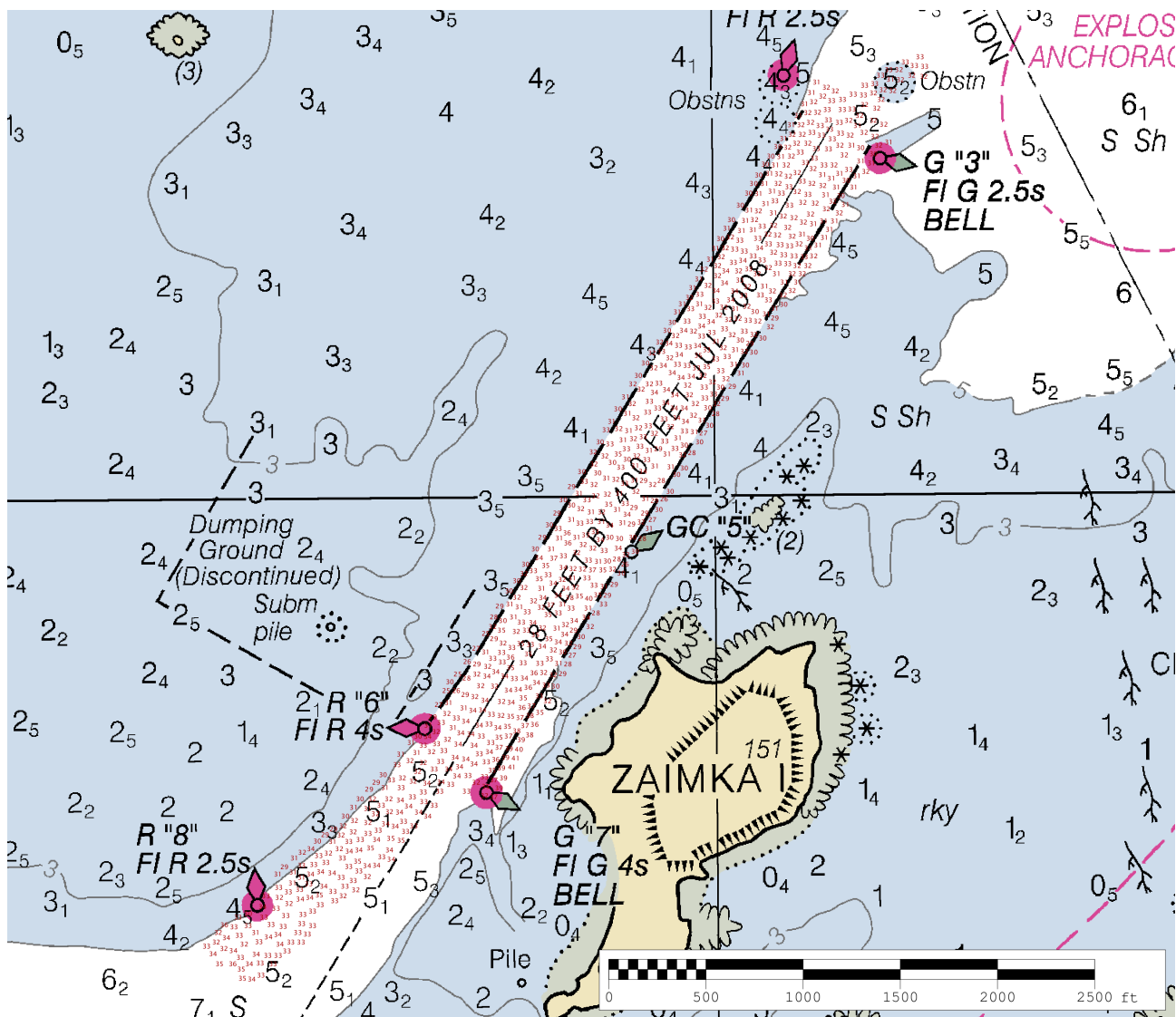


Figure 1. D00266 selected soundings (units feet, shown in red) overlaid on Chart 16595.

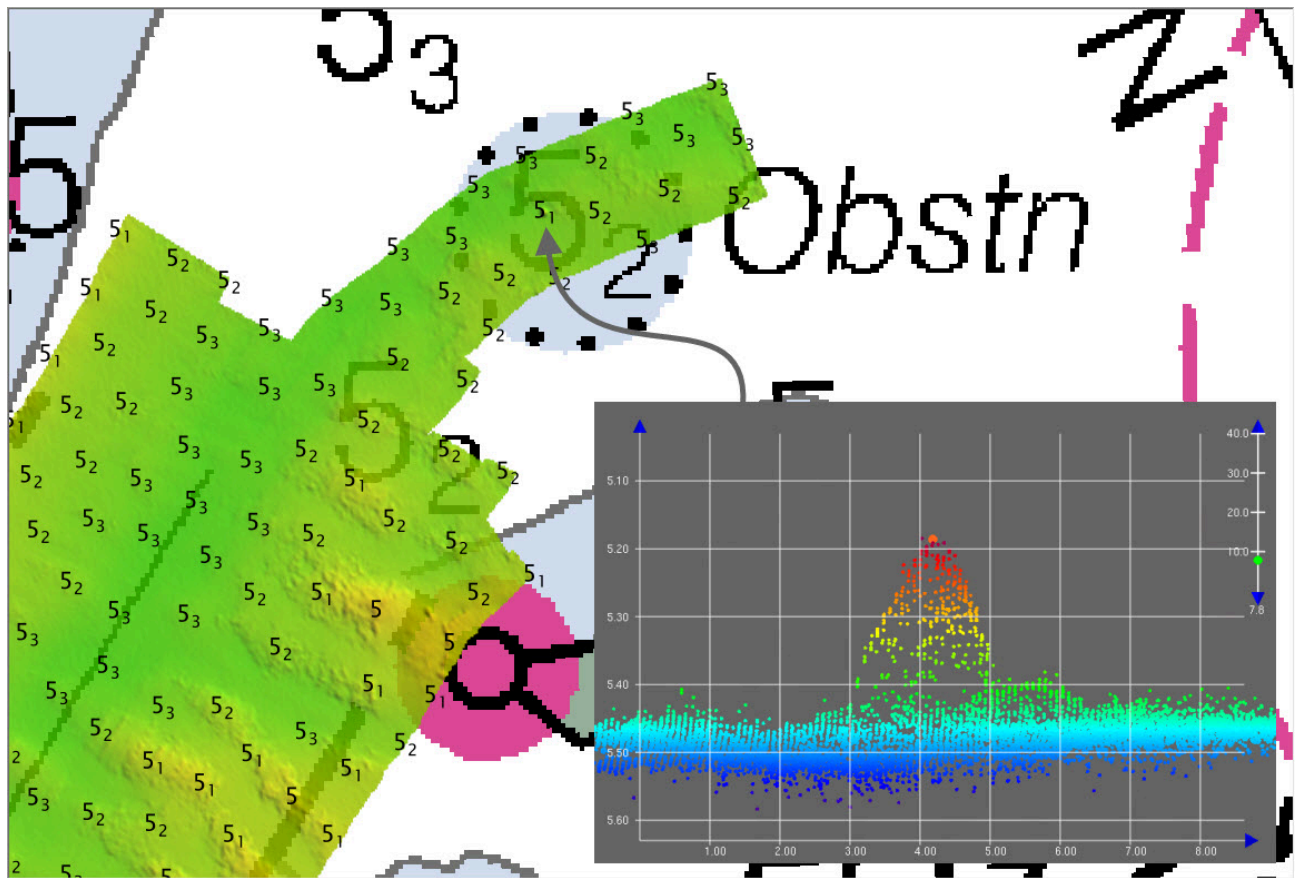


Figure 2. Charted 5-fathom, 2-ft obstruction with D00266 surface, selected sounding layer and subset view inset. Subset view shows obstruction depth is charted correctly; a rounding issue with the sounding layer caused a slightly shoaler than actual depth to display.

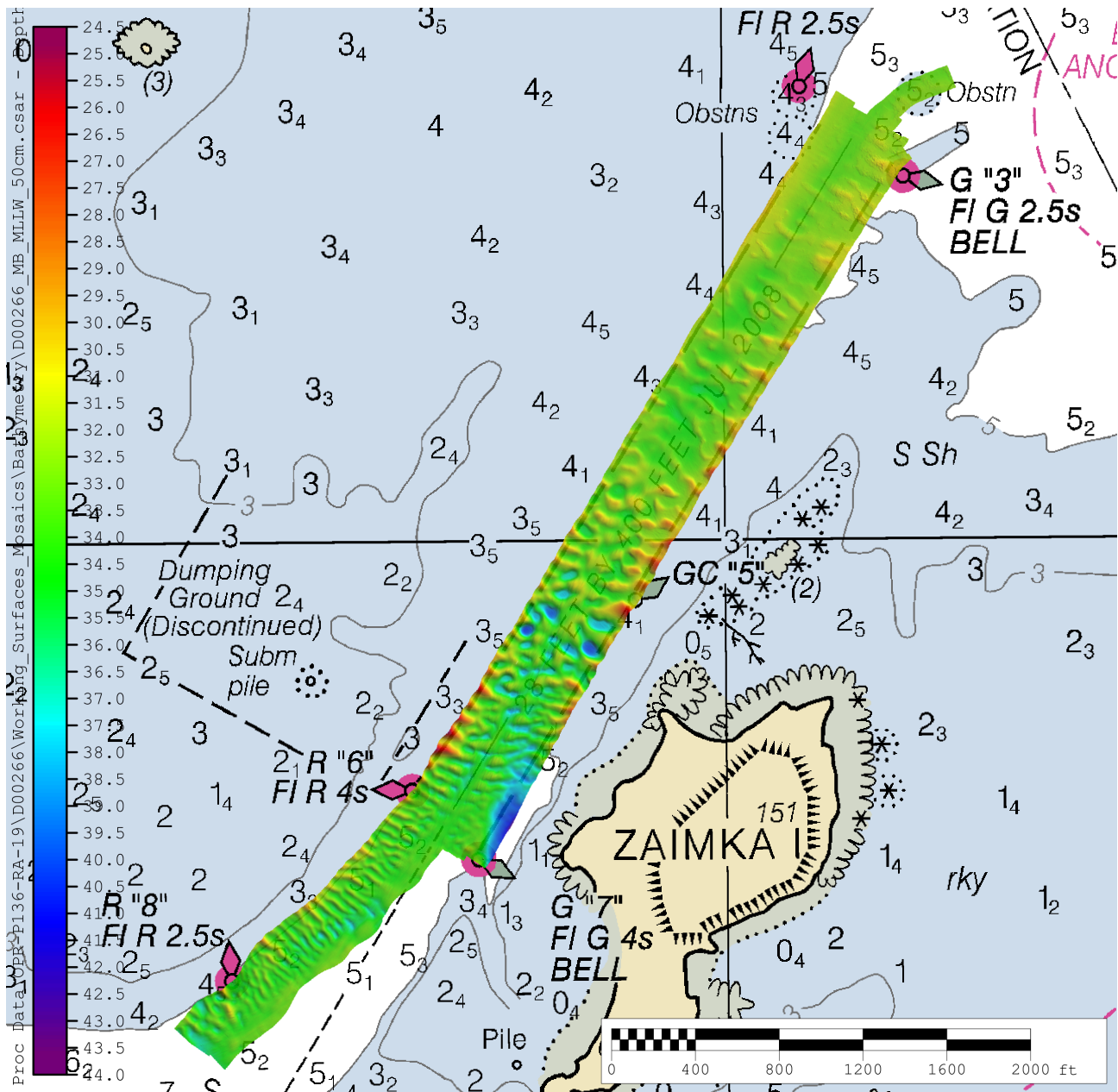
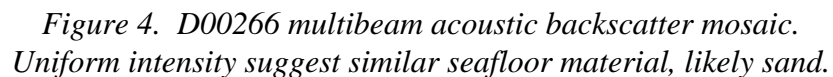


Figure 3. D00266 MBES surface overlaid on Chart 16595.
 Seafloor topography suggest the presence of sand waves.



This survey does meet charting specifications and is adequate to supersede prior data. However, this survey was conducted only to provide information for a USCG decision regarding possible future dredging of the Womens Bay channel. The Hydrographer requests that PHB determine if NOAA is the authorized charting authority for Womens Bay Channel and if so, to update the depth notation with D00266 findings as appropriate. Survey D00266 data should be archived for public access at the National Center for Environmental Information (NCEI).



Jacklyn James - NOAA Federal <jacklyn.c.james@noaa.gov>

Fwd: Re: Update on charting of Kodiak

2 messages

LT Bart O. Buesseler, NOAA <bart.o.buesseler@noaa.gov>

Mon, Dec 18, 2017 at 6:40 PM

To: _NOS OCS HSD OPS <HSD.OPS@noaa.gov>, Corey Allen <corey.allen@noaa.gov>, Janice Eisenberg - NOAA Federal <janice.eisenberg@noaa.gov>, Chief NRB OCS - NOAA Service Account <chief.nrb.ocs@noaa.gov>
Cc: Rachel Medley <rachel.medley@noaa.gov>

Good Afternoon All,

I've just created a new SURF request in Kodiak based on the email chain below. Long story short, it sounds like larger vessels are bound for Kodiak and the pilots would like to verify the depths on the approach between the 6 and 7 buoy in St. Paul Harbor. This is the shallowest part of the run and the pilots want to make sure they know exactly how much depth they have.

As the requested area is quite small is there any chance that RA/FA could do a quick survey next season in conjunction with a Kodiak port call (or other planned work in the area)?

Very Respectfully,

LT Bart Buesseler, NOAA

Navigation Manager, Alaska
NOAA Office of Coast Survey
222 West 7th Ave, #43
Room 552
Anchorage, AK 99513

Office: 907.271.3327
Cell: 907.231.7112
Bart.O.Buesseler@noaa.gov

www.nauticalcharts.noaa.gov

----- Forwarded Message -----

Subject:Re: Update on charting of Kodiak Cargo Pier

Date:Mon, 18 Dec 2017 14:10:02 -0900

From:Ron Ward <captron@ak.net>

To:LT Bart O. Buesseler, NOAA <bart.o.buesseler@noaa.gov>

CC:Jenni Zeilinski <swpilots@ak.net>, Pete Garay <petergaray@hotmail.com>

Good Day Bart,

Thanks for the "update" but yes we are looking at the area south of buoy 7 showing 31 feet by your 1999 soundings. We are requesting that NOAA resurvey this area as its been 18 years since the latest soundings were published and we have had discussions with our customers about larger vessels calling in Kodiak in the future.

Regards,

Capt. Ron Ward
(907) 399-1162
captron@ak.net

On Dec 18, 2017, at 1:51 PM, LT Bart O. Buesseler, NOAA <bart.o.buesseler@noaa.gov> wrote:

Good Afternoon Captain Ward,

I'm not currently aware of any planned surveys right there at the 6 and 7 buoys, but would be happy to put in a request. What are you seeing that you would like addressed?

I took a peek at the data we currently have and it looks like we last surveyed the area in 1999 using modern techniques (full bottom coverage). I pulled that data and overlaid it onto the chart which I've attached. This allowed me to put some extra soundings on the chart (the blue soundings) over the survey area (the faint colors in the background). If you have a specific area of interest let me know and I can give you more detail about how that area looked in 1999. That said if you're seeing changes from what's charted we'll need to focus on getting some new survey work done.

Very Respectfully,

LT Bart Buesseler, NOAA

Navigation Manager, Alaska
NOAA Office of Coast Survey
222 West 7th Ave, #43
Room 552
Anchorage, AK 99513

Office: 907.271.3327

Cell: 907.231.7112

Bart.O.Buesseler@noaa.gov

www.nauticalcharts.noaa.gov

On 12/18/2017 10:30 AM, Ron Ward wrote:

Hi Bart,

Thanks for the update on the Kodiak Container pier! We look forward to having it represented on the RNC's we utilize, soon. The other issue that has come up recently is a current survey of the depths between buoys 6 and 7 in the approach to Kodiak. If you have any information about when this will be surveyed again or advice as to how we can request a survey please advise.

Merry Christmas to you and yours,

Best regards,
Capt. Ron Ward
(907) 399-1162
captron@ak.net

On Dec 15, 2017, at 3:35 PM, LT Bart O. Buesseler, NOAA
<bart.o.buesseler@noaa.gov> wrote:

Good Afternoon Captain Ward,

I wanted to provide you an update regarding the charting of the new Kodiak Cargo Pier that you brought to my attention in October. The good news is that the ENC should as of last Thursday accurately reflect the new pier configuration (attached screen grab). That update should trickle down to the RNC as well here in the next couple of weeks.

The bad news is that the lights are currently way off... In the screen grab you can see a mark (Light 26740) where the light list has said all four lights are, so I'm still working with the folks at D17 and Coast Survey to get that ironed out.

Baby steps, but at least we're getting closer.

Happy Holidays!

Very Respectfully,

LT Bart Buesseler, NOAA

--

Navigation Manager, Alaska
NOAA Office of Coast Survey
[222 West 7th Ave, #43](#)
Room 552
Anchorage, AK 99513

Office: 907.271.3327
Cell: 907.231.7112
Bart.O.Buesseler@noaa.gov

www.nauticalcharts.noaa.gov

<NewKodiakPier_ENC.png>

<Kodiak_Soundings_H10912.png>

LT Bart O. Buesseler, NOAA <bart.o.buesseler@noaa.gov>

Fri, Mar 23, 2018 at 1:47 PM

To: Jackie James <jacklyn.c.james@noaa.gov>

Cc: Corey Allen <corey.allen@noaa.gov>, Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>

Jackie,

FYI; here's the email I had sent back in December regarding that SURF request.

Very Respectfully,

LT Bart Buesseler, NOAA

Navigation Manager, Alaska
NOAA Office of Coast Survey
222 West 7th Ave, #43
Room 552
Anchorage, AK 99513

Office: 907.271.3327
Cell: 907.231.7112
Bart.O.Buesseler@noaa.gov

www.nauticalcharts.noaa.gov

----- Forwarded Message -----

Subject: Fwd: Re: Update on charting of Kodiak

Date: Mon, 18 Dec 2017 14:40:39 -0900

From: LT Bart O. Buesseler, NOAA <Bart.O.Buesseler@noaa.gov>

To: _NOS OCS HSD OPS <HSD.OPS@noaa.gov>, Corey Allen <corey.allen@noaa.gov>, Janice Eisenberg - NOAA Federal <janice.eisenberg@noaa.gov>, Chief NRB OCS - NOAA Service Account <chief.nrb.ocs@noaa.gov>

CC: Rachel Medley <rachel.medley@noaa.gov>

[Quoted text hidden]



Barry Jackson - NOAA Federal <barry.jackson@noaa.gov>

Re: Request for new FXXXXX and DXXXXX

1 message

Jacklyn <jacklyn.c.james@noaa.gov>

Wed, Jun 5, 2019 at 9:38 PM

To: OPS Rainier - NOAA Service Account <ops.rainier@noaa.gov>

Cc: Martha Herzog <martha.herzog@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, Carl Stedman - NOAA Federal <carl.r.stedman@noaa.gov>, Barry Jackson - NOAA Federal <barry.jackson@noaa.gov>, Jim Jacobson <ChiefST.Rainier@noaa.gov>

Yes, that is correct.

On Wed, Jun 5, 2019 at 4:36 PM OPS Rainier - NOAA Service Account <ops.rainier@noaa.gov> wrote:

Thanks very much. And these will be a part of OPR-P136-RA-19?

R,
HadleyOperations Officer
NOAA Ship *Rainier*
[2002 SE Marine Science Drive](#)
[Newport, OR 97365](#)Ship Cell: (541) 272-9430
Iridium: (808) 659-0049
Email: Ops.Rainier@noaa.gov

On Wed, Jun 5, 2019 at 12:22 PM Jacklyn <jacklyn.c.james@noaa.gov> wrote:

Entrance to Womens Bay, Kodiak, Alaska **D00266**
JAG Shipyard, Seward, Alaska **F00776**

On Wed, Jun 5, 2019 at 8:21 AM Corey Allen - NOAA Federal <corey.allen@noaa.gov> wrote:

Jacklyn,

Can you please add the requested numbers under the Josiah project. No need for a PI mod at this point.

Kick the sep request over to Jack.

Corey

----- Forwarded message -----

From: **CO RAINIER** <co.rainier@noaa.gov>

Date: Tue, Jun 4, 2019 at 10:19 PM

Subject: Re: Request for new FXXXXX and DXXXXX

To: Corey Allen - NOAA Federal <corey.allen@noaa.gov>

CC: OPS Rainier - NOAA Service Account <ops.rainier@noaa.gov>

Corey,

I should add that both of these surveys were endorsed by Bart Buesseler, and the Kodiak work was performed on a not-to-interfere basis with HSD's assigned tasking... we're not totally freelancing up here!

Ben

On 6/4/2019 2:14 PM, OPS Rainier - NOAA Service Account wrote:

Good afternoon -

We would like to request survey numbers for two opportunistic surveys *Rainier* has conducted recently. The first followed a request by the USCG for a current survey of the dredged channel on the entrance to Womens Bay in Kodiak. We believe this should be a D-survey, with memo. The second is recommended as an inset for chart 16682, in the region of the JAG Shipyard near Seward. We are requesting this to be a F-survey, with full DR.

Relatedly, I would also like to request a PMVD SEP file for the Seward survey. Is this something you can help me with, or should I send a message directly to Jack Riley?

Thanks very much.

Hadley

Operations Officer
NOAA Ship *Rainier*
[2002 SE Marine Science Drive](#)
[Newport, OR 97365](#)

Ship Cell: (541) 272-9430
Iridium: (808) 659-0049
Email: Ops.Rainier@noaa.gov

--

CDR Ben Evans, NOAA
Commanding Officer
NOAA Ship RAINIER (S-221)

--

J. Corey Allen
Chief, Operations Branch
[Office of Coast Survey, NOAA](#)
Corey.Allen@noaa.gov
240.533.0037 (Office)
301.717.7271 (Cell)
[Click here for a StoryMap of 2019 NOAA Hydrographic Surveys](#)
Find us on [Facebook](#), [Twitter](#) and the [NOAA Coast Survey](#) blog

--

Jacklyn James
Physical Scientist/ COR III
Hydrographic Surveys Division
[1315 East-West Highway](#)
SSMC3 Room 6114
Silver Spring, MD 20910
[*\(o\) 240-533-0036 NEW NUMBER*](#)

jacklyn.c.james@noaa.gov

View our [Upcoming Hydrographic Surveys!](#)

To see live feeds from the NOAA Ship Okeanos Explorer go to the web site below.

<http://oceanexplorer.noaa.gov/okeanos/welcome.html#>

--

6/5/2019

National Oceanic and Atmospheric Administration Mail - Re: Request for new FXXXXX and DXXXXX

Jacklyn James
Physical Scientist/ COR III
Hydrographic Surveys Division
[1315 East-West Highway](#)
SSMC3 Room 6114
Silver Spring, MD 20910
(o) 240-533-0036 NEW NUMBER

jacklyn.c.james@noaa.gov

View our [Upcoming Hydrographic Surveys!](#)

To see live feeds from the NOAA Ship Okeanos Explorer go to the web site below.

<http://oceanexplorer.noaa.gov/okeanos/welcome.html#>

APPROVAL PAGE

D00266

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
- Collection of Bathymetric Attributed Grids (BAGs)
- Collection of backscatter mosaics
- Processed survey data and records
- GeoPDF of survey product

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: _____

Pete Holmberg

Products Team Lead, Pacific Hydrographic Branch