	U.S. DEPARTMENT OF COMMERCE
	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SERVICE
[DESCRIPTIVE REPORT
Type of S	urvey HYDROGRAPHIC
Field No.	RA-10-09-05
Registry I	No. H11122
	LOCALITY
State	Alaska
General I	Locality Approaches to Sitka
Sublocali	<i>ty</i> Eastern Channel to Silver Bay
	2005
	CHIEF OF PARTY
	CDR John W. Humphrey, NOAA
	LIBRARY & ARCHIVES

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NOAA FORM 77-28 (11-72)	U.S. E NATIONAL OCEANIC AND ATM	EPARTMENT OF COMM	IERCE ATION	REGISTRY No
	HYDROGRAPHIC TITLE SHEET			H11122
INSTRUCTIONS as completely as poss	 The Hydrographic Sheet should be accompani tible, when the sheet is forwarded to the Office. 	ed by this form, fill	ed in	FIELD No RA-10-09-05
State <u>Alaska</u>				
General Locality	Approaches to Sitka			
Sub-Locality <u>E</u>	astern Channel to Silver Bay			
Scale <u>1:10,000</u>		Dates of Survey	5/4/2	005 - 6/16/2005
Instructions dated	3/18/2005	Project No.	OPR	-0112-RA-05
Vessel <u>RA5 (100</u>	06), RA6 (1015), RA4 (1016), RA3 (1021)), RA2 (1103), R	RA7 (8	17)
Chiefs of party <u>C</u>	commander John W. Humphrey, NOAA			
Surveyed by RAIN	NIER Personnel			
Soundings by echo s	ounder, hand lead, pole <u>Reson 8101, Seabo</u>	eam/Elac 1180, I	Reson	8125, Knudsen 320M, Ross
Graphic record scale	ed by RAINIER Personnel			
Graphic record cheo	cked by RAINIER Personnel	Automated Plot	HP1	950C & HP755CM
Verification by K	Curt Brown, Peter Holmberg			
Soundings in Fa	athoms and Feet at MLLW			
RFMARKS: All ti	mes are UTC_UTM Projection (zone #	8)		
Revisions and an	notations annearing as endnotes were g	onerated during	1 office	nrocessing. As a result nage
numbering may	he interrunted or non-sequential	cherateu uurmg	s onnex	processing. As a result, page
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An separates are	incu with the nyurographic data.			
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	8 FORM (#0.0 597			

Descriptive Report to Accompany Hydrographic Survey H11122

Project OPR-O112-RA-05 Approaches to Sitka, AK Eastern Channel to Silver Bay Scale 1:10,000 May – June 2005 **NOAA Ship RAINIER** Chief of Party: Commander John W. Humphrey, NOAA

A. AREA SURVEYED

This hydrographic survey was completed as specified by Hydrographic Survey Letter Instructions OPR-O112-RA-05 dated April 2005 and all other applicable direction^I, with the exception of deviations noted in this report. The survey area is Eastern Channel to Silver Bay, Alaska, and corresponds to sheet "R" in the sheet layout provided with the Letter Instructions.

One hundred percent shallow-water multibeam (SWMB) coverage was obtained in the survey area in waters 8 meters and deeper. In 4-8 meters of water 100% SWMB coverage was obtained to the extent possible and to acquire least depths over significant features or shoals. Vertical-beam echo sounder (VBES) data were acquired in depths from 4 to 20 meters to define the four-meter curve and to aid in the planning of SWMB data acquisition.

Limited shoreline verification was performed as part of survey H11122. Shoreline verification limits were extended to include the area covered by junction survey H11124 (with the exception of Deep Inlet), as this survey was completed by a field unit without shoreline verification capability.

Data acquisition was conducted from May 4 to June 16, 2005 (DN 124 to 167).

¹ Standing Instructions for Hydrographic Surveys (March 2004), NOS Hydrographic Surveys Specifications and Deliverables (March 2004), OCS Field Procedures Manual for Hydrographic Surveying (March 2005), and all Hydrographic Surveys Technical Directives issued through June 2005.



Figure 1. H11122 Survey Limits and Junctions overlaid on Chart 17326

B. DATA ACQUISTION AND PROCESSING

A complete description of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods can be found in the *OPR-O112-RA-05 Data Acquisition and Processing Report* (DAPR),¹ submitted under separate cover. Items specific to this survey, and any deviations from the aforementioned report are discussed in the following sections.

Final Approved Water Levels have been applied to this survey. See Section C. for additional information.

B.1 Equipment and Vessels

Data were acquired by the RAINIER survey launches RA2 (1103), RA3 (1021), RA4 (1016), RA5 (1006), RA6 (1015) and RA 7 (817 Ross 950). Vessels 1021, 1016, 1006, and 1015 were used to acquire shallow-water multibeam (SWMB) soundings and sound velocity profiles. Vessels 1103 and 817 were used to acquire vertical-beam echo soundings (VBES) and detached positions (DPs) for shoreline verification and AWOIS investigations.²

No unusual vessel configurations were used for data acquisition.

B.2 Quality Control

B.2.a Crosslines

Crosslines of main scheme shallow-water multi-beam (SWMB) bathymetry were acquired with both multi-beam and vertical-beam echosounders, and totaled 8.64 nautical miles, comprising 4.5% of SWMB main scheme hydrography.³ Manual comparison of the main

scheme bathymetry and the crossline nadir beams in CARIS subset mode revealed high agreement with no discernable differences noted.⁴

A statistical Quality Control Report was generated for SWMB data acquired on this project to validate launch offsets and sonar biases. A copy of this report is included in the *OPR-O112-RA-05 DAPR*.

B.2.b Junctions

The following contemporary surveys junction with H11112 (see Figure 1):

Registry #	Scale	Date	Junction side
H11121	1:10,000	2004	North
H11123	1:10,000	2004	East
H11124	1:10,000	2004	South
H11354	1:10,000	2004	West

CARIS field sheets and weighted grids were provided by Pacific Hydrographic Branch (N/CS34) for each junction survey. The gridded datasets for each junction survey were compared the H11122 bathymetry in HIPS subset mode, with the following results:

- A cursory comparison with survey H11121 indicates good agreement. Differences are typically less than 1 meter in the area of overlap, with some isolated discrepancies of up to 3 meters.⁵
- A cursory comparison with survey H11123 indicates good agreement. Differences are typically less than 2 meters in the area of overlap, which averages over 100 meters deep.⁶
- A cursory comparison with survey H11124 indicates excellent agreement in the flat, featureless area of overlap in Aleutkina Bay. However, discrepancies of up to 2.5 meters in 10 to 20 meters of water were noted in the western area of overlap. Where differences were found, soundings from H11122 were almost universally shoaler than those of H11124.⁷
- A cursory comparison with survey H11354 indicates good agreement, with differences generally less 1 meter.⁸

The hydrographer notes that these junction survey products were all created with different techniques than the BASE surface-based process currently in place aboard RAINIER, and suggests that this may be responsible for some of the discrepancies. The hydrographer recommends that H11122 supersede bathymetry from all prior surveys in the common areas.⁹

B.2.c Data Quality Factors

Data for survey H11122 exhibited no major deficiencies. No unusual conditions were encountered during the survey that affected the expected accuracy and quality of survey data.

Sound Speed Artifacts

There are two areas of this survey that exhibit data indicative of sound speed correction errors. The first area is in Leesoffskia Bay in data acquired by RA 4 (1016) on June 9, 2005 (DN160). Errors in this area are within error tolerances for an IHO Order 1 survey (generally less than 0.2-m differences in 10m water depth).



The second area exhibiting sound velocity errors is the-inner most portion of the bay east of Harris Island in data acquired by RA 4 (1016) on June 2, 2005 (DN153), specifically on lines 315_1828, 317_2132, and 318_2136. Errors in this area are also within error tolerances for an IHO Order 1 survey (generally less than 0.2-m differences in 10m water depth).



B.3 Data Reduction

Data reduction procedures for survey H11122 conform to those detailed in the *OPR-O112-RA-05 DAPR*, with the following exceptions.

Data acquired by RA4 (1016) on June 16, 2005 (DN167) was mistakenly logged without "precise timing" data transmitted to the sonar for UTC time synchronization. A departure from standard procedure was required to recover and process these data. These data were converted to CARIS format using the "navigation from sensor" and "attitude from attitude packet" options, rather than the "Raw Navigation Datagram". This change or procedure introduced negligible error into the final BASE surfaces.

Final review and BASE Surface re-computation was completed in CARIS HIPS 6.0, SP2, HF13. BASE Surfaces were computed with uncertainty weighting, using the same parameters as described in the DAPR.

B.4 Data Representation

Final BASE surface resolutions and depth ranges were set in accordance with the Field Procedures Manual. The submission Field Sheet and BASE Surface structure are shown in Figures 4 and 5.



Figure 4. Field sheets and BASE surfaces submitted with H11122



Figure 5. H11122 field sheet layout.

C. VERTICAL AND HORIZONTAL CONTROL

Project OPR-O112-RA-05 did not require static GPS observations or other horizontal control work, and all tide corrections were generated from CO-OPS maintained tide stations. Thus, no Horizontal and Vertical Control Report will be submitted. A summary of horizontal and vertical control for this survey follows

C.1 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 from U.S. Coast Guard beacon at Biorka Island (305 kHz) were utilized during this survey. This beacon is approximately 15nm from the H11122 survey area.

C.2 Vertical Control

The vertical datum for this project is Mean Lower-Low Water (MLLW). The operating National Water Level Observation Network (NWLON) primary tide station at Sitka, AK (945-1600) served as control for datum determination and as the primary source for water level reducers for survey H11122.

No subordinate gauges were required.

All data were reduced to MLLW using Final Approved Water Levels from station Sitka,

AK using the tide file 9451600.tid and time and height correctors using the zone corrector file O122RA2005CORP.zdf.

Final Approved Water Levels were requested from CO-OPS on June 19, 2005, and received on July 14, 2005. Documentation of the Approved Water Levels Request is included in Appendix IV.¹⁰

D. RESULTS AND RECOMMENDATIONS

D.1.a Survey Agreement with Chart

Survey H11122 was compared with charts 17327 (21^{st} Ed.; Aug. 2003, Updated through NTM dated 11/05/2005, 1:10,000) and 17326 (13^{h} Ed.; Aug. 2000, Updated through NTM dated 11/05/2005, 1:40,000).

In many instances, this survey found shoaler soundings between charted soundings even though agreement at the position of the charted depths was good.¹¹ This can be attributed to increased bottom coverage using SWMB methods.

Chart 17327

Survey H11122 covers an area of variable bathymetry, and while survey soundings generally agreed with charted depths to within one to two fathoms, some instances of differences up to 17 fathoms were noted.¹² Significant discrepancies are shown below (Figure 6). Most of major differences were found in waters deeper than 20 fathoms and are thus not navigationally significant. Navigationally significant discrepancies were selected as Dangers to Navigation (see D.1.b below).



Figure 6. Major Depth Discrepancies on Chart 17327. Red annotations indicate survey soundings deeper than charted depts; blue annotations are shoaler than charted.

Chart 17326

Depths from survey H11122 generally agreed within one to two fathoms of the depths on chart 17326 with one instance noted of survey soundings 7 fathoms shoaler than the charted depth (see figure 7). This sounding does not pose a hazard to surface navigation, and thus was not selected as a Danger to Navigation.¹³



Figure 7. Major Depth Discrepancy on Chart 17326.

D.1.b Dangers to Navigation

Three (3) Dangers to Navigation (DToNs) were found within the limits of H11122, and reported to the Marine Chart Division via email on 18 July 2006. The original DTON submission package is included in Appendix IV. Descriptions of each DTON are included in the Survey Feature Report in Appendix I.¹⁴

D.1.c Other Features

No AWOIS item were located within the limits of H11122.¹⁵

D.2 Additional Results

D.2.a Prior Survey Comparison

No comparison was done with prior surveys for this area.

D.3.b Shoreline Verification

Shoreline Source

Vector photogrammetric projects GC10516 and GC10517 were supplied by N/NGS3 in the form of cartographic feature files (CFF). RAINIER conducted limited shoreline verification of the CFF. In the absence of CFF MHW or CFF MLLW RAINIER personnel digitized the largest scale charts in MapInfo and displayed in HYPACK for field verification. In addition, features shown on the current editions of charts 17327 and 17326, that were not depicted on the shoreline source document were digitized in MapInfo by RAINIER personnel and displayed in Hypack for field verification.

Shoreline Verification

Limited shoreline verification was conducted near predicted low water in accordance with the Standing Project Instructions and FPM sections 6.1 and 6.2. Detached positions (DPs) and line features acquired during shoreline verification were recorded in HYPACK or Trimble ProXRS DGPS receivers with TSCe data collectors, documented on DP forms, and processed in Pydro. These indicate revisions to features and features not found on the verified shoreline. In addition, annotations describing shoreline were recorded on hard copy plots of digital shoreline. DP forms are included in Section I of the *Separates to be Included with Survey Data*.¹⁶

A detailed Detached Position and Bottom Sample plot in MapInfo format is provided showing all detached positions and bottom samples with notes relating to each feature. The updated shoreline and features are also depicted on the final sounding plot. Verified CFF shoreline that did not require revision is in MapInfo table "H11122_CFF_Shoreline" and shown in black. Charted shoreline, when used for reference purposes or when source data were not available, is depicted in the MapInfo table "H11122_Charted_Shoreline" and displayed in brown. New MHW features and changes to the MHW shoreline, CFF or charted, are displayed in red on the "H11122_Shoreline_Updates" MapInfo table. New features and changes to low water shoreline, CFF or charted, are displayed in pink in the "H11112_Shoreline_Updates" MapInfo table. CFF features are depicted in black and are found in the MapInfo table "H1112_CFF_Rocks." Charted features, when used for reference purposes or when source data were not available, are depicted in brown and are found in the MapInfo table "H11122_CFF_Rocks."

Source Shoreline Changes and New Features

Items for survey H11122 that needed further discussion and are associated with a detached position, have been flagged "Report" in Pydro in H11122.pss. Investigation/survey methods and recommendations are listed in the Remarks and Recommendation tabs. A report with these items was generated (H11122_Feature_Report.pdf)¹⁸ included in Appendix I. Items not associated with a detached position are discussed below.

Charted Features

Items within No Thorofare Bay, approximate position 57° 01' 15" N 135° 14' 30" W, were not addressed and shoreline was not run in this area due to inaccessibility to RAINIER survey launches. The entrance to this bay was only navigable during extreme high tide, due to a rock in the center of the channel and the extremely high flow rate of current through the channel at all times other than slack water.

Recommendations

The Hydrographer recommends that the shoreline as depicted on the Detached Position and Bottom Sample and final sounding Mapinfo digital file supersede and complement shoreline information compiled on the CFF and charts as noted.¹⁹ In addition, field notes made by the Hydrographer, including verification of source features or charted features if no source shoreline was available are submitted in the digital MapInfo file "H11122_Shoreline_Notes."²⁰

D.2.c Aids to Navigation

Four (4) Aids to Navigation (ATONs) are located within the limits of H11122. Three (3) charted buoys and one (1) light were verified by detached position and found to serve their intended purpose. These positions are depicted in the Detached Position and Bottom Sample digital file.²¹

D.2.d Overhead Features

No overhead features were contained within the survey limits of H11122.²²

D.2.e Submarine Cables and Pipelines

There are charted submarine cables depicted on the chart surrounding Bamdoroshni Island in the Northwest corner of the survey H11122. Two charted submarine cables are also depicted running between Bamdoroshni Island and Galankin Island. No indication of these submarine cables is evident in the data.²³

D.2.f Ferry Routes

No ferry routes were contained within the survey limits of H11122.

D.2.g Bottom Samples

Twenty-three (23) bottom samples were collected and are depicted on the Detached Position and Bottom Sample Plot. Due to time constraints and relative high density of charted bottom types, not all historic bottom type locations were recovered, but instead one representative bottom sample was taken in some areas. Bottom samples correlated well with charted bottom types in common areas.²⁴

D.2.h Other Findings

The hydrographer notes that H11122 covers an area of extremely complex bathymetry and nearshore features. Although there are currently significant discrepancies between the largest scale chart (17327) and the survey, the scale of this chart (1:10,000) is sufficient to allow for unusually accurate and detailed representation of the area. The hydrographer recommends that special care be taken in the review and selection of features and soundings for this chart.²⁵

E. SUBMITTED PROJECT REPORTS

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

<u>Title</u>	Date Sent	<u>Office</u>
Data Acquisition and Processing Report for OPR-O112-RA-05	21 July 2006	N/CS34
Coast Pilot Report for OPR-O112-RA-05	10 May 2006	N/CS26

⁹ Concur.

¹¹ Concur.

¹² Concur.

¹³ Concur.

¹⁷ Plot is filed with hydrographic records.

¹⁸ Features report is appended to this report with HCell compilers notes in red under "Office Notes".

¹⁹ Concur. All features from H11122 were imported into US511122_CS.000

²⁰ Filed with hydrographic records.

²¹ ATONs were excluded from US511122_CS.000. Chart per latest ATONIS information.

²² Concur.

²³ Retain submerged cables as charted.

²⁴ In addition to the bottom samples from H11122 several were imported from ENC US5AK3VM and several were hand digitized from raster 17327 (no ENC equivalent). Some surveyed and charted bottom samples were overruled by areas depicted as rocky from the surface. Of these conflicting bottom samples, those from H11122 were excluded and charted ones are blue noted as "remove".

²⁵ Concur, compilation of US511122_CS.000 was performed appropriately to emulate the large scale and high level of detail on chart 17327.

¹ Filed with project records.

² H11122 does not contain any AWOIS items.

³ NOAA spec of 5% not met. However cross lines were adequate for comparisons.

⁴ Concur.

⁵ Concur.

⁶ Concur.

⁷ Shoaler data from H11122 has been selected for charting to supercede the NW portion of H11124.

⁸ Concur.

¹⁰ Tide note is appended to this report.

¹⁴ DTON report is appended to this report.

¹⁵ Concur.

¹⁶ DP forms filed with hydrographic records.



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration Office of Marine and Aviation Operations NOAA Ship RAINIER (S221) 1801 Fairview Ave E, Seattle, WA 98102 July 21, 2006

MEMORANDUM FOR:

CDR Donald W. Haines, NOAA Chief, Pacific Hydrographic Branch

FROM:

CDR Guy T. Noll, NOAA

SUBJECT:

Approval of Hydrographic Survey H11122

Field operations for hydrographic survey H11122 conducted under the direct supervision of the previous Commanding Officer, CDR John W. Humphrey, with frequent personal checks of progress and adequacy. I have reviewed the attached survey data and reports. The survey data meets or exceeds requirements as set forth in the NOS Hydrographic Surveys and Specifications Deliverables Manual, Field Procedures Manual, Standing and Letter Instructions, and HSD Technical Directives. These data are adequate to supersede charted data in their common areas. This survey is complete and no additional work is required. All data and reports are respectfully submitted to N/CS34, Pacific Hydrographic Branch.

In addition, the following individuals were responsible for oversight of acquisition and processing of this survey:

Survey Sheet Manager:

and

Brent J. Pounds Lieutenant (junior grade), NOAA

Chief Survey Technician:

James B. Jacobson

Chief Survey Technician, NOAA Ship RAINIER

Field Operations Officer:

Ulan 11-2

Benjamin K. Evans Lieutenant, NOAA



H11122 DTON Report

Registry Number:	RA-10-09-05
State:	Alaska
Locality:	Stika Sound
Sub-locality:	East
Project Number:	OPR-O112-RA-05
Survey Dates:	05/11/2005 - 06/06/2005

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
17327	23rd	07/01/2008	1:10,000 (17327_1)	USCG LNM: 01/06/2009 (02/10/2009) CHS NTM: None (01/30/2009) NGA NTM: None (02/14/2009)
17326	16th	11/01/2007	1:40,000 (17326_1)	USCG LNM: 06/12/2007 (02/10/2009) CHS NTM: None (01/30/2009) NGA NTM: 07/11/1998 (02/14/2009)
17320	17th	11/01/2005	1:217,828 (17320_1)	[L]NTM: ?
16016	20th	11/01/2003	1:969,756 (16016_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: ?
530	31st	06/01/2005	1:4,860,700 (530_1)	[L]NTM: ?
50	6th	06/01/2003	1:10,000,000 (50_1)	[L]NTM: ?

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

Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Rock	2.62 m	57° 00' 21.6" N	135° 17' 31.9" W	
1.2	Shoal	15.91 m	56° 59' 52.7" N	135° 18' 29.3" W	
1.3	Shoal	14.47 m	57° 00' 13.3" N	135° 19' 31.9" W	

1 - Danger To Navigation

1.1) Profile/Beam - 462/225 from h11122 / 1016_reson8125_hvf / 2005-153 / 261_2342

DANGER TO NAVIGATION

Survey Summary

Survey Position:	57° 00' 21.6" N, 135° 17' 31.9" W
Least Depth:	2.62 m (= 8.60 ft = 1.433 fm = 1 fm 2.60 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-153.23:43:13.453 (06/02/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-153 / 261_2342
Profile/Beam:	462/225
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

NEW ROCK Designated sounding on least depth on shoal. 100% SWMB coverage. 1.43 fathom least depth in charted 3.5 fathoms.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-153/261_2342	462/225	0.00	000.0	Primary

Hydrographer Recommendations

Chart dangerous rock with survey sounding.

Cartographically-Rounded Depth (Affected Charts):

1 ¼fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1)

1fm 2ft (531_1)

2.6m (500_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC) Attributes: QUASOU - 1:depth known STATUS - 1:permanent TECSOU - 3:found by multi-beam VALSOU - 2.621 m VERDAT - 12:Mean lower low water WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.2) Profile/Beam - 15/240 from h11122 / 1016_reson8125_hvf / 2005-157 / 012_1737

DANGER TO NAVIGATION

Survey Summary

Survey Position:	56° 59' 52.7" N, 135° 18' 29.3" W
Least Depth:	15.91 m (= 52.20 ft = 8.700 fm = 8 fm 4.20 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-157.17:37:47.041 (06/06/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-157 / 012_1737
Profile/Beam:	15/240
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

NEW SHOAL Designated sounding on least depth on rocky shoal. 100% SWMB Coverage.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-157/012_1737	15/240	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding only.

Cartographically-Rounded Depth (Affected Charts):

8 ¾fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1)

8fm 4ft (531_1)

15.9m (500_1, 50_1)

S-57 Data

Geo object 1:	Sounding (SOUNDG)
Attributes:	QUASOU - 1:depth known
	TECSOU - 3: found by multi-beam

Office Notes

Concur.

1.3) Profile/Beam - 159/51 from h11122 / 1021_reson8101_hvf / 2005-131 / 375_2226

DANGER TO NAVIGATION

Survey Summary

Survey Position:	57° 00' 13.3" N, 135° 19' 31.9" W
Least Depth:	14.47 m (= 47.46 ft = 7.910 fm = 7 fm 5.46 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.22:26:29.797 (05/11/2005)
Survey Line:	h11122 / 1021_reson8101_hvf / 2005-131 / 375_2226
Profile/Beam:	159/51
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

NEW SHOAL Designated sounding on least depth on shoal. 100% SWMB coverage.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1021_reson8101_hvf/2005-131/375_2226	159/51	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding only.

Cartographically-Rounded Depth (Affected Charts):

7 ¾fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1)

7fm 5ft (531_1)

14.5m (500_1, 50_1)

S-57 Data

Geo object 1:	Sounding (SOUNDG)
Attributes:	QUASOU - 1:depth known
	TECSOU - 3: found by multi-beam

Office Notes

Concur.

H11122 Features Report

Registry Number:	RA-10-09-05
State:	Alaska
Locality:	Stika Sound
Sub-locality:	East
Project Number:	OPR-O112-RA-05
Survey Dates:	05/07/2005 - 06/16/2005

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
17327	23rd	07/01/2008	1:10,000 (17327_1)	USCG LNM: 01/06/2009 (02/10/2009) CHS NTM: None (01/30/2009) NGA NTM: None (02/14/2009)
17326	16th	11/01/2007	1:40,000 (17326_1)	USCG LNM: 06/12/2007 (02/10/2009) CHS NTM: None (01/30/2009) NGA NTM: 07/11/1998 (02/14/2009)
17320	17th	11/01/2005	1:217,828 (17320_1)	[L]NTM: ?
16016	20th	11/01/2003	1:969,756 (16016_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: ?
530	31st	06/01/2005	1:4,860,700 (530_1)	[L]NTM: ?
50	6th	06/01/2003	1:10,000,000 (50_1)	[L]NTM: ?

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

Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Obstruction	2.05 m	57° 00' 06.9" N	135° 13' 25.1" W	
1.2	Rock	2.62 m	57° 00' 21.6" N	135° 17' 31.9" W	
1.3	Pile	4.09 m	57° 00' 18.3" N	135° 17' 13.6" W	
1.4	Obstruction	7.18 m	57° 02' 13.9" N	135° 16' 36.2" W	
1.5	Pile	7.21 m	57° 00' 18.2" N	135° 17' 15.9" W	
1.6	Shoal	11.29 m	57° 00' 13.5" N	135° 13' 32.8" W	
1.7	Shoal	11.71 m	57° 00' 20.3" N	135° 13' 32.6" W	

1.8	Shoal	14.47 m	57° 00' 13.3" N	135° 19' 31.9" W	
1.9	Shoal	15.91 m	56° 59' 52.7" N	135° 18' 29.3" W	
1.10	Shoal	17.93 m	57° 00' 11.7" N	135° 13' 42.3" W	
1.11	Wreck	19.38 m	57° 00' 30.9" N	135° 14' 11.4" W	
1.12	Shoal	20.12 m	57° 00' 18.5" N	135° 13' 49.8" W	
1.13	Shoal	24.43 m	57° 00' 21.0" N	135° 14' 12.1" W	
2.1	Wreck	-5.52 m	57° 00' 06.4" N	135° 13' 23.4" W	
2.2	Wreck	-5.26 m	57° 00' 10.8" N	135° 13' 03.2" W	
2.3	Wreck	-4.55 m	57° 00' 58.9" N	135° 14' 39.3" W	
2.4	Pile	-4.50 m	57° 00' 05.5" N	135° 17' 56.2" W	
2.5	Pile	-4.38 m	57° 00' 35.4" N	135° 18' 21.8" W	
2.6	Wreck	-4.09 m	57° 00' 41.0" N	135° 17' 23.2" W	
2.7	Shoal	-2.17 m	57° 00' 14.9" N	135° 15' 08.1" W	
2.8	Shoal	-2.11 m	57° 00' 08.3" N	135° 16' 34.9" W	
2.9	Obstruction	-1.43 m	57° 00' 37.3" N	135° 17' 46.1" W	
2.10	Rock	-0.85 m	57° 00' 19.7" N	135° 15' 25.9" W	
2.11	Rock	-0.63 m	57° 00' 17.2" N	135° 15' 21.4" W	
2.12	Rock	-0.57 m	57° 00' 17.5" N	135° 15' 56.3" W	
2.13	Rock	-0.55 m	57° 00' 11.3" N	135° 16' 12.8" W	
2.14	Pile	-0.22 m	57° 02' 13.5" N	135° 15' 53.9" W	
2.15	Pile	-0.14 m	57° 02' 16.1" N	135° 15' 59.1" W	
2.16	Pile	-0.12 m	57° 02' 16.5" N	135° 16' 01.3" W	
2.17	Shoal	0.02 m	57° 00' 24.0" N	135° 18' 32.7" W	
2.18	Rock	0.08 m	57° 00' 45.3" N	135° 18' 06.1" W	
2.19	Rock	0.13 m	56° 59' 47.4" N	135° 20' 23.3" W	
2.20	Shoal	0.22 m	57° 00' 17.7" N	135° 18' 13.0" W	
2.21	Rock	0.22 m	57° 00' 31.6" N	135° 18' 59.2" W	
2.22	Rock	0.28 m	57° 00' 11.2" N	135° 18' 10.9" W	
2.23	Rock	0.29 m	56° 59' 08.9" N	135° 20' 47.4" W	
2.24	Rock	0.75 m	57° 01' 25.8" N	135° 20' 49.9" W	
2.25	Rock	0.90 m	56° 58' 45.0" N	135° 19' 20.4" W	
2.26	Rock	1.00 m	57° 01' 42.5" N	135° 20' 57.0" W	
2.27	Rock	1.32 m	56° 58' 46.4" N	135° 18' 45.6" W	
2.28	Rock	1.36 m	57° 00' 16.3" N	135° 15' 19.1" W	
2.29	Rock	1.55 m	57° 00' 31.1" N	135° 17' 26.2" W	
2.30	Rock	1.62 m	57° 00' 33.3" N	135° 19' 00.6" W	

2.31	Rock	1.67 m	56° 58' 59.3" N	135° 18' 31.2" W	
2.32	Wreck	2.13 m	57° 00' 39.6" N	135° 14' 20.6" W	
2.33	Rock	2.16 m	56° 58' 56.7" N	135° 18' 42.7" W	
2.34	Rock	2.17 m	56° 59' 01.8" N	135° 21' 03.8" W	
2.35	Rock	2.35 m	56° 59' 52.5" N	135° 20' 47.1" W	
2.36	Rock	3.34 m	57° 01' 37.1" N	135° 20' 25.5" W	
2.37	Rock	6.76 m	57° 00' 21.1" N	135° 18' 46.1" W	
2.38	Rock	8.22 m	57° 00' 44.2" N	135° 19' 19.9" W	
2.39	Rock	20.39 m	56° 59' 38.3" N	135° 18' 42.8" W	
2.40	Rock	21.09 m	57° 00' 00.6" N	135° 16' 28.7" W	
2.41	Wreck	48.53 m	56° 59' 48.9" N	135° 20' 16.0" W	
2.42	Shoal	998.64 m	57° 00' 35.0" N	135° 18' 23.8" W	
2.43	Shoal	9999.91 m	56° 59' 47.2" N	135° 20' 26.3" W	
3.1	GP	[None]	57° 00' 40.1" N	135° 14' 19.2" W	
3.2	GP	[None]	57° 00' 38.2" N	135° 14' 26.0" W	
3.3	GP	[None]	57° 00' 41.8" N	135° 14' 25.9" W	
3.4	GP	[None]	57° 00' 16.1" N	135° 13' 21.0" W	
3.5	GP	[None]	57° 00' 19.7" N	135° 13' 25.2" W	
3.6	GP	[None]	57° 00' 40.1" N	135° 14' 24.0" W	
3.7	GP	[None]	57° 00' 21.4" N	135° 13' 30.8" W	
3.8	GP	[None]	57° 00' 38.5" N	135° 14' 19.8" W	
3.9	GP	[None]	57° 00' 23.8" N	135° 13' 45.5" W	
3.10	GP	[None]	57° 00' 27.6" N	135° 14' 02.5" W	
3.11	Mooring buoy	[None]	57° 00' 07.2" N	135° 13' 29.4" W	
3.12	Stationary structure, floating or fixed	[None]	57° 02' 00.5" N	135° 16' 14.9" W	
3.13	Stationary structure, floating or fixed	[None]	57° 02' 07.9" N	135° 16' 32.0" W	

1 - Features from Bathymetry

1.1) Profile/Beam - 21/109 from h11122 / 1016_reson8125_hvf / 2005-160 / 140_2301

Survey Summary

Survey Position:	57° 00' 06.9" N, 135° 13' 25.1" W
Least Depth:	2.05 m (= 6.73 ft = 1.122 fm = 1 fm 0.73 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-160.23:01:57.862 (06/09/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-160 / 140_2301
Profile/Beam:	21/109
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

NEW OBSTRUCTION SWMB least depth on submerged dredge bucket. Bucket located visually during shoreline investigation. Developed with full SWMB coverage.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-160/140_2301	21/109	0.00	000.0	Primary
GenPoint_DN127.shp	11	1.92	214.2	Secondary

Hydrographer Recommendations

Chart obstruction with survey depth.

Cartographically-Rounded Depth (Affected Charts):

1fm (17326_1, 17320_1, 16016_1, 530_1) 1fm 0ft (531_1)

2.1m (500_1, 50_1)

Office Notes

Concur.

1.2) Profile/Beam - 462/225 from h11122 / 1016_reson8125_hvf / 2005-153 / 261_2342

DANGER TO NAVIGATION

Survey Summary

Survey Position:	57° 00' 21.6" N, 135° 17' 31.9" W
Least Depth:	2.62 m (= 8.60 ft = 1.433 fm = 1 fm 2.60 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-153.23:43:13.453 (06/02/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-153 / 261_2342
Profile/Beam:	462/225
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

NEW ROCK Designated sounding on least depth on shoal. 100% SWMB coverage. 1.43 fathom least depth in charted 3.5 fathoms.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-153/261_2342	462/225	0.00	000.0	Primary

Hydrographer Recommendations

Chart dangerous rock with survey sounding.

Cartographically-Rounded Depth (Affected Charts):

1 ¼fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 1fm 2ft (531_1) 2.6m (500_1, 50_1)

Office Notes

Concur.

1.3) Profile/Beam - 16/29 from h11122 / 1016_reson8125_hvf / 2005-167 / 008_1849

Survey Summary

Survey Position:	57° 00' 18.3" N, 135° 17' 13.6" W
Least Depth:	4.09 m (= 13.41 ft = 2.234 fm = 2 fm 1.41 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-167.18:50:11.247 (06/16/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-167 / 008_1849
Profile/Beam:	16/29
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Designated sounding on propbable submerged piling or vertical log. 100% SWMB coverage.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-167/008_1849	16/29	0.00	000.0	Primary

Hydrographer Recommendations

Chart submerged piling with survey sounding.

Cartographically-Rounded Depth (Affected Charts):

2 ¼fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 2fm 1ft (531_1) 4.1m (500_1, 50_1)

Office Notes

Concur with clarification, chart snag with least depth.

1.4) Profile/Beam - 1615/8 from h11122 / 1016_reson8125_hvf / 2005-153 / 317_2132

Survey Summary

Survey Position:	57° 02' 13.9" N, 135° 16' 36.2" W
Least Depth:	7.18 m (= 23.57 ft = 3.929 fm = 3 fm 5.57 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-153.21:35:13.235 (06/02/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-153 / 317_2132
Profile/Beam:	1615/8
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Obstruction. Designated sounding on obstruction standing \sim 0.5m above seabed. 100% SWMB coverage. Insignificant to navigation.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-153/317_2132	1615/8	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding only.

Office Notes

Do not concur, Do not chart the obstruction that is insignificant to navigation. Shoaler soundings in vicinity have been chosen for charting.

1.5) Profile/Beam - 326/240 from h11122 / 1016_reson8125_hvf / 2005-153 / 264_2352

Survey Summary

Survey Position:	57° 00' 18.2" N, 135° 17' 15.9" W
Least Depth:	7.21 m (= 23.65 ft = 3.941 fm = 3 fm 5.65 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-153.23:53:15.509 (06/02/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-153 / 264_2352
Profile/Beam:	326/240
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Designated sounding on propbable submerged piling or vertical log. 100% SWMB coverage.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-153/264_2352	326/240	0.00	000.0	Primary

Hydrographer Recommendations

Chart submerged piling with survey sounding.

Cartographically-Rounded Depth (Affected Charts):

4fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 3fm 5ft (531_1) 7.2m (500_1, 50_1)

Office Notes

Concur with clarification, chart snag with least depth.

1.6) Profile/Beam - 1243/101 from h11122 / 1016_reson8125_hvf / 2005-146 / 157_2010

Survey Summary

Survey Position:	57° 00' 13.5" N, 135° 13' 32.8" W
Least Depth:	11.29 m (= 37.03 ft = 6.172 fm = 6 fm 1.03 ft)
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-146.20:12:10.953 (05/26/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-146 / 157_2010
Profile/Beam:	1243/101
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Probable insignificant submerged log standing vertical.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-146/157_2010	1243/101	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding only.

Office Notes

Do not concur. Chart snag with least depth.

1.7) Profile/Beam - 1377/27 from h11122 / 1016_reson8125_hvf / 2005-146 / 494_2238

Survey Summary

Survey Position:	57° 00' 20.3" N, 135° 13' 32.6" W
Least Depth:	11.71 m (= 38.43 ft = 6.404 fm = 6 fm 2.43 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-146.22:40:19.516 (05/26/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-146 / 494_2238
Profile/Beam:	1377/27
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Probable insignificant submerged piling.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-146/494_2238	1377/27	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding only.

Office Notes

Do not concur. Surrounding shoaler depths selected for charting.

1.8) Profile/Beam - 159/51 from h11122 / 1021_reson8101_hvf / 2005-131 / 375_2226

DANGER TO NAVIGATION

Survey Summary

Survey Position:	57° 00' 13.3" N, 135° 19' 31.9" W
Least Depth:	14.47 m (= 47.46 ft = 7.910 fm = 7 fm 5.46 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.22:26:29.797 (05/11/2005)
Survey Line:	h11122 / 1021_reson8101_hvf / 2005-131 / 375_2226
Profile/Beam:	159/51
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

NEW SHOAL Designated sounding on least depth on shoal. 100% SWMB coverage.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1021_reson8101_hvf/2005-131/375_2226	159/51	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding only.

Cartographically-Rounded Depth (Affected Charts):

7 ¾fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 7fm 5ft (531_1) 14.5m (500_1, 50_1)

Office Notes

Concur.
1.9) Profile/Beam - 15/240 from h11122 / 1016_reson8125_hvf / 2005-157 / 012_1737

DANGER TO NAVIGATION

Survey Summary

Survey Position:	56° 59' 52.7" N, 135° 18' 29.3" W
Least Depth:	15.91 m (= 52.20 ft = 8.700 fm = 8 fm 4.20 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-157.17:37:47.041 (06/06/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-157 / 012_1737
Profile/Beam:	15/240
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

NEW SHOAL Designated sounding on least depth on rocky shoal. 100% SWMB Coverage.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-157/012_1737	15/240	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding only.

Cartographically-Rounded Depth (Affected Charts):

8 ³/₄fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 8fm 4ft (531_1) 15.9m (500_1, 50_1)

Office Notes

1.10) Profile/Beam - 1077/229 from h11122 / 1016_reson8125_hvf / 2005-146 / 022_2248

Survey Summary

Survey Position:	57° 00' 11.7" N, 135° 13' 42.3" W
Least Depth:	17.93 m (= 58.82 ft = 9.803 fm = 9 fm 4.82 ft)
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-146.22:50:25.736 (05/26/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-146 / 022_2248
Profile/Beam:	1077/229
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Probable insignificant rk.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-146/022_2248	1077/229	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding only.

Office Notes

Concur. Sounding selected for charting.

1.11) Profile/Beam - 107/98 from h11122 / 1016_reson8125_hvf / 2005-160 / 158_2314

Survey Summary

Survey Position:	57° 00' 30.9" N, 135° 14' 11.4" W
Least Depth:	19.38 m (= 63.59 ft = 10.598 fm = 10 fm 3.59 ft)
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-160.23:14:38.892 (06/09/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-160 / 158_2314
Profile/Beam:	107/98
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

NEW WRECK Designated sounding is least depth on sunken barge. Barge is \sim 40m x \sim 10m, standing \sim 3m off the seabed, lying parallel to shoreline.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-160/158_2314	107/98	0.00	000.0	Primary
h11122/1016_reson8125_hvf/2005-160/161_2312	64/60	9.62	171.4	Secondary

Hydrographer Recommendations

Chart non-dangerous wreck with survey sounding.

Cartographically-Rounded Depth (Affected Charts):

10 ½fm (17326_1, 17320_1, 16016_1, 530_1) 10fm 3ft (531_1) 19.4m (500_1, 50_1)

Office Notes

1.12) Profile/Beam - 2256/108 from h11122 / 1016_reson8125_hvf / 2005-146 / 157_2010

Survey Summary

Survey Position:	57° 00' 18.5" N, 135° 13' 49.8" W
Least Depth:	20.12 m (= 66.02 ft = 11.003 fm = 11 fm 0.02 ft)
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-146.20:14:04.656 (05/26/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-146 / 157_2010
Profile/Beam:	2256/108
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Probable insignificant submerged log standing vertical.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-146/157_2010	2256/108	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding only.

Office Notes

Do not concur. Surrounding shoaler depths selected for charting.

1.13) Profile/Beam - 240/29 from h11122 / 1016_reson8125_hvf / 2005-146 / 161_2048

Survey Summary

Survey Position:	57° 00' 21.0" N, 135° 14' 12.1" W
Least Depth:	24.43 m (= 80.14 ft = 13.357 fm = 13 fm 2.14 ft)
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-146.20:49:10.877 (05/26/2005)
Survey Line:	h11122 / 1016_reson8125_hvf / 2005-146 / 161_2048
Profile/Beam:	240/29
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Probable insignificant obstruction.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/1016_reson8125_hvf/2005-146/161_2048	240/29	0.00	000.0	Primary
h11122/1016_reson8125_hvf/2005-146/155_1930	2775/193	6.96	175.9	Secondary

Hydrographer Recommendations

Chart sounding only.

Office Notes

Do not concur. Surrounding shoaler depths selected for charting.

2 - Detached Positions (DPs)

2.1) Profile/Beam - 3/1 from h11122 / trimble_proxrs / 2005-127 / wrecks_dn127.shp

Survey Summary

Survey Position:	57° 00' 06.4" N, 135° 13' 23.4" W
Least Depth:	-5.52 m (= -18.12 ft = -3.019 fm = -3 fm 0.12 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.18:34:38.000 (05/07/2005)
DP Dataset:	h11122 / trimble_proxrs / 2005-127 / wrecks_dn127.shp
Profile/Beam:	3/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Wreck Barge above MLLW

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/trimble_proxrs/2005-127/wrecks_dn127.shp	3/1	0.00	000.0	Primary

Hydrographer Recommendations

Add wreck symbol to chart.

Cartographically-Rounded Depth (Affected Charts):

-3fm (17326_1, 17320_1, 16016_1, 530_1)

-3fm 0ft (531_1)

-5.5m (500_1, 50_1)

Office Notes



Figure 2.1.1





Figure 2.1.2

2.2) Profile/Beam - 2/1 from h11122 / trimble_proxrs / 2005-127 / wrecks_dn127.shp

Survey Summary

Survey Position:	57° 00' 10.8" N, 135° 13' 03.2" W
Least Depth:	-5.26 m (= -17.26 ft = -2.877 fm = -2 fm 5.26 ft)
TPU (±1.96 0):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.18:14:17.000 (05/07/2005)
DP Dataset:	h11122 / trimble_proxrs / 2005-127 / wrecks_dn127.shp
Profile/Beam:	2/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Wreck Barge above MLLW

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/trimble_proxrs/2005-127/wrecks_dn127.shp	2/1	0.00	000.0	Primary

Hydrographer Recommendations

Add wreck symbol to chart.

Cartographically-Rounded Depth (Affected Charts):

-2 ³/₄fm (17326_1, 17320_1, 16016_1, 530_1) -2 fm 5ft (531_1) -5.3m (500_1, 50_1)

Office Notes



Figure 2.2.1

2.3) Profile/Beam - 1/1 from h11122 / trimble_proxrs / 2005-128 / tr1_128_32.shp

Survey Summary

Survey Position:	57° 00' 58.9" N, 135° 14' 39.3" W
Least Depth:	-4.55 m (= -14.91 ft = -2.486 fm = -2 fm 2.91 ft)
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-128.18:09:27.000 (05/08/2005)
DP Dataset:	h11122 / trimble_proxrs / 2005-128 / tr1_128_32.shp
Profile/Beam:	1/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Wreck 50' (approx.) fishing vessel above MLLW

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/trimble_proxrs/2005-128/tr1_128_32.shp	1/1	0.00	000.0	Primary

Hydrographer Recommendations

Add wreck symbol to chart.

Cartographically-Rounded Depth (Affected Charts):

-2 ¹/₂fm (17326_1, 17320_1, 16016_1, 530_1) -2fm 3ft (531_1) -4.5m (500_1, 50_1)

Office Notes



Figure 2.3.1

2.4) Profile/Beam - 10/1 from h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	57° 00' 05.5" N, 135° 17' 56.2" W
Least Depth:	-4.50 m (= -14.78 ft = -2.463 fm = -2 fm 2.78 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.17:36:07.000 (05/11/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	10/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Pile

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-131/dp_1103_131	10/1	0.00	000.0	Primary

Hydrographer Recommendations

chart pile

Cartographically-Rounded Depth (Affected Charts):

```
-2 <sup>1</sup>/<sub>2</sub>fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1)
-2fm 3ft (531_1)
```

-4.5m (500_1, 50_1)

Office Notes



Figure 2.4.1

2.5) Profile/Beam - 1/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 35.4" N, 135° 18' 21.8" W
Least Depth:	-4.38 m (= -14.37 ft = -2.394 fm = -2 fm 2.37 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.16:32:06.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	1/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

SWM 4 New Piles

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	1/1	0.00	000.0	Primary

Hydrographer Recommendations

chart pile

Cartographically-Rounded Depth (Affected Charts):

```
-2 <sup>1</sup>/<sub>4</sub>fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1)
-2fm 2ft (531_1)
-4.4m (500_1, 50_1)
```

Office Notes



Figure 2.5.1

2.6) Profile/Beam - 2/1 from h11122 / trimble_proxrs / 2005-131 / wrecks.shp

Survey Summary

Survey Position:	57° 00' 41.0" N, 135° 17' 23.2" W
Least Depth:	-4.09 m (= -13.42 ft = -2.236 fm = -2 fm 1.42 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.19:08:50.000 (05/11/2005)
DP Dataset:	h11122 / trimble_proxrs / 2005-131 / wrecks.shp
Profile/Beam:	2/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Wreck 20' (approx.) fishing vessel above MLLW

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/trimble_proxrs/2005-131/wrecks.shp	2/1	0.00	000.0	Primary

Hydrographer Recommendations

Add wreck symbol to chart.

Cartographically-Rounded Depth (Affected Charts):

-2 ¼fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) -2fm 1ft (531_1) -4.1m (500_1, 50_1)

Office Notes



Figure 2.6.1

2.7) Profile/Beam - 19/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 14.9" N, 135° 15' 08.1" W
Least Depth:	-2.17 m (= -7.11 ft = -1.185 fm = -1 fm 1.11 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.19:34:11.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	19/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Ext New Ldg

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	19/1	0.00	000.0	Primary

Hydrographer Recommendations

chart ledge

Cartographically-Rounded Depth (Affected Charts):

-1fm (17326_1, 17320_1, 16016_1, 530_1)

-1fm 1ft (531_1)

-2.2m (500_1, 50_1)

Office Notes



Figure 2.7.1

2.8) Profile/Beam - 21/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 08.3" N, 135° 16' 34.9" W
Least Depth:	-2.11 m (= -6.93 ft = -1.155 fm = -1 fm 0.93 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.20:34:55.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	21/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

SWM Ext New Ldg

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	21/1	0.00	000.0	Primary

Hydrographer Recommendations

chart ledge

Cartographically-Rounded Depth (Affected Charts):

-1fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) -1fm 1ft (531_1) -2.1m (500_1, 50_1)

Office Notes



Figure 2.8.1

2.9) Profile/Beam - 6/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 37.3" N, 135° 17' 46.1" W
Least Depth:	-1.43 m (= -4.68 ft = -0.779 fm = 0 fm 1.32 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.18:27:57.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	6/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

SWM Ext New Foul Area

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	6/1	0.00	000.0	Primary

Hydrographer Recommendations

chart area as foul

Cartographically-Rounded Depth (Affected Charts):

0³/4fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 0fm 4ft (531_1) -1.4m (500_1, 50_1)

Office Notes



Figure 2.9.1

2.10) Profile/Beam - 15/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 19.7" N, 135° 15' 25.9" W
Least Depth:	-0.85 m (= -2.78 ft = -0.463 fm = 0 fm 3.22 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.19:22:47.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	15/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	15/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0 ½fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 3ft (531_1) -.8m (500_1, 50_1)

Office Notes



Figure 2.10.1

2.11) Profile/Beam - 17/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 17.2" N, 135° 15' 21.4" W
Least Depth:	-0.63 m (= -2.07 ft = -0.345 fm = 0 fm 3.93 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.19:28:35.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	17/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	17/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0 ¼fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 2ft (531_1) -.6m (500_1, 50_1)

Office Notes



Figure 2.11.1

2.12) Profile/Beam - 13/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 17.5" N, 135° 15' 56.3" W
Least Depth:	-0.57 m (= -1.87 ft = -0.312 fm = 0 fm 4.13 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.19:17:40.000 (05/12/2005)
DP Dataset:	$h11122\ /\ 1103_nonechosounder_dp\ /\ 2005132\ /\ dp_1103_132$
Profile/Beam:	13/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	13/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0 ¼fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 2ft (531_1) -.6m (500_1, 50_1)

Office Notes



Figure 2.12.1

2.13) Profile/Beam - 12/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 11.3" N, 135° 16' 12.8" W
Least Depth:	-0.55 m (= -1.82 ft = -0.303 fm = 0 fm 4.18 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.19:13:31.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	12/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	12/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0 ¼fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 2ft (531_1) -.6m (500_1, 50_1)

Office Notes



Figure 2.13.1

2.14) Profile/Beam - 1/1 from h11122 / trimble_proxrs / 2005-132 / pilpnt_132_tr1.shp

Survey Summary

Survey Position:	57° 02' 13.5" N, 135° 15' 53.9" W				
Least Depth:	-0.22 m (= -0.73 ft = -0.121 fm = 0 fm 5.27 ft)				
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]				
Timestamp:	2005-132.16:52:42.000 (05/12/2005)				
DP Dataset:	h11122 / trimble_proxrs / 2005-132 / pilpnt_132_tr1.shp				
Profile/Beam:	1/1				
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1				

Remarks:

New Pile Group of piles (three) SE most in line of three

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/trimble_proxrs/2005-132/pilpnt_132_tr1.shp		0.00	000.0	Primary

Hydrographer Recommendations

Add pile symbol(s) to chart.

Cartographically-Rounded Depth (Affected Charts):

0fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 0ft (531_1)

-.2m (500_1, 50_1)

Office Notes

Concur with clarification, add one pile to chart.



Figure 2.14.1

2.15) Profile/Beam - 3/1 from h11122 / trimble_proxrs / 2005-132 / pilpnt_132_tr1.shp

Survey Summary

Survey Position:	57° 02' 16.1" N, 135° 15' 59.1" W				
Least Depth:	-0.14 m (= -0.47 ft = -0.079 fm = 0 fm 5.53 ft)				
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]				
Timestamp:	2005-132.17:05:27.000 (05/12/2005)				
DP Dataset:	h11122 / trimble_proxrs / 2005-132 / pilpnt_132_tr1.shp				
Profile/Beam:	3/1				
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1				

Remarks:

New Pile SWM of 3 Piles Western Most set of 5 sets of Piles

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/trimble_proxrs/2005-132/pilpnt_132_tr1.shp	3/1	0.00	000.0	Primary

Hydrographer Recommendations

Add pile symbol(s) to chart.

Cartographically-Rounded Depth (Affected Charts):

0fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 0ft (531_1) -.1m (500_1, 50_1)

Office Notes


Figure 2.15.1

2.16) Profile/Beam - 4/1 from h11122 / trimble_proxrs / 2005-132 / pilpnt_132_tr1.shp

Survey Summary

Survey Position:	57° 02' 16.5" N, 135° 16' 01.3" W
Least Depth:	-0.12 m (= -0.39 ft = -0.065 fm = 0 fm 5.61 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.17:10:17.000 (05/12/2005)
DP Dataset:	h11122 / trimble_proxrs / 2005-132 / pilpnt_132_tr1.shp
Profile/Beam:	4/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Pile SWM of 3 Piles Eastern Most set of 5 sets of Piles

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/trimble_proxrs/2005-132/pilpnt_132_tr1.shp	4/1	0.00	000.0	Primary

Hydrographer Recommendations

Add pile symbol(s) to chart.

Cartographically-Rounded Depth (Affected Charts):

0fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 0ft (531_1) -.1m (500_1, 50_1)

Office Notes



Figure 2.16.1

2.17) Profile/Beam - 14/1 from h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	57° 00' 24.0" N, 135° 18' 32.7" W
Least Depth:	0.02 m (= 0.08 ft = 0.013 fm = 0 fm 0.08 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.18:53:04.000 (05/11/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	14/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CFF Floating Dock Verified

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-131/dp_1103_131	14/1	0.00	000.0	Primary

Hydrographer Recommendations

chart dock

Cartographically-Rounded Depth (Affected Charts):

0fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 0fm 0ft (531_1) .0m (500_1, 50_1)

Office Notes

Concur with clarification, chart pier connected to island.



Figure 2.17.1

2.18) Profile/Beam - 5/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 45.3" N, 135° 18' 06.1" W
Least Depth:	0.08 m (= 0.28 ft = 0.046 fm = 0 fm 0.28 ft)
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.18:17:03.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	5/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	5/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 0fm 0ft (531_1) .1m (500_1, 50_1)

Office Notes

2.19) Profile/Beam - 3/1 from h11122 / 1103_nonechosounder_dp / 2005-127 / dp_1103_127

Survey Summary

Survey Position:	56° 59' 47.4" N, 135° 20' 23.3" W
Least Depth:	0.13 m (= 0.42 ft = 0.070 fm = 0 fm 0.42 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.16:25:19.000 (05/07/2005)
DP Dataset:	$h11122\ /\ 1103_nonechosounder_dp\ /\ 2005\text{-}127\ /\ dp_1103_127$
Profile/Beam:	3/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-127/dp_1103_127	3/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 0ft (531_1) .1m (500_1, 50_1)

Office Notes



Figure 2.19.1

2.20) Profile/Beam - 12/1 from h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	57° 00' 17.7" N, 135° 18' 13.0" W
Least Depth:	0.22 m (= 0.71 ft = 0.119 fm = 0 fm 0.71 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.18:13:00.000 (05/11/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	12/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Floating Dock On CFF Rk Position

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-131/dp_1103_131	12/1	0.00	000.0	Primary

Hydrographer Recommendations

Add dock to chart, Do not chart CFF Rk.

Cartographically-Rounded Depth (Affected Charts):

0fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 0fm 0ft (531_1) .2m (500_1, 50_1)

Office Notes

Concur with clarification, chart pier connected to island and remove rock.



Figure 2.20.1

2.21) Profile/Beam - 15/1 from h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	57° 00' 31.6" N, 135° 18' 59.2" W
Least Depth:	0.22 m (= 0.72 ft = 0.120 fm = 0 fm 0.72 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.19:07:36.000 (05/11/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	15/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-131/dp_1103_131	15/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 0fm 0ft (531_1) .2m (500_1, 50_1)

Office Notes

2.22) Profile/Beam - 11/1 from h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	57° 00' 11.2" N, 135° 18' 10.9" W
Least Depth:	0.28 m (= 0.91 ft = 0.152 fm = 0 fm 0.91 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.17:48:15.000 (05/11/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	11/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-131/dp_1103_131	11/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 0fm 1ft (531_1) .3m (500_1, 50_1)

Office Notes



Figure 2.22.1

2.23) Profile/Beam - 1/1 from h11122 / 1103_nonechosounder_dp / 2005-128 / dp-1103-128

Survey Summary

Survey Position:	56° 59' 08.9" N, 135° 20' 47.4" W
Least Depth:	0.29 m (= 0.95 ft = 0.159 fm = 0 fm 0.95 ft)
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-128.15:47:55.000 (05/08/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-128 / dp-1103-128
Profile/Beam:	1/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Chd (17326) Rk Verified

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-128/dp-1103-128	1/1	0.00	000.0	Primary

Hydrographer Recommendations

Reposition charted rk.

Cartographically-Rounded Depth (Affected Charts):

0fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 1ft (531_1) .3m (500_1, 50_1)

Office Notes



Figure 2.23.1

2.24) Profile/Beam - 4/1 from h11122 / 817_nonechosounder_dp / 2005-130 / dp_817_130

Survey Summary

Survey Position:	57° 01' 25.8" N, 135° 20' 49.9" W
Least Depth:	0.75 m (= 2.45 ft = 0.409 fm = 0 fm 2.45 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-130.17:54:03.000 (05/10/2005)
DP Dataset:	h11122 / 817_nonechosounder_dp / 2005-130 / dp_817_130
Profile/Beam:	4/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/817_nonechosounder_dp/2005-130/dp_817_130	4/1	0.00	000.0	Primary

Hydrographer Recommendations

Chart rock

Cartographically-Rounded Depth (Affected Charts):

0 ¼fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 0fm 2ft (531_1) .7m (500_1, 50_1)

Office Notes

2.25) Profile/Beam - 4/1 from h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	56° 58' 45.0" N, 135° 19' 20.4" W
Least Depth:	0.90 m (= 2.95 ft = 0.492 fm = 0 fm 2.95 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.16:56:43.000 (05/11/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	4/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-131/dp_1103_131	4/1	0.00	000.0	Primary

Hydrographer Recommendations

Chart rock

Cartographically-Rounded Depth (Affected Charts):

0 ½fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 3ft (531_1) .9m (500_1, 50_1)

Office Notes



Figure 2.25.1

2.26) Profile/Beam - 5/1 from h11122 / 817_nonechosounder_dp / 2005-130 / dp_817_130

Survey Summary

Survey Position:	57° 01' 42.5" N, 135° 20' 57.0" W
Least Depth:	1.00 m (= 3.29 ft = 0.548 fm = 0 fm 3.29 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-130.18:26:34.000 (05/10/2005)
DP Dataset:	h11122 / 817_nonechosounder_dp / 2005-130 / dp_817_130
Profile/Beam:	5/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/817_nonechosounder_dp/2005-130/dp_817_130	5/1	0.00	000.0	Primary

Hydrographer Recommendations

Chart rock.

Cartographically-Rounded Depth (Affected Charts):

0 ½fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 0fm 3ft (531_1) 1.0m (500_1, 50_1)

Office Notes

2.27) Profile/Beam - 5/1 from h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	56° 58' 46.4" N, 135° 18' 45.6" W
Least Depth:	1.32 m (= 4.34 ft = 0.724 fm = 0 fm 4.34 ft)
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.17:01:46.000 (05/11/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	5/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-131/dp_1103_131	5/1	0.00	000.0	Primary

Hydrographer Recommendations

Chart rock

Cartographically-Rounded Depth (Affected Charts):

0³/₄fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 4ft (531_1) 1.3m (500_1, 50_1)

Office Notes

2.28) Profile/Beam - 18/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 16.3" N, 135° 15' 19.1" W
Least Depth:	1.36 m (= 4.45 ft = 0.741 fm = 0 fm 4.45 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.19:30:38.000 (05/12/2005)
DP Dataset:	$h11122\ /\ 1103_nonechosounder_dp\ /\ 2005132\ /\ dp_1103_132$
Profile/Beam:	18/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	18/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0 ³/₄fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 4ft (531_1) 1.4m (500_1, 50_1)

Office Notes

2.29) Profile/Beam - 9/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 31.1" N, 135° 17' 26.2" W
Least Depth:	1.55 m (= 5.09 ft = 0.848 fm = 0 fm 5.09 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.18:43:55.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	9/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	9/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0 ³/₄fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 0fm 5ft (531_1) 1.6m (500_1, 50_1)

Office Notes

2.30) Profile/Beam - 22/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 33.3" N, 135° 19' 00.6" W
Least Depth:	1.62 m (= 5.31 ft = 0.885 fm = 0 fm 5.31 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.21:05:12.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	22/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	22/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0 ³/₄fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 0fm 5ft (531_1) 1.6m (500_1, 50_1)

Office Notes

2.31) Profile/Beam - 8/1 from h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	56° 58' 59.3" N, 135° 18' 31.2" W
Least Depth:	1.67 m (= 5.47 ft = 0.912 fm = 0 fm 5.47 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.17:13:19.000 (05/11/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	8/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk 20-m X 8-m

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-131/dp_1103_131	8/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

0 ³/₄fm (17326_1, 17320_1, 16016_1, 530_1) 0fm 5ft (531_1) 1.7m (500_1, 50_1)

Office Notes

2.32) Profile/Beam - 1/1 from h11122 / trimble_proxrs / 2005-127 / wrecks_dn127.shp

Survey Summary

Survey Position:	57° 00' 39.6" N, 135° 14' 20.6" W
Least Depth:	2.13 m (= 6.97 ft = 1.162 fm = 1 fm 0.97 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.17:44:59.000 (05/07/2005)
DP Dataset:	h11122 / trimble_proxrs / 2005-127 / wrecks_dn127.shp
Profile/Beam:	1/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Wreck Identified visually and sounded with lead line. Wreck appears to be remains of wooden hull.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/trimble_proxrs/2005-127/wrecks_dn127.shp	1/1	0.00	000.0	Primary

Hydrographer Recommendations

Recommend annotation with callout, due to excessive clutter at current chart scale.

Cartographically-Rounded Depth (Affected Charts):

1fm (17326_1, 17320_1, 16016_1, 530_1) 1fm 1ft (531_1) 2.1m (500_1, 50_1)

Office Notes

2.33) Profile/Beam - 7/1 from h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	56° 58' 56.7" N, 135° 18' 42.7" W
Least Depth:	2.16 m (= 7.09 ft = 1.181 fm = 1 fm 1.09 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.17:09:54.000 (05/11/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	7/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-131/dp_1103_131	7/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

1fm (17326_1, 17320_1, 16016_1, 530_1) 1fm 1ft (531_1) 2.2m (500_1, 50_1)

Office Notes

2.34) Profile/Beam - 2/1 from h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	56° 59' 01.8" N, 135° 21' 03.8" W
Least Depth:	2.17 m (= 7.14 ft = 1.189 fm = 1 fm 1.14 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.16:35:26.000 (05/11/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	2/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-131/dp_1103_131	2/1	0.00	000.0	Primary

Hydrographer Recommendations

chart rock

Cartographically-Rounded Depth (Affected Charts):

1 ¼fm (17326_1, 17320_1, 16016_1, 530_1) 1fm 1ft (531_1) 2.2m (500_1, 50_1)

Office Notes

2.35) Profile/Beam - 5/1 from h11122 / 1103_nonechosounder_dp / 2005-127 / dp_1103_127

Survey Summary

Survey Position:	56° 59' 52.5" N, 135° 20' 47.1" W
Least Depth:	2.35 m (= 7.72 ft = 1.287 fm = 1 fm 1.72 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.16:43:22.000 (05/07/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-127 / dp_1103_127
Profile/Beam:	5/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Rk

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-127/dp_1103_127	5/1	0.00	000.0	Primary

Hydrographer Recommendations

Chart rock

Cartographically-Rounded Depth (Affected Charts):

1 ¼fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 1fm 1ft (531_1) 2.4m (500_1, 50_1)

Office Notes

2.36) Profile/Beam - 1/1 from h11122 / 817_echosounder_dp / 2005-130 / dp_817_130

Survey Summary

Survey Position:	57° 01' 37.1" N, 135° 20' 25.5" W
Least Depth:	3.34 m (= 10.96 ft = 1.827 fm = 1 fm 4.96 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-130.18:16:26.000 (05/10/2005)
DP Dataset:	h11122 / 817_echosounder_dp / 2005-130 / dp_817_130
Profile/Beam:	1/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CFF Rk Disproval 40-m, 5-min. VBES Star Pattern Search. Conditions partly cloudy skys and calm seas. Water visibility 4-m.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11122/817_echosounder_dp/2005-130/dp_817_130	1/1	0.00	000.0	Primary

Hydrographer Recommendations

Remove Chd Rk symbol from chart.

Office Notes

2.37) Profile/Beam - 2/1 from h11122 / 1103_echosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	57° 00' 21.1" N, 135° 18' 46.1" W
Least Depth:	6.76 m (= 22.17 ft = 3.695 fm = 3 fm 4.17 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.18:40:20.000 (05/11/2005)
DP Dataset:	h11122 / 1103_echosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	2/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Chd (17327) Rk Disproval 60-m, 10-min VBES Star Pattern Search. Conditions clear skys and calm seas. Water visibility approx. 4-m, bottom not seen.

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_echosounder_dp/2005-131/dp_1103_131	2/1	0.00	000.0	Primary

Hydrographer Recommendations

Remove Chd Rk symbol from chart.

Office Notes

2.38) Profile/Beam - 3/1 from h11122 / 1103_echosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	57° 00' 44.2" N, 135° 19' 19.9" W
Least Depth:	8.22 m (= 26.97 ft = 4.495 fm = 4 fm 2.97 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.19:34:34.000 (05/11/2005)
DP Dataset:	h11122 / 1103_echosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	3/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Chd (17327) Rk Disproval 20-m, 10-min Drift search with lead line. Conditions Clear Skys and Valm Seas. Water visibility 4-m. Least depth from echosounder.

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_echosounder_dp/2005-131/dp_1103_131	3/1	0.00	000.0	Primary

Hydrographer Recommendations

Remove Chd Rk symbol from chart.

Office Notes

2.39) Profile/Beam - 1/1 from h11122 / 1103_echosounder_dp / 2005-131 / dp_1103_131

Survey Summary

Survey Position:	56° 59' 38.3" N, 135° 18' 42.8" W
Least Depth:	20.39 m (= 66.90 ft = 11.150 fm = 11 fm 0.90 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-131.17:29:34.000 (05/11/2005)
DP Dataset:	h11122 / 1103_echosounder_dp / 2005-131 / dp_1103_131
Profile/Beam:	1/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Chd (17326) Rk Disproval 60-m, 5-min VBES Star Pattern Search. Conditions clear skys and calm seas. Water visibility 5-m.

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_echosounder_dp/2005-131/dp_1103_131	1/1	0.00	000.0	Primary

Hydrographer Recommendations

Remove Chd Rk symbol from chart.

Office Notes

2.40) Profile/Beam - 11/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 00.6" N, 135° 16' 28.7" W
Least Depth:	21.09 m (= 69.21 ft = 11.534 fm = 11 fm 3.21 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.19:06:23.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	11/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Chd (17326) Rk Disproval 100% SWMB Coverage

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	11/1	0.00	000.0	Primary

Hydrographer Recommendations

Remove Chd Rk symbol from chart.

Office Notes

2.41) Profile/Beam - 1/1 from h11122 / 1103_nonechosounder_dp / 2005-161 / dp_1103_160

Survey Summary

Survey Position:	56° 59' 48.9" N, 135° 20' 16.0" W
Least Depth:	48.53 m (= 159.23 ft = 26.538 fm = 26 fm 3.23 ft)
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-161.03:56:20.000 (06/10/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-161 / dp_1103_160
Profile/Beam:	1/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Chd (17326) Wreck Verified Diver verification of scattered wreckage on sebed. No least diver least depth acquired. Natural rock outcroppings in vicinity have shoaler least depths.

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-161/dp_1103_160	1/1	0.00	000.0	Primary

Hydrographer Recommendations

Reposition chd wk to surveyed location.

Cartographically-Rounded Depth (Affected Charts):

26fm (17326_1, 17320_1, 16016_1, 530_1) 26fm (531_1) 49m (500_1, 50_1)

Office Notes

Concur. In addition change wreck symbol to non-dangerous.

2.42) Profile/Beam - 2/1 from h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132

Survey Summary

Survey Position:	57° 00' 35.0" N, 135° 18' 23.8" W
Least Depth:	998.64 m (= 3276.38 ft = 546.064 fm = 546 fm 0.38 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.16:34:20.000 (05/12/2005)
DP Dataset:	h11122 / 1103_nonechosounder_dp / 2005-132 / dp_1103_132
Profile/Beam:	2/1
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Floating Dock

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-132/dp_1103_132	2/1	0.00	000.0	Primary

Hydrographer Recommendations

Chart dock

Cartographically-Rounded Depth (Affected Charts):

546fm (17327_1, 17326_1, 17320_1, 16016_1, 530_1) 546fm (531_1) 999m (500_1, 50_1)

Office Notes

Concur with clarification, chart pier attached to islet.



Figure 2.42.1
2.43) Profile/Beam - 4/1 from h11122 / 1103_nonechosounder_dp / 2005-127 / dp_1103_127

Survey Summary

Survey Position:	56° 59' 47.2" N, 135° 20' 26.3" W
Least Depth:	9999.91 m (= 32808.09 ft = 5468.015 fm = 5468 fm 0.09 ft)
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.16:28:06.000 (05/07/2005)
DP Dataset:	$h11122\ /\ 1103_nonechosounder_dp\ /\ 2005\text{-}127\ /\ dp_1103_127$
Profile/Beam:	4/1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Dock

Feature Correlation

Address		Range	Azimuth	Status
h11122/1103_nonechosounder_dp/2005-127/dp_1103_127	4/1	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

5468fm (17326_1, 17320_1, 16016_1, 530_1) 5468fm (531_1) 10000m (500_1, 50_1)

Office Notes

Chart new dock connecting to land.



Feature Images

Figure 2.43.1

3 - Geographical Positions (GPs)

3.1) GP No. - 3 from GenPoint_DN127.shp

Survey Summary

Survey Position:	57° 00' 40.1" N, 135° 14' 19.2" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.17:37:34.000 (05/07/2005)
GP Dataset:	GenPoint_DN127.shp
GP No.:	3
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

House on pontoon, anchored. Kayak Rental Facility

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenPoint_DN127.shp	3	0.00	000.0	Primary

Hydrographer Recommendations

Chart structure.

Office Notes



Figure 3.1.1

3.2) GP No. - 5 from GenPoint_DN127.shp

Survey Summary

Survey Position:	57° 00' 38.2" N, 135° 14' 26.0" W
Least Depth:	[None]
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.17:52:15.000 (05/07/2005)
GP Dataset:	GenPoint_DN127.shp
GP No.:	5
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

House on pontoon, anchored.

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenPoint_DN127.shp	5	0.00	000.0	Primary

Hydrographer Recommendations

chart structure

Office Notes



Figure 3.2.1

3.3) GP No. - 2 from GenPoint_DN127.shp

Survey Summary

Survey Position:	57° 00' 41.8" N, 135° 14' 25.9" W
Least Depth:	[None]
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.17:33:00.000 (05/07/2005)
GP Dataset:	GenPoint_DN127.shp
GP No.:	2
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

House on pontoon, anchored.

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenPoint_DN127.shp	2	0.00	000.0	Primary

Hydrographer Recommendations

Chart structure.

Office Notes



Figure 3.3.1

3.4) GP No. - 10 from GenPoint_DN127.shp

Survey Summary

Survey Position:	57° 00' 16.1" N, 135° 13' 21.0" W
Least Depth:	[None]
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.18:07:41.000 (05/07/2005)
GP Dataset:	GenPoint_DN127.shp
GP No.:	10
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

House on pontoon, anchored.

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenPoint_DN127.shp	10	0.00	000.0	Primary

Hydrographer Recommendations

Chart structure.

Office Notes

3.5) GP No. - 9 from GenPoint_DN127.shp

Survey Summary

Survey Position:	57° 00' 19.7" N, 135° 13' 25.2" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.18:05:20.000 (05/07/2005)
GP Dataset:	GenPoint_DN127.shp
GP No.:	9
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

House on pontoon, anchored.

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenPoint_DN127.shp	9	0.00	000.0	Primary

Hydrographer Recommendations

Chart structure.

Office Notes



Figure 3.5.1

3.6) GP No. - 1 from GenPoint_DN127.shp

Survey Summary

Survey Position:	57° 00' 40.1" N, 135° 14' 24.0" W
Least Depth:	[None]
TPU (±1.96 0):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.17:30:35.000 (05/07/2005)
GP Dataset:	GenPoint_DN127.shp
GP No.:	1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

House on pontoon, anchored.

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenPoint_DN127.shp	1	0.00	000.0	Primary

Hydrographer Recommendations

Chart structure.

Office Notes



Figure 3.6.1

3.7) GP No. - 8 from GenPoint_DN127.shp

Survey Summary

Survey Position:	57° 00' 21.4" N, 135° 13' 30.8" W
Least Depth:	[None]
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.18:03:29.000 (05/07/2005)
GP Dataset:	GenPoint_DN127.shp
GP No.:	8
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

House on pontoon, anchored.

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenPoint_DN127.shp	8	0.00	000.0	Primary

Hydrographer Recommendations

Chart structure.

Office Notes



Figure 3.7.1

3.8) GP No. - 4 from GenPoint_DN127.shp

Survey Summary

Survey Position:	57° 00' 38.5" N, 135° 14' 19.8" W
Least Depth:	[None]
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.17:39:51.000 (05/07/2005)
GP Dataset:	GenPoint_DN127.shp
GP No.:	4
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

House on pontoon, anchored.

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenPoint_DN127.shp	4	0.00	000.0	Primary

Hydrographer Recommendations

Chart structure.

Office Notes



Figure 3.8.1

3.9) GP No. - 7 from GenPoint_DN127.shp

Survey Summary

Survey Position:	57° 00' 23.8" N, 135° 13' 45.5" W
Least Depth:	[None]
TPU (±1.96 5):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.18:01:16.000 (05/07/2005)
GP Dataset:	GenPoint_DN127.shp
GP No.:	7
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

House on pontoon, anchored.

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenPoint_DN127.shp	7	0.00	000.0	Primary

Hydrographer Recommendations

Chart structure.

Office Notes



Figure 3.9.1

3.10) GP No. - 6 from GenPoint_DN127.shp

Survey Summary

Survey Position:	57° 00' 27.6" N, 135° 14' 02.5" W
Least Depth:	[None]
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.17:58:36.000 (05/07/2005)
GP Dataset:	GenPoint_DN127.shp
GP No.:	6
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Platform Fishing Charter Business

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenPoint_DN127.shp	6	0.00	000.0	Primary

Hydrographer Recommendations

Chart structure.

Office Notes



Figure 3.10.1

3.11) GP No. - 1 from MORFAC_DN127.shp

Survey Summary

Survey Position:	57° 00' 07.2" N, 135° 13' 29.4" W
Least Depth:	[None]
TPU (±1.960):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-127.18:36:31.000 (05/07/2005)
GP Dataset:	MORFAC_DN127.shp
GP No.:	1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Mooring Buoy

Feature Correlation

Address	Feature	Range	Azimuth	Status
MORFAC_DN127.shp	1	0.00	000.0	Primary

Hydrographer Recommendations

Chart mooring buoy.

Office Notes



Figure 3.11.1

3.12) GP No. - 1 from GenLine_132_TR1.shp

Survey Summary

Survey Position:	57° 02' 00.5" N, 135° 16' 14.9" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.17:19:40.000 (05/12/2005)
GP Dataset:	GenLine_132_TR1.shp
GP No.:	1
Charts Affected:	17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Floating Dock

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenLine_132_TR1.shp	1	0.00	000.0	Primary

Hydrographer Recommendations

Chart pier

Office Notes

Concur with clairification, chart pier attached to land.



Figure 3.12.1

3.13) GP No. - 2 from GenLine_132_TR1.shp

Survey Summary

Survey Position:	57° 02' 07.9" N, 135° 16' 32.0" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2005-132.17:26:51.000 (05/12/2005)
GP Dataset:	GenLine_132_TR1.shp
GP No.:	2
Charts Affected:	17327_1, 17326_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

New Floating Dock est. 8/2004

Feature Correlation

Address	Feature	Range	Azimuth	Status
GenLine_132_TR1.shp	2	0.00	000.0	Primary

Hydrographer Recommendations

Chart pier.

Office Notes

Concur with clairification, chart pier attached to land.



Figure 3.13.1



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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : August 2, 2005

HYDROGRAPHIC BRANCH: Pacific HYDROGRAPHIC PROJECT: OPR-0112-RA-2005 HYDROGRAPHIC SHEET: H11122

LOCALITY: Eastern Channel to Silver Bay, Sitka Sound, AK TIME PERIOD: May 4 - June 16, 2005

TIDE STATION USED: 945-1600 Sitka, Alaska Lat. 57 03.1'N Long. 135 20.5' W PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 2.791 meters

REMARKS: RECOMMENDED ZONING Use zone(s) identified as: SEA200

Refer to attachments for zoning information.

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

CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION



Final tide zone node point locations for OPR-O112-RA-2005, H11122

Format:

Tide Station (in recommended order of use) Average Time Correction (in minutes) Range Correction Longitude in decimal degrees (negative value denotes Longitude West), Latitude in decimal degrees

	Tide Station	AVG Time	Range
	Order	Correction	Correction
Zone SEA200	945-1600	0	1.00
-135.560208 56.847672			
-135.542365 56.857201			
-135.513529 56.850654			
-135.50839 56.861868			
-135.472042 56.890618			
-135.413912 56.927046			
-135.37942 56.944575			
-135.345146 56.937479			
-135.148538 56.891767			
-135.096503 56.976245			
-135.219418 57.152377			
-135.294235 57.2785			
-135.435854 57.285735			
-135.536277 57.284567			
-135.677763 57.256337			
-135.665367 57.054404			
-135.816846 57.006056			
-135.678821 56.918667			
-135.578921 56.858887			
-135.560208 56.847672			



H11122 HCell Report

Peter Holmberg, Physical Scientist Pacific Hydrographic Branch

Introduction

The primary purpose of the HCell is to directly update NOAA ENCs with new survey information in International Hydrographic Organization (IHO) format S-57. HCell compilation of survey H11122 utilized Office of Coast Survey H-Cell Specifications Version 3.0, May 2008 and Hcell User Guide Version 1.1, June 2008. HCell H11122 will be used to update charts 17327, 1:10,000 (23rd Ed.; July 2008, NM 02/14/2009), 17326 1:40,000 (16th Ed.; November 2007, NM 02/14/2009), and US5AK3VM.

1. Compilation Scale

The density of soundings in the HCell are compiled as appropriate to emulate those soundings of Charts 17327, 1:10,000, and 17326, 1:40,000. Position and density of non-bathymetric features included in the HCell have not been generalized from the scale of the hydrographic survey H11122.

2. Soundings

2.1 Source Data

One 10-meter resolution Combined BASE surface, **H11122_Combined_10m** was used as the basis for HCell production following Branch certification.

A survey-scale sounding (SOUNDG) feature object source layer was built from the **H11122_Combined_10m** surface in CARIS BASE Editor. A shoal-biased selection was made at 1:40,000 survey scale for the portion of the survey covering 17326 not overlapping chart 17327. A 1:10,000 survey scale for the portion covering chart 17327 using table with values shown in **Table 1**.

Upper limit (m)	Lower limit (m)	Radius (mm)	
0	10	3	
10	20	4	
20	50	4.5	
50	170	5	

Table 1.

2.2 Sounding Feature Objects

In CARIS BASE Editor soundings were manually selected from the high density sounding layer from H11122 and imported into a new layer created to accommodate chart density depths. Manual selection was used to accomplish a density and distribution that more closely represents the seafloor morphology and that emulates density and distribution of soundings on charts 17327 and 17326 than is possible using automated methods. See section 10.1, Data Processing Notes, for details about the use of manual sounding selection for H11122. The sounding feature object source layer was imported into the H11122_HCell_Features.hob file, which was used as a template to create the S-57 Composer product H11122_CS.prd.

3. Depth Areas

3.1 Source Data

Using the combined BASE surface **H11122_Combined_10m** two depth areas were generated. Additional depth contours at the intervals on the largest scale chart were delivered per latest guidance from the 2009 Field Procedures Workshop. The depth contours are included in the US511122_SS.000 file.

3.2 Depth Area Feature Objects

One depth range, 0.00 meters to 170.00 meters, was used for the depth area object. Upon conversion to NOAA charting units, this depth range is 0 fathoms to 93 fathoms.

4. Meta Areas

The following Meta object areas are included in HCell 11222:

M_QUAL M_COVR M_CSCL

Meta area objects were constructed on the basis of perimeter lines delineating the surveyed limits and extents of data gaps inside the survey area. These perimeters were first used to create the Skin of The Earth (SOTE) layer, then were duplicated to the Meta object layers and attributed per the H-Cell Specifications, ver. 3.0 and HCell User Guide ver. 1.1.

5. Survey Features

All features for H11122 were delivered in Pydro and imported into CARIS Notebook. Once in CARIS Notebook the features were reviewed and incorrect and incomplete S-57 attribution was repaired. Final decisions on the charting of individual features were made in CARIS S-57 Composer. The office notes tab for each feature in Pydro was populated during HCell compilation to reflect the cartographic actions taken. The office notes are printed in red at the bottom of each page of the feature report exported from Pydro.

6. Shoreline / Tide Delineation

Depth areas (DEPARE) were created for all SOTE features.

7. Attribution

All S-57 Feature Objects have been attributed as fully as possible based on information provided by the Hydrographer and in accordance with OCS HCell Specifications, ver. 3.0 and Hcell User Guide ver. 1.1.

8. Layout

8.1 CARIS S-57 Composer Scheme

\$CSYMB	Blue notes
DEPARE	Group 1 objects (Skin of the Earth)
DEPNCT	Chart scale contours and some zero contours
LNDARE	Islet
LNDELV	Height of Islet
MORFAC	Mooring buoy
M_COVR	Data coverage meta object
M_QUAL	Data quality meta object
M_CSCL	Areas compiled to scales that differ from the HCell
OBSTRN	Point and area obstructions (some foul areas)
PILPNT	Pilings
SBDARE	Bottom samples and rocky seabed areas
SLCONS	Shoreline construction
SOUNDG	Chart scale soundings
UWTROC	Rocks
WEDKLP	Kelp areas
WRECK	Ship and boat wrecks

8.2 Blue Notes

Notes regarding data sources are in S-57 Composer as a \$CSYMB feature with the blue note located in the INFORM field and the survey registry number, chart number, chart edition and edition date located in the NINFOM field. The blue notes are included in the HCell when it is exported to .000. The blue notes are also included as a separate ASCII file **H11122_Bluenotes.txt**.

9. Spatial Framework

9.1 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.

9.2 Horizontal and Vertical Units

During creation of sounding sets in CARIS BASE Editor, and creation of the HCell in CARIS S-57 Composer, units are maintained as metric with millimeter resolution. NOAA rounding is applied at the same time that conversion to chart units is made to the metric HCell base cell file, at the end of the HCell compilation process.

A CARIS environment variable, uslXsounding_round, controls the depth at which rounding occurs. Setting this variable to NOAA fathoms and feet displays all soundings equal to or greater than 11 fathoms as whole units. Depths shoaler than 11 fathoms are shown in fathoms and feet.

In an ENC viewer fathoms and feet display in the format X.YZZZ, where X is fathoms, Y is feet, and ZZZ is decimals of the foot. For fathoms and feet between 0 and 10 fathoms 4.5 feet (10.75 fms), soundings round to the deeper foot if the decimals of the foot are X.Y75000 or greater. For fathoms and feet deeper or equal to 11 fathoms, soundings round to the deeper fathom if feet and decimals of the foot are X.45000 (X.Y75000) or greater. Drying heights are in feet and are rounded using arithmetic methods. In an ENC viewer, heights greater than 6 feet will register in fathoms and feet using the above stated rules.

<u>S-57 Composer Units</u> Sounding Units: Meters rounded to the nearest millimeter Spot Height Units: Meters rounded to the nearest meter

<u>Chart Unit Base Cell Units</u> Depth Units (DUNI): Fathoms and feet Height Units (HUNI): Feet (or fathoms and feet above 6 feet) Positional Units (PUNI): Meters

10. QA/QC

10.1 Data Processing Notes

Manual chart scale sounding selections were made for this survey. Experience has shown that in areas where bathymetry is varied, as in the case of varied topography on the sea floor, automated sounding selection is impractical. None of the default sounding suppression options offered in CARIS BASE Editor or S-57 Composer yields an acceptable density and distribution of depths, generally bunching soundings nearshore with too sparse coverage seaward. While the customized options are more practical for this type of terrain, an inordinate amount of time must be spent in experimentation with variations on the algebraic terms in order to devise the most suitable formula, and manual adjustments are still required to the resulting sounding set.

10.2 ENC Validation Checks

H11122 was subjected to QA and Validation checks in S-57 Composer prior to exporting to the HCell base cell (000) file. Full millimeter precision was retained in the export of the metric S-57 base cell data set. This data set was converted to a chart unit 000 file. dKart Inspector 5.1 was then used to further check the data set for conformity using the S-58 ver. 2 standard (formerly Appendix B.1 Annex C of the S-57 standard). All tests were run and errors investigated and corrected where necessary.

11. Products

11.1 HSD, MCD and CGTP Deliverables

- H11122 Base Cell File, Chart Units, Soundings compiled to 1:10,000 (chart scale).
- H11122 Base Cell File, Chart Units, Soundings compiled to 1:10,000 (survey scale).
- H11122 Descriptive Report including end notes compiled during office processing and certification
- H11122 HCell Supplemental Report
- Blue Notes ASCII file

11.2 File Naming Conventions

<u>S-57 Composer Product prefix</u>: H11122_CS.prd and H11122_SS.prd

MCD Chart units base cell file: US511122_CS.000

MCD Chart units base cell file, survey scale soundings: US511122_SS.000
11.3 Software

HIPS 6.1:	Management and inspection of Combined BASE surfaces
BASE Editor 2.1:	Combination of Product Surfaces and initial creation of the
	S-57 bathymetry-derived features
Pydro	Creation of DTON and feature reports
Notebook	Management of features to be brought into the HCell
S-57 Composer 2.0:	Assembly of the HCell, S-57 products export, QA
HOM 3.3:	Assembly of the HCell, S-57 products unit conversion and
	sounding rounding
GIS 4.4a:	Setting the sounding rounding variable
dKart Inspector 5.1:	Validation of the base cell file

12. Contacts

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

Peter Holmberg, Physical Scientist, PHB, Seattle, WA; 206-526-6843; peter.holmberg@noaa.gov.

APPROVAL SHEET H11122

Initial Approvals:

The survey evaluation and verification has been conducted according to branch processing procedures and the HCell compiled per the latest OCS HCell 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 HCell, 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.