

H11742

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. n/a

Registry No. H11742

LOCALITY

State Alaska

General Locality Northeastern Prince William Sound

Sublocality Western Portion of Port Fidalgo

2007

CHIEF OF PARTY

..... CDR Andrew L. Beaver, NOAA

LIBRARY & ARCHIVES

DATE

HYDROGRAPHIC TITLE SHEET

H11742

INSTRUCTIONS - The hydrographic sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the office.

FIELD NO.

n/a

State Alaska

General Locality Northeastern Prince William Sound

Sublocality Western Portion of Port Fidalgo

Scale 1:10,000

Date of Survey 8/24/2007-10/10/2007

Instructions Dated 8/3/2007

Project No. OPR-P132-FA-07

Vessel R/V FAIRWEATHER

Chief of Party CDR Andrew L. Beaver, NOAA

Surveyed by ENS Nicholas Morgan, CST Grant Froelich, LT Jennifer Dowling

Soundings taken by echo sounder Reson 8101, Reson 8111

Graphic record scaled by N/A

Graphic record checked by N/A

Evaluation by Fernando Ortiz Automated plot by N/A

Verification by Tyanne Faulkes

Soundings in Fathoms and Feet at MLLW

REMARKS: Time in UTC. UTM Projection Zone 6

Revisions and annotations appearing as endnotes were

generated during office processing.

As a result, page numbering may be interrupted or non-sequential

All separates are filed with the hydrographic data.

Descriptive Report to Accompany Hydrographic Survey H11742

Project OPR-P132-FA-07
Northeastern Prince William Sound, Alaska
Scale 1:10,000
August 24 to October 10, 2007
NOAA Ship FAIRWEATHER
Chief of Party: Commander Andrew L. Beaver, NOAA

A. AREA SURVEYED

The survey area was located in Northeastern Prince William Sound, within the sub-locality of the Western Portion of Port Fidalgo. This survey corresponds to Sheet B in the sheet layout provided with the Letter Instructions, as shown in Figure 1 below. The survey area is bounded on the Southwest corner at 60°40'00"N, 146°50'00"W and the Northeast corner at 60°50'00"N, 146°25'00"W.

Data acquisition was conducted from August 24 to October 10, 2007 (DN 236 to DN 283).

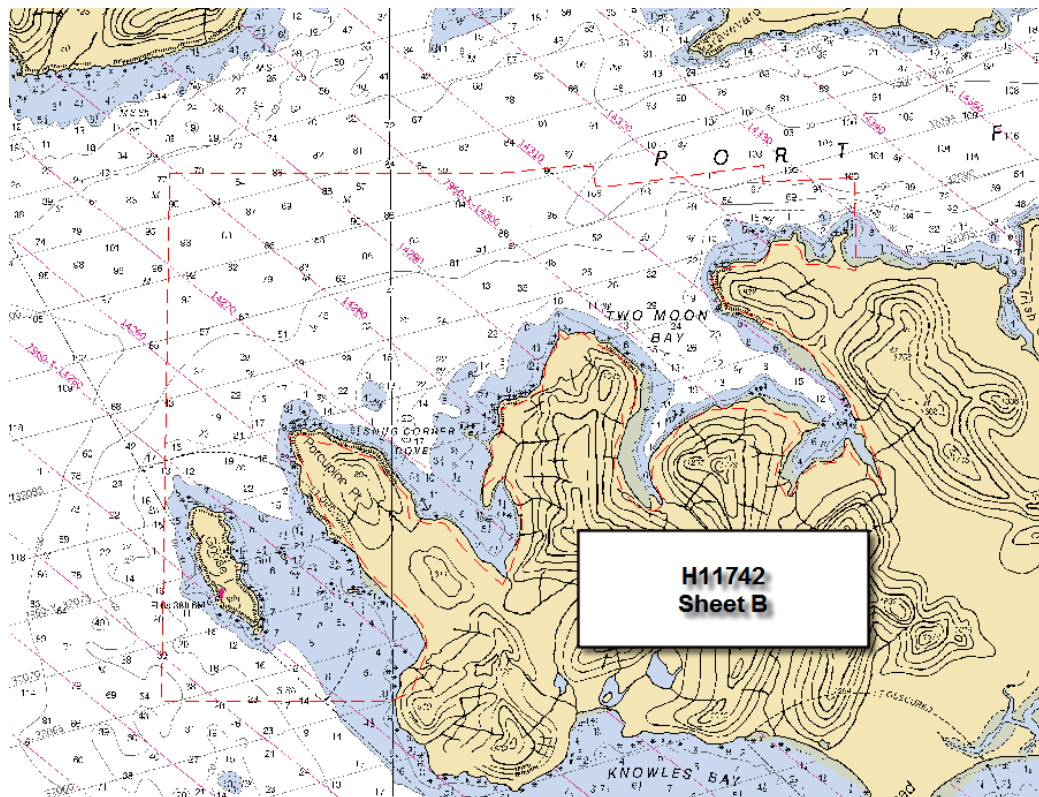


Figure 1: H11742

One hundred percent multibeam echosounder (MBES) coverage was obtained in the survey area offshore of the 8-meter depth curve except in areas where safe navigation of the vessel was a concern.¹ When conditions allowed, multibeam echosounder (MBES) data was acquired parallel to contours and at a line spacing of no less than 25 meters at depths between four and eight meters. Additional coverage was obtained when determining least depths over features or shoals offshore of the Navigable Area Limit Line (NALL), which is defined as the furthest offshore of either the 4-meter depth contour or a distance of 64 meters (0.8 mm from the Mean High Water line at the scale of the largest scale chart). Due consideration was given to the safety of operations and areas deemed unsafe to survey were avoided by order of the Chief of Party.

Shoreline data were acquired for H11742. These data were attributed as S-57 objects for submittal.

B. DATA ACQUISITION AND PROCESSING

A complete description of data acquisition/processing systems and survey vessels along with quality control procedures and data processing methods are included and described in the *OPR-P132-FA-07 Data Acquisition and Processing Report (DAPR)*², submitted under separate cover. Items specific to this survey and any deviations from the aforementioned report are discussed in the following sections. This hydrographic survey was completed as specified by Hydrographic Survey Project Instructions OPR-P132-FA, dated August 3, 2007 and signed on August 8, 2007.

B1. Equipment and Vessels

Equipment and vessels used for data acquisition and survey operations during this survey are below in Table 1.

	FAIRWEATHER	Jensen Launch 1010	Jensen Launch 1018	MonArk	Ambar 700
Hull Registration Number	S220	1010	1018	1706	2302
Builder	Aerojet-General Shipyard	The Boat Yard, Inc.	The Boat Yard, Inc.	MonArk	Marine Silverships, Inc
Length Overall	231 feet	28' 10"	28' 10"	17'	23'
Beam	42 feet	10' 8"	10' 8"	7'2"	9' 4"
Draft, Maximum	15' 6"	4' 0" DWL	4' 0" DWL	1' 3"	1' 4"
Cruising Speed	12.5 knots	24 knots	24 knots	20 knots	22 knots
Max Survey Speed	10 knots	10 knots	10 knots		
Primary Echosounder	RESON 8111 & RESON 8160	RESON 8101	RESON 8101		
Sound Velocity Equipment	SBE 19plus & 45, MVP 200	SBE 19plus	SBE19plus		
Attitude & Positioning Equipment	POS/MV V4	POS/MV V4	POS/MV V4		
Type of operations	MBES	MBES	MBES	Shoreline	Shoreline

Table 1 -Vessel Inventory

No vessel configurations used during data acquisition deviated from the *OPR-PI32-FA-07 Data Acquisition and Processing Report (DAPR)*.

B2. Quality Control

Crosslines

Shallow water multibeam crosslines for this survey totaled 35.3 linear nautical miles (lnm), comprising 8.7% of the 441.1 lnm of total MBES hydrography.³ This is sufficient mileage, however, there are some nearshore lines that are not covered by a crossline such as the arms in Two Moon Bay. Both mainscheme and crossline mileage are summarized in Table 2.

Statistics

Date: 12/5/2007 Completed by: Nicholas Morgan
 Date: _____ Reviewed by: _____

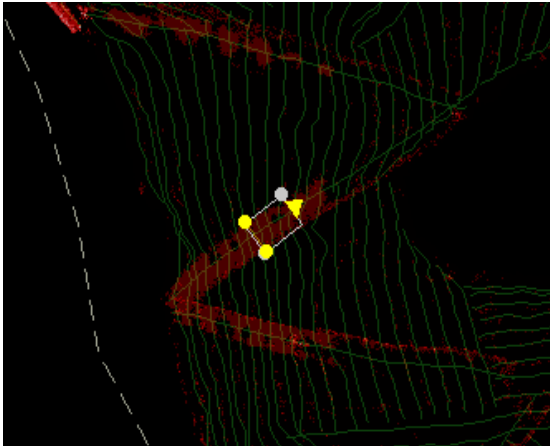
All spaces should fill in automatically from other tabs in this worksheet except SL Mileage* & SNM**.

MAIN SCHEME - Mileage	
Single Beam MS	<u>0</u>
Multibeam MS mileage	<u>405.82</u>
SideScan MS	<u>0</u>
Total MS	<u>405.82</u>
CROSSLINE - Mileage	
Single Beam XL	<u>0</u>
Multibeam XL	<u>35.31</u>
Total XL	<u>35.31</u>
OTHER	
Developments/AWOIS - Mileage	<u>0</u>
Shoreline/Nearshore Investigation - Mileage	<u>0</u>
Total # of Investigated Items	<u>80</u>
Total Bottom Samples	<u>35</u>
Total SNM	<u>441.13</u>
Specific Dates of Acquisition	<u>8/24, 8/27, 8/28, 8/29, 9/10, 9/11, 9/12, 9/13, 9/14, 9/20, 9/21, 9/23, 10/6, 10/9, 10/10</u>
Specific Dn#s of Acquisition	<u>Dn236, Dn239, Dn240, Dn241, Dn252, Dn253, Dn254, Dn255, Dn256, Dn257, Dn263, Dn264, Dn266, Dn279, Dn282, Dn283</u>

*Boxed area above must be inserted in Section A of DR

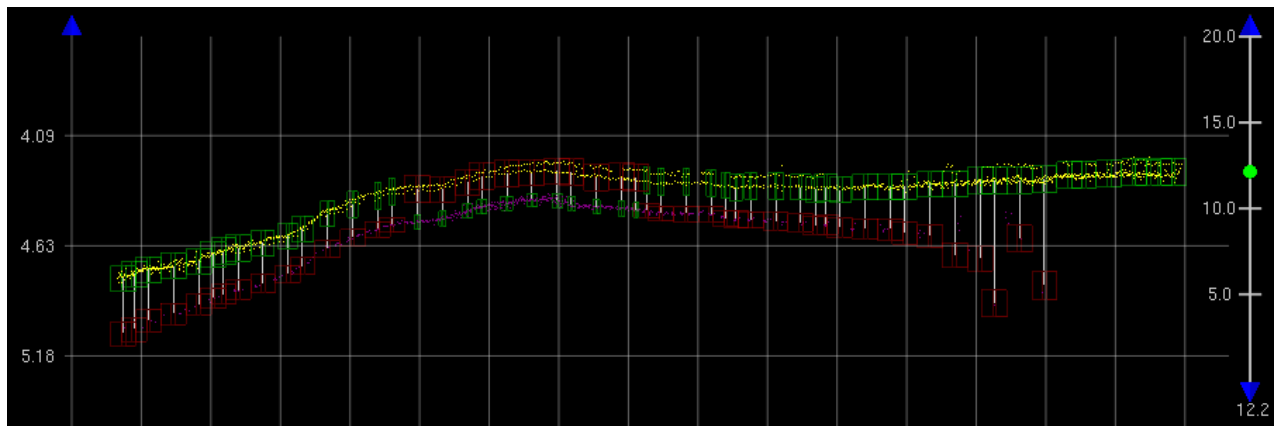
Table 2 - H11742 Mainscheme and Crossline Statistics Summary.

The Hydrographer has determined, through manual examination of the data, that the crossline agreement with main scheme data meet the vertical accuracy requirements as stated in the *NOS Hydrographic Surveys Specifications and Deliverables Manual (HSSDM)*.



Southern crosslines east of Goose Island disagree with other soundings by as much as 0.34 meters. This is likely a tidal error. However, this is within spec as IHO Order 1 allows for up to 0.503 meters at this depth (4.5 meters). Figure 2 on the left is a screen grab illustrating the hypothesis count values that increase directly in conjunction with crossline data. Figure 3 is a screen grab illustrating the computed CUBE surface alternating (middle) between the two day's soundings, creating a vertical surface disagreement of about 0.29 meters. At this depth, 0.29 meters is equivalent to 48% of the allowable IHO Order 1 error.⁴

Figure 2 (above) Figure 3 (below)



Junctions

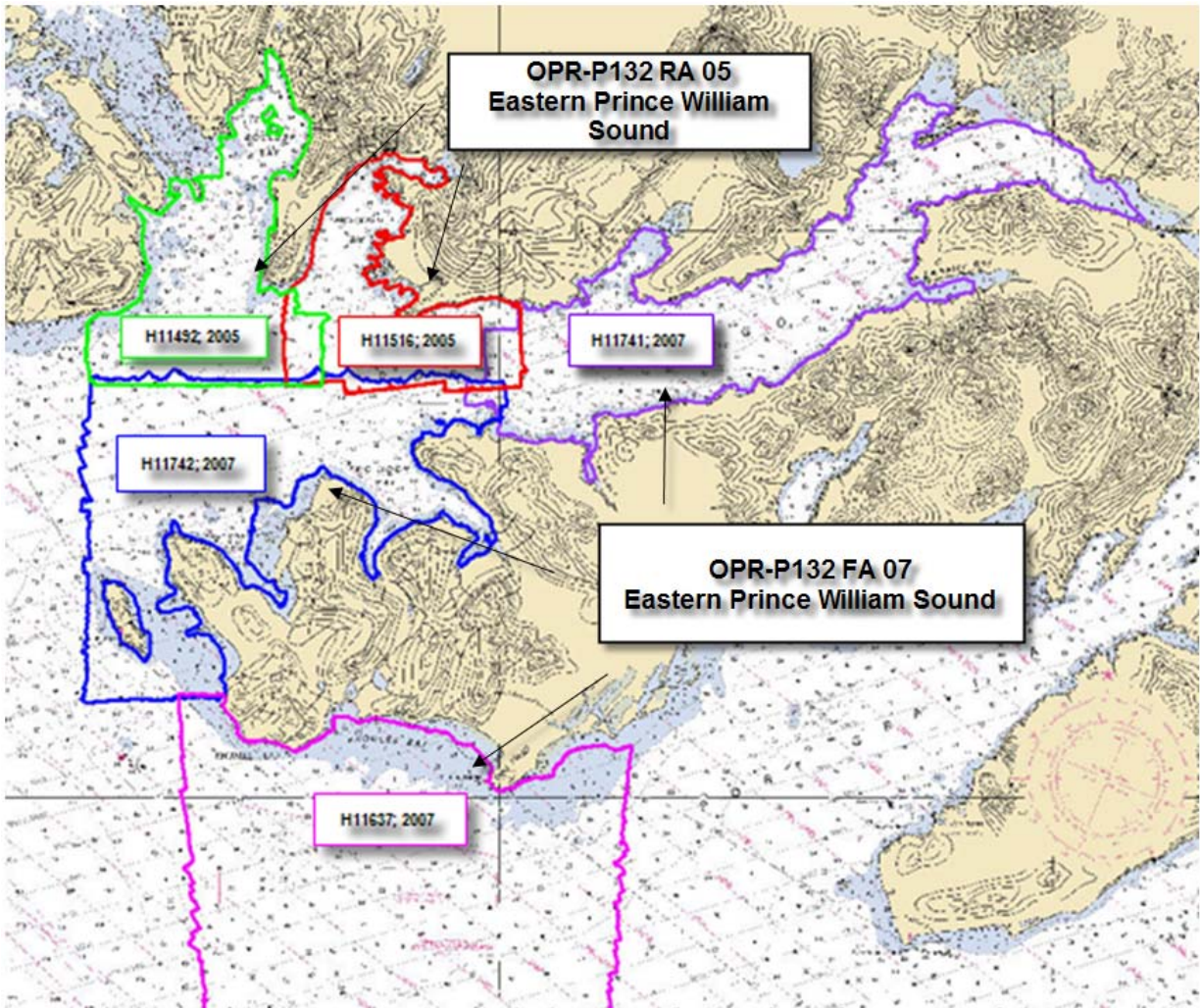


Figure 4 – Junctions with Survey H11742

a. OPR-132-FA-07 Junctions

Survey H11742 junctions with H11637 on the southernmost boundary and H11741 on the easternmost boundary which are Sheet K and A, respectively, of the same project (OPR-132-FA-07). The area of overlap between Sheets A and K was approximately 40 meters wide and between Sheet B and Sheet A was approximately 100 meters wide. Data were reviewed in CARIS Subset Editor and depths were found to be consistent between the two surveys, meeting the requirements as stated in the *HSSDM*.⁵ The sheet limits and area of overlap for each sheet junction are pictured below in Figures 5 and 6.

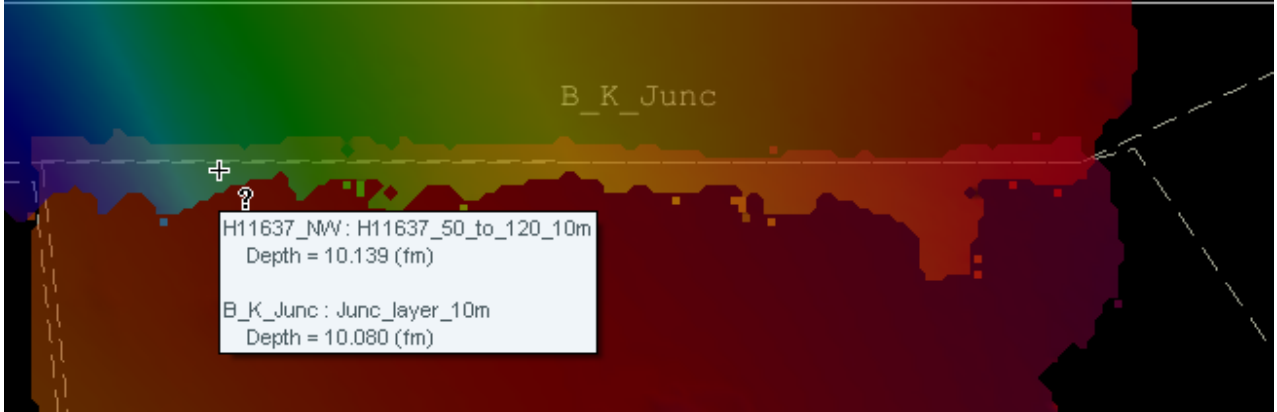


Figure 5 - Junction of Sheet B (H11742) with Sheet K (H11637) Scale 1:6000 captured on 10/19/07

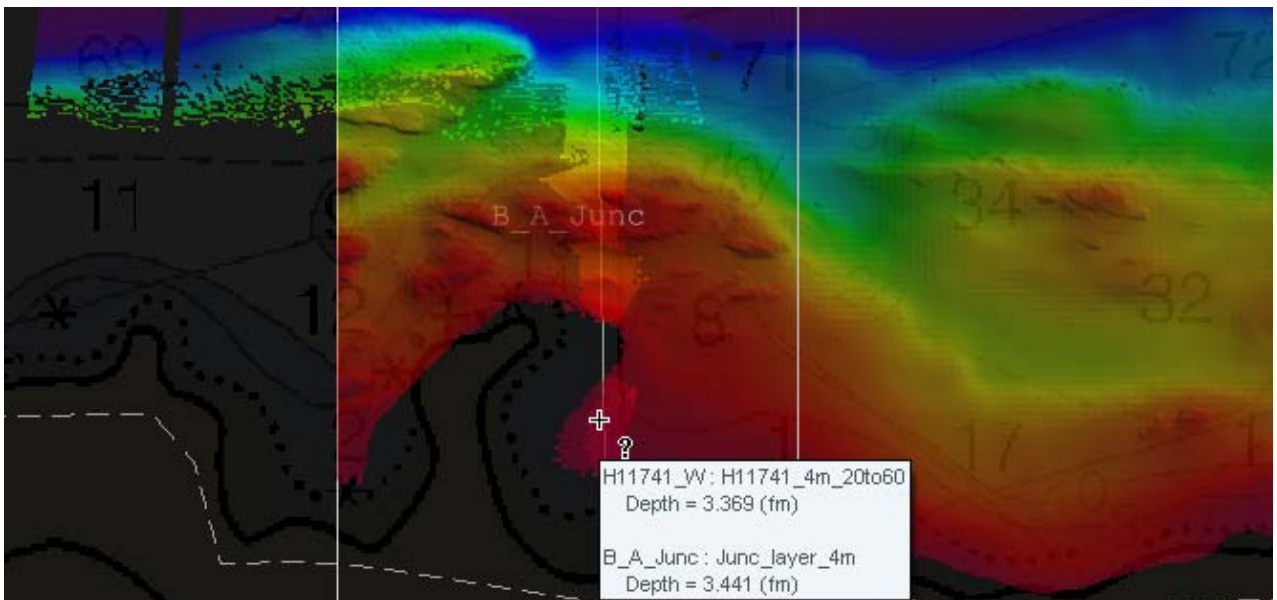


Figure 6 - Junction of Sheet B (H11742) with Sheet A (H11741) Scale 1:16000 captured on 10/19/07

b. OPR-P132-RA-05 Junctions:

Survey H11742 junctions with surveys H11516 and H11492 of project OPR-P132-RA-05 both on the northern boundary of H11742. The area of overlap between H11742 and H11492 was approximately 140 meters wide and was approximately 200 meters wide between H11742 and H11516. Data were reviewed in CARIS Subset Editor and depths were found to be consistent between the two surveys, meeting the requirements as stated in the *HSSDM*.⁶ The sheet limits and area of overlap for each sheet junction are pictured below in Figures 7 and 8.

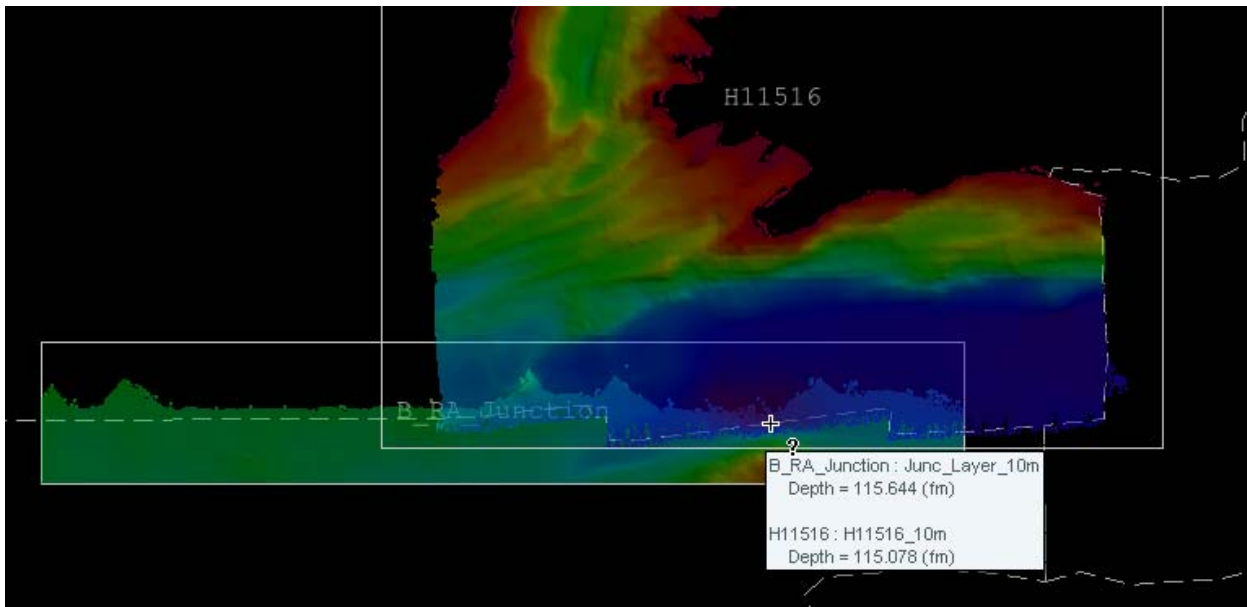


Figure 7 – Junction of Sheet B (H11742) with H11516 of RA-07 Scale 1:50000 captured on 11/4/07

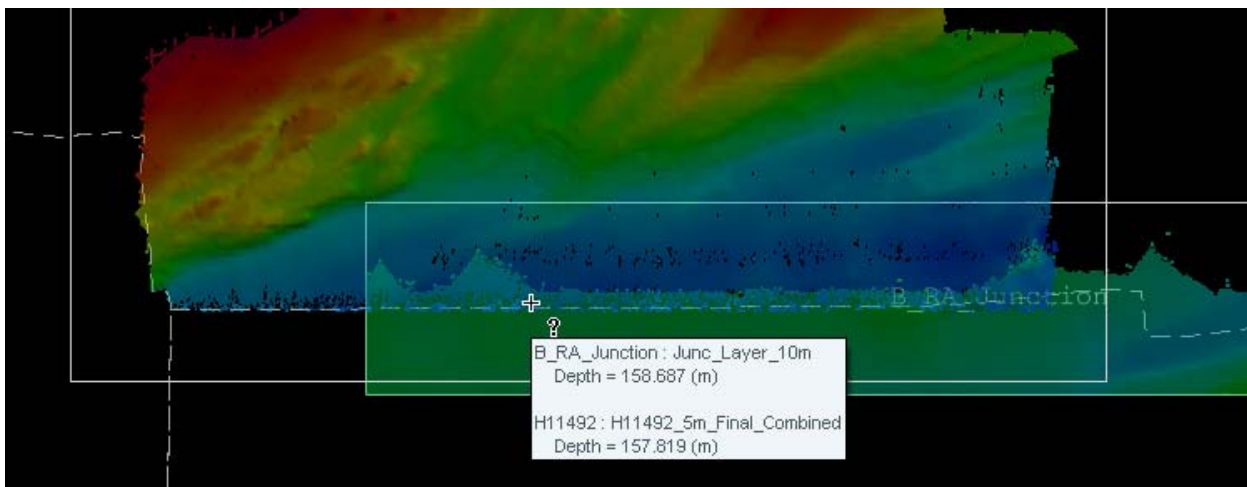


Figure 8 – Junction of Sheet B (H11742) with H11492 of RA-07 Scale 1:47500 captured on 11/13/07

Quality Control Checks

MBES quality control checks were conducted as discussed in the quality control section of the DAPR.

Data Quality Factors

Coverage Assessment

Coverage assessment was determined using the following base surface resolutions listed below in Table 3:

Depth Ranges (m)		Resolution (m)
Low	High	
0	25	2.0
15	45	4.0
35	85	8.0
70	250	16.0

Table 3: Caris BASE Surface Depth Ranges and Resolutions

Survey H11742 has been thoroughly cleaned and combined. The surfaces were cleaned to the appropriate range and resolution. Initially, 1.5, 4.0, 10.0 and 20.0 meter resolution surfaces were used and the data was cleaned accordingly. The survey was then changed to use the FA 2008 standards for surfaces which include 2.0, 4.0, 8.0, and 16.0 meter resolutions.⁷

Splitting H11742 into 2 smaller field sheets facilitated data cleaning by decreasing processing times. Accordingly, there are a total of three fieldsheets for survey H11742 titled “H11742_SW”, “H11742_NE”, and “H11760”. The “Northeast” and “Southwest” fieldsheets are comprised of the 2.0 meter resolution surfaces. Fieldsheet “H11742” encompasses the entire survey and contains coarser resolutions of 4m, 8m, and 16m.

The resolution and depth range schemes used for coverage assessment of H11760 are shown in Table 3. Like the other surfaces, initially a different combined surface was used. A 10.0 meter combined was used, but it was changed to match the FA 2008 standards. The H11742_Combined_8m surface, incorporating 2.0, 4.0, and 8.0 meter final surfaces, served as the final combined base surface output (the combined output at a 8m resolution surface). By lessening the resolution of the combined surface, some gaps began to show up when reaching about 110 meters of depth. These gaps do not show up in the clipped finalized surfaces, thus sufficient coverage has been shown.

When computing the BASE surfaces, four sets of parameters were used. These four parameters were based on data density for each node of each resolution. Thus each setting was name after each resolution used(2 meter grid, 4 meter grid, 8 meter grid and 16 meter grid). The settings for each are in Table 4 as follows:

	2metergrid	4metergrid	8metergrid	16metergrid
Estimate Offset	4.00	4.00	4.00	4.00
Capture Distance Scale	1.00%	1.00%	1.00%	1.00%
Capture Distance Min.	1.41m	2.83m	5.65m	11.31m
Horizontal Error Scalar	2.95	2.95	2.95	2.95
Density Strength Limit	2.00	2.00	2.00	2.00
Locale Strength Limit	2.50	2.50	2.50	2.50
Locale Search Radius	1 pixel	1 pixel	1 pixel	1 pixel

Table 4: Caris BASE Surface Parameter Settings

Holidays

By interpolating the finalized surfaces, coverage was assessed to determine if any holidays were present. All in all, four holidays were found all located in the southwest arm of Two Moon Bay (figure 9). These were formed due to an error in near shore polygon planning. There is no evidence of shoaling on the periphery of the holidays except for one where it is on a gradual incline towards shore.⁸

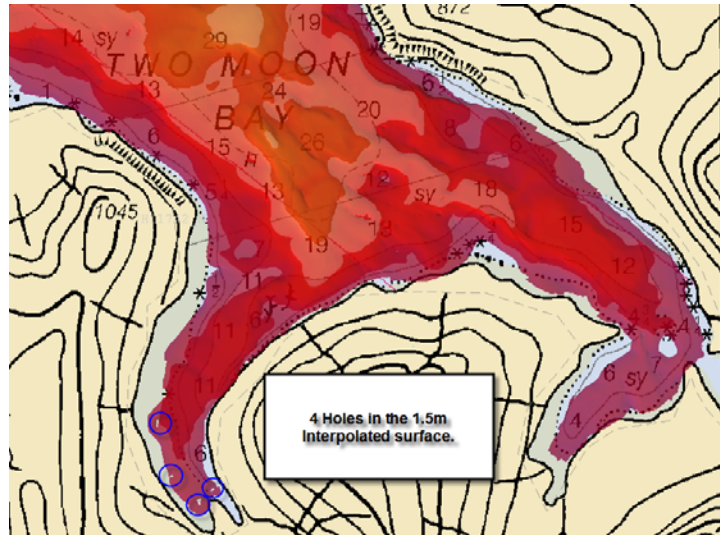


Figure 9

In the case that the holiday was larger than 3 nodes across, the corresponding multibeam backscatter sidescan was examined and no navigationally significant items were found.⁹

Sound Velocity

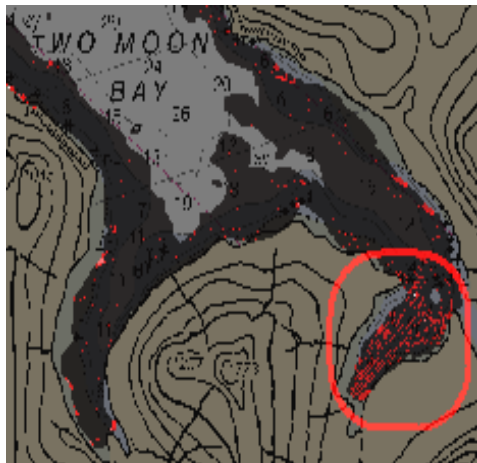


Figure 10 – Two Moon Bay Arm

Two Moon Bay:

Figure 10 shows the Hypothesis Count, with higher values getting brighter along the red spectrum. This was examined in Subset Editor where characteristic “frowns” of SV error were found and pictured below and exaggerated for effect. This was an area near the mouth of a stream where large amounts of freshwater appear to have affected the data. Outer beam errors in the data of up to 1.25 meters were found in approximately 10 meters of water which is out of the IHO Order 1 error limit.¹⁰ The 1.5m surface, on average in this area, grabs on to beams 15-85. This still creates some “humps” in the surface. The vertical difference (amount of arch from outer beams 15 or 85 to the nadir beam) appears to be on the order of 0.20 meters.

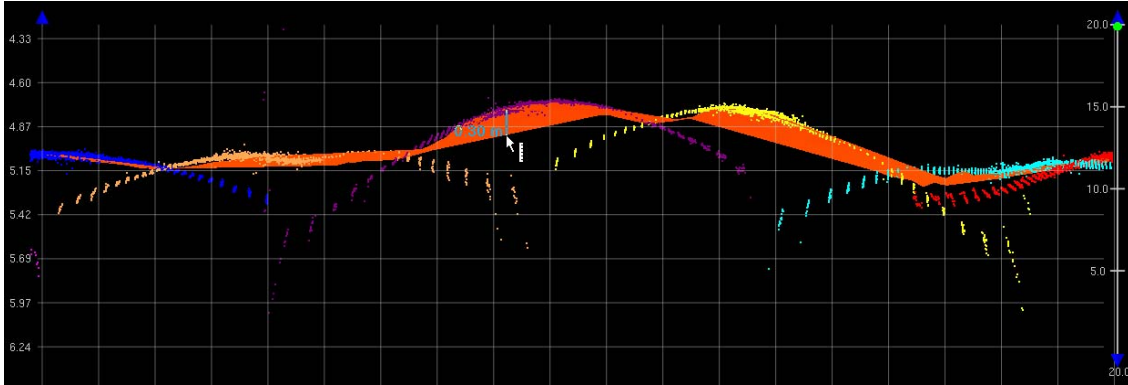


Figure 11- Caris Subset Editor View of Sound Velocity Error Dn 253

Tidal Offsets

Tidal discrepancies have been found in some areas consisting of lines on different days. There is evidence of this in multiple areas. A good example can be found near the shore on the north side of Goose Island. There is a vertical offset of 2 lines from Dn 263 and Dn 283. Crosslines in the area between Porcupine Pt. and Goose Island also had a noticeable offset. Refer to figure 2 in section B2: Quality Control that shows a 0.34m offset between crossline and main scheme lines. The offset appears to be limited to the vertical dimension, and the lines are from different days. Dynamic draft, and vessel loading were considered, however, due to the significant amount of disagreement between days, the Hydrographer concludes that the difference in depth values must be tide induced. As stated in section B2: Quality Control, the lines are still within IHO Order 1 limits.¹¹ The example on the north side of Goose Island is shown in figures 12 and 13:

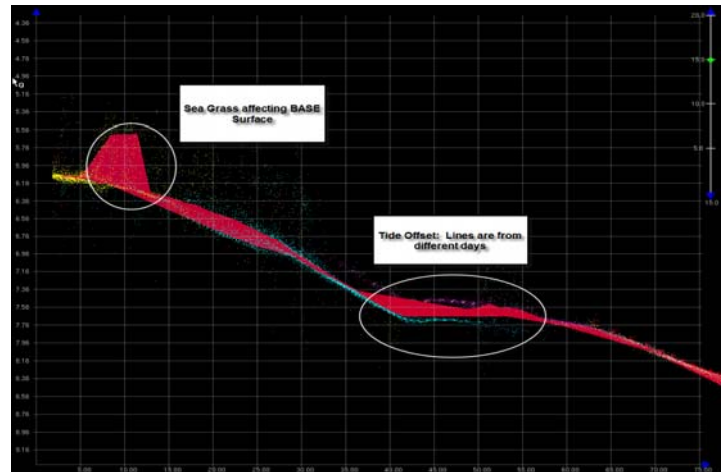
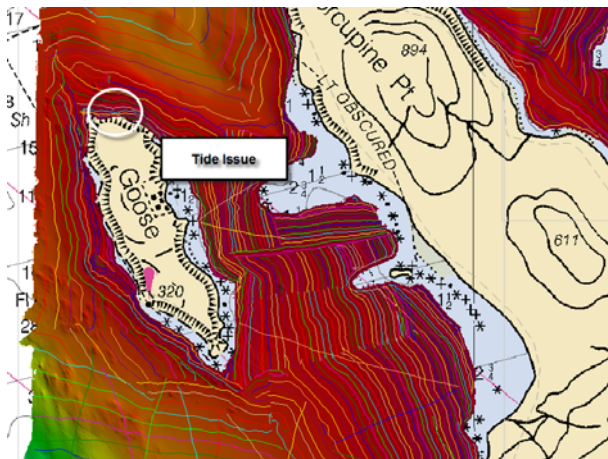


Figure 12 and 13: Tidal Offset Example near Goose Island

TrueHeave

TrueHeave data could not be applied to MBES data from lines in a few instances for 1010 and 1018. This was due to either no TrueHeave being acquired for the line(s) or because the TrueHeave fix was unsuccessful. A “fixed TrueHeave” file was created for all TrueHeave files

that did not initially apply to the data. This file was created using the “Fix TrueHeave” tool from CARIS. The lines noted here could not accept the fixed TrueHeave files. Those lines for which TrueHeave could not be applied are noted in daily acquisition logs. MBES data quality does not appear to have been affected by the lack of TrueHeave.¹²

-1010:

- In the case of lines 239-2230 thru 239-2358, the TrueHeave fix file failed to solve the problem. Depth data appears to be consistent with surrounding depth data when reviewed in Subset Editor. The depth data deemed acceptable by Hydrographer.
- No True Heave was acquired for lines 266-1724 to 2202. Existing TrueHeave file applies to lines 266-2223 to 267-0012. When examined in subset editor along with overlapping data, lines with no TH do not appear affected by its absence. The depth data deemed acceptable by Hydrographer.

-1018:

- TrueHeave does not apply to line 236-2134. According to the acquisition log the TrueHeave does not match navigation time. When examined in subset editor along with overlapping data, the line’s depth data does not appear affected by the absence of TrueHeave application. The depth data deemed acceptable by Hydrographer.

Designated Soundings

A total of fourteen designated soundings were used in H11742. Six were used in identifying the DTONs, and five were used to show charted (16708) sounding disagreements or to get the surface to grab a shoal. Designation of soundings followed procedures as outlined in the DAPR. Forty-nine outstanding soundings have been utilized during processing for disprovals and new positions of features.¹³

Unusual Conditions

-Sea Grass

Large areas of sea grass were found when very close to shore especially when depths were less than 7m. An example of a high hypothesis count due to possible eel grass or nature of the seabed is shown in figures 14 and 15 on the northwest shore of Knowles Head.

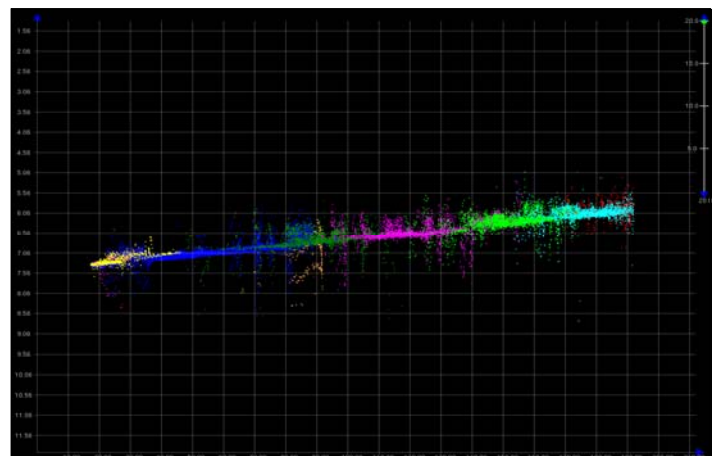
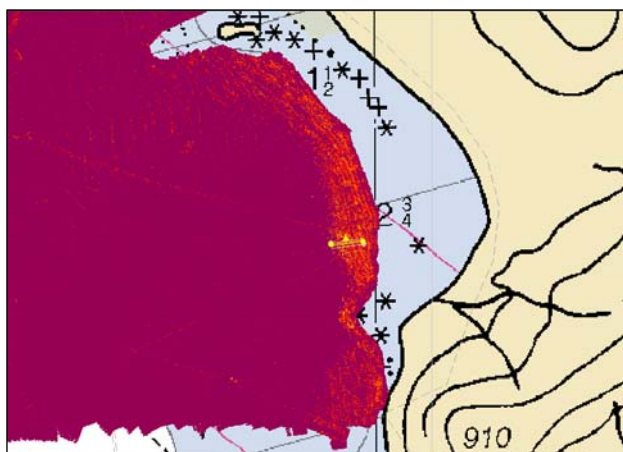


Figure 14 and 15: Area of high variability due to the nature of the seabed

-Squat

Some data in the passage between Goose Island and Porcupine Pt appear to have a slight vertical offset between adjacent lines. The offset is small (approximately 0.1m to 0.15m) but it seems to correlate with heading. This narrow passage has high tidal currents and could have caused the launch to have different squat values due to the different speeds through the water. The Hydrographer deems the data to meet specifications and an example picture is shown in figures 16 and 17.¹⁴

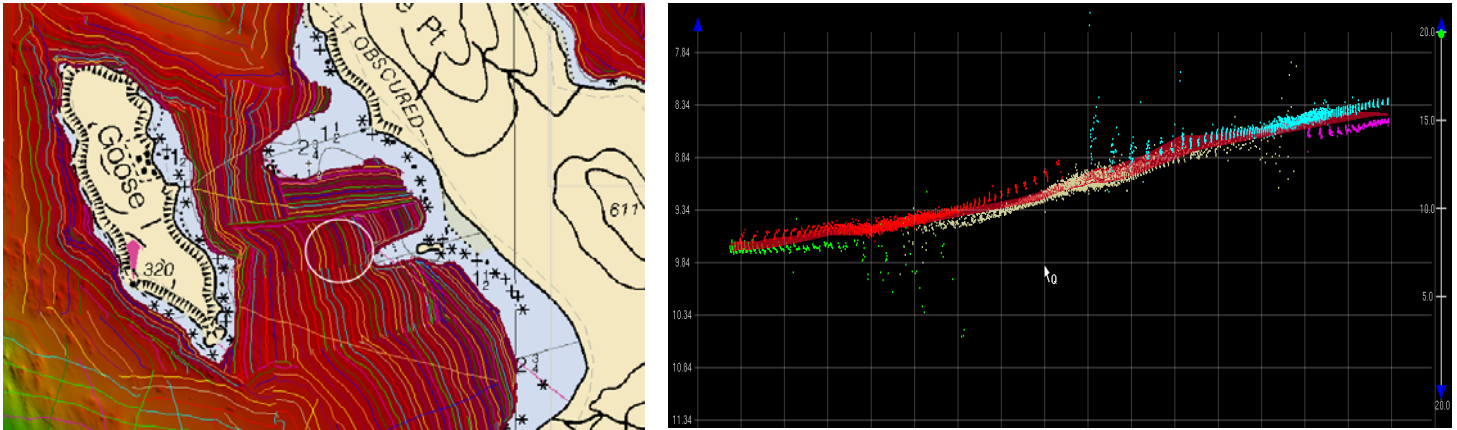


Figure 16 and 17: Possible Squat Issue

Accuracy Standards

All data meet the data accuracy specifications as stated in the *HSSDM*.¹⁵

Internal consistency and integrity of data among acquisition platforms collected for survey H11742 were manually examined by the Hydrographer in CARIS subset mode. The internal consistency and integrity of data collected for survey H11742 were found to be good, as the data agreed within day-to-day, vessel-to-vessel and line-to-line.

Data quality for survey H11742 was evaluated through examination of CUBE and BASE surfaces that were generated from raw soundings. CUBE hypothesis count and strength child layers were used to identify any areas of ambiguity where the surface model required manual review.

B3. Corrections to Echo Soundings

Data reduction procedures for survey H11742 conform to those detailed in the DAPR.

B4. Data Processing

Data processing procedures for survey H11742 conform to those detailed in the DAPR.

There are three fieldsheets fulfilling the various resolution requirements for survey H11742. Fieldsheet H11742 is the largest, encompassing the entire survey area to the four-, eight-, and sixteen-meter resolutions. Two additional fieldsheets - H11742_NE and H11742_SW - cover the areas of the survey near coastline or shoals. These fieldsheets include surfaces of 2.0 meter resolution. The fieldsheet areas of coverage are displayed in Figure 18. The Hydrographer has determined that a 2.0 meter resolution surface is adequate to fully represent shoal measurements using CARIS Reference Surfaces and is to be used whenever coverage is complete enough to allow.¹⁶

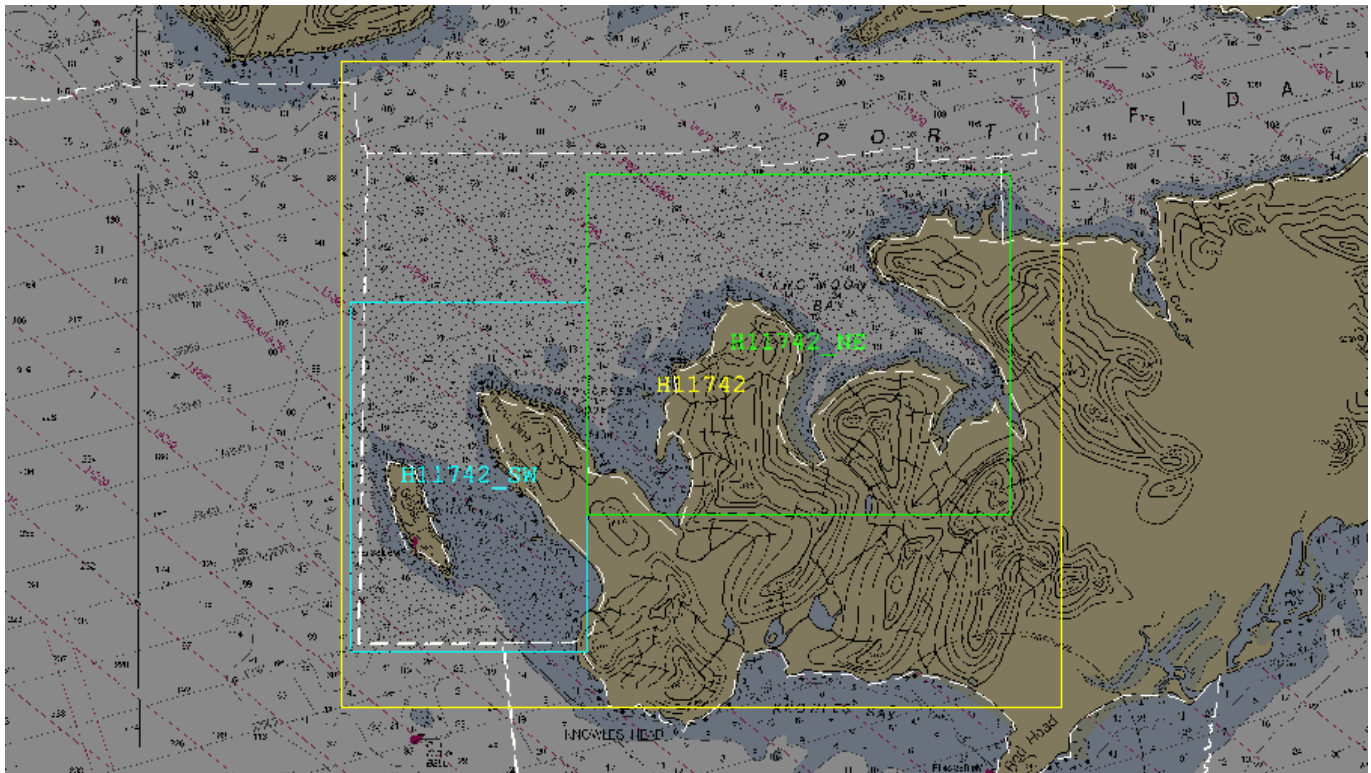


Figure 18 – Fieldsheets used in H11742

C. HORIZONTAL AND VERTICAL CONTROL

A complete description of horizontal and vertical control for survey H11742 can be found in the *OPR-P132-FA-07 Horizontal and Vertical Control Report*, submitted under separate cover.¹⁷ A summary of horizontal and vertical control for this survey follows.

Horizontal Control

The horizontal datum for this project is the North American Datum of 1983 (NAD83). Differential GPS (DGPS) was the sole method of positioning. Differential corrections came from the U.S. Coast Guard beacons at Cape Hinchinbrook (292 kHz), and Potato Point (298 kHz).

Vertical Control

The vertical datum for this project is Mean Lower-Low Water (MLLW). The operating National Water Level Observation Network (NWLON) primary tide stations at Valdez (945-4240) and Cordova (945-4050) served as control for datum determination and as the primary source for water level reducers for survey H11742 during acquisition. A tertiary tide gauge was not required for this project.

A request for delivery of final approved water level data (smooth tides) for survey H11742 was forwarded to N/OPS1 on October 18th, in accordance with the *Field Procedures Manual*, dated March 2007 (FPM). A copy of the request is included in Appendix IV.

FAIRWEATHER received the Tide Note for Hydrographic Survey H11742 October 29, 2007. The Tide Note for Hydrographic Survey H11742 states that preliminary zoning is accepted as the final zoning correctors. Final approved water level data were received by the FAIRWEATHER on October 29, 2007 for NWLON Valdez (945-4240) and Cordova (945-4050). The Tide Note for Hydrographic Survey H11742 is included in Appendix V.¹⁸

As per the Letter Instructions, all data were reduced to MLLW using the final approved water levels (smooth tides) from station Valdez (945-4240) and Cordova (945-4050). Files 9454240.tid and 9454050.tid were used for time and height correctors, as well as the P132FA2007CORP.zdf for the zone corrector file on date November 8, 2007. It will not be necessary for the Pacific Hydrographic Branch to reapply the final approved water levels (smooth tides) to the survey data during final processing.

D. RESULTS AND RECOMMENDATIONS

D1. Chart Comparison

Chart comparison procedures were followed as outlined in the FPM

Survey H11742 was compared with charts 16700 (29th Ed.; July 2004, 1:200,000), 16708 (26th Ed.; October 2004, 1:79,291) and 16709 (23rd Ed.; April 2005, 1:80,000). Chart 16700 has been updated with the Notice to Mariners through December 8, 2007, chart 16708 has been updated with Notice to Mariners through December 8, 2007 and chart 16709 has been updated with Notice to Mariners through December 8, 2007. The most recent Notice to Mariners from December 8, 2007 was consulted. There were no new changes within the survey area besides the Dangers to Navigation submitted in this survey.¹⁹

Chart 16708

Depths from survey H11742 generally agree within one to two fathoms with depths on chart 16708.²⁰ Some of the shallower depths represented on the chart near the shoreline appear to have been pulled off shore for cartographic representation, but remain accurate within the scale of the chart.

In general, multi-beam bathymetry from H11742 reveals a deeper sea floor than is charted (16708). Since the best scale chart represented in H11742 is Chart 16708, a 1:79,291 scale chart, there are some small shoal areas not adequately represented on the chart. Also due to the scale of the chart, some of the soundings may have been pushed off shore for cartographic reasons, thus not representing the actual location.²¹ Examples of these issues are shown below. Subset screen grabs are included to show that shoal soundings were not missed and that the soundings referenced are reliable.

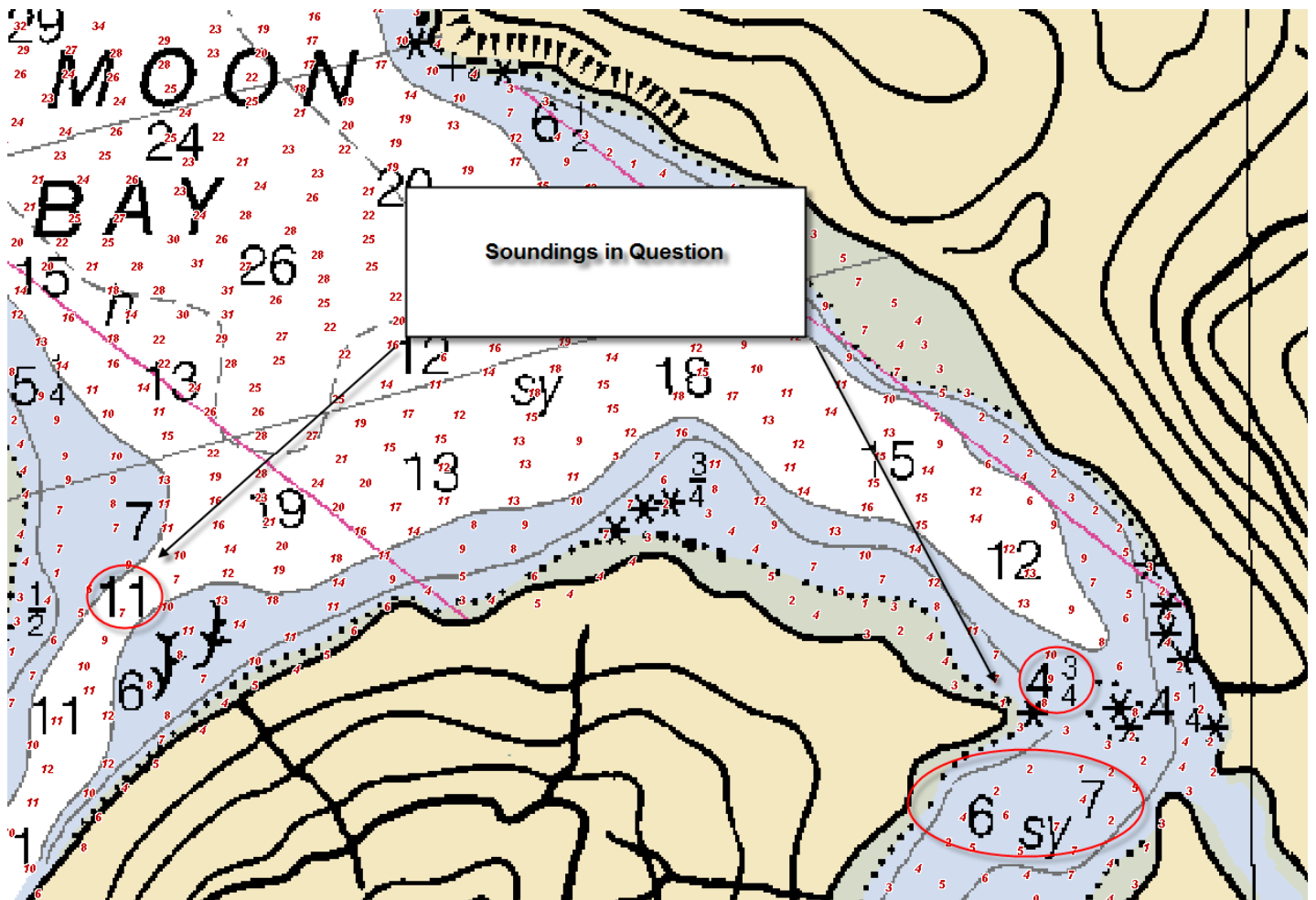


Figure 19 - Unrepresentative Soundings in Two Moon Bay

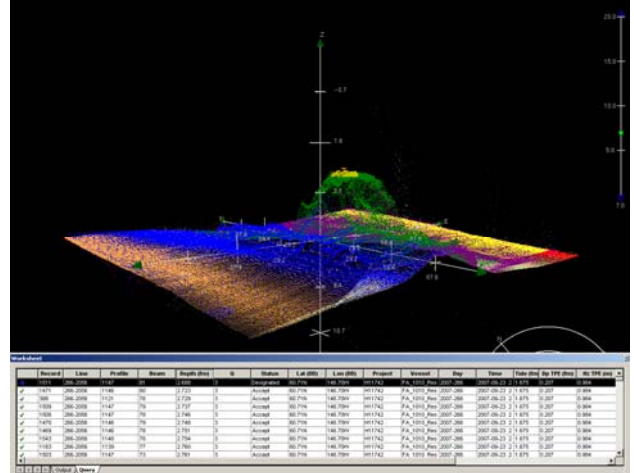
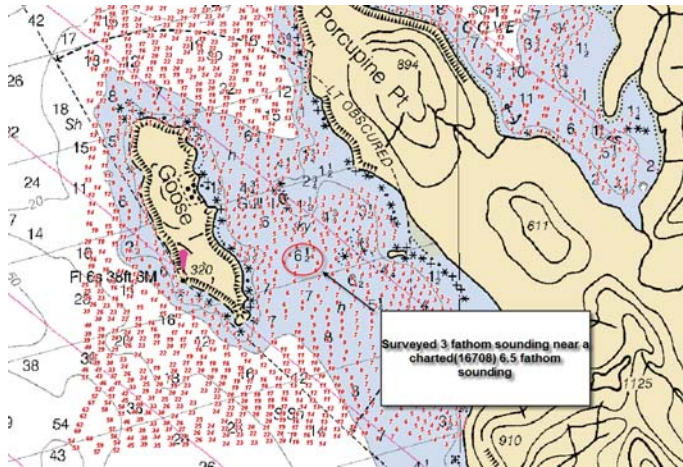


Figure 20: Charted (16708) 6.5 fm (surveyed depth 3 fathoms)

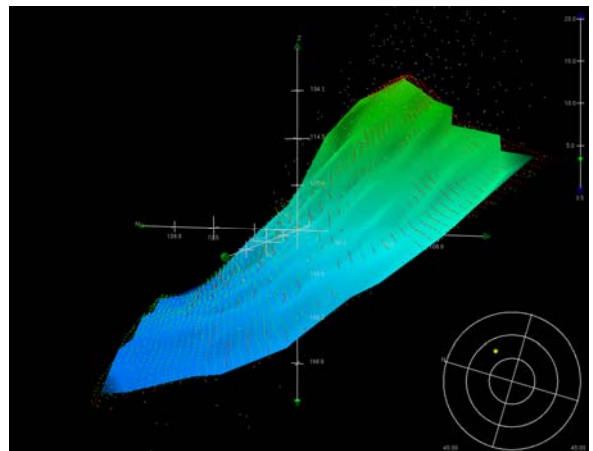
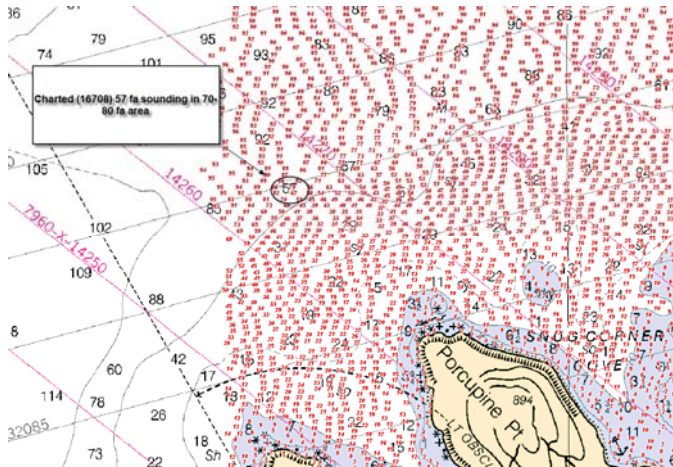


Figure 21: Charted (16708) 57 fathom sounding in surveyed 70-80 fathom area. Subset Editor reveals that the surface did not miss any pinnacles.

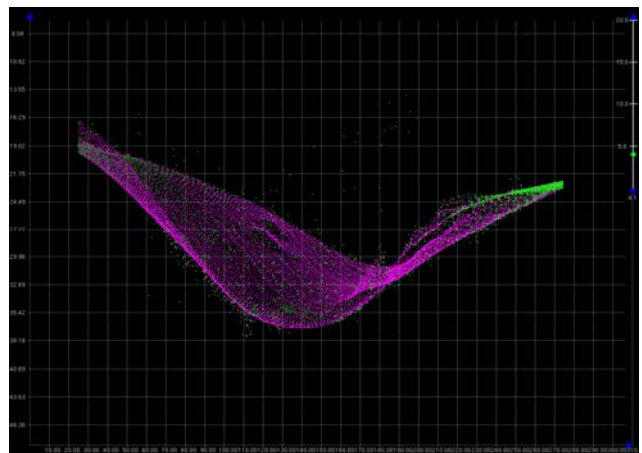
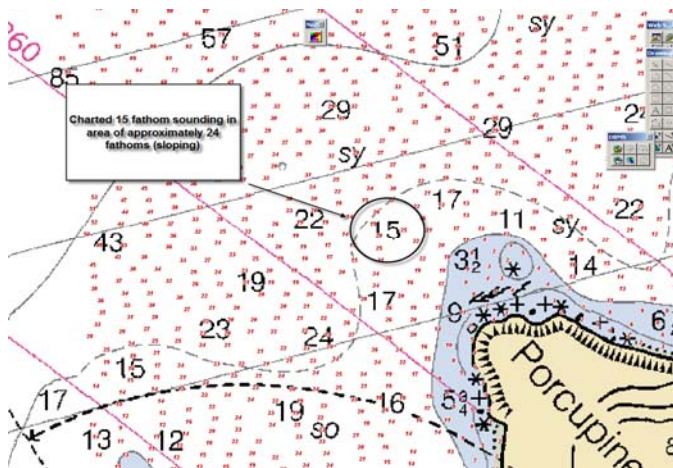


Figure 22: Charted (16708) 15 fathom sounding in surveyed 24 fathom area. Subset Editor reveals that the surface did not miss any pinnacles.

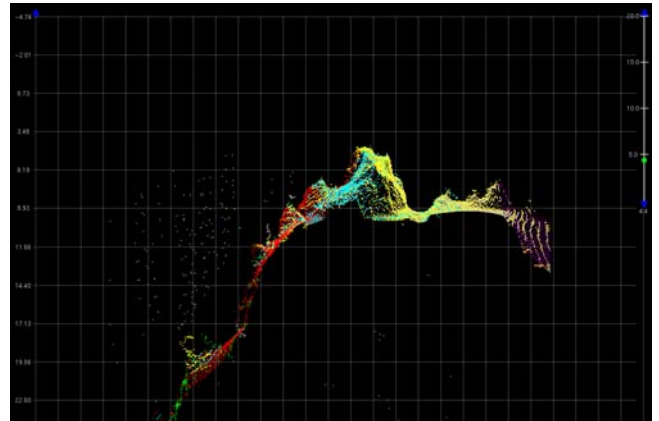
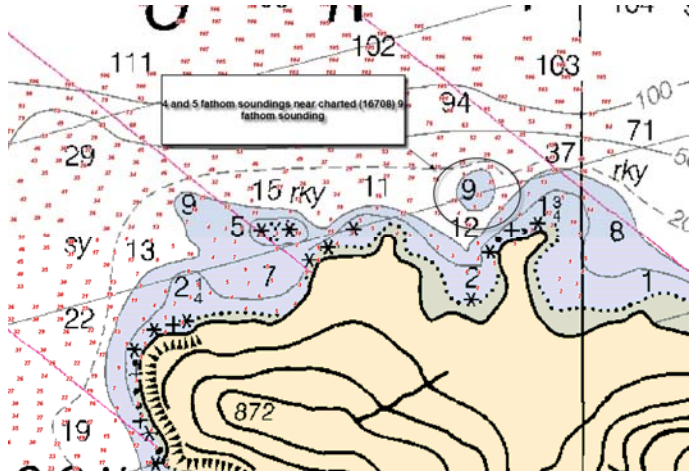


Figure 23: Surveyed 4 and 5 fathom soundings near charted (16708) 9 fathom sounding

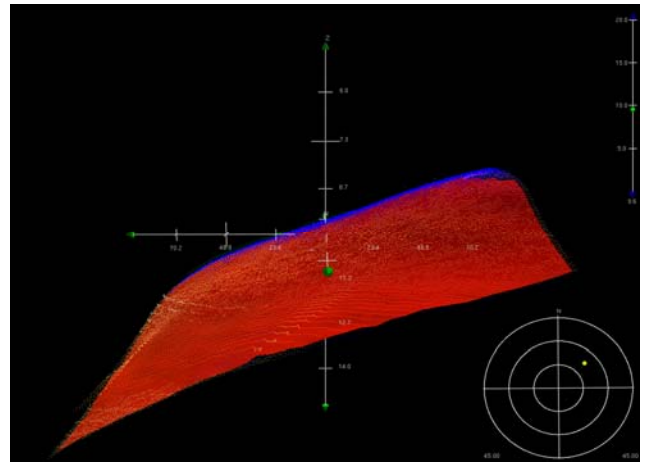
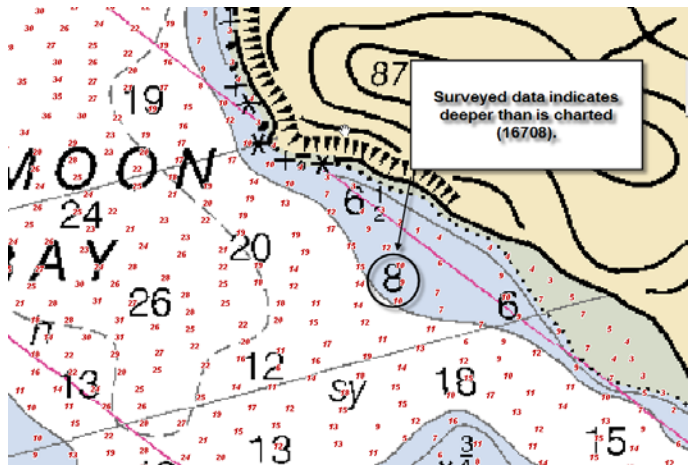


Figure 24: Charted (16708) 8 fathom sounding. Survey reveals deeper seafloor. Subset Editor shows that the surface did not miss any pinnacles.

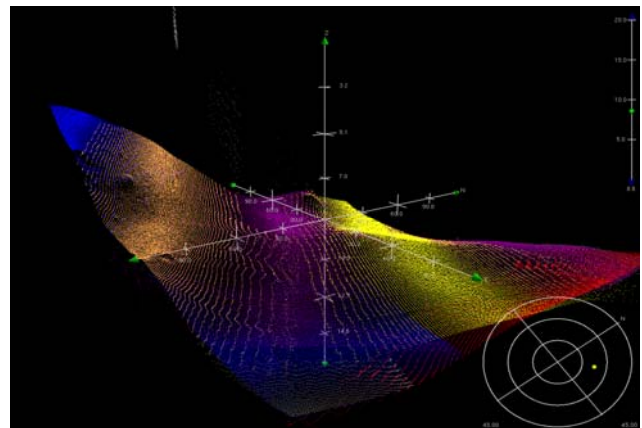
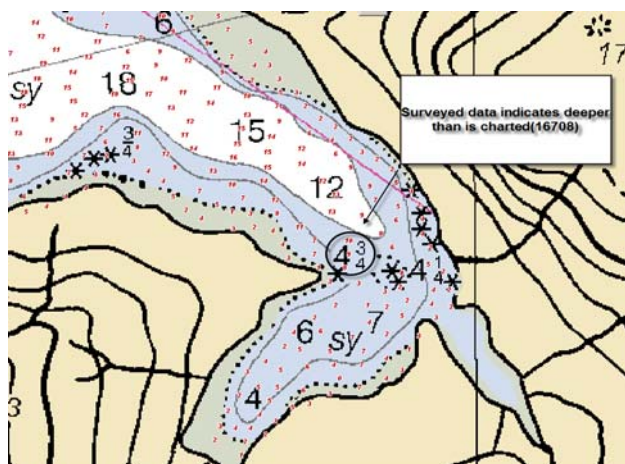


Figure 25: Charted (16708) 4.75 fathom sounding. Survey reveals deeper seafloor as sounding may have been pushed offshore for cartographic reasons. Subset Editor shows that the surface did not miss any pinnacles.

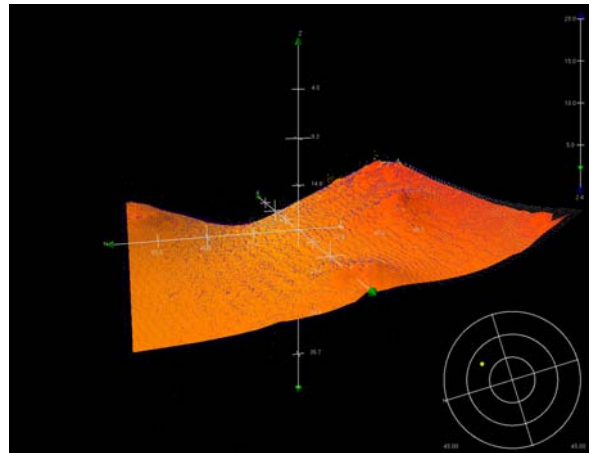
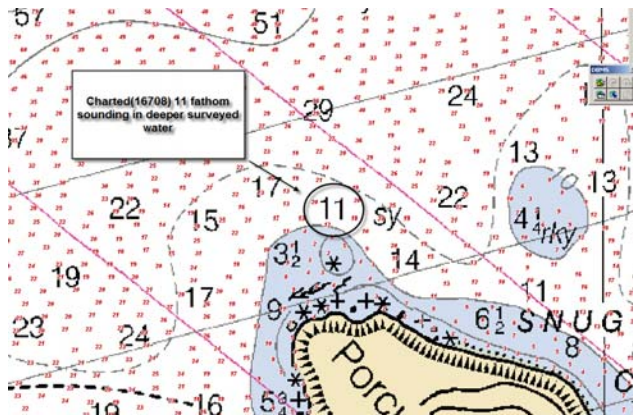


Figure 26: Charted (16708) 11 fathom sounding in surveyed 14-22 fathom area. Subset Editor reveals that the surface did not miss any pinnacles.

Chart 16700

Chart 16700 covers survey H11742 for all coastline shoal of the ten-fathom curve. All discrepancies and agreements have been covered in the comments for chart 16708.²²

Chart 16709

Chart 16709 registers in a very small area in the southernmost boundary of survey H11742. All charted soundings agree reliably with multibeam data.²³

Chart Comparison Recommendations

The Hydrographer has determined that bottom coverage requirements have been met and data accuracy meets requirements specified by the *HSSDM*. **The surveyed soundings are adequate to supersede prior surveys in their common areas.**²⁴ Based on the application of verified water level data (smooth tides) by FAIRWEATHER, final chart comparisons are not required by the Pacific Hydrographic Branch.

Automated Wreck and Obstruction Information System (AWOIS) Investigations

There were no AWOIS items located within the limits of H11742.²⁵

Dangers to Navigation

Six dangers to navigation were found and reported to the Mapping and Charting Division for final submission to the Seventeenth Coast Guard District in all. Four were submitted on September 19, 2007, and two were submitted on November 15th, 2007. Copies of the preliminary Danger to Navigation Reports are included in Appendix I.²⁶

D2. Additional Results

Shoreline Verification and Processing

FAIRWEATHER personnel conducted limited shoreline verification at times near predicted low water, in accordance with the Project Instructions and HTD-2007-7. A composite source file from HSD's Operations Branch was provided with the project instructions and included: Geographic Cell (GC) or Digital Data (DD) Shoreline compiled by the Remote Sensing Division (RSD) from current and prior photogrammetric surveys, and charted features compiled by HSD's Operations Branch. Navigationally significant charted (16708) features located within the survey limits were also digitized into the composite source layer. All shoreline features from the composite source seaward of the Navigable Area Limit Line (NALL) were verified or disproved during shoreline operations except in the four features with insufficient multibeam coverage to disprove as discussed in the Source Shoreline Changes and New Features section below.

Detached positions (DPs) and generic positions (GPs) acquired during shoreline verification were recorded in Trimble TerraSync 2.4.1 and on paper DP forms. Scanned copies of the DP forms are included in the digital Separates folder.²⁷ In addition, annotations describing the shoreline were recorded on hard copy plots (boat sheets) of the digital shoreline.

DPs and GPs were inserted into Pydro where they were tide corrected, S57 attributed and resolved according to Pydro flagging logic. A survey feature report for shoreline items was generated and included as H11742_Features_Report.pdf in Appendix II.²⁸ The report includes all significant shoreline items requiring specific attention that were flagged Report in Pydro. Investigation or survey methods for these items were included under the Remarks tab and, when appropriate, recommendations to the cartographer were included in the recommendations tab.

Shoreline deliverable .HOB files were compiled in Caris Notebook 3.0. Edits to existing source shoreline features were made in the H11742_Composite_Source.hob file, with GC (DD) and charted features modified or deleted as necessary. Field notes accompanying verified source features were entered in the remarks attribute field. GPs and DPs were imported into Notebook from Pydro; these features are included in the H11742_Updates_Final.hob and/or H11742_Disprovals.hob files. Features that the Hydrographer has removed from the composite source subsequent to field verification can also be found in the H11742_Disprovals.hob.

If a source feature was edited in Notebook, the SORIND and SORDAT attribute fields were modified to reflect the survey number (US,US,survey,H11742) and final survey date. Unmodified source shoreline features were left with their original SORIND and SORDAT values. The SORIND/SORDAT information for shoreline features included in the final Notebook .hob files is included in Table 5.

Shoreline Source	SORIND	SORDAT
RSD	US,US,reprt,DD-6166*	19980701
RSD	US,US,reprt,17thCGD,LNM 26/05	20050628
RNC	US,US,graph,Chart16708	20010209
Survey	US,US,survey,H11742	20071010

Table 6. SORIND/SORDAT Shoreline Features; (*) denotes GC file

For a more detailed description of shoreline verification and processing refer to the DAPR.

Source Shoreline Changes and New Features

For new shoreline features refer to H11742_Updates_Final.hob, and to view source shoreline changes refer to the H11742_Composite_Source.hob.

There were five features from the composite source that were not seen in the field or detected using a depth sounder by the shoreline team (remain unaddressed). The features are identified using marker areas within the H11742_Composite_Source.hob. All five features are outside of the acquired NALL line, however, safety concerns precluded the collection of multibeam data over the features.

There appears to be an offset of approximately 170 meters to the northeast between the charted (16708) Gull Island, and the Gull Island that appears in the DD-6166 data. A DP was not gathered on Gull Island due to the fact that Gull Island is shown inside the NALL. Based on the shoreline buffer acquired around the island and the multibeam coverage over the charted (16708) location of Gull Island, the Hydrographer recommends that the DD-6166 location be utilized. An image of the offset is shown in Figure 27 below.²⁹

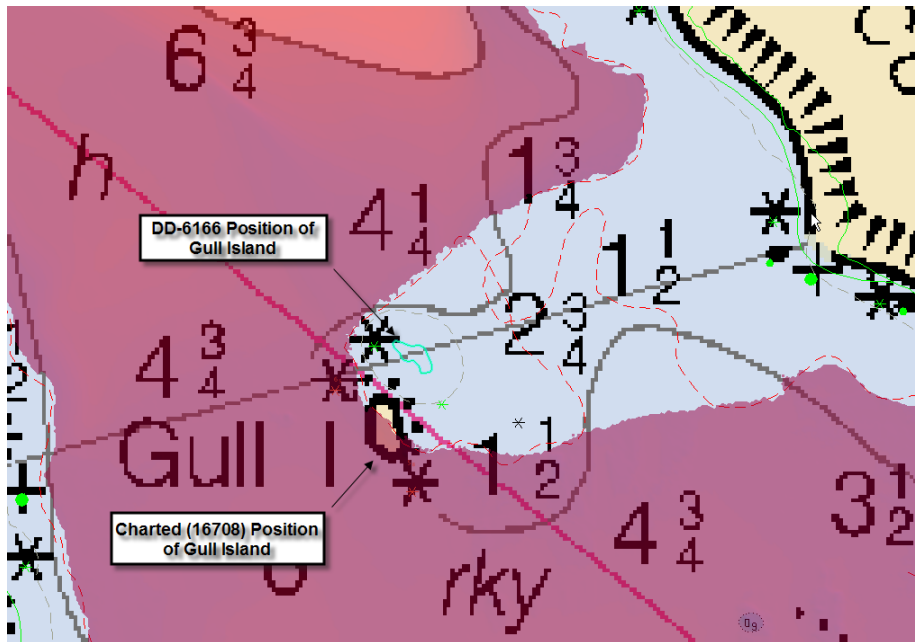


Figure 27-Gull Island Offset

Below are more images of the offsets that were found between the coastline from the chart (16708) and the DD-6166 file. The arms of Two Moon Bay show an offset to the southeast by 170-200 meters. The north end of Goose Island DD-6166 data is offset to the southeast by 130 meters.³⁰

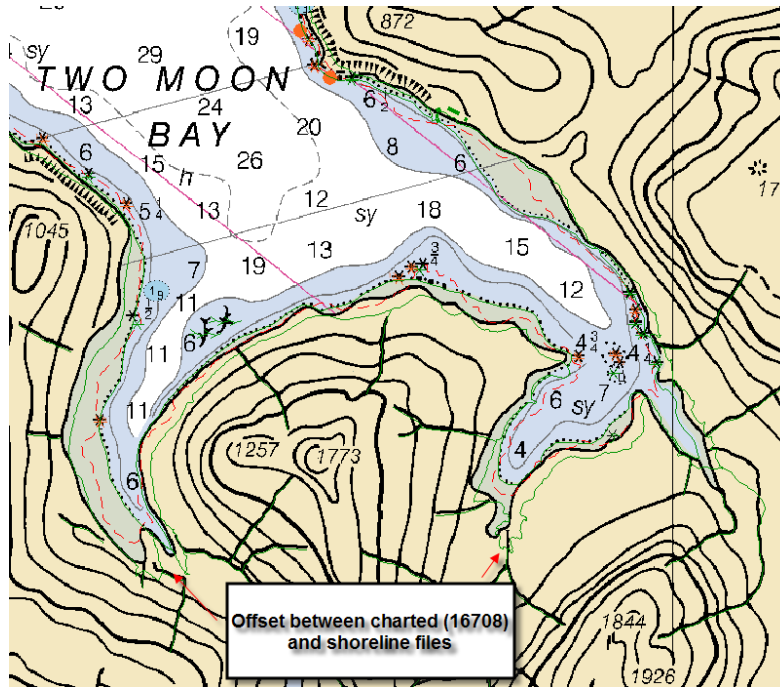
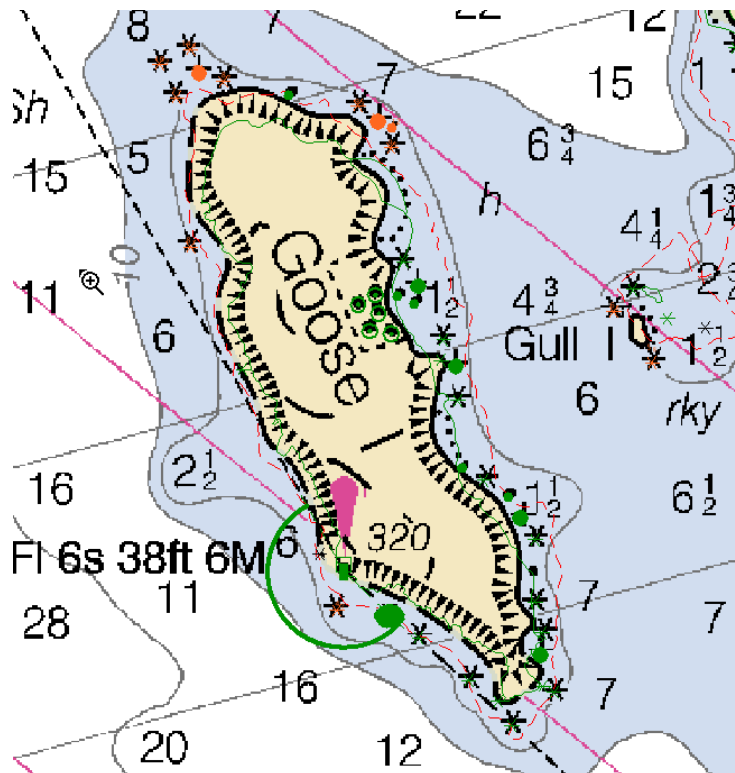


Figure 28 (above), Figure 29 (below)-Offsets between chart (16708) and shoreline files.



Items that were new features, charted features that were changed, or features that are to be removed from the chart are listed in the H11742_Features_Report. This can be found in Appendix II. Remarks and recommendations have been filled in as necessary to discuss features further.

Shoreline Recommendations

The Hydrographer recommends that the shoreline depicted in the CARIS Notebook files and final sounding files supersede and complement shoreline information compiled on the NOAA charts.

Aids to Navigation³¹

Survey H11742 included one (1) aid to navigation (ATON). However, due to time constraints, static GPS observations were not conducted on Goose Island Light (USCG Light List #25655) but it appears to be represented adequately on the chart.

Bottom Samples

Bottom samples were collected on September 20, 2007 (DN 263) and are included as seabed areas and classified along with the other S-57 features in the Pydro Preliminary Smooth Sheet. The bottom sample positions were also imported to the Notebook H11742_Updates_Final.hob file.³²

E. Supplemental Reports

Listed below are supplemental reports submitted separately that contain additional information relevant to this survey:

<u>Title</u>	<u>Date Sent</u>	<u>Office</u>
Hydrographic Systems Readiness Review Memo 2007	April 23, 2007	N/CS34
OPR-P132-FA-07 Data Acquisition and Processing Report	June 9, 2008	N/CS34
OPR-P132-FA-07 Horizontal & Vertical Control Report	Nov. 19, 2007	N/CS34, N/OPS1
OPR-P132-FA-07 Tides and Water Levels Package	October 29, 2007	N/OPS1
OPR-P132-FA-07 Coast Pilot Report	March 5, 2008	N/CS26

-
- ¹ Concur.
 - ² Filed with the project records.
 - ³ Concur.
 - ⁴ Concur.
 - ⁵ Concur.
 - ⁶ Concur.
 - ⁷ A new fieldsheet and surfaces were created upon office review. An 8-meter combined surface was used for compilation purposes.
 - ⁸ Concur.
 - ⁹ Concur.
 - ¹⁰ Concur with clarification. The data was cleaned during office processing to bring the data into specifications.
 - ¹¹ Concur.
 - ¹² Concur.
 - ¹³ Concur.
 - ¹⁴ Concur.
 - ¹⁵ Concur with clarification. The data was cleaned during office processing to bring the data into specifications.
 - ¹⁶ During office review a new fieldsheet was created along with new surfaces at the same resolution and depth ranges submitted by the field. These new surfaces contain edits to the data which were done during office review.
 - ¹⁷ Filed with project records.
 - ¹⁸ Tide note is appended to this document.
 - ¹⁹ HCell was compiled to Chart 16708; 11th edition; 11/1/2008 edition date. All DTONs, except one, were applied to latest edition of the chart by MCD. The DTON is present in the HCell.
 - ²⁰ Concur.
 - ²¹ Concur.
 - ²² Concur.
 - ²³ Concur.
 - ²⁴ Concur.
 - ²⁵ Concur.
 - ²⁶ Concur with clarification. Six DTONs were submitted by the Fairweather. In addition, four DTONs were submitted by PHB during the office review. All DTONs except for one have been applied to the chart. The DTON that was not applied to the chart has been retained in the HCell.
 - ²⁷ Filed with hydrographic records.
 - ²⁸ Document is appended to this document.
 - ²⁹ On the most updated chart 16708 used during compilation. The RSD island is now applied. The charted position of Gull Island has been disproved and the RSD island is represented in the HCell.
 - ³⁰ Concur. It is recommended to use the new RSD shoreline.
 - ³¹ Use latest ATONIS information.
 - ³² 28 bottom sample features were imported into the HCell, 22 from the survey and 6 from chart 16708. The source of all features included in the H11742 HCell can be determined by the SORIND field.

H11742 Office DtoN Report

Registry Number: H11742
State: Alaska
Locality: Northeastern Prince William Sound
Sub-locality: Western Portion of Port Fildago
Project Number: OPR-P132-FA-07
Survey Dates: 08/27/2007 - 09/23/2007

Features which were discovered during office review which were also determined as Dangers to Navigation.

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
16708	26th	10/01/2004	1:79,291 (16708_1)	USCG LNM: 09/23/2008 (10/28/2008) CHS NTM: None (09/26/2008) NGA NTM: 06/02/2001 (11/08/2008)
16700	30th	12/01/2007	1:200,000 (16700_1)	[L]NTM: ?
16013	30th	07/01/2006	1:969,761 (16013_1)	[L]NTM: ?
531	24th	07/01/2007	1:2,100,000 (531_1)	[L]NTM: ?
500	8th	06/01/2003	1:3,500,000 (500_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 Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Rock	15.78 m	60° 44' 15.6" N	146° 44' 39.7" W	---
1.2	Rock	4.92 m	60° 42' 53.0" N	146° 42' 08.9" W	---
1.3	Rock	11.57 m	60° 45' 09.2" N	146° 32' 20.1" W	---
1.4	Rock	2.88 m	60° 44' 33.7" N	146° 30' 37.8" W	---

1 - Dangers to Navigation

1.1) Profile/Beam - 2321/10 from h11742 / fa_1010_reson8101 / 2007-239 / 239-1639

DANGER TO NAVIGATION

Survey Summary

Survey Position: 60° 44' 15.6" N, 146° 44' 39.7" W
Least Depth: 15.78 m (= 51.77 ft = 8.628 fm = 8 fm 3.77 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.996 m ; **TVU (TPEv)** ± 0.271 m
Timestamp: 2007-239.16:47:49.348 (08/27/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-239 / 239-1639
Profile/Beam: 2321/10
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

underwater rock least depth at 15.8 meters found by multibeam echosounder. The rock is located between a 13 and 12 fathom soundings.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11742/fa_1010_reson8101/2007-239/239-1639	2321/10	0.00	000.0	Primary

Hydrographer Recommendations

chart rock with least depth of 15.8 meters.

Cartographically-Rounded Depth (Affected Charts):

8 ½fm (16708_1, 16700_1, 16013_1)

8fm 4ft (531_1)

15.8m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: TECSOU - 3:found by multi-beam
 VALSOU - 15.778 m

WATLEV - 3:always under water/submerged

Office Notes

Chart underwater rock.

Feature Images

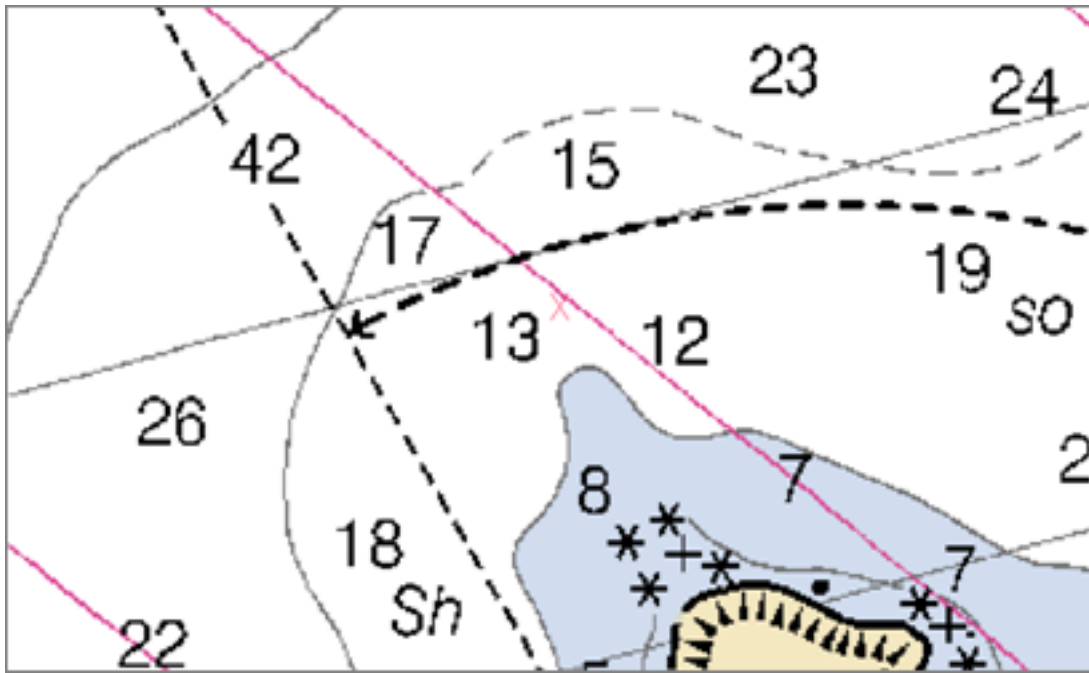


Figure 1.1.1

1.2) Profile/Beam - 1147/81 from h11742 / fa_1010_reson8101 / 2007-266 / 266-2056

DANGER TO NAVIGATION

Survey Summary

Survey Position: 60° 42' 53.0" N, 146° 42' 08.9" W
Least Depth: 4.92 m (= 16.13 ft = 2.688 fm = 2 fm 4.13 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.984 m ; TVU (TPEv) ± 0.379 m
Timestamp: 2007-266.20:58:11.284 (09/23/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-266 / 266-2056
Profile/Beam: 1147/81
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

A 4.9 meters rock was found by multibeam echosounder

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11742/fa_1010_reson8101/2007-266/266-2056	1147/81	0.00	000.0	Primary

Hydrographer Recommendations

chart rock with least depth of 4.9 meters

Cartographically-Rounded Depth (Affected Charts):

2 $\frac{3}{4}$ fm (16708_1, 16700_1, 16013_1)

2fm 4ft (531_1)

4.9m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: SORDAT - 20071010
 SORIND - US,US,survy,H11742
 VALSOU - 4.915 m

WATLEV - 3:always under water/submerged

Office Notes

Chart as underwater rock.

Feature Images

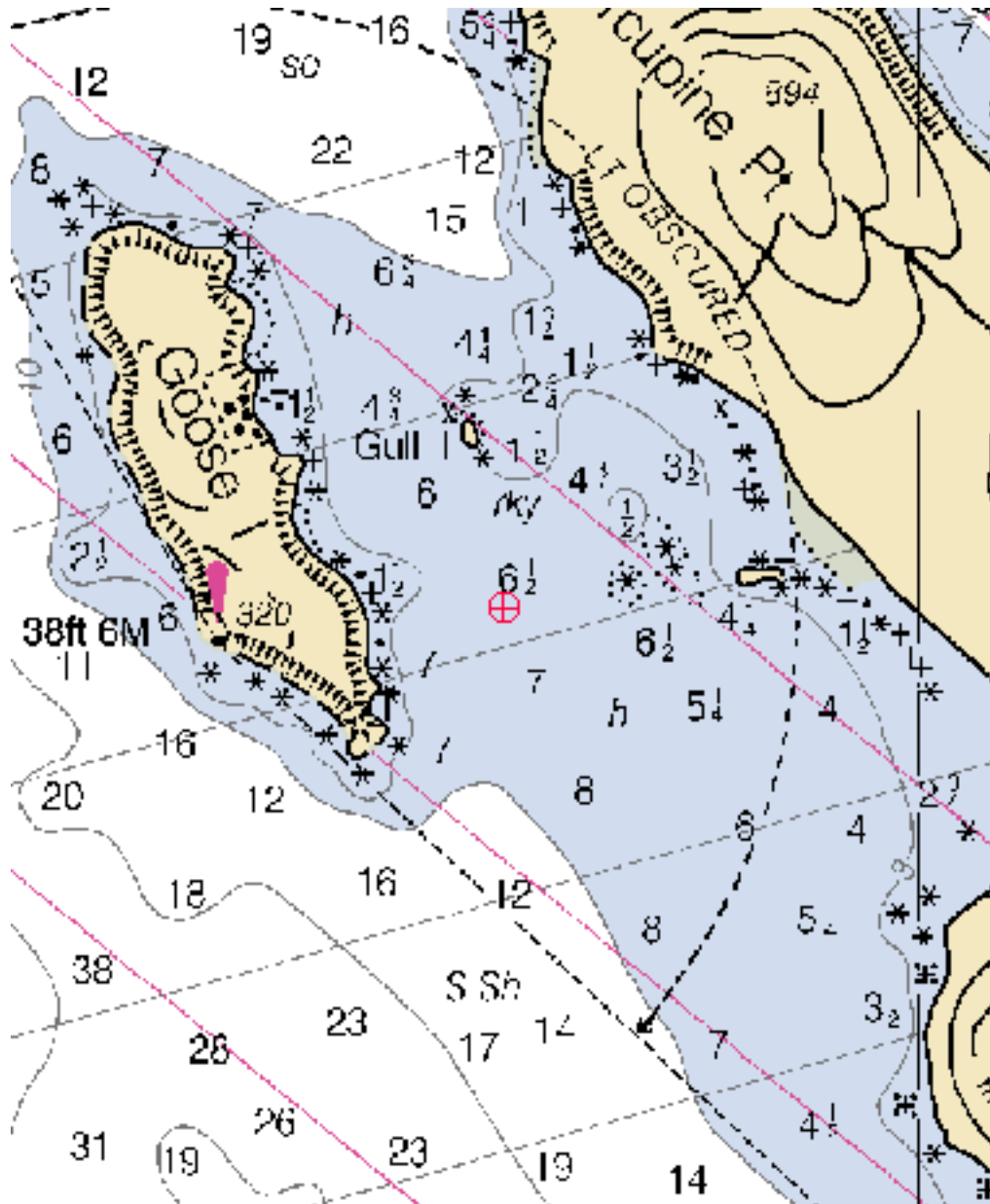


Figure 1.2.1

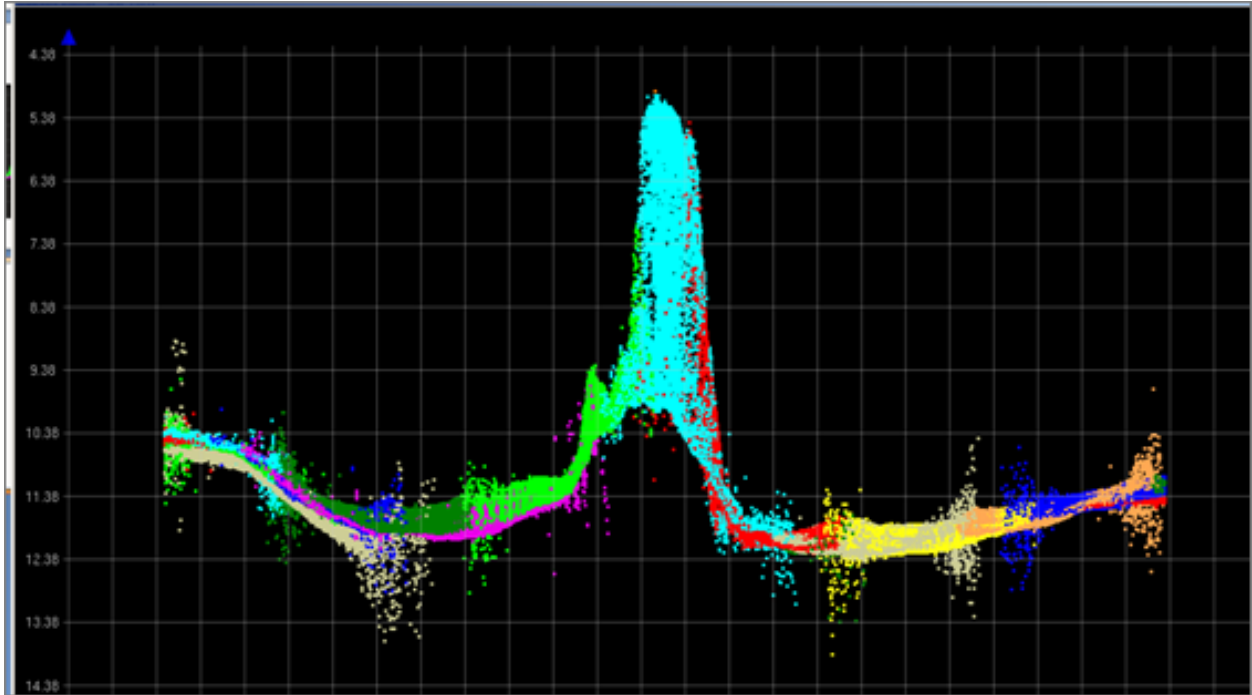


Figure 1.2.2

1.3) Profile/Beam - 464/88 from h11742 / fa_1018_reson8101 / 2007-241 / 241-1615

DANGER TO NAVIGATION

Survey Summary

Survey Position: 60° 45' 09.2" N, 146° 32' 20.1" W
Least Depth: 11.57 m (= 37.96 ft = 6.326 fm = 6 fm 1.96 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.986 m ; **TVU (TPEv)** ± 0.391 m
Timestamp: 2007-241.16:18:17.969 (08/29/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-241 / 241-1615
Profile/Beam: 464/88
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Underwater rock least depth at 11.6 meters found by multibeam echosounder. The rock is located between a 13 and 18 fathom soundings.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11742/fa_1018_reson8101/2007-241/241-1615	464/88	0.00	000.0	Primary

Hydrographer Recommendations

Chart rock with least depth of 11.6 meters.

Cartographically-Rounded Depth (Affected Charts):

6 ¼fm (16708_1, 16700_1, 16013_1)

6fm 2ft (531_1)

11.6m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 1:depth known
 SORDAT - 20071010

SORIND - US,US,survey,H11742

TECSOU - 3:found by multi-beam

VALSOU - 11.569 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Chart rock as a sounding.

Feature Images

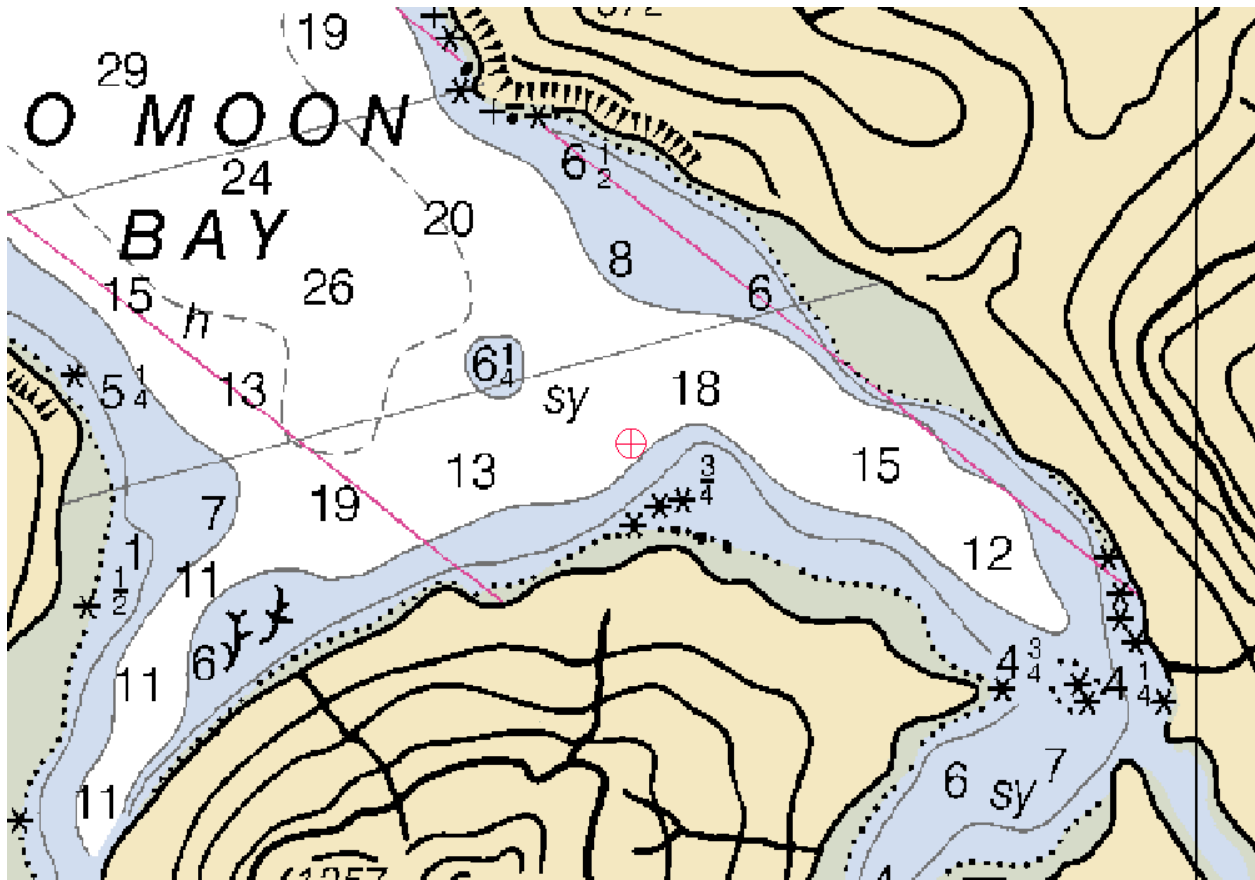


Figure 1.3.1

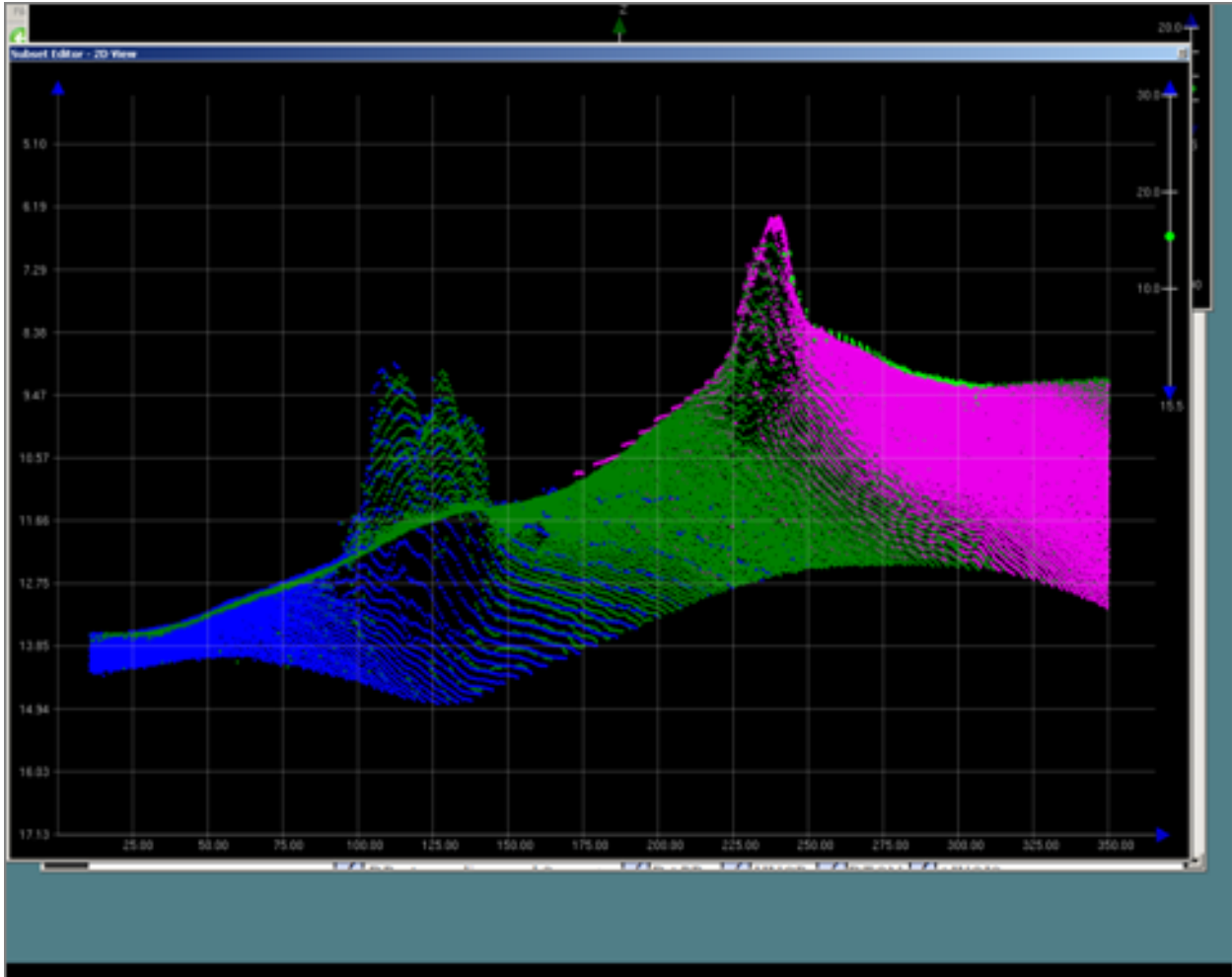


Figure 1.3.2

1.4) Profile/Beam - 3956/21 from h11742 / fa_1010_reson8101 / 2007-253 / 253-2251

DANGER TO NAVIGATION

Survey Summary

Survey Position: 60° 44' 33.7" N, 146° 30' 37.8" W
Least Depth: 2.88 m (= 9.46 ft = 1.576 fm = 1 fm 3.46 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.984 m ; TVU (TPEv) ± 0.228 m
Timestamp: 2007-253.22:57:12.478 (09/10/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-253 / 253-2251
Profile/Beam: 3956/21
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

underwater rock least depth at 2.88 meters found by multibeam echosounder.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11742/fa_1010_reson8101/2007-253/253-2251	3956/21	0.00	000.0	Primary

Hydrographer Recommendations

chart rock with least depth of 2.88 meters.

Cartographically-Rounded Depth (Affected Charts):

1 ½fm (16708_1, 16700_1, 16013_1)
 1fm 3ft (531_1)
 2.9m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: SORDAT - 20071010
 SORIND - US,US,survey,H11742
 TECSOU - 3:found by multi-beam

VALSOU - 2.883 m

WATLEV - 3:always under water/submerged

Office Notes

Chart underwater rock.

Feature Images

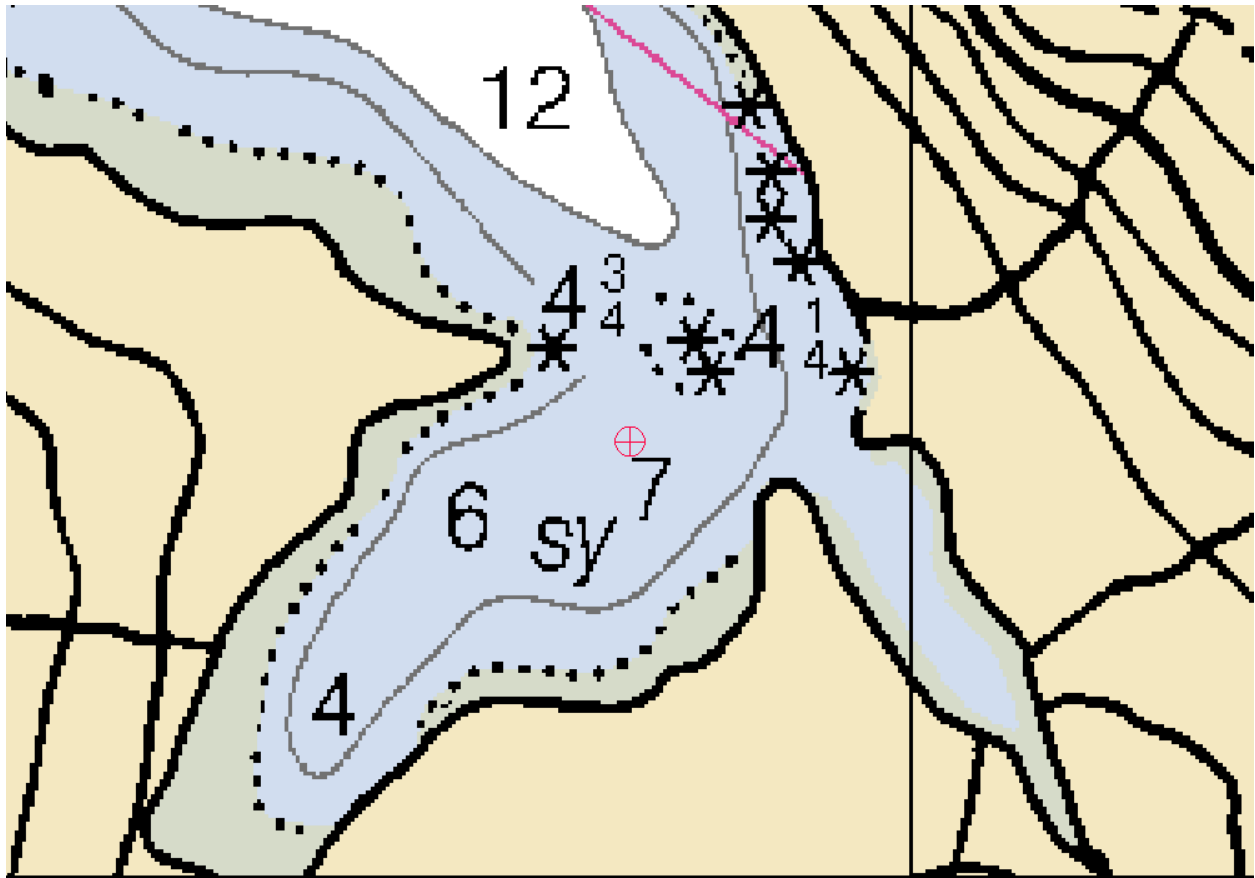


Figure 1.4.1

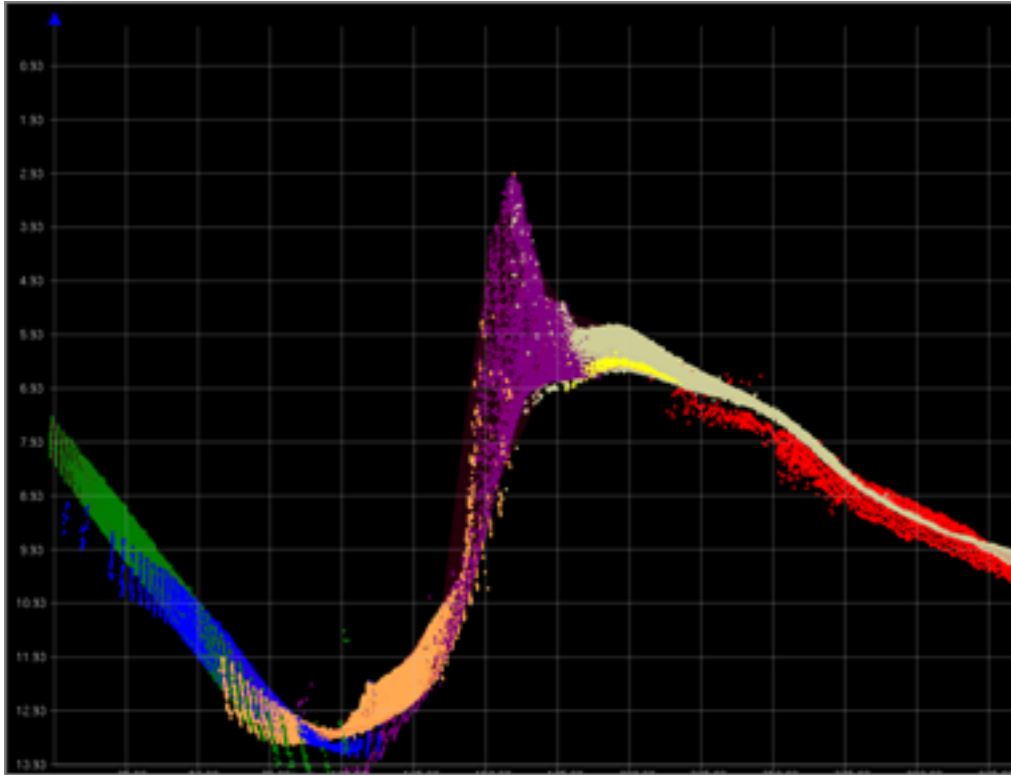


Figure 1.4.2

3 - Dangers to Navigation

3.1) 562/79**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 60° 46' 43.0" N, 146° 31' 47.2" W
Least Depth: 0.63 m (= 2.06 ft = 0.343 fm = 0 fm 2.06 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.23:06:21.987 (08/29/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-241 / 241-2303
Profile/Beam: 562/79
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

A 0.34 fathom (0.63m) rock was found by multibeam echosounder offshore of charted (16708) 10 fathom curve and was forwarded to MCD on 9/19/07. This sounding is corrected with smooth tides from Valdez and Cordova tide stations.

Hydrographer Recommendations

Add least depth to chart(16708)

Cartographically-Rounded Depth (Affected Charts):

0 ¼fm (16708_1, 16700_1, 16013_1)

0fm 2ft (531_1)

.6m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742
 VALSOU - 0.628 m

Office Notes

Chart new rock.

3.2) 899/3

DANGER TO NAVIGATION

Survey Summary

Survey Position: 60° 46' 36.2" N, 146° 33' 19.4" W
Least Depth: 8.75 m (= 28.71 ft = 4.785 fm = 4 fm 4.71 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.20:01:29.266 (08/29/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-241 / 241-1955
Profile/Beam: 899/3
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

A 4.79 fathom (8.75m) shoal was found by multibeam echosounder near a charted (16708) 13 fathom sounding and was forwarded to MCD on 9/19/07. This sounding is corrected with smooth tides from Valdez and Cordova tide stations.

Hydrographer Recommendations

Add least depth to chart(16708)

Cartographically-Rounded Depth (Affected Charts):

4 $\frac{3}{4}$ fm (16708_1, 16700_1, 16013_1)

4fm 4ft (531_1)

8.8m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Chart as sounding.

3.3) 387/100**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 60° 46' 38.8" N, 146° 33' 04.1" W
Least Depth: 6.93 m (= 22.74 ft = 3.789 fm = 3 fm 4.74 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.20:32:42.746 (08/29/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-241 / 241-2030
Profile/Beam: 387/100
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

A 3.79 fathom (6.93m) shoal was found by multibeam echosounder near a charted (16708) 13 fathom sounding and was forwarded to MCD on 9/19/07. This sounding is corrected with smooth tides from Valdez and Cordova tide stations.

Hydrographer Recommendations

Add least depth to chart(16708)

Cartographically-Rounded Depth (Affected Charts):

3 ¾fm (16708_1, 16700_1, 16013_1)

3fm 4ft (531_1)

6.9m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742

Office Notes

Chart sounding.

3.4) 1098/1

DANGER TO NAVIGATION

Survey Summary

Survey Position: 60° 45' 18.8" N, 146° 32' 57.1" W
Least Depth: 11.44 m (= 37.54 ft = 6.256 fm = 6 fm 1.54 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.15:45:36.974 (08/29/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-241 / 241-1539
Profile/Beam: 1098/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

A 6.26 fathom (11.44m) shoal was found by multibeam echosounder near a charted (16708) 12 fathom sounding and was forwarded to MCD on 9/19/07. This sounding is corrected with smooth tides from Valdez and Cordova tide stations.

Hydrographer Recommendations

Add least depth to chart(16708)

Cartographically-Rounded Depth (Affected Charts):

6 ¼fm (16708_1, 16700_1, 16013_1)

6fm 1ft (531_1)

11.4m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Chart as sounding.

3.5) 1683/17**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 60° 44' 55.7" N, 146° 34' 22.6" W
Least Depth: 1.86 m (= 6.09 ft = 1.015 fm = 1 fm 0.09 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-253.19:33:06.544 (09/10/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-253 / 253-1930
Profile/Beam: 1683/17
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

A 1.856m (1.015fa) rock was detected using multibeam sonar outside of a charted (16708) 5fa contour and was forwarded to MCD on 11/15/07. This sounding is corrected with smooth tide values using the primary stations of Valdez and Cordova.

Hydrographer Recommendations

Add least depth to chart(16708)

Cartographically-Rounded Depth (Affected Charts):

1fm (16708_1, 16700_1, 16013_1)

1fm 0ft (531_1)

1.9m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 1:depth known
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 TECSOU - 3:found by multi-beam
 VALSOU - 1.856 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Chart feature as rock rather than sounding.

3.6) 1510/43**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 60° 43' 05.8" N, 146° 41' 29.7" W
Least Depth: 0.88 m (= 2.88 ft = 0.480 fm = 0 fm 2.88 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-266.21:35:09.611 (09/23/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-266 / 266-2133
Profile/Beam: 1510/43
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

A 0.877m (0.480fa) rock was detected using multibeam sonar near a charted (16708) 4.75fa sounding and was forwarded to MCD on 11/15/07. This sounding is corrected with smooth tide values using the primary stations of Valdez and Cordova.

Hydrographer Recommendations

Add least depth to chart(16708)

Cartographically-Rounded Depth (Affected Charts):

0 ½fm (16708_1, 16700_1, 16013_1)

0fm 3ft (531_1)

.9m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 1:depth known
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 TECSOU - 3:found by multi-beam
 VALSOU - 0.877 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Chart as rock.

H11742 Features Report

Registry Number: H11742
State: Alaska
Locality: NE Prince William Sound
Sub-locality: Western Port Fidalgo
Project Number: OPR-P132-FA-07
Survey Dates: 8/24/07 - 10/10/07

Items for survey H11742 associated with a detached or generic position that needed further discussion were flagged Report in Pydro. Recommendations were provided in the Recommendations tab.

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
16708	27th	11/01/2008	1:79,291 (16708_1)	USCG LNM: 05/05/2009 (09/08/2009) CHS NTM: None (08/28/2009) NGA NTM: 06/02/2001 (09/26/2009)
16709	23rd	04/01/2005	1:80,000 (16709_1)	[L]NTM: ?
16700	29th	07/01/2004	1:200,000 (16700_1)	[L]NTM: ?
16013	30th	07/01/2006	1:969,761 (16013_1)	[L]NTM: ?
531	23rd	01/01/2006	1:2,100,000 (531_1)	[L]NTM: ?
500	8th	06/01/2003	1:3,500,000 (500_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

Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude
897/43	Shoal	9.21 m	60° 44' 38.1" N	146° 30' 25.9" W
3803/42	Shoal	3.96 m	60° 42' 58.3" N	146° 41' 17.8" W
22392	GP	[None]	60° 44' 18.0" N	146° 30' 31.5" W
22391	Rock	-0.68 m	60° 45' 00.9" N	146° 32' 08.2" W
22393	Shoal	-0.40 m	60° 44' 19.7" N	146° 30' 29.9" W
22401	Rock	2.05 m	60° 42' 41.1" N	146° 43' 26.1" W
22402	Rock	0.46 m	60° 42' 49.3" N	146° 43' 44.9" W
22403	Rock	-0.47 m	60° 43' 19.0" N	146° 42' 01.1" W

12403	GP	[None]	60° 45' 40.0" N	146° 35' 50.2" W
12404	Obstruction	0.00 m	60° 45' 43.6" N	146° 36' 14.6" W
12406	Obstruction	0.00 m	60° 44' 56.5" N	146° 37' 39.7" W
225401	Obstruction	0.00 m	60° 43' 01.5" N	146° 41' 28.2" W
225402	Rock	-1.71 m	60° 42' 55.1" N	146° 41' 17.7" W
225403	Rock	-2.70 m	60° 42' 58.3" N	146° 41' 06.3" W
225404	Rock	-2.17 m	60° 42' 06.6" N	146° 40' 03.2" W
12401	Rock	0.61 m	60° 44' 47.4" N	146° 34' 32.2" W
12402	Rock	0.57 m	60° 45' 40.5" N	146° 35' 51.8" W
12405	Rock	1.46 m	60° 44' 59.0" N	146° 37' 14.2" W
12407	Rock	-1.48 m	60° 44' 38.9" N	146° 38' 23.3" W
12408	Rock	-0.12 m	60° 44' 55.2" N	146° 37' 49.7" W
3855/92	Shoal	17.37 m	60° 44' 24.0" N	146° 34' 50.8" W
2246/17	Shoal	12.10 m	60° 44' 59.3" N	146° 32' 21.5" W
262/32	Shoal	9.85 m	60° 45' 01.8" N	146° 32' 11.8" W
3730/61	Shoal	15.30 m	60° 44' 40.0" N	146° 30' 29.0" W
7561/89	Shoal	11.48 m	60° 44' 36.8" N	146° 42' 08.7" W
626/66	Shoal	8.38 m	60° 44' 24.9" N	146° 42' 08.0" W
2182/1	Shoal	3.32 m	60° 44' 16.7" N	146° 42' 01.5" W
3340/18	Shoal	12.90 m	60° 44' 39.1" N	146° 42' 04.2" W
22/36	Shoal	6.02 m	60° 44' 39.8" N	146° 41' 57.1" W
6194/38	Shoal	5.90 m	60° 44' 41.1" N	146° 41' 31.0" W
4536/54	Shoal	14.94 m	60° 43' 56.2" N	146° 44' 20.0" W
555/39	Shoal	16.23 m	60° 43' 54.2" N	146° 44' 27.1" W
8529/44	Shoal	4.25 m	60° 42' 42.6" N	146° 43' 39.4" W
344/70	Shoal	6.53 m	60° 43' 21.8" N	146° 42' 25.5" W
1181/98	Shoal	5.80 m	60° 43' 16.3" N	146° 42' 15.6" W
333/92	Shoal	9.90 m	60° 42' 56.2" N	146° 41' 30.2" W
766/28	Shoal	6.01 m	60° 43' 02.5" N	146° 41' 18.3" W
2185/89	Shoal	6.62 m	60° 45' 38.6" N	146° 35' 40.6" W
3272/98	Shoal	8.81 m	60° 45' 17.8" N	146° 34' 38.1" W
3806/33	Shoal	11.48 m	60° 45' 34.0" N	146° 35' 21.2" W
119/31	Shoal	8.59 m	60° 45' 49.0" N	146° 32' 53.1" W
192/9	Shoal	8.05 m	60° 45' 48.6" N	146° 32' 50.3" W
151/44	Shoal	10.42 m	60° 45' 52.5" N	146° 33' 00.5" W
425/85	Shoal	8.48 m	60° 45' 58.8" N	146° 33' 05.5" W

547/74	Shoal	9.54 m	60° 46' 00.8" N	146° 33' 07.7" W
2761/91	Shoal	8.65 m	60° 44' 39.7" N	146° 38' 28.3" W
3012/55	Shoal	9.34 m	60° 43' 48.6" N	146° 43' 34.1" W
3394/36	Shoal	10.42 m	60° 43' 46.7" N	146° 43' 28.9" W
3633/8	Shoal	12.05 m	60° 43' 46.1" N	146° 43' 24.3" W
1331/17	Shoal	9.49 m	60° 43' 43.2" N	146° 43' 25.2" W
302/57	Shoal	8.16 m	60° 43' 53.0" N	146° 44' 17.6" W
722/48	Shoal	8.74 m	60° 43' 52.1" N	146° 44' 10.0" W
4213/95	Shoal	8.06 m	60° 43' 30.4" N	146° 44' 19.6" W
3370/10	Shoal	7.67 m	60° 43' 50.1" N	146° 44' 23.2" W
24/81	Shoal	9.11 m	60° 46' 15.5" N	146° 33' 11.3" W
72/92	Shoal	13.24 m	60° 46' 33.9" N	146° 31' 56.0" W
159/76	Shoal	16.25 m	60° 46' 35.1" N	146° 30' 38.7" W
717/29	Shoal	22.36 m	60° 46' 40.1" N	146° 30' 29.1" W
22412	Obstruction	0.00 m	60° 44' 41.8" N	146° 41' 34.3" W
22415	Obstruction	0.00 m	60° 44' 45.7" N	146° 41' 40.3" W
22411	Rock	-1.24 m	60° 43' 44.8" N	146° 37' 40.7" W
22414	Rock	0.91 m	60° 44' 48.7" N	146° 41' 50.7" W
12411	Obstruction	0.00 m	60° 44' 35.4" N	146° 30' 32.7" W
12416	Obstruction	0.00 m	60° 46' 27.8" N	146° 32' 46.0" W
12417	Obstruction	0.00 m	60° 46' 37.1" N	146° 31' 43.2" W
12418	Obstruction	0.00 m	60° 46' 40.0" N	146° 32' 17.1" W
12412	Rock	-1.55 m	60° 44' 35.3" N	146° 30' 29.5" W
12413	Rock	1.97 m	60° 46' 08.3" N	146° 33' 09.6" W
12414	Rock	2.25 m	60° 46' 07.2" N	146° 33' 08.8" W
12415	Rock	0.06 m	60° 46' 14.7" N	146° 33' 08.0" W
12419	Rock	-0.20 m	60° 46' 39.8" N	146° 31' 18.4" W
124110	Rock	-4.22 m	60° 46' 24.7" N	146° 30' 47.9" W
124111	Rock	1.00 m	60° 46' 41.0" N	146° 30' 16.2" W
2776/68	Shoal	8.22 m	60° 44' 18.6" N	146° 42' 05.2" W
3221/46	Shoal	8.81 m	60° 44' 20.4" N	146° 42' 07.0" W
418/81	Shoal	9.32 m	60° 44' 39.6" N	146° 30' 47.7" W
458/8	Shoal	6.93 m	60° 44' 51.3" N	146° 30' 18.6" W
1127/99	Shoal	4.39 m	60° 41' 57.5" N	146° 39' 56.9" W
103/12	Shoal	7.22 m	60° 45' 33.2" N	146° 36' 31.5" W
465/58	Shoal	10.70 m	60° 45' 31.4" N	146° 36' 35.8" W

562/79	Rock	0.63 m	60° 46' 43.0" N	146° 31' 47.2" W
899/3	Shoal	8.75 m	60° 46' 36.2" N	146° 33' 19.4" W
387/100	Shoal	6.93 m	60° 46' 38.8" N	146° 33' 04.1" W
1098/1	Shoal	11.44 m	60° 45' 18.8" N	146° 32' 57.1" W
1683/17	Rock	1.86 m	60° 44' 55.7" N	146° 34' 22.6" W
1510/43	Rock	0.88 m	60° 43' 05.8" N	146° 41' 29.7" W

1 - Charted Features

1.1) 897/43

Survey Summary

Survey Position: 60° 44' 38.1" N, 146° 30' 25.9" W
Least Depth: 9.21 m (= 30.22 ft = 5.037 fm = 5 fm 0.22 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-253.22:37:32.139 (09/10/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-253 / 253-2235
Profile/Beam: 897/43
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

5fm (16708_1, 16700_1, 16013_1)

5fm 0ft (531_1)

9.2m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% shallow water multibeam coverage.

1.2) 3803/42

Survey Summary

Survey Position: 60° 42' 58.3" N, 146° 41' 17.8" W
Least Depth: 3.96 m (= 12.99 ft = 2.164 fm = 2 fm 0.99 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-266.22:06:21.064 (09/23/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-266 / 266-2202
Profile/Beam: 3803/42
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk v, is new pos(DP 22542)

Hydrographer Recommendations

The Hydrographer recommends using the position of DP(22542), and removing this rock from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

2fm (16708_1, 16700_1, 16013_1)

2fm 1ft (531_1)

4.0m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Reposition charted rock. Chart new position and depth.

2 - New Features

2.1) 22392

Survey Summary

Survey Position: 60° 44' 18.0" N, 146° 30' 31.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-239.17:27:28.000 (08/27/2007)
GP Dataset: TR2_239_1.mdb
GP No.: 1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new ldg; used for reference only

Hydrographer Recommendations

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 6:yellow
NATSUR - 9:rock
RECDAT - 20070827
SORDAT - 20071010
SORIND - us,us,graph,H11742
WATLEV - 3:always under water/submerged

Office Notes

Chart new ledge.

2.2) 22391**Survey Summary**

Survey Position: 60° 45' 00.9" N, 146° 32' 08.2" W
Least Depth: -0.68 m (= -2.24 ft = -0.373 fm = 0 fm 3.76 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-239.16:38:22.000 (08/27/2007)
DP Dataset: h11742 / fa_trimble_dpne_2 / 2007-239 / tr2_239_1.mdb
Profile/Beam: 1/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new pos chd(16708) rk: DP is swm ext

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0 ¼fm (16708_1, 16700_1, 16013_1)
 0fm 2ft (531_1)
 -.7m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742
 VALSOU - -0.683 m
 WATLEV - 4:covers and uncovers

Office Notes

Chart new position and height of rock.

2.3) 22393

Survey Summary

Survey Position: 60° 44' 19.7" N, 146° 30' 29.9" W
Least Depth: -0.40 m (= -1.32 ft = -0.219 fm = 0 fm 4.68 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-239.17:32:33.000 (08/27/2007)
DP Dataset: h11742 / fa_trimble_dpne_2 / 2007-239 / tr2_239_1.mdb
Profile/Beam: 2/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

swm ext new ldg; used for reference only

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0 ¼fm (16708_1, 16700_1, 16013_1)

0fm 1ft (531_1)

-.4m (500_1, 50_1)

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Attributes: SORDAT - 20071010

SORIND - us,us,graph,H11742

Office Notes

Chart new ledge.

2.4) 22401

Survey Summary

Survey Position: 60° 42' 41.1" N, 146° 43' 26.1" W
Least Depth: 2.05 m (= 6.72 ft = 1.120 fm = 1 fm 0.72 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.15:40:10.000 (08/28/2007)
DP Dataset: h11742 / fa_trimble_dpne_2 / 2007-240 / tr2_240.mdb
Profile/Beam: 1/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

chd(16708) rk vfd, DP for ht; for reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 1:depth known
SORDAT - 20071010
SORIND - us,us,graph,H11742
TECSOU - 5:found by lead-line
VALSOU - 2.049 m
WATLEV - 3:always under water/submerged

Office Notes

Chart new depth of charted rock.

2.5) 22402**Survey Summary**

Survey Position: 60° 42' 49.3" N, 146° 43' 44.9" W
Least Depth: 0.46 m (= 1.51 ft = 0.251 fm = 0 fm 1.51 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.16:02:31.000 (08/28/2007)
DP Dataset: h11742 / fa_trimble_dpne_2 / 2007-240 / tr2_240.mdb
Profile/Beam: 2/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new rk

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0 ¼fm (16708_1, 16700_1, 16013_1)
 0fm 1ft (531_1)
 .5m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 1:depth known
 RECDAT - 20070828
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 STATUS - 1:permanent
 TECSOU - 5:found by lead-line
 VALSOU - 0.459 m
 VERDAT - 12:Mean lower low water
 WATLEV - 4:covers and uncovers

Office Notes

Chart new rock.

2.6) 22403**Survey Summary**

Survey Position: 60° 43' 19.0" N, 146° 42' 01.1" W
Least Depth: -0.47 m (= -1.55 ft = -0.258 fm = 0 fm 4.45 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.17:25:37.000 (08/28/2007)
DP Dataset: h11742 / fa_trimble_dpne_2 / 2007-240 / tr2_240.mdb
Profile/Beam: 3/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new rk

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0 ¼fm (16708_1, 16700_1, 16013_1)
 0fm 1ft (531_1)
 -.5m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070828
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 STATUS - 1:permanent
 TECSOU - 1:found by echo-sounder
 VALSOU - -0.471 m
 VERDAT - 12:Mean lower low water
 WATLEV - 4:covers and uncovers

Office Notes

Chart new rock.

2.7) 12403

Survey Summary

Survey Position: 60° 45' 40.0" N, 146° 35' 50.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.15:44:04.000 (08/28/2007)
GP Dataset: TR1_240_2.mdb
GP No.: 1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new ldg; used as reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 9:rock
RECDAT - 20070828
SORDAT - 20071010
SORIND - us,us,graph,H11742
WATLEV - 3:always under water/submerged

Office Notes

Chart new ledge.

2.8) 12404

Survey Summary

Survey Position: 60° 45' 43.6" N, 146° 36' 14.6" W
Least Depth: 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.15:53:53.000 (08/28/2007)
GP Dataset: TR1_240.mdb
GP No.: 1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new foul area - foul w rks; used as reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: CATOBS - 6:foul area
RECDAT - 20070828
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - 0.0 m
VERDAT - 12:Mean lower low water

Office Notes

Chart new foul area.

2.9) 12406

Survey Summary

Survey Position: 60° 44' 56.5" N, 146° 37' 39.7" W
Least Depth: 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.16:44:12.000 (08/28/2007)
GP Dataset: TR1_240.mdb
GP No.: 2
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new foul area - foul w rks; used as reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: CATOBS - 6:foul area
RECDAT - 20070828
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - 0.0 m
VERDAT - 12:Mean lower low water

Office Notes

Chart new foul area.

2.10) 225401

Survey Summary

Survey Position: 60° 43' 01.5" N, 146° 41' 28.2" W
Least Depth: 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-254.15:14:57.000 (09/11/2007)
GP Dataset: TR2_254B.mdb
GP No.: 1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new pos chd (16708) foul - foul w/ rks; used for reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: CATOBS - 6:foul area
RECDAT - 20070911
SORDAT - 20071010
SORIND - us,us,graph,H11742
STATUS - 1:permanent
VALSOU - 0.0 m
VERDAT - 12:Mean lower low water

Office Notes

Chart new foul area.

Feature Images



Figure 2.10.1

2.11) 225402**Survey Summary**

Survey Position: 60° 42' 55.1" N, 146° 41' 17.7" W
Least Depth: -1.71 m (= -5.59 ft = -0.932 fm = 0 fm 0.41 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-254.15:31:11.000 (09/11/2007)
DP Dataset: h11742 / fa_trimble_dpne_2 / 2007-254 / tr2_254b.mdb
Profile/Beam: 1/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new position chd (16708) rk

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0 ¾fm (16708_1, 16700_1, 16013_1)
 0fm 5ft (531_1)
 -1.7m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070911
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 VALSOU - -1.705 m
 VERDAT - 12:Mean lower low water
 WATLEV - 4:covers and uncovers

Office Notes

Chart new rock

2.12) 225403**Survey Summary**

Survey Position: 60° 42' 58.3" N, 146° 41' 06.3" W
Least Depth: -2.70 m (= -8.85 ft = -1.474 fm = -1 fm 2.85 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-254.15:34:05.000 (09/11/2007)
DP Dataset: h11742 / fa_trimble_dpne_2 / 2007-254 / tr2_254b.mdb
Profile/Beam: 2/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new rk is hp of foul area

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

-1 ½fm (16708_1, 16700_1, 16013_1)
-1fm 3ft (531_1)
-2.7m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070911
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - -2.696 m
VERDAT - 12:Mean lower low water
WATLEV - 4:covers and uncovers

Office Notes

Chart new rock

2.13) 225404**Survey Summary**

Survey Position: 60° 42' 06.6" N, 146° 40' 03.2" W
Least Depth: -2.17 m (= -7.10 ft = -1.184 fm = -1 fm 1.10 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-254.16:01:54.000 (09/11/2007)
DP Dataset: h11742 / fa_trimble_dpne_2 / 2007-254 / tr2_254b.mdb
Profile/Beam: 3/1
Charts Affected: 16708_1, 16709_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new pos chd(16708) rk: DP is swm ext

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

-1fm (16708_1, 16709_1, 16700_1, 16013_1)
 -1fm 1ft (531_1)
 -2.2m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070911
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 VALSOU - -2.165 m
 VERDAT - 12:Mean lower low water
 WATLEV - 4:covers and uncovers

Office Notes

Chart new rock.

2.14) 12401

Survey Summary

Survey Position: 60° 44' 47.4" N, 146° 34' 32.2" W
Least Depth: 0.61 m (= 2.01 ft = 0.335 fm = 0 fm 2.01 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.15:17:41.000 (08/28/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-240 / tr1_240.mdb
Profile/Beam: 1/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

chd (16708) rk vfd - DP for ht; used for reference only

Hydrographer Recommendations

New depth on charted rock.

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 1:depth known
RECDAT - 20070828
SORDAT - 20071010
SORIND - us,us,graph,H11742
TECSOU - 5:found by lead-line
VALSOU - 0.612 m
VERDAT - 12:Mean lower low water
WATLEV - 5:awash

Office Notes

Chart new depth and position of charted rock.

2.15) 12402

Survey Summary

Survey Position: 60° 45' 40.5" N, 146° 35' 51.8" W
Least Depth: 0.57 m (= 1.87 ft = 0.312 fm = 0 fm 1.87 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.15:41:38.000 (08/28/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-240 / tr1_240.mdb
Profile/Beam: 2/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new rk is swm hp new ldg

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070828
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - 0.571 m
VERDAT - 12:Mean lower low water
WATLEV - 5:awash

Office Notes

Do not chart rock. New rock is encompassed by new ledge.

2.16) 12405

Survey Summary

Survey Position: 60° 44' 59.0" N, 146° 37' 14.2" W
Least Depth: 1.46 m (= 4.79 ft = 0.798 fm = 0 fm 4.79 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.16:33:56.000 (08/28/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-240 / tr1_240.mdb
Profile/Beam: 3/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

chd(16708) rk vfd - dp swm ext; for reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 1:depth known
RECDAT - 20070828
SORDAT - 20071010
SORIND - us,us,graph,H11742
TECSOU - 5:found by lead-line
VALSOU - 1.460 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Update new depth of charted rock.

2.17) 12407

Survey Summary

Survey Position: 60° 44' 38.9" N, 146° 38' 23.3" W
Least Depth: -1.48 m (= -4.86 ft = -0.810 fm = 0 fm 1.14 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.17:26:37.000 (08/28/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-240 / tr1_240.mdb
Profile/Beam: 4/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

chd(16708) rk vfd - dp for ht; use for reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070828
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - -1.482 m
VERDAT - 12:Mean lower low water
WATLEV - 4:covers and uncovers

Office Notes

New depth on charted rock.

2.18) 12408

Survey Summary

Survey Position: 60° 44' 55.2" N, 146° 37' 49.7" W
Least Depth: -0.12 m (= -0.39 ft = -0.065 fm = 0 fm 5.61 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-240.17:45:53.000 (08/28/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-240 / tr1_240.mdb
Profile/Beam: 5/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new rk is swm hp new foul area

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0fm (16708_1, 16700_1, 16013_1)

0fm 0ft (531_1)

-.1m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: RECDAT - 20070828

SORDAT - 20071010

SORIND - us,us,graph,H11742

VALSOU - -0.118 m

VERDAT - 12:Mean lower low water

WATLEV - 4:covers and uncovers

Office Notes

Chart new rk.

2.19) 3855/92

Survey Summary

Survey Position: 60° 44' 24.0" N, 146° 34' 50.8" W
Least Depth: 17.37 m (= 56.98 ft = 9.497 fm = 9 fm 2.98 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-253.18:58:10.688 (09/10/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-253 / 253-1851
Profile/Beam: 3855/92
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

9 ½fm (16708_1, 16700_1, 16013_1)

9fm 3ft (531_1)

17.4m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Retain charted rock. 100% multibeam coverage not achieved.

2.20) 2246/17**Survey Summary**

Survey Position: 60° 44' 59.3" N, 146° 32' 21.5" W
Least Depth: 12.10 m (= 39.71 ft = 6.618 fm = 6 fm 3.71 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-253.21:22:20.993 (09/10/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-253 / 253-2118
Profile/Beam: 2246/17
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

6 ½fm (16708_1, 16700_1, 16013_1)

6fm 3ft (531_1)

12.1m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Charted rock disproved with 100% shallow water multibeam coverage.

2.21) 262/32

Survey Summary

Survey Position: 60° 45' 01.8" N, 146° 32' 11.8" W
Least Depth: 9.85 m (= 32.32 ft = 5.387 fm = 5 fm 2.32 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-253.21:32:38.304 (09/10/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-253 / 253-2132
Profile/Beam: 262/32
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

5 ¼fm (16708_1, 16700_1, 16013_1)

5fm 2ft (531_1)

9.9m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock.

2.22) 3730/61

Survey Summary

Survey Position: 60° 44' 40.0" N, 146° 30' 29.0" W
Least Depth: 15.30 m (= 50.20 ft = 8.367 fm = 8 fm 2.20 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-253.22:40:22.225 (09/10/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-253 / 253-2235
Profile/Beam: 3730/61
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

8 ¼fm (16708_1, 16700_1, 16013_1)

8fm 2ft (531_1)

15.3m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% shallow water multibeam coverage.

2.23) 7561/89

Survey Summary

Survey Position: 60° 44' 36.8" N, 146° 42' 08.7" W
Least Depth: 11.48 m (= 37.66 ft = 6.276 fm = 6 fm 1.66 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.18:42:58.939 (09/12/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-255 / 255-1835
Profile/Beam: 7561/89
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) Indare

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

6 ¼fm (16708_1, 16700_1, 16013_1)

6fm 1ft (531_1)

11.5m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted islet. Disproved with 100% multibeam coverage.

2.24) 626/66**Survey Summary**

Survey Position: 60° 44' 24.9" N, 146° 42' 08.0" W
Least Depth: 8.38 m (= 27.49 ft = 4.582 fm = 4 fm 3.49 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.18:56:19.362 (09/12/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-255 / 255-1855
Profile/Beam: 626/66
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 ½fm (16708_1, 16700_1, 16013_1)

4fm 3ft (531_1)

8.4m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.25) 2182/1

Survey Summary

Survey Position: 60° 44' 16.7" N, 146° 42' 01.5" W
Least Depth: 3.32 m (= 10.90 ft = 1.816 fm = 1 fm 4.90 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.18:57:45.773 (09/12/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-255 / 255-1855
Profile/Beam: 2182/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

1 $\frac{3}{4}$ fm (16708_1, 16700_1, 16013_1)

1fm 5ft (531_1)

3.3m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.26) 3340/18

Survey Summary

Survey Position: 60° 44' 39.1" N, 146° 42' 04.2" W
Least Depth: 12.90 m (= 42.33 ft = 7.055 fm = 7 fm 0.33 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.19:09:52.721 (09/12/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-255 / 255-1906
Profile/Beam: 3340/18
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

7fm (16708_1, 16700_1, 16013_1)

7fm 0ft (531_1)

12.9m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam.

2.27) 22/36**Survey Summary**

Survey Position: 60° 44' 39.8" N, 146° 41' 57.1" W
Least Depth: 6.02 m (= 19.75 ft = 3.292 fm = 3 fm 1.75 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.19:18:11.149 (09/12/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-255 / 255-1918
Profile/Beam: 22/36
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

3 ¼fm (16708_1, 16700_1, 16013_1)

3fm 2ft (531_1)

6.0m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Retain charted rock. Multibeam does not sufficiently cover charted rock to warrant a disproval.

2.28) 6194/38

Survey Summary

Survey Position: 60° 44' 41.1" N, 146° 41' 31.0" W
Least Depth: 5.90 m (= 19.37 ft = 3.228 fm = 3 fm 1.37 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.20:04:38.612 (09/12/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-255 / 255-1957
Profile/Beam: 6194/38
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

3 ¼fm (16708_1, 16700_1, 16013_1)

3fm 1ft (531_1)

5.9m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.29) 4536/54

Survey Summary

Survey Position: 60° 43' 56.2" N, 146° 44' 20.0" W
Least Depth: 14.94 m (= 49.00 ft = 8.167 fm = 8 fm 1.00 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-263.17:51:33.801 (09/20/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-263 / 263-1745
Profile/Beam: 4536/54
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

8fm (16708_1, 16700_1, 16013_1)

8fm 1ft (531_1)

14.9m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.30) 555/39

Survey Summary

Survey Position: 60° 43' 54.2" N, 146° 44' 27.1" W
Least Depth: 16.23 m (= 53.24 ft = 8.873 fm = 8 fm 5.24 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-263.19:51:15.987 (09/20/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-263 / 263-1949
Profile/Beam: 555/39
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

8 $\frac{3}{4}$ fm (16708_1, 16700_1, 16013_1)

8fm 5ft (531_1)

16.2m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.31) 8529/44

Survey Summary

Survey Position: 60° 42' 42.6" N, 146° 43' 39.4" W
Least Depth: 4.25 m (= 13.94 ft = 2.323 fm = 2 fm 1.94 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-263.20:02:22.427 (09/20/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-263 / 263-1949
Profile/Beam: 8529/44
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

2 ¼fm (16708_1, 16700_1, 16013_1)

2fm 2ft (531_1)

4.2m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.32) 344/70

Survey Summary

Survey Position: 60° 43' 21.8" N, 146° 42' 25.5" W
Least Depth: 6.53 m (= 21.44 ft = 3.573 fm = 3 fm 3.44 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-266.18:31:22.856 (09/23/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-266 / 266-1831
Profile/Beam: 344/70
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

3 ½fm (16708_1, 16700_1, 16013_1)

3fm 3ft (531_1)

6.5m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.33) 1181/98

Survey Summary

Survey Position: 60° 43' 16.3" N, 146° 42' 15.6" W
Least Depth: 5.80 m (= 19.02 ft = 3.170 fm = 3 fm 1.02 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-266.18:41:29.757 (09/23/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-266 / 266-1839
Profile/Beam: 1181/98
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

3fm (16708_1, 16700_1, 16013_1)

3fm 1ft (531_1)

5.8m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.34) 333/92

Survey Summary

Survey Position: 60° 42' 56.2" N, 146° 41' 30.2" W
Least Depth: 9.90 m (= 32.49 ft = 5.416 fm = 5 fm 2.49 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-266.21:24:16.537 (09/23/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-266 / 266-2123
Profile/Beam: 333/92
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

5 ¼fm (16708_1, 16700_1, 16013_1)

5fm 2ft (531_1)

9.9m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.35) 766/28

Survey Summary

Survey Position: 60° 43' 02.5" N, 146° 41' 18.3" W
Least Depth: 6.01 m (= 19.72 ft = 3.287 fm = 3 fm 1.72 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-266.21:38:57.549 (09/23/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-266 / 266-2138
Profile/Beam: 766/28
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

3 ¼fm (16708_1, 16700_1, 16013_1)

3fm 1ft (531_1)

6.0m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.36) 2185/89

Survey Summary

Survey Position: 60° 45' 38.6" N, 146° 35' 40.6" W
Least Depth: 6.62 m (= 21.72 ft = 3.619 fm = 3 fm 3.72 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-282.23:38:12.105 (10/09/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-282 / 282-2336
Profile/Beam: 2185/89
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

3 ½fm (16708_1, 16700_1, 16013_1)

3fm 3ft (531_1)

6.6m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.37) 3272/98**Survey Summary**

Survey Position: 60° 45' 17.8" N, 146° 34' 38.1" W
Least Depth: 8.81 m (= 28.89 ft = 4.816 fm = 4 fm 4.89 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-242.00:17:48.486 (08/30/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-241 / 242-0009
Profile/Beam: 3272/98
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 $\frac{3}{4}$ fm (16708_1, 16700_1, 16013_1)

4fm 5ft (531_1)

8.8m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.38) 3806/33**Survey Summary**

Survey Position: 60° 45' 34.0" N, 146° 35' 21.2" W
Least Depth: 11.48 m (= 37.67 ft = 6.278 fm = 6 fm 1.67 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-242.00:24:54.953 (08/30/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-241 / 242-0018
Profile/Beam: 3806/33
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

6 ¼fm (16708_1, 16700_1, 16013_1)

6fm 1ft (531_1)

11.5m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.39) 119/31

Survey Summary

Survey Position: 60° 45' 49.0" N, 146° 32' 53.1" W
Least Depth: 8.59 m (= 28.17 ft = 4.695 fm = 4 fm 4.17 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.21:19:21.202 (09/12/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-255 / 255-2117
Profile/Beam: 119/31
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 $\frac{3}{4}$ fm (16708_1, 16700_1, 16013_1)

4fm 4ft (531_1)

8.6m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.40) 192/9

Survey Summary

Survey Position: 60° 45' 48.6" N, 146° 32' 50.3" W
Least Depth: 8.05 m (= 26.40 ft = 4.401 fm = 4 fm 2.40 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.21:19:32.063 (09/12/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-255 / 255-2117
Profile/Beam: 192/9
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart (16708).

Cartographically-Rounded Depth (Affected Charts):

4 ¼fm (16708_1, 16700_1, 16013_1)

4fm 2ft (531_1)

8.0m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Chart symbology mistaken as an islet/rock. Symbol indicates extents of intertidal area. Retain intertidal area as charted.

2.41) 151/44

Survey Summary

Survey Position: 60° 45' 52.5" N, 146° 33' 00.5" W
Least Depth: 10.42 m (= 34.20 ft = 5.699 fm = 5 fm 4.20 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.21:52:51.611 (09/12/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-255 / 255-2150
Profile/Beam: 151/44
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

5 ¾fm (16708_1, 16700_1, 16013_1)

5fm 4ft (531_1)

10.4m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.42) 425/85

Survey Summary

Survey Position: 60° 45' 58.8" N, 146° 33' 05.5" W
Least Depth: 8.48 m (= 27.81 ft = 4.635 fm = 4 fm 3.81 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.21:53:46.097 (09/12/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-255 / 255-2150
Profile/Beam: 425/85
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 ½fm (16708_1, 16700_1, 16013_1)

4fm 4ft (531_1)

8.5m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.43) 547/74

Survey Summary

Survey Position: 60° 46' 00.8" N, 146° 33' 07.7" W
Least Depth: 9.54 m (= 31.30 ft = 5.217 fm = 5 fm 1.30 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.21:54:04.253 (09/12/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-255 / 255-2150
Profile/Beam: 547/74
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

5 ¼fm (16708_1, 16700_1, 16013_1)

5fm 1ft (531_1)

9.5m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.44) 2761/91

Survey Summary

Survey Position: 60° 44' 39.7" N, 146° 38' 28.3" W
Least Depth: 8.65 m (= 28.38 ft = 4.729 fm = 4 fm 4.38 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-282.21:17:02.907 (10/09/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-282 / 282-2109
Profile/Beam: 2761/91
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 $\frac{3}{4}$ fm (16708_1, 16700_1, 16013_1)

4fm 4ft (531_1)

8.6m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.45) 3012/55

Survey Summary

Survey Position: 60° 43' 48.6" N, 146° 43' 34.1" W
Least Depth: 9.34 m (= 30.64 ft = 5.107 fm = 5 fm 0.64 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-263.17:56:55.787 (09/20/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-263 / 263-1752
Profile/Beam: 3012/55
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

5fm (16708_1, 16700_1, 16013_1)

5fm 0ft (531_1)

9.3m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.46) 3394/36**Survey Summary**

Survey Position: 60° 43' 46.7" N, 146° 43' 28.9" W
Least Depth: 10.42 m (= 34.17 ft = 5.696 fm = 5 fm 4.17 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-263.17:57:22.244 (09/20/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-263 / 263-1752
Profile/Beam: 3394/36
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

5 ¾fm (16708_1, 16700_1, 16013_1)

5fm 4ft (531_1)

10.4m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.47) 3633/8

Survey Summary

Survey Position: 60° 43' 46.1" N, 146° 43' 24.3" W
Least Depth: 12.05 m (= 39.52 ft = 6.586 fm = 6 fm 3.52 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-263.17:57:41.586 (09/20/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-263 / 263-1752
Profile/Beam: 3633/8
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) Indare

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

6 ½fm (16708_1, 16700_1, 16013_1)

6fm 3ft (531_1)

12.0m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted islet. Disproved with 100% multibeam coverage.

2.48) 1331/17

Survey Summary

Survey Position: 60° 43' 43.2" N, 146° 43' 25.2" W
Least Depth: 9.49 m (= 31.12 ft = 5.187 fm = 5 fm 1.12 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-263.18:03:08.341 (09/20/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-263 / 263-1800
Profile/Beam: 1331/17
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

5fm (16708_1, 16700_1, 16013_1)

5fm 1ft (531_1)

9.5m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.49) 302/57

Survey Summary

Survey Position: 60° 43' 53.0" N, 146° 44' 17.6" W
Least Depth: 8.16 m (= 26.77 ft = 4.461 fm = 4 fm 2.77 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-263.18:08:12.609 (09/20/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-263 / 263-1807
Profile/Beam: 302/57
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 ½fm (16708_1, 16700_1, 16013_1)

4fm 3ft (531_1)

8.2m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.50) 722/48

Survey Summary

Survey Position: 60° 43' 52.1" N, 146° 44' 10.0" W
Least Depth: 8.74 m (= 28.68 ft = 4.780 fm = 4 fm 4.68 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-263.18:08:45.382 (09/20/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-263 / 263-1807
Profile/Beam: 722/48
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 $\frac{3}{4}$ fm (16708_1, 16700_1, 16013_1)

4fm 4ft (531_1)

8.7m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.51) 4213/95**Survey Summary**

Survey Position: 60° 43' 30.4" N, 146° 44' 19.6" W
Least Depth: 8.06 m (= 26.43 ft = 4.405 fm = 4 fm 2.43 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-263.20:16:20.055 (09/20/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-263 / 263-2009
Profile/Beam: 4213/95
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 ¼fm (16708_1, 16700_1, 16013_1)

4fm 2ft (531_1)

8.1m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.52) 3370/10**Survey Summary**

Survey Position: 60° 43' 50.1" N, 146° 44' 23.2" W
Least Depth: 7.67 m (= 25.18 ft = 4.197 fm = 4 fm 1.18 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-283.18:06:07.706 (10/10/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-283 / 283-1803
Profile/Beam: 3370/10
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 ¼fm (16708_1, 16700_1, 16013_1)

4fm 1ft (531_1)

7.7m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.53) 24/81

Survey Summary

Survey Position: 60° 46' 15.5" N, 146° 33' 11.3" W
Least Depth: 9.11 m (= 29.89 ft = 4.981 fm = 4 fm 5.89 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.22:08:29.843 (09/12/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-255 / 255-2206
Profile/Beam: 24/81
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

5fm (16708_1, 16700_1, 16013_1)

3fm 0ft (531_1)

9.1m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.54) 72/92

Survey Summary

Survey Position: 60° 46' 33.9" N, 146° 31' 56.0" W
Least Depth: 13.24 m (= 43.45 ft = 7.242 fm = 7 fm 1.45 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.23:28:36.251 (09/12/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-255 / 255-2326
Profile/Beam: 72/92
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

7 ¼fm (16708_1, 16700_1, 16013_1)

7fm 1ft (531_1)

13.2m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Retain charted rock. Multibeam coverage was not sufficient enough to disprove rock.

2.55) 159/76

Survey Summary

Survey Position: 60° 46' 35.1" N, 146° 30' 38.7" W
Least Depth: 16.25 m (= 53.30 ft = 8.883 fm = 8 fm 5.30 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-256.00:19:45.322 (09/13/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-255 / 256-0017
Profile/Beam: 159/76
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

8 ¾fm (16708_1, 16700_1, 16013_1)

8fm 5ft (531_1)

16.2m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.56) 717/29**Survey Summary**

Survey Position: 60° 46' 40.1" N, 146° 30' 29.1" W
Least Depth: 22.36 m (= 73.36 ft = 12.226 fm = 12 fm 1.36 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-256.00:23:41.108 (09/13/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-255 / 256-0020
Profile/Beam: 717/29
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

12fm (16708_1, 16700_1, 16013_1)

12fm (531_1)

22m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.57) 22412**Survey Summary**

Survey Position: 60° 44' 41.8" N, 146° 41' 34.3" W
Least Depth: 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.16:50:59.000 (08/29/2007)
GP Dataset: TR2241.mdb
GP No.: 1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

obstr new ldg; used for reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: RECDAT - 20070829
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - 0.0 m

Office Notes

Chart new ledge.

2.58) 22415**Survey Summary**

Survey Position: 60° 44' 45.7" N, 146° 41' 40.3" W
Least Depth: 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2007-241.17:13:20.000 (08/29/2007)
GP Dataset: TR2241.mdb
GP No.: 2
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

obstrn reef; used as reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: RECDAT - 20070829
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - 0.0 m

Office Notes

Chart new ledge.

2.59) 22411

Survey Summary

Survey Position: 60° 43' 44.8" N, 146° 37' 40.7" W
Least Depth: -1.24 m (= -4.06 ft = -0.677 fm = 0 fm 1.94 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.15:43:38.000 (08/29/2007)
DP Dataset: h11742 / fa_trimble_dpne_2 / 2007-241 / tr2241.mdb
Profile/Beam: 1/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

chd(16708) rks are ldg; DP'd hp

Hydrographer Recommendations

remove 3 chd(16708) rks; replace with new pos hp rk and ldg

Cartographically-Rounded Depth (Affected Charts):

0 ½fm (16708_1, 16700_1, 16013_1)

0fm 4ft (531_1)

-1.2m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070829
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - -1.238 m
WATLEV - 4:covers and uncovers

Office Notes

Chart new rock as high point of new ledge.

2.60) 22414**Survey Summary**

Survey Position: 60° 44' 48.7" N, 146° 41' 50.7" W
Least Depth: 0.91 m (= 2.98 ft = 0.497 fm = 0 fm 2.98 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.17:03:58.000 (08/29/2007)
DP Dataset: h11742 / fa_trimble_dpne_2 / 2007-241 / tr2241.mdb
Profile/Beam: 2/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new pos chd (16708) rk; hp reef

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0 ½fm (16708_1, 16700_1, 16013_1)
 0fm 3ft (531_1)
 .9m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070829
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 VALSOU - 0.908 m
 WATLEV - 3:always under water/submerged

Office Notes

Do not chart rock. Rock is part of new reef.

2.61) 12411**Survey Summary**

Survey Position: 60° 44' 35.4" N, 146° 30' 32.7" W
Least Depth: 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.15:01:26.000 (08/29/2007)
GP Dataset: TR1_241.mdb
GP No.: 1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new pos chd(16708) foul area

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0fm (16708_1, 16700_1, 16013_1)
 0fm 0ft (531_1)
 .0m (500_1, 50_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: CATOBS - 6:foul area
 RECDAT - 20070829
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 VALSOU - 0.0 m
 VERDAT - 12:Mean lower low water

Office Notes

Chart new foul area.

2.62) 12416

Survey Summary

Survey Position: 60° 46' 27.8" N, 146° 32' 46.0" W
Least Depth: 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.16:12:53.000 (08/29/2007)
GP Dataset: TR1_241.mdb
GP No.: 2
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new obs area; used for reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: CATOBS - 6:foul area
RECDAT - 20070829
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - 0.0 m
VERDAT - 12:Mean lower low water

Office Notes

Chart area inside zero contour as ledge and area seaward of zero contour as a foul area.

2.63) 12417**Survey Summary**

Survey Position: 60° 46' 37.1" N, 146° 31' 43.2" W
Least Depth: 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2007-241.16:23:11.000 (08/29/2007)
GP Dataset: TR1_241.mdb
GP No.: 3
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new obs area; used for reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: CATOBS - 6:foul area
RECDAT - 20070829
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - 0.0 m
VERDAT - 12:Mean lower low water

Office Notes

Chart area inside zero contour as ledge and area seaward of zero contour as a foul area.

2.64) 12418

Survey Summary

Survey Position: 60° 46' 40.0" N, 146° 32' 17.1" W
Least Depth: 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.16:29:51.000 (08/29/2007)
GP Dataset: TR1_241.mdb
GP No.: 4
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new pos chd(16708) foul area; use for reference only

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: CATOBS - 6:foul area
RECDAT - 20070829
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - 0.0 m
VERDAT - 12:Mean lower low water

Office Notes

Chart area as foul.

2.65) 12412**Survey Summary**

Survey Position: 60° 44' 35.3" N, 146° 30' 29.5" W
Least Depth: -1.55 m (= -5.09 ft = -0.849 fm = 0 fm 0.91 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.15:08:31.000 (08/29/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-241 / tr1_241.mdb
Profile/Beam: 1/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new pos chd(16708) rk - rk is hp foul area

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0 ¾fm (16708_1, 16700_1, 16013_1)
 0fm 5ft (531_1)
 -1.6m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070829
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 VALSOU - -1.552 m
 VERDAT - 12:Mean lower low water
 WATLEV - 4:covers and uncovers

Office Notes

Chart rock.

2.66) 12413

Survey Summary

Survey Position: 60° 46' 08.3" N, 146° 33' 09.6" W
Least Depth: 1.97 m (= 6.45 ft = 1.074 fm = 1 fm 0.45 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.15:49:41.000 (08/29/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-241 / tr1_241.mdb
Profile/Beam: 2/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new rk

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

1fm (16708_1, 16700_1, 16013_1)

1fm 0ft (531_1)

2.0m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070829
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - 1.965 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Chart new rock.

2.67) 12414**Survey Summary**

Survey Position: 60° 46' 07.2" N, 146° 33' 08.8" W
Least Depth: 2.25 m (= 7.40 ft = 1.233 fm = 1 fm 1.40 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.15:53:16.000 (08/29/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-241 / tr1_241.mdb
Profile/Beam: 3/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new rk

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

1 ¼fm (16708_1, 16700_1, 16013_1)
 1fm 1ft (531_1)
 2.3m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070829
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 VALSOU - 2.255 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Do not chart rock at this scale. Chart rock to the north-- it is shoaler.

2.68) 12415**Survey Summary**

Survey Position: 60° 46' 14.7" N, 146° 33' 08.0" W
Least Depth: 0.06 m (= 0.20 ft = 0.034 fm = 0 fm 0.20 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.15:58:44.000 (08/29/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-241 / tr1_241.mdb
Profile/Beam: 4/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new pos chd(16708) rk - DP for ht

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0fm (16708_1, 16700_1, 16013_1)
 0fm 0ft (531_1)
 .1m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070829
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 VALSOU - 0.062 m
 VERDAT - 12:Mean lower low water
 WATLEV - 5:awash

Office Notes

Chart rock.

2.69) 12419

Survey Summary

Survey Position: 60° 46' 39.8" N, 146° 31' 18.4" W
Least Depth: -0.20 m (= -0.67 ft = -0.111 fm = 0 fm 5.33 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.16:38:54.000 (08/29/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-241 / tr1_241.mdb
Profile/Beam: 5/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new rk

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0fm (16708_1, 16700_1, 16013_1)

0fm 0ft (531_1)

-.2m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: RECDAT - 20070829
SORDAT - 20071010
SORIND - us,us,graph,H11742
VALSOU - -0.203 m
VERDAT - 12:Mean lower low water
WATLEV - 4:covers and uncovers

Office Notes

Chart new rock.

2.70) 124110**Survey Summary**

Survey Position: 60° 46' 24.7" N, 146° 30' 47.9" W
Least Depth: -4.22 m (= -13.83 ft = -2.305 fm = -2 fm 1.83 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.16:58:56.000 (08/29/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-241 / tr1_241.mdb
Profile/Beam: 6/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new pos chd (16708) rk

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

-2 ¼fm (16708_1, 16700_1, 16013_1)
-2fm 2ft (531_1)
-4.2m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 1:depth known
SORDAT - 20071010
SORIND - US,US,graph,H11742
TECSOU - 7:found by laser
VALSOU - -4.216 m
VERDAT - 12:Mean lower low water
WATLEV - 4:covers and uncovers

Office Notes

Charted rock is islet. Chart new position and height on islet.

2.71) 124111**Survey Summary**

Survey Position: 60° 46' 41.0" N, 146° 30' 16.2" W
Least Depth: 1.00 m (= 3.28 ft = 0.546 fm = 0 fm 3.28 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-241.17:10:42.000 (08/29/2007)
DP Dataset: h11742 / fa_trimble_dpne_1 / 2007-241 / tr1_241.mdb
Profile/Beam: 7/1
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

new pos chd(16708) rk

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

0 ½fm (16708_1, 16700_1, 16013_1)
 0fm 3ft (531_1)
 1.0m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 1:depth known
 RECDAT - 20070829
 SORDAT - 20071010
 SORIND - us,us,graph,H11742
 TECSOU - 5:found by lead-line
 VALSOU - 0.999 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Chart new depth and position on charted rock.

2.72) 2776/68**Survey Summary**

Survey Position: 60° 44' 18.6" N, 146° 42' 05.2" W
Least Depth: 8.22 m (= 26.96 ft = 4.493 fm = 4 fm 2.96 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.18:53:38.479 (09/12/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-255 / 255-1851
Profile/Beam: 2776/68
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) Indare

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 ½fm (16708_1, 16700_1, 16013_1)

4fm 3ft (531_1)

8.2m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted islet. Disproved with 100% multibeam.

2.73) 3221/46**Survey Summary**

Survey Position: 60° 44' 20.4" N, 146° 42' 07.0" W
Least Depth: 8.81 m (= 28.91 ft = 4.818 fm = 4 fm 4.91 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.18:54:00.727 (09/12/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-255 / 255-1851
Profile/Beam: 3221/46
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart(16708).

Cartographically-Rounded Depth (Affected Charts):

4 $\frac{3}{4}$ fm (16708_1, 16700_1, 16013_1)

4fm 5ft (531_1)

8.8m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.74) 418/81

Survey Summary

Survey Position: 60° 44' 39.6" N, 146° 30' 47.7" W
Least Depth: 9.32 m (= 30.57 ft = 5.095 fm = 5 fm 0.57 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-253.22:11:49.389 (09/10/2007)
Survey Line: h11742 / fa_1010_reson8101 / 2007-253 / 253-2211
Profile/Beam: 418/81
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart (16708).

Cartographically-Rounded Depth (Affected Charts):

5fm (16708_1, 16700_1, 16013_1)

5fm 0ft (531_1)

9.3m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.75) 458/8**Survey Summary**

Survey Position: 60° 44' 51.3" N, 146° 30' 18.6" W
Least Depth: 6.93 m (= 22.73 ft = 3.789 fm = 3 fm 4.73 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-255.19:42:37.032 (09/12/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-255 / 255-1940
Profile/Beam: 458/8
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart (16708).

Cartographically-Rounded Depth (Affected Charts):

3 ¾fm (16708_1, 16700_1, 16013_1)

3fm 4ft (531_1)

6.9m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
 SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.

2.76) 1127/99

Survey Summary

Survey Position: 60° 41' 57.5" N, 146° 39' 56.9" W
Least Depth: 4.39 m (= 14.40 ft = 2.400 fm = 2 fm 2.40 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-279.21:26:32.753 (10/06/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-279 / 279-2123
Profile/Beam: 1127/99
Charts Affected: 16708_1, 16709_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart (16708).

Cartographically-Rounded Depth (Affected Charts):

2 ¼fm (16708_1, 16709_1, 16700_1, 16013_1)

2fm 2ft (531_1)

4.4m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Do not concur. Retain charted rock. Multibeam data does not sufficiently cover feature for it to be removed.

2.77) 103/12

Survey Summary

Survey Position: 60° 45' 33.2" N, 146° 36' 31.5" W
Least Depth: 7.22 m (= 23.68 ft = 3.946 fm = 3 fm 5.68 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-282.18:14:03.616 (10/09/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-282 / 282-1811
Profile/Beam: 103/12
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart (16708).

Cartographically-Rounded Depth (Affected Charts):

4fm (16708_1, 16700_1, 16013_1)

3fm 5ft (531_1)

7.2m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted islet. Disproved with 100% multibeam coverage.

2.78) 465/58**Survey Summary**

Survey Position: 60° 45' 31.4" N, 146° 36' 35.8" W
Least Depth: 10.70 m (= 35.11 ft = 5.851 fm = 5 fm 5.11 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2007-282.18:14:26.812 (10/09/2007)
Survey Line: h11742 / fa_1018_reson8101 / 2007-282 / 282-1811
Profile/Beam: 465/58
Charts Affected: 16708_1, 16700_1, 16013_1, 531_1, 500_1, 50_1

Remarks:

Charted(16708) rk

Disproved with 100 percent multibeam coverage.

Hydrographer Recommendations

The Hydrographer recommends removal from chart (16708).

Cartographically-Rounded Depth (Affected Charts):

5 ¾fm (16708_1, 16700_1, 16013_1)

5fm 5ft (531_1)

10.7m (500_1, 50_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: SORDAT - 20071010
SORIND - us,us,graph,H11742

Office Notes

Remove charted rock. Disproved with 100% multibeam coverage.



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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : October 29, 2007

HYDROGRAPHIC BRANCH: Pacific
HYDROGRAPHIC PROJECT: OPR-P132-FA-2007
HYDROGRAPHIC SHEET: H11742

LOCALITY: Western Port Fidalgo, NE Prince William Sound, AK
TIME PERIOD: August 24 - October 10, 2007

TIDE STATION USED: 945-4050 Cordova, AK
Lat. 60° 33.4' N Long. 145° 45.3' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 3.559 meters

TIDE STATION USED: 945-4240 Valdez, AK
Lat. 61° 07.5' N Long. 146° 21.8' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 3.417 meters

REMARKS: RECOMMENDED ZONING

Preliminary zoning is accepted as the final zoning for project OPR-P132-FA-2007, H11742 during the time period between August 24 and October 10, 2007.

Please use the zoning file "P132FA2007CORP" submitted with the project instructions for OPR-P132-FA-2007. Zones PWS64 and PWS65 are the applicable zones for H11742.

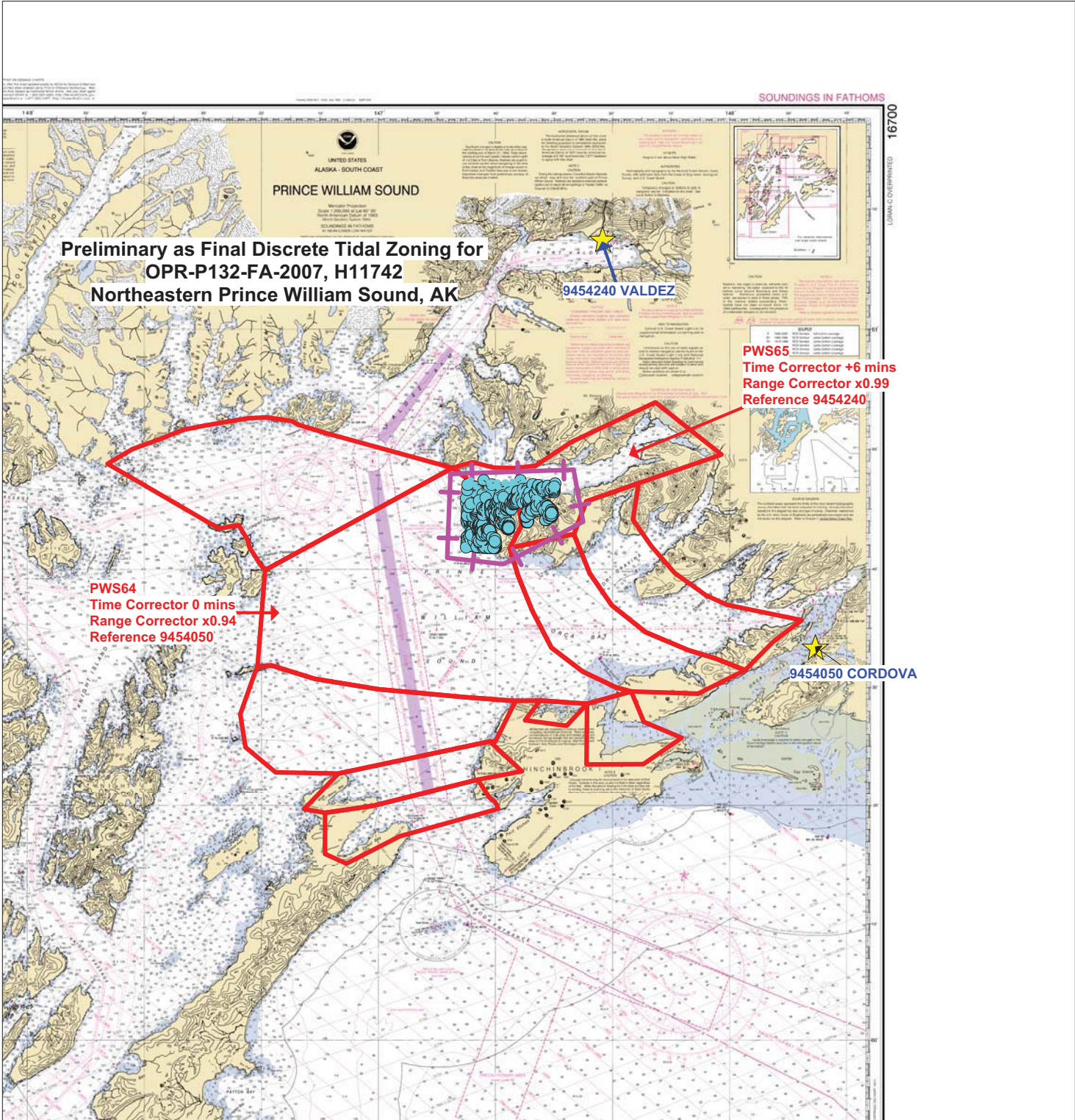
Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the 1983-2001 National Tidal Datum Epoch (NTDE).

Peter J. Stone

Digitally signed by Peter J. Stone
DN: cn=Peter J. Stone, c=US, o=CO-OPS,
ou=NOAA/NOS, email=peter.stone@noaa.gov
Reason: I am approving this document
Date: 2007.11.06 07:05:23 -05'00'

CHIEF, PRODUCTS AND SERVICES DIVISION





H11742 HCell Report
Tyanne Faulkes, ERT Associate
Pacific Hydrographic Branch

Introduction

The primary purpose of the HCell is to provide new survey information in International Hydrographic Organization (IHO) format S-57 to update the largest ENC and RNC in the region: NOAA ENC: US4AK25M; and NOAA RNCs: 16708.

HCell compilation of survey H11742 utilized Office of Coast Survey HCell Specifications Version 3.1, with approved modifications to better align with PHB’s HCell process and to meet MCD needs.

1. Compilation Scale

The density of soundings in the HCell are compiled as appropriate to emulate those soundings of Charts 16708 1:79,291.

2. Soundings

A survey-scale sounding (SOUNDG) feature object source layer was built from the **H11742_Office_Combined** surface in CARIS BASE Editor. A shoal-biased selection was made at 1:10,000 survey scale for the area of the survey covered by chart 16708 (1:79,291). These shoal-based selections were made using a Radius Table file with values shown in the table, below. The resultant sounding layer contains 35,470 depths ranging from 0 to 116 fathoms.

Upper limit (m)	Lower limit (m)	Radius (mm)
0	10	3
10	20	4
20	50	4.5
50	150	5

In CARIS BASE Editor soundings were manually selected from the high density sounding layers and imported into a new layer created to accommodate chart density depths. Manual selection was used to accomplish a density and distribution that closely represents the seafloor morphology.

3. Depth Areas and Depth Contours

3.1 Depth Areas

The extents of the highest resolution BASE Surface together with the extents of the soundings layer were used to digitize the hydrographic extents, which were then used to

create the single, all encompassing depth area (DEPARE). Two depth ranges, one from 0 to 216 meters, was used for depth area objects and the other from -10.991 to 0 meters was used for intertidal areas. Upon conversion to NOAA charting units, the depth range is 0 to 118 fathoms and -10.973 to 0.

3.2 Depth Contours

Depth contours at the intervals on the largest scale chart are included in the H11742_SS HCell for MCD raster charting division to use for guidance in creating chart contours. The generalized metric and fathom equivalent contour values are shown in the table below.

Chart Contours in Fathoms	Metric Equivalent of Chart Contours	Metric Equivalent of Chart Contours NOAA Rounded	Actual Value of Chart Contours
0	0	0.2286	0.125
3	5.4864	5.715	3.125
10	18.288	18.5166	10.125
20	36.576	37.9476	20.750
50	91.44	92.8116	50.750
100	184.2516	182.88	100.750

Contours delivered in the H11742_SS file have not been deconflicted against soundings and hydrography as all other features in the H11742_CS file and soundings in the H11742_SS have been. This results in conflicts between the H11742_SS file contours and HCell features at or near the survey limits. Conflicts with M_COVR, M_QUAL, and DEPARE objects should be expected. HCell features should be honored over H11742_SS.000 file contours in all cases where conflicts are found.

4. Meta Areas

The following Meta object areas are included in HCell H11742:

M_QUAL
M_COVR

Meta area objects were constructed on the basis of the limits of the hydrography. (See 3.1 *Depth Areas*.)

5. Features

Features files **H11742_Composite_Source.hob**, **H11742_Disprovals.hob**, **H11742_Original_Composite_Source.hob**, and **H11742_Updates_Final.hob** were delivered. The features files have been combined into one feature file for delivery to MCD for historical purposes called H11742_Features.000. There six DTON reported by the field unit and four reported during office review. These Dangers to Navigation were

discovered to be depicted on Chart 16708 during chart comparison and are reflected in H11742_CS.000.

28 bottom sample features were imported into the HCell, 22 from the survey and 6 from chart 16708. The source of all features included in the H11742 HCell can be determined by the SORIND field.

6. S-57 Objects and Attributes

The H11742_CS HCell contains the following Objects:

SOUNDG	Chart scale soundings
DEPARE	All-encompassing depth area and intertidal areas
SBDARE	Bottom samples and rocky seabed areas
M_COVR	Data coverage Meta object
M_QUAL	Data quality Meta object
\$CSYMB	Blue notes
OBSTRN	Foul areas
UWTROC	Rocks
WEDKLP	Kelp
DEPCNT	Zero contour
LNDARE	Islets and islands
LNDELV	Elevation of islets
COALNE	Coastline

The H11742_SS HCell contains the following Objects:

SOUNDG	Soundings at the survey scale density
DEPCNT	NOAA rounded contours at chart scale intervals

All S-57 Feature Objects in the H11742_CS HCell have been attributed as fully as possible based on information provided by the Hydrographer and in accordance with current guidance and the OCS HCell Specifications.

7. Blue Notes

Notes to the RNC and ENC chart compilers are included in the HCell as \$CSYMB features with the Blue Note information located in the INFORM field.

8. Spatial Framework

8.1 Coordinate System

All spatial map and base cell file deliverables are in an LLDG geographic coordinate system, with WGS84 horizontal, MHW vertical, and MLLW (1983-2001 NTDE) sounding datums.

8.2 Horizontal and Vertical Units

DUNI, HUNI and PUNI are used to define units for depth, height and horizontal position in the chart units HCell, as shown below.

Chart Unit Base Cell Units:

Depth Units (DUNI):	Fathoms
Height Units (HUNI):	Feet
Positional Units (PUNI):	Meters

During creation of the HCell in CARIS BASE Editor and CARIS S-57 Composer, all soundings and features are maintained in metric units with as high precision as possible. Depth units for soundings measured with sonar maintain millimeter precision. Depths on rocks above MLLW and heights on islets above MHW are typically measured with range finder, and therefore have lower precision. Units and precision are shown below.

BASE Editor and S-57 Composer Units:

Sounding Units:	Meters rounded to the nearest millimeter
Spot Height Units:	Meters rounded to the nearest decimeter

Conversion to charting units and application of NOAA rounding is completed in the same step, at the end of the HCell compilation process.

Conversion to charting units with NOAA rounding ensures that:

- All depths deeper or equal to 11 fathoms display as whole fathoms.
- All depth units between 0 fathoms (MLLW) and 11 fathoms display as fathoms and whole feet.
- All depth units skyward of 0 fathoms (MLLW) to 2.0 feet above MHW display in feet for values that round to 5 feet or less, and in fathoms and feet skyward of that.
- All height units (HUNI) which have been converted to charting units, and that are 2.00 feet above MHW and greater, are shown in feet.

In an ENC viewer fathoms and feet depth units (DUNI) display in the format X.YZZZ, where X is fathoms, Y is feet, and ZZZ is decimals of the foot. In an ENC viewer, heights (HUNI) display as whole feet.

9. Data Processing Notes

9.1 Junctions

Refer to section B.2 of the Descriptive Report for information on junction surveys.

10. QA/QC and ENC Validation Checks

H11742 was subjected to QA checks in S-57 Composer prior to exporting to the HCell base cell (000) file. The millimeter precision metric S-57 HCell was converted to a chart units and NOAA rounding applied. dKart Inspector was then used to further check the data set for conformity with the S-58 ver. 2 standard (formerly Appendix B.1 Annex C of the S-57 standard). All tests were run and warnings and errors investigated and corrected unless they have been approved by MCD as inherent to and acceptable for HCells.

11. Products

11.1 HSD, MCD and CGTP Deliverables

- H11742_CS, Chart Units, Soundings compiled to 1:79,291
- H11742_SS, Chart Units, Soundings compiled to 1:10,000
- H11742_Features, survey scale features compiled to 1:10,000
- H11742_DR including end notes compiled during office processing and certification, the HCell Report, and supplemental items
- H11742 Survey Outline to populate to SURDEX

11.2 File Naming Conventions

- Chart units base cell file, chart scale soundings H11742_CS.000
- Chart units base cell file, survey scale soundings H11742_SS.000
- Chart units base file, survey scale features H11742_Features.000
- Descriptive Report H11742_DR.pdf
- Survey outline H11742_Outline.gml&*.xsd

11.3 Software

CARIS HIPS Ver. 6.1	Inspection of Combined BASE Surfaces
CARIS BASE Editor Ver. 2.2	Creation of soundings and bathy-derived features, creation of the depth area, meta area objects, and Blue Notes; Survey evaluation and verification; Initial HCell assembly.
CARIS S-57 Composer Ver. 2.0	Final compilation of the HCell, correct geometry and build topology, apply final attributes, export the HCell, and QA.
CARIS GIS 4.4a	Setting the sounding rounding variable for conversion of the metric HCell to NOAA charting units with NOAA rounding.
CARIS HOM Ver. 3.3	Perform conversion of the metric HCell to NOAA charting units with NOAA rounding.

HydroService AS, dKart Inspector Ver. 5.1	Validation of the base cell file.
Newport Systems, Inc., Fugawi View ENC Ver.1.0.0.3	Independent inspection of final HCells using a COTS viewer.

12. Contacts

Inquiries regarding this HCell content or construction should be directed to:

Tyanne Faulkes, ERT Associate, PHB, Seattle, WA; 206-526-6883;
Tyanne.Faulkes@noaa.gov

APPROVAL SHEET
H11742

Initial Approvals:

The survey evaluation and verification has been conducted according to branch processing procedures and the H-Cell compiled per the latest OCS H-Cell Specifications.

The survey and associated records have been inspected with regard to survey coverage, delineation of the depth curves, development of critical depths, S-57 classification and attribution of soundings and features, cartographic characterization, and verification or disproval of charted data within the survey limits. The survey records and digital data comply with OCS requirements except where noted in the Descriptive Report and are adequate to supersede prior surveys and nautical charts in the common area.

I have reviewed the H-Cell, accompanying data, and reports. This survey and accompanying digital data meet or exceed OCS requirements and standards for products in support of nautical charting except where noted in the Descriptive Report.