

H1112

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. RA-10-01-03

Registry No. H-11112

LOCALITY

State Alaska

General Locality Sitka Sound

Sublocality Southeast Salisbury Sound and Sukoi Inlet

2003

CHIEF OF PARTY

..... CDR J.W.Humphrey, NOAA

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DATE

NOAA FORM 77-28 (11-72)		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION		REGISTER NO. H11112
HYDROGRAPHIC TITLE SHEET				
INSTRUCTIONS The hydrographic sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the office.				FIELD NO. RA-10-01-03
State <u>Alaska</u>				
General Locality <u>Sitka Sound</u>				
Sublocality <u>Southeast Salisbury Sound and Sukoi Inlet</u>				
Scale <u>1:10,000</u>		Date of Survey <u>4/22/2003 - 6/10/2003</u>		
Instructions Date <u>4/21/2003</u>		Project No. <u>OPR-O112-RA-03</u>		
Vessel <u>NOAA Ship launches 2121, 2122, 2124, 2125, 2127</u>				
Chief of Party <u>CDR J.W. Humphrey, NOAA</u>				
Surveyed by <u>RAINIER Personnel</u>				
Soundings taken by echo sounder <u>Knudsen 320M, Reson SeaBat 8101, 8125, Seabeam/Elac 1180</u>				
Graphic record scaled by <u>RAINIER Personnel</u>				
Graphic record checked by <u>RAINIER Personnel</u>				
Evaluation by <u>R. Davies</u>		Automated plot by <u>HP Designjet 1050C</u>		
Verification by <u>R. Davies, E. Domingo</u>				
Soundings in <u>Fathoms and tenths</u>		at <u>MLLW</u>		
REMARKS: <u>Time in UTC. UTM Projection Zone 8</u>				
Revisions and annotations appearing as endnotes were				
generated during office processing.				
All separates are filed with the hydrographic data.				
As a result, page numbering may be interrupted or non-sequential				

Descriptive Report to Accompany Hydrographic Survey H11112

Project OPR-O112-RA-03

Sitka Sound, Alaska

Scale 1:10,000

April-June 2003

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-03, dated April 21, 2003, and the Draft Standing Project Instructions dated March 21, 2001. The survey area is located from Salisbury Sound north of Sitka to Sitka Sound Southwest of Sitka. This survey corresponds to sheet “H” in the sheet layout provided with the Letter Instructions. ¹

One hundred percent shallow-water multibeam (SWMB) coverage was obtained in the survey area in waters 8 meters and deeper. In waters from 4 meters to 8 meters additional coverage was obtained to obtain least depths over features or shoals. Vertical-beam echo sounder (VBES) data was acquired in depths from 4 to 20 meters to define the four-meter curve and to aid in the planning of SWMB data acquisition. ²

Data acquisition was conducted from April 22 to June 10, 2003 (DN 112 to 161).

B. DATA ACQUISITION 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-03 Data Acquisition and Processing Report* (DAPR), submitted under separate cover. ³ Items specific to this survey and any deviations from the aforementioned report are discussed in the following sections.

B1. Equipment and Vessels

Data was acquired by RAINIER’s survey launches RA1, RA2, RA4, RA5, and RA7. Vessels RA4 and RA5 were used to acquire shallow-water multibeam (SWMB) soundings and sound velocity profiles. Vessels RA1, RA2, and RA7 were used to acquire VBES and detached positions (DPs) for shoreline verification. Vessel RA2 was also used to collect bottom samples. ⁴

All launches commonly utilized to collect detached positions (RA1, RA2 & RA7) each have two separate CARIS Vessel Configuration Files (VCFs) associated with them to cover all possible data collection conditions. The “SB” VCFs (ex: R1SB_2003) contain all offset and dynamic draft correctors and are applied to single beam hydrography and to all echo sounder detached positions. The

“NE” VCFs (ex: R1NE_2003) are simply zeroed out VCFs which are applied to all non echo sounder detached positions. Detached positions, both echo sounder and non echo sounder, have all sensor offsets applied in Pydro. All single beam data have sensor offsets and dynamic draft applied in CARIS during post-processing.

No other unusual vessel configurations were used for data acquisition. ⁵

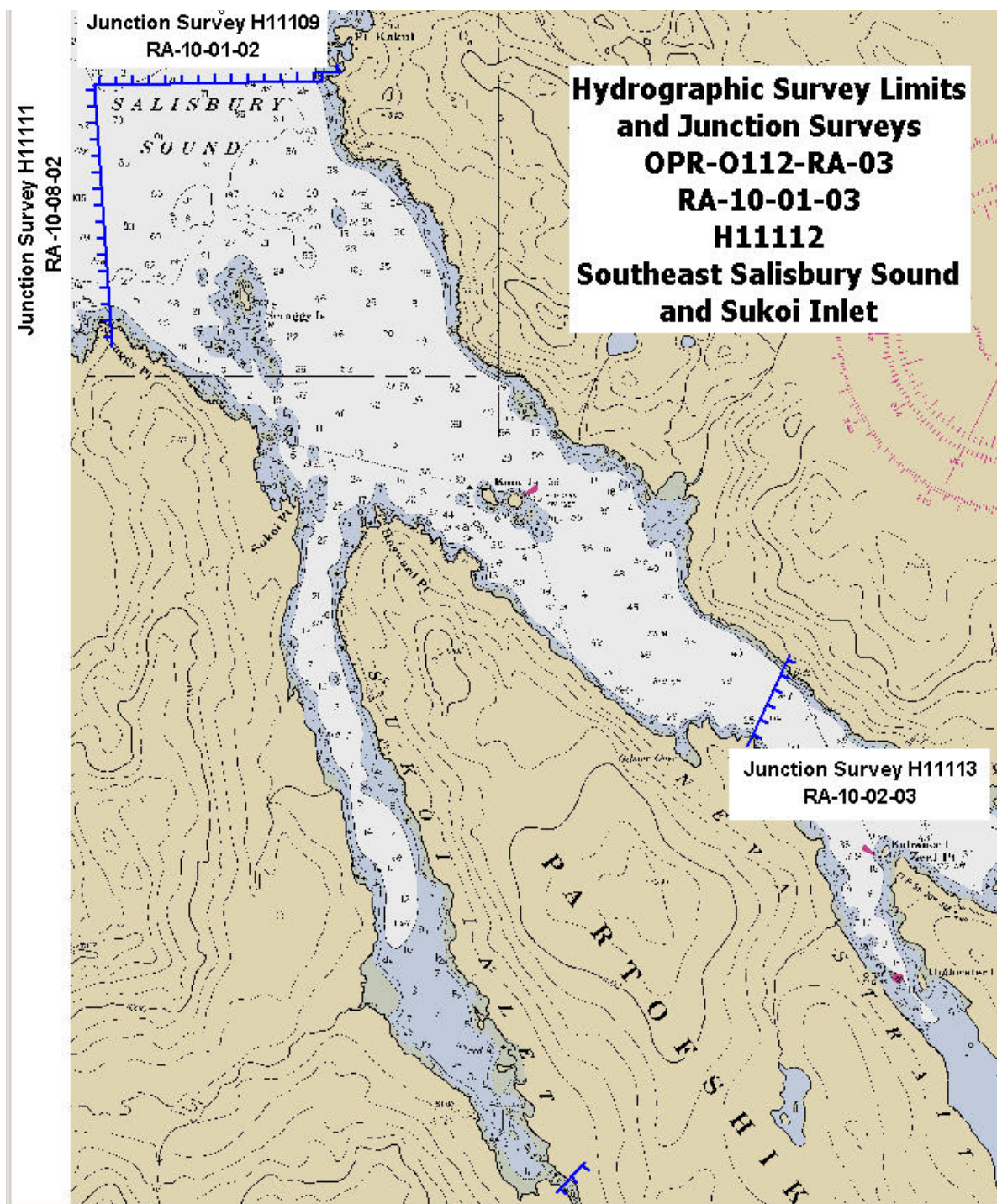


Figure 1. H11112 Survey Limits and Junction Surveys (chart 17324)

B2. Quality Control

Crosslines

Vertical Beam Echo Sounder crosslines including buffer lines totaled 36.26 nautical miles, comprising 55% of VBES mainscheme hydrography. Crosslines generally agreed within 1 meter of mainscheme hydrography.

Shallow-Water Multibeam crosslines totaled 13.51 nautical miles, comprising 6.7% of SWMB hydrography. The mainscheme bathymetry was manually compared to the crossline nadir beams in CARIS subset mode and agreed well with differences averaging approximately 0.5 meter.

A statistical Quality Control Report has been conducted on data representative data collected with each system used on this survey and is included in the *OPR-O112-RA-03 DAPR*. All systems collect data that meet IHO order 2 specifications.⁶

After manual examination of the data the hydrographer believes that accuracy standards have been met.

Junctions

The following contemporary survey junctions with H11112 (see Figure 1):⁷

Registry #	Scale	Date	Junction side
H11109	1:10,000	2002	North
H11111	1:10,000	2003	Northwest
H11113	1:10,000	2003	Southeast

Survey H11109 junctions well with this survey. A cursory comparison indicates differences are generally less than two fathoms, many less than one fathom.⁸

Survey H11111 junctions well with this survey. A cursory comparison indicates differences are generally one to two fathoms.⁹

Survey H11113 junctions well with this survey. A cursory comparison indicates differences are generally less than one fathom.¹⁰

Final comparisons will be made at the Pacific Hydrographic Branch (PHB) after the application of smooth tides.¹¹

Data Quality Factors

No unusual conditions were encountered during the survey that affected the expected accuracy and quality of survey data.¹²

B3. Data Reduction

Data reduction procedures for survey H11112 conform to those detailed in the *OPR-O112-RA-03 DAPR*.

C. VERTICAL AND HORIZONTAL CONTROL

A complete description of vertical and horizontal control for survey H11112 can be found in the *OPR-O112-RA-03 Horizontal and Vertical Control Report*, submitted under separate cover.¹³ A summary of horizontal and vertical control for this survey follows.

Horizontal Control

The horizontal datum for this project is the North American Datum of 1983 (NAD83). Differential GPS (DGPS) was the sole method of positioning. Differential corrections from U.S. Coast Guard beacon at Biorka Island (305 kHz) were utilized during this survey. Launch-to-launch DGPS performance checks using U.S. Coast Guard beacon Level Island (295 kHz) or Gustavus (288 kHz) as the check stations were performed weekly in accordance with Section 3.2 of the Field Procedures Manual (FPM). Copies of the performance checks are included in the *OPR-O112-RA-03 Horizontal and Vertical Control Report*.

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 H11112.

RAINIER personnel installed Sutron 8210 “bubbler” tide gauges at the following subordinate stations to provide information for N/OPS1 to determine time and height correctors.

Station Name	Station Number	Type of Gauge	Date of Installation	Date of Removal
Scraggy Island	945-1805	3-day	April 21, 2003	June 23, 2003
Golf Island	945-1421	30-day	May 8, 2003	June 26, 2003

All data were reduced to MLLW using unverified observed tides from station Sitka, AK using the tide file 9451600.tid and time and height correctors using the zone corrector file 0112RA2003CORP.zdf.

The Pacific Hydrographic Branch will apply final approved (smooth) tides to the survey data during final processing.¹⁴ A request for delivery of final approved (smooth) tides for survey H11112 was forwarded to N/OPS1 on June 12, 2003. A copy of the request is included in Appendix IV.¹⁵

D. RESULTS AND RECOMMENDATIONS

D.1 Automated Wreck and Obstruction Information System (AWOIS) Investigations

A total of one (1) AWOIS item was located within the limits of H11112 and investigated during this survey. Investigation methods, results, and charting recommendations have been entered into the Pydro session for the sheet (H11121.pss) and will be submitted with the digital data. A report was generated and is attached to this report.

D.2 Chart Comparison ¹⁶

Survey H11112 was compared with charts 17320 (15th Ed. March 6, 1999, 1:217,828), 17323 (10th Ed.; July 10, 1993, 1:40,000), and chart 17324 (13th Ed. March 25, 1989, 1:40,000). ¹⁷

Chart 17320 ¹⁸

Depths from survey H11112 were generally in agreement with chart 17320 within two or three fathoms at the center of the charted soundings. Due to the small scale of the chart many of the charted depths covered large ranges of actual soundings.

Chart 17323 ¹⁹

Depths from survey H11112 were generally in agreement with chart 17323 within one to two fathoms.

Chart 17324

Chart 17324 was the primary chart referenced while conducting the survey. Depths from survey H11112 were generally in agreement with the chart within one to two fathoms. ²⁰

Final chart comparisons will be made at the Pacific Hydrographic Branch after the application of smooth tides. ²¹

The Hydrographer has determined that data accuracy standards and bottom coverage requirements have been met and survey data are adequate to supersede charted data in their common areas. ²²

D.3 Shoreline

Shoreline Source

Vector photogrammetric project AK9703A was 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 them 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) taken during shoreline verification were recorded in HYPACK and 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*.

A detailed Detached Position and Bottom Sample (DPBS) plot²³ 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 “H11112_CFF_Shoreline” and shown in black. New MHW features and changes to the MHW shoreline, CFF or charted, are displayed in red on the “H11112_Shoreline_Updates” MapInfo table, and changes to the MLLW are displayed in pink. Charted shoreline, when used for reference purposes or when source data were not available, is depicted in the MapInfo table “H11112_Charted_Shoreline” and is displayed in brown.²⁴

Items for survey H11112 that needed further discussion and are associated with a detached position have been flagged “Report” in the Pydro H11112.pss. Investigations, survey methods and recommendations are listed in the remarks and recommendations tabs of H11112.pss. A report, H11112 Shoreline Report, of these items has been produced in Pydro and is attached.

Source Shoreline Changes and New Features

The CFF shoreline at position 57°18'41.62"N , 135°41'31.92"W (458299.11E , 6352282.22N) was rejected in favor of the charted (17324) shoreline. SWMB and VBES data was collected inshore of the CFF shoreline, and numerous trees were noted overhanging the water. The Hydrographer recommends the use of the charted (17324) shoreline in lieu of the CFF shoreline as it more accurately represents the actual shoreline.²⁵

The CFF shoreline at position 57°18'09.86"N, 135°38'02.52"W (461798E , 6351263.78N) was found to be incorrect. The Hydrographer recommends the use of the charted (17324) shoreline in lieu of the CFF shoreline as it more accurately represents the actual shoreline.²⁶ The CFF island in position 57°21'32.68"N , 135°41'36.00"W (458289.97E , 6357570.57N) was found to be connected to shore at high water. The Hydrographer recommends the use of the charted (17324) shoreline in lieu of the CFF shoreline as it more accurately represents the actual shoreline.²⁷

Charted Features ²⁸

The charted (17324) rocks in positions 57°19'43.76"N , 135°42'08.10"W (457719.12E, 6354206.92N) and 57°19'43.72"N, 135°41'58.84"W (457874.3E , 6354207N) were not found. Four-minute visual and VBES search using 100m radius star pattern was conducted in 0-2' chop and 3m visibility, bottom not visible. Additionally, 100% SWMB coverage was acquired over each charted position. The Hydrographer recommends removal of the charted rocks. ²⁹

The charted (17324) reef in position 57°19'18.08"N, 135°41'01.05"W (458830.62E, 6353401.94N) was not found. SWMB coverage was acquired at 100% over the position. The Hydrographer recommends the removal of the charted reef. ³⁰

The charted (17324) rock in position 57°20'11.84"N , 135°42'15.93"W (457594.23E, 6355079.37N) was not found. Four-minute visual and VBES search using 50m radius star pattern was conducted in 0-1' chop and 3m visibility, bottom not visible. Additionally, 100% SWMB data was acquired over the charted position. The CFF foul area to the west was confirmed during shoreline verification. The Hydrographer recommends that the charted rock be removed and the CFF foul area be charted. ³¹

The charted (17324) rock at 57°20'07.20"N , 135°42'33.60"W (457297.58E, 6354937.94N) was not found at that position. 100% SWMB coverage was acquired over the area. The foul area was defined by low-water VBES, though at high water SWMB obtained depths within the area. The Hydrographer recommends charting the new foul area. ³²

Recommendations

The Hydrographer recommends that the shoreline as depicted on the Detached Position and Bottom Sample and final sounding MapInfo digital files supersede and complement shoreline information compiled on the CFF and charts as noted. 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 "H11112_Shoreline_Notes." ³³

D.4 Dangers to Navigation

Three dangers to navigation were found and reported to the Marine Chart Division (MCD) for verification and final submission to the Seventeenth Coast Guard District in the form of a digital XML file "H11112_DTON1.xml". A copy of the preliminary Danger to Navigation file is included with the digital data. ³⁴

D.5 Aids to Navigation

One aid to navigation (ATON) was found to be correctly charted and serve its intended purpose. A detached position was taken on the Kane Islands Light 25 (LL# 25155) for check purposes only. A GPS static survey was not conducted. ³⁵

D.6 Miscellaneous

Bottom samples were collected and are submitted with the survey data.³⁶

Sound velocity, for all lines, was applied in CARIS using previous in time and the concatenated vessel files. The sound velocity casts for RA5 03131162.svp & 03131205.svp have suspicious data points at the deep end of the casts. The Hydrographer has checked the lines that would be affected and finds no sound velocity issues caused by those data points.³⁷

DP lines in CARIS, R2SB_2003 2003-132 DP2132 & R1SB_2003 2003-125 DP1125, have only one point in the line. CARIS doesn't deal well with single points and so the line is marked with an X in the project window. Tide and SV correctors are applied to the data and appear correct when viewed in Pydro. The DPs associated with these lines meet requirements.³⁸

In February 2004, the RAINIER was informed of a bug in CARIS SBEdit that incorrectly changes the Observed depths if the VBES data is processed in the following manner: SVP correct (at least once), followed by depth edits (includes accept/reject flagging), followed by an additional SVP correct and merge. By reconverting the raw VBES lines on survey H11112 and copying the SLRange, SLRangeLineSegments, SLRangeTmIdx files into the original processed line file folders, and re-merging, the errors from the Sbedit bug were removed. A comparison of the reconverted and original data in Mapinfo found very few differences. Only 5 soundings, on the whole survey, had a variance greater than 0.01 meters. The 5 soundings were from vessel RA2 on Dn120, line 900_2245. The submitted HDCS_DATA for this survey includes the corrected VBES depths and meets requirements.³⁹

E. APPROVAL

As Chief of Party, I have ensured that standard field surveying and processing procedures were followed in producing this examination in accordance with the Hydrographic Manual, Fourth Edition, Hydrographic Survey Guidelines, Field Procedures Manual and the NOS Hydrographic Surveys Specifications and Deliverables, as updated for 2003.

The digital data and supporting records have been reviewed by me, are considered complete and adequate for charting purposes, and are approved. All records are forwarded for final review and processing to N/CS34, Pacific Hydrographic Branch.

Survey H11112 is complete and adequate to supersede charted soundings ⁴⁰ in their common areas. ⁴¹ No additional work is required for this survey. ⁴²

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

<u>Title</u>	<u>Date Sent</u>	<u>Office</u>
Data Acquisition and Processing Report for OPR-O112-RA-03	October 9, 2003	N/CS34
Horizontal and Vertical Control Report for OPR- O112-RA-03	September 8, 2003	N/CS34
Tides and Water Levels Package for OPR- O112-RA-03	August 1, 2003	N/OPS1
Coast Pilot Report for OPR-O112-RA-03	October 10, 2003	N/CS26

Approved and Forwarded: John W. Humphrey 12-10-03
 John W. Humphrey
 Commander, NOAA
 Commanding Officer
 Date

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

Survey Sheet Manager: Lynette V. Morgan
 Lynette V. Morgan
 Senior Survey Technician, NOAA

Survey Sheet Assistant: Mark Van Waes
 Mark Van Waes
 Lieutenant (junior grade), NOAA

Field Operations Officer: Richard A. Fletcher
 Richard A. Fletcher
 Lieutenant Commander, NOAA

Revisions Processed During Office Processing and Certification

¹ Concur

² Concur

³ Filed with the project records.

⁴ Concur

⁵ Concur

⁶ After office review of the survey data, it was determined that this survey meets IHO S-44 Order 1 specifications.

⁷ The junction with survey H11112, H11111 and H11113 are complete. A "Joins" note has been added to the smooth sheets where applicable. The junction with H11109 was not complete because the survey was processed earlier and sent to MCD. An "Adjoins" note has been added to the smooth sheet where applicable.

⁸ Concur

⁹ Concur

¹⁰ Concur

¹¹ Results of the comparison after applications of approved tides are considered good and reflect similar differences as discussed by the hydrographer.

¹² Concur

¹³ Filed with the project data.

¹⁴ Approved tide note dated December 18, 2003 is attached.

¹⁵ Filed with hydrographic data.

¹⁶ A submerged feature, subm buoy (cov 48 fms), was located within this survey. It was not discussed by the hydrographer. This feature should be retained as charted unless MCD has additional information.

¹⁷ Survey H11112 was compared to Chart 17324, 14th Edition, dated Jan. 1 2005

¹⁸ Chart 17320 was not compared to during office processing.

¹⁹ Chart 17323 was not compared to during office processing.

²⁰ Concur

²¹ With the application of smooth tides, no changes to the comparison were noticed. This survey is adequate to supersede all prior surveys and miscellaneous charted data within the common area, except where noted in this report.

²² Concur, except where mention in the report.

²³ Filed with the hydrographic data.

²⁴ Shoreline verification conducted by the hydrographer and portrayed on the detached position plot has been analyzed during office processing and shown on the smooth sheet as warranted. A few minor revisions to the CFF shoreline have been shown in dashed red on the smooth sheet.

²⁵ Do not concur, the hydrographer located the shoreline (MHWL) inshore of the charted shoreline, therefore the MHWL should be adjusted as shown in dashed red on the smooth sheet.

²⁶ Do not concur, the hydrographer located the shoreline (MHWL) offshore of the charted shoreline, therefore the MHWL should be adjusted as shown on the smooth sheet.

²⁷ Do not concur, the hydrographer noted that the island is now connected to the MHWL; therefore the MHWL should be adjusted as shown on the smooth sheet.

²⁸ There are numerous rocks, ledges and MLLW throughout this survey which the hydrographer recommends retaining as charted. These features are drawn in brown on the smooth sheet. Unless there is an additional photogrammetric source, these features should be retained as charted.

²⁹ Concur, chart this area based on the smooth sheet information.

³⁰ Concur, chart this area based on the smooth sheet information.

³¹ Concur

³² Concur, a 1.3 fathom depth was found near the charted rock. Chart this area based on the smooth sheet.

³³ Shoreline verification conducted by the hydrographer and portrayed on the detached position plot has been analyzed during office processing and shown on the smooth sheet as warranted. A few minor revisions to the CFF shoreline have been shown in dashed red on the smooth sheet.

³⁴ The danger to navigation letter is attached to this report. No additional dangers were found during office processing.

³⁵ The evaluator recommends that MCD use the latest information to chart aids to navigation.

³⁶ Concur, Bottom characteristics have been shown on the smooth sheet as positioned by the present survey.

³⁷ Concur

³⁸ Concur

³⁹ Concur

⁴⁰ insert; and features

⁴¹ Concur, except for features mention in this report.

⁴² Concur

H11112 AWOIS Report

Registry Number: H11112
State: AK
Locality: Salisbury Sound
Sub-locality: Southeast Salisbury Sound and Sukoi Inlet
Project Number: OPR-O112-RA-03
Survey Dates: April 22, 2003 - June 10, 2003

Awois Items from the OPR-O112-RA-03 database that are associated with survey H11112 have been inserted into Pydro in H11112.pss. Investigation methods and charting recommendations have been entered. This report is produced in Pydro and is for reference purposes only. Final review and recommendations of the following AWOIS items will be conducted at the Pacific Hydrographic Branch.

Charts Affected

Number	Version	Date	Scale
17324	13th Ed.	03/25/89	1:40000
17325	7th Ed.	10/13/90	1:40000
17320	15th Ed.	03/06/99	1:217828
16016	19th Ed.	07/10/93	1:969756
531	21st Ed.	02/02/02	1:2100000
500	7th Ed.	06/01/96	1:3500000
530	30th Ed.	03/23/02	1:4860700
50	5th Ed.	07/30/94	1:10000000

Features

Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
AWOIS	4.14 m	57.26771340° N	135.66753971° W	---

1.29) AWOIS #52936 - OBSTRUCTION

Search Position: 57.26767222° N, 135.66767500° W
Historical Depth: [None]
Search Radius: 250
Search Technique: VS, ES, DI, S2, SWMB
Technique Notes: Obtain DP and LD on charted rock and investigate possible shoaling offshore of charted slide area 200 meters to NW.

History Notes:

Hirtoy CL 686/47-- Mr. Albert Brookman of the PRIMROSE II, drawing 6 ft., reports that in Sukoi Inlet, chart 8281, about 200 yards due west of the rock awash at 57/16.04N, lon. 135/39.65W, there is a rock with about 1 1/2 ft. at MLLW. This rock was seen by Mr. Brookman at a minus 3 1/2 ft. tide and was bare about 2 ft. Position scaled in MapInfo from raster chart 17324 13th ed., March 17, 1989. (ENT DAS 02/15/2002)

Survey Summary

Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

See DP#112528 112528 chd (17324) PA rk disproval

INVESTIGATION SUMMARY: Charted (17324) PA rock position was disproved with VBES search radius of 100x50m with 3m visibility, calm seas, and a 5 minute duration. The AWOIS and slide area were covered with additional VBES mainscheme at 50m line spacing and 100% SWMB inshore to 3m depth. Detached positions were obtained for a CFF rock-DP#213244 inshore of the charted position, a new rock-DP#1124270 to the south, a new rock DP#1124288 to the east, and the high point of the ledge at DP#213246. Also two hundred meters to the west of the reported geographic position is a verified charted reef.

Feature Correlation

Address	Feature	Range	Azimuth	Status
OPR-O112-RA-03_H11112	AWOIS # 52936	0.00	000.0	Primary

Hydrographer Recommendations

CHARTING RECOMMENDATION (HYDROGRAPHER): The Hydrographer recommends removal of the charted (17324) PA rock and charting the area with data from the present survey.

Office Notes

Concur

H11112 Shoreline Report

Registry Number: H11112
State: AK
Locality: Salisbury Sound
Sub-locality: Southeast Salisbury Sound and Sukoi Inlet
Project Number: OPR-O112-RA-03
Survey Dates: 04/22/2003 - 05/26/2003

Charts Affected

Number	Version	Date	Scale
17323	10th Ed.	07/10/93	1:40000
17324	13th Ed.	03/25/89	1:40000
17325	7th Ed.	10/13/90	1:40000
17320	15th Ed.	03/06/99	1:217828
16016	19th Ed.	07/10/93	1:969756
531	21st Ed.	02/02/02	1:2100000
500	7th Ed.	06/01/96	1:3500000
530	30th Ed.	03/23/02	1:4860700
50	5th Ed.	07/30/94	1:10000000

Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Rock	-0.93 m	57.33313636° N	135.70247902° W	---
1.2	Sounding	-1.03 m	57.32992310° N	135.66195727° W	---
1.3	Sounding	1.15 m	57.32078425° N	135.66040398° W	---
1.4	Sounding	-2.62 m	57.32079915° N	135.67968722° W	---
1.5	Sounding	-1.05 m	57.32144602° N	135.68854669° W	---
1.6	Sounding	-3.47 m	57.28998221° N	135.68800152° W	---
1.7	Sounding	-1.77 m	57.27994645° N	135.66981097° W	---
1.8	Sounding	-1.26 m	57.29032541° N	135.67848824° W	---
1.9	Sounding	-0.26 m	57.29465268° N	135.68124549° W	---

1.10	Sounding	3.18 m	57.32358326° N	135.69934826° W	---
1.11	Sounding	0.47 m	57.32445227° N	135.70130171° W	---
1.12	Sounding	-1.38 m	57.33030011° N	135.70780151° W	---
1.13	Sounding	-0.89 m	57.33108809° N	135.71049590° W	---
1.14	Sounding	0.09 m	57.33620805° N	135.71163460° W	---
1.15	Sounding	-0.43 m	57.33875696° N	135.70894846° W	---
1.16	Sounding	-0.27 m	57.34221705° N	135.70746008° W	---
1.17	Sounding	-1.54 m	57.33502025° N	135.72042222° W	---
1.18	Sounding	-1.61 m	57.34820853° N	135.68000527° W	---
1.19	Sounding	-2.42 m	57.34059805° N	135.70619975° W	---
1.20	Sounding	-2.38 m	57.33463212° N	135.70309518° W	---
1.21	Sounding	-3.86 m	57.32034325° N	135.68730687° W	---
1.22	Sounding	-3.62 m	57.27841603° N	135.67031036° W	---
1.23	Sounding	-0.98 m	57.26538955° N	135.65929055° W	---
1.24	Sounding	-3.48 m	57.26596812° N	135.66110029° W	---
1.25	Sounding	-4.68 m	57.26635744° N	135.66240423° W	---
1.26	Sounding	-3.48 m	57.26880586° N	135.66214955° W	---
1.27	Sounding	-4.40 m	57.31602847° N	135.67039837° W	---
1.28	Sounding	11.97 m	57.33730388° N	135.67366205° W	---
1.29	AWOIS	[no data]	[no data]	[no data]	---
2.1	Shoal	3.55 m	57.30023352° N	135.68746008° W	---
2.2	Shoal	1.97 m	57.29781581° N	135.68469040° W	---
2.3	Shoal	1.18 m	57.32060520° N	135.64215625° W	---

1 - New Features

1.1) Profile/Beam - 2/1 from H11112 / R7NE_2003 / 2003-112 / DP7112**Survey Summary**

Survey Position: 57.33313636° N, 135.70247902° W
Least Depth: -0.93 m
Timestamp: 2003-112.19:56:42.000 (04/22/2003)
DP Dataset: H11112 / R7NE_2003 / 2003-112 / DP7112
Profile/Beam: 2/1
Charts Affected: 17323_1, 17324_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

711268 new rk

The charted (17324) rock in position 57°19'58.48"N , 135°42'07.40"W (457733.6E , 6354663.0N) was disproved visually during shoreline verification, with VBES (50m star pattern, 3m visibility, 0-1' seas), and with SWMB. A new rock was located at DP#711268.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R7NE_2003/2003-112/DP7112	2/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the charted rock and charting of the new rock and foul area as depicted on the DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet.

1.2) Profile/Beam - 1/1 from H11112 / R2NE_2003 / 2003-121 / DP2121**Survey Summary**

Survey Position: 57.32992310° N, 135.66195727° W
Least Depth: -1.03 m
Timestamp: 2003-121.17:04:57.000 (05/01/2003)
DP Dataset: H11112 / R2NE_2003 / 2003-121 / DP2121
Profile/Beam: 1/1
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

2121206 chd (17324) rk ext new ldg ext foul area

During shoreline verification the charted (17324) rock was found to be the extent of a new ledge and foul area, DP#2121206. The surrounding MLLW line was repositioned and reclassified as foul using SWMB and shoreline buffer.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2NE_2003/2003-121/DP2121	1/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of charted rock and MLLW line, and charting islet, ledge, and foul area as depicted on DPBS plot.

Office Notes

Concur, chart as as depicted on the smooth sheet

1.3) Profile/Beam - 1/1 from H11112 / R7NE_2003 / 2003-122 / DP7122

Survey Summary

Survey Position: 57.32078425° N, 135.66040398° W
Least Depth: 1.15 m
Timestamp: 2003-122.17:15:44.000 (05/02/2003)
DP Dataset: H11112 / R7NE_2003 / 2003-122 / DP7122
Profile/Beam: 1/1
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

71226 chd (17324) rk ext ldg

During shoreline verification with VBES, the charted (17324) rock in position 57°19'14.58"N , 135°39'37.61"W (460225.5E , 6353280.5N) was found to be the new extent of the charted ledge, DP#71226. SWMB was used to reposition the north extent of the ledge. Charted (17324) and CFF foul areas repositioned using SWMB and buffer lines.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R7NE_2003/2003-122/DP7122	1/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the charted rock and charting the ledge and foul area as depicted on the DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet.

1.4) Profile/Beam - 7/1 from H11112 / R7NE_2003 / 2003-123 / DP7123**Survey Summary**

Survey Position: 57.32079915° N, 135.67968722° W
Least Depth: -2.62 m
Timestamp: 2003-123.17:46:07.000 (05/03/2003)
DP Dataset: H11112 / R7NE_2003 / 2003-123 / DP7123
Profile/Beam: 7/1
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

7123278 highpoint of ledge

During shoreline verification, the Hydrographer found the CFF rock to be the highpoint of the charted (17324) islet. The Hydrographer determined that the chd islet better represents this area and a detached position was taken for height reference at DP#7123278. The VBES shoreline buffer and DP#7123277 were used to accurately portray the extents of the ledge.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R7NE_2003/2003-123/DP7123	7/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends not charting the CFF rock, retaining the charted MHW, and charting the ledge as depicted on DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.5) Profile/Beam - 9/1 from H11112 / R7NE_2003 / 2003-123 / DP7123**Survey Summary**

Survey Position: 57.32144602° N, 135.68854669° W
Least Depth: -1.05 m
Timestamp: 2003-123.18:06:25.000 (05/03/2003)
DP Dataset: H11112 / R7NE_2003 / 2003-123 / DP7123
Profile/Beam: 9/1
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

7123326 ext new ldg

The charted (17324) 0 fathom 2 foot sounding was disproved with 100% SWMB. The ledge to the south was positioned at DP# 712326 and 7123325.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R7NE_2003/2003-123/DP7123	9/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends charting ledge as depicted on DPBS plot and charting depths from the present survey as depicted on the Final Field Sheet.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.6) Profile/Beam - 2/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.28998221° N, 135.68800152° W
Least Depth: -3.47 m
Timestamp: 2003-125.16:51:45.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 2/1
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

11252 CFF rk chd (17324) islets exts new ldg

The charted (17324) islets at 57°17'24.711"N , 135°41'20.708"W (458466.31E , 6349900.26N) and the CFF rock are extents of a new ledge, DP#11252.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	2/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the charted (17324) islets, not charting the CFF rock, and charting the new ledge as depicted on the DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet

1.7) Profile/Beam - 4/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.27994645° N, 135.66981097° W
Least Depth: -1.77 m
Timestamp: 2003-125.17:43:31.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 4/1
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

112532 chd (17324) ldg disproved, bldr beach

The charted (17324) ledge was disproved during shoreline verification at DP#112532. The beach consists of only boulders, no ledge was seen. The area is completely uncovered at low water.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	4/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the ledge from the chart as depicted on the DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet and retain the charted MLLW in the area.

1.8) Profile/Beam - 5/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.29032541° N, 135.67848824° W
Least Depth: -1.26 m
Timestamp: 2003-125.17:53:47.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 5/1
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

112533 CFF foul ext new reef, chd (17324) islets CFF rks hps

The CFF foul line is the extent of a new reef. The charted (17324) islets and CFF rock in position 57°17'24.25"N , 135°40'40.56"W (459138.3E , 6349879.3N) are highpoints of the new reef positioned at DP#112533. The DP height was taken on the highpoint, and the reef covers at high water. The reef is connected to shore at low water.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	5/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the charted islets, not charting the CFF rock or CFF foul line, and charting of the new reef as depicted on the DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet.

1.9) Profile/Beam - 6/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.29465268° N, 135.68124549° W
Least Depth: -0.26 m
Timestamp: 2003-125.17:59:07.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 6/1
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

112534 CFF foul is swm ext chd (17324) ldg, CFF rk hp

The CFF foul is the new extent and the CFF rock is the highpoint of the charted ledge. DP#112534 was taken at the seaward most extent of the ledge.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	6/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends not charting the CFF rock or the CFF foul line and charting the ledge as depicted on the DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet.

1.10) Profile/Beam - 10/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.32358326° N, 135.69934826° W
Least Depth: 3.18 m
Timestamp: 2003-125.18:35:24.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 10/1
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

112590 CFF rk new ext chd (17324) ldg

The CFF rock was found to be the extent of the charted (17324) ledge during shorelone verification. The ledge was redefined using VBES, SWMB, and DP#112590.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	10/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends not charting the CFF rock and charting of the ledge as depicted on DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.11) Profile/Beam - 12/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.32445227° N, 135.70130171° W
Least Depth: 0.47 m
Timestamp: 2003-125.18:40:50.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 12/1
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

1125100 new ext chd (17324) ldg

The CFF rock in position 57°19'28.67"N , 135°42'05.20"W (457760.9E , 6353740.9N) was disproved during shoreline verification, with VBES, and with 100% SWMB. New extents of the charted (17324) ledge were positioned with DP#1125100, DP#112598, and the VBES shoreline buffer.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	12/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends not charting the CFF rocks, and charting the ledge as depicted on the DPBS plot.

Office Notes

Cocnur, chart area as depicted on the smooth sheet

1.12) Profile/Beam - 13/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.33030011° N, 135.70780151° W
Least Depth: -1.38 m
Timestamp: 2003-125.18:54:04.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 13/1
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

1125120 new ext chd (17324) ldg

The charted (17324) islet located at 57°19'49.79"N , 135°42'26.62"W (457409.42E , 6354397.7N) was disproved during shoreline verification, with VBES, and with 100% SWMB. The new extent of the charted (17324) ledge was positioned with DP#1125120 and the VBES shoreline buffer.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	13/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the offshore charted islet, retaining the inshore charted islet, charting the CFF MHW, and charting the updated ledge as depicted on the DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.13) Profile/Beam - 14/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.33108809° N, 135.71049590° W
Least Depth: -0.89 m
Timestamp: 2003-125.18:56:28.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 14/1
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

1125121 ext chd (17324) ldg, chd islets disproved

The three charted (17324) islets were disproved visually by Hydrographer during shoreline verification. The ledge slopes upward from MLLW to CFF MHW with no distinct highpoints on the ledge. The new extent of the charted (17324) ledge was positioned with DP#1125121, the VBES shoreline buffer and SWMB.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	14/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the charted islets and charting the ledge as depicted on the DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.14) Profile/Beam - 15/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.33620805° N, 135.71163460° W
Least Depth: 0.09 m
Timestamp: 2003-125.19:01:59.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 15/1
Charts Affected: 17323_1, 17324_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

1125122 CFF rk ext chd (17324) reef

A new extent of the charted reef was positioned at DP#1125122. The CFF rock at 57°20'08.86" N 135°42'42.00" W (457158.4E , 6354990.0N) was disproved during shoreline verification. The reef covers and uncovers, and does not have a significant highpoint.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	15/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the charted (17324) rock, not charting the CFF rock, and charting the reef as depicted on DPBS plot.

Office Notes

Concur, see smooth sheet for depiction of the area.

1.15) Profile/Beam - 16/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.33875696° N, 135.70894846° W
Least Depth: -0.43 m
Timestamp: 2003-125.19:05:34.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 16/1
Charts Affected: 17323_1, 17324_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

1125123 chd (17324) reef is new ext chd ldg

During shoreline verification, the charted (17324) reef was found to be connected to the charted ledge to the north, DP#1125123. The VBES shoreline buffer and SWMB were used to define the extents of the ledge and new extent of the CFF foul with kelp area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	16/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends connecting the reef to the charted ledge and charting the CFF/new foul with kelp area as depicted on DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet. Also remove charted islet as lat. 57/20/18N, long. 135/42/29.8W

1.16) Profile/Beam - 18/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.34221705° N, 135.70746008° W
Least Depth: -0.27 m
Timestamp: 2003-125.19:11:46.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 18/1
Charts Affected: 17323_1, 17324_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

1125138 new ext chd (17324) ldg

The charted (17324) islet in position 57°20'32.81"N , 135°42'26.46"W (457425.9E , 6355727.8N) and northern part of charted (17324) ledge were disproved during shoreline verification and with VBES. A new northern extent of the charted ledge was positioned at DP#1125138.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	18/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of charted islet and northern extent of charted ledge, and recommends charting the ledge as depicted on the DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet.

1.17) Profile/Beam - 20/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.33502025° N, 135.72042222° W
Least Depth: -1.54 m
Timestamp: 2003-125.19:24:06.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 20/1
Charts Affected: 17323_1, 17324_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

1125238 new ext chd (17324) ldg

The charted (17324) islets in positions 57°20'07.053"N , 135°43'13.820"W (456625.67E , 6354939.72N) and 57°20'06.86"N , 135°43'11.46"W (456665.1E , 6354933.3N) were disproved with 100% SWMB. The new extent of the charted (17324) ledge was positioned at DP#1125238.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	20/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the charted islets and charting of the ledge as depicted on the DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet.

1.18) Profile/Beam - 22/1 from H11112 / R1NE_2003 / 2003-125 / DP1125**Survey Summary**

Survey Position: 57.34820853° N, 135.68000527° W
Least Depth: -1.61 m
Timestamp: 2003-125.19:34:32.000 (05/05/2003)
DP Dataset: H11112 / R1NE_2003 / 2003-125 / DP1125
Profile/Beam: 22/1
Charts Affected: 17323_1, 17324_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

1125241 CFF rk hp new ldg

During shoreline verification the CFF rock was found to be the highpoint of a new ledge, a southern extent of which is this DP, and a northern extent of which is DP#1125240. The charted (17324) rocks in positions 57°20'55.71"N , 135°40'51.24"W (459024.9E , 6356419.7N) and 57°21'00.39"N , 135°40'55.49"W (458955.4E , 6356565.3N) are extents of the ledge. The new ledge is the CFF foul area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R1NE_2003/2003-125/DP1125	22/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends not charting CFF rock or CFF foul, removal of charted (17324) rocks, and charting of new ledge as depicted on DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet.

1.19) Profile/Beam - 1/1 from H11112 / R2NE_2003 / 2003-132 / DP2132**Survey Summary**

Survey Position: 57.34059805° N, 135.70619975° W
Least Depth: -2.42 m
Timestamp: 2003-132.16:44:01.000 (05/12/2003)
DP Dataset: H11112 / R2NE_2003 / 2003-132 / DP2132
Profile/Beam: 1/1
Charts Affected: 17323_1, 17324_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

213224 chd MHW are exts chd (17324) ldg

The charted (17324) islets between 57°20'29.940"N , 135°42'26.210"W (457429.16E , 6355639.07N) and 57°20'25.733"N , 135°42'23.171"W (457478.61E , 6355508.44N) were found to be the extents of the charted ledge during shoreline verification. The eastern most extent of the ledge was positioned with DP#213224, 30m west of the original charted extent. The CFF foul with kelp area was verified and the VBES buffer line was used to delineate the foul area to the north.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2NE_2003/2003-132/DP2132	1/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the charted islets and charting of the CFF MHW, CFF foul with kelp area, and the ledge as depicted on the DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet.

1.20) Profile/Beam - 2/1 from H11112 / R2NE_2003 / 2003-132 / DP2132**Survey Summary**

Survey Position: 57.33463212° N, 135.70309518° W
Least Depth: -2.38 m
Timestamp: 2003-132.16:52:32.000 (05/12/2003)
DP Dataset: H11112 / R2NE_2003 / 2003-132 / DP2132
Profile/Beam: 2/1
Charts Affected: 17323_1, 17324_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

213225 new ext chd (17324) ldg

During shoreline verification the charted (17324) ledge was repositioned to DP#213225. The CFF danger area in position 57°20'02.47" N 135°42'08.01" W (457633.6 E, 6354805.3 N) was found to be a charted (17324) ledge. The CFF kelp area in position 57°20'00.37" N 135°42'11.52" W (457664.0 E, 6354721.6 N) was found to be foul with rocks and kelp by the Hydrographer.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2NE_2003/2003-132/DP2132	2/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the CFF danger area, charting the CFF kelp area as foul with rocks and kelp, and charting the ledge as depicted on DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet. Also retain charted rock at lat. 57/20/1.1N, long. 135/42/8.3W

1.21) Profile/Beam - 3/1 from H11112 / R2NE_2003 / 2003-132 / DP2132**Survey Summary**

Survey Position: 57.32034325° N, 135.68730687° W
Least Depth: -3.86 m
Timestamp: 2003-132.17:27:19.000 (05/12/2003)
DP Dataset: H11112 / R2NE_2003 / 2003-132 / DP2132
Profile/Beam: 3/1
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

213226 ext MHW

During shoreline verification, the CFF island was found to be connected to the shore at MHW. A new extent of the MHW was positioned at DP#213226.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2NE_2003/2003-132/DP2132	3/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends charting the MHW as depicted on the DPBS plot.

Office Notes

Concur, chart area as depicted on the smooth sheet.

1.22) Profile/Beam - 4/1 from H11112 / R2NE_2003 / 2003-132 / DP2132**Survey Summary**

Survey Position: 57.27841603° N, 135.67031036° W
Least Depth: -3.62 m
Timestamp: 2003-132.17:40:29.000 (05/12/2003)
DP Dataset: H11112 / R2NE_2003 / 2003-132 / DP2132
Profile/Beam: 4/1
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

213227 chd (17324) MHW OK

During shoreline verification, the Hydrographer found the charted (17324) shoreline to be correct, as verified by DP#213227.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2NE_2003/2003-132/DP2132	4/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends retaining the charted shoreline as depicted on the DPBS plot.

Office Notes

Do not concur, the hydrographer found th MHWL different from the chart. Chart MHWL as shown on the smooth sheet

1.23) Profile/Beam - 9/1 from H11112 / R2NE_2003 / 2003-132 / DP2132**Survey Summary**

Survey Position: 57.26538955° N, 135.65929055° W
Least Depth: -0.98 m
Timestamp: 2003-132.18:32:20.000 (05/12/2003)
DP Dataset: H11112 / R2NE_2003 / 2003-132 / DP2132
Profile/Beam: 9/1
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

213298 CFF rk hp new islet

During shoreline verification, the CFF rock was found to be the highpoint of a new islet, DP#213298. A ledge connects the islet to the shore at low water.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2NE_2003/2003-132/DP2132	9/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends not charting the CFF rock and charting the new islet as depicted on the DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.24) Profile/Beam - 10/1 from H11112 / R2NE_2003 / 2003-132 / DP2132**Survey Summary**

Survey Position: 57.26596812° N, 135.66110029° W
Least Depth: -3.48 m
Timestamp: 2003-132.18:35:03.000 (05/12/2003)
DP Dataset: H11112 / R2NE_2003 / 2003-132 / DP2132
Profile/Beam: 10/1
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

213299 CFF rk new ext/hp chd (17324) islet

During high water shoreline verification, the CFF rock in position 57°15'57.76" N 135°39'40.17" W ; (460122.3 E , 6347196.6 N) was found to be the highpoint and new extent of the charted (17324) islet, DP#213299. The CFF rock in position 57°15'57.26" N 135°39'36.5" W ; (460183.9 E , 6347180.3 N) was not able to be positioned due to shoaling, however it was observed to be the highpoint and new extent of the charted (17324) islet. The highpoint is approximately the same as DP#213299.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2NE_2003/2003-132/DP2132	10/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends not charting the CFF rocks and charting the adjusted islets as depicted on the DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.25) Profile/Beam - 11/1 from H11112 / R2NE_2003 / 2003-132 / DP2132**Survey Summary**

Survey Position: 57.26635744° N, 135.66240423° W
Least Depth: -4.68 m
Timestamp: 2003-132.18:37:14.000 (05/12/2003)
DP Dataset: H11112 / R2NE_2003 / 2003-132 / DP2132
Profile/Beam: 11/1
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

2132100 CFF rk new ext/hp chd (17324) islet

During high water shoreline verification, the CFF rock was found to be the highpoint and new extent of the charted (17324) islet, DP#2132100.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2NE_2003/2003-132/DP2132	11/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends not charting the CFF rock and charting the islet as depicted on the DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.26) Profile/Beam - 12/1 from H11112 / R2NE_2003 / 2003-132 / DP2132**Survey Summary**

Survey Position: 57.26880586° N, 135.66214955° W
Least Depth: -3.48 m
Timestamp: 2003-132.18:41:50.000 (05/12/2003)
DP Dataset: H11112 / R2NE_2003 / 2003-132 / DP2132
Profile/Beam: 12/1
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

2132101 ext MHW

During shoreline verification, the CFF island was found to be connected by a spit to the shore at MHW. A new extent of the MHW was positioned at DP#2132101.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2NE_2003/2003-132/DP2132	12/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends charting the MHW as depicted on the DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.27) Profile/Beam - 13/1 from H11112 / R2NE_2003 / 2003-132 / DP2132**Survey Summary**

Survey Position: 57.31602847° N, 135.67039837° W
Least Depth: -4.40 m
Timestamp: 2003-132.19:20:24.000 (05/12/2003)
DP Dataset: H11112 / R2NE_2003 / 2003-132 / DP2132
Profile/Beam: 13/1
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

2132189 chd (17324) rk is ext MHW

During shoreline verification, the charted (17324) rock in position 57°18'58.60"N , 135°40'13.37"W (459622.3E , 6352792.3N) was found to be on shore. A new extent of the MHW was positioned at DP#2132189. The CFF rock at 57°18'57.15"N 135°40'12.30"W (459639.8E , 6352747.2N) was verified.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2NE_2003/2003-132/DP2132	13/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the charted rock, charting the new MHW and CFF rock.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.28) Profile/Beam - 1/1 from H11112 / R2SB_2003 / 2003-132 / DP2132**Survey Summary**

Survey Position: 57.33730388° N, 135.67366205° W
Least Depth: 11.97 m
Timestamp: 2003-132.16:30:57.000 (05/12/2003)
DP Dataset: H11112 / R2SB_2003 / 2003-132 / DP2132
Profile/Beam: 1/1
Charts Affected: 17323_1, 17324_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

213221 chd (17324) islet disproval

The charted (17324) islet was disproved with SWMB and a 100m search radius, star-pattern VBES. During the search visibility was 2.5m and clear to a rocky bottom with calm seas.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11112/R2SB_2003/2003-132/DP2132	1/1	0.00	000.0	Primary

Hydrographer Recommendations

The Hydrographer recommends removal of the charted islet as depicted on the DPBS plot.

Office Notes

Concur, chart area as shown on the smooth sheet.

1.29) AWOIS #52936 - OBSTRUCTION

Search Position: 57.26767222° N, 135.66767500° W
Historical Depth: [None]
Search Radius: 250
Search Technique: VS, ES, DI, S2, SWMB
Technique Notes: Obtain DP and LD on charted rock and investigate possible shoaling offshore of charted slide area 200 meters to NW.

History Notes:

Hirtoy CL 686/47-- Mr. Albert Brookman of the PRIMROSE II, drawing 6 ft., reports that in Sukoi Inlet, chart 8281, about 200 yards due west of the rock awash at 57/16.04N, lon. 135/39.65W, there is a rock with about 1 1/2 ft. at MLLW. This rock was seen by Mr. Brookman at a minus 3 1/2 ft. tide and was bare about 2 ft. Position scaled in MapInfo from raster chart 17324 13th ed., March 17, 1989. (ENT DAS 02/15/2002)

Survey Summary

Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

See DP#112528 112528 chd (17324) PA rk disproval

INVESTIGATION SUMMARY: Charted (17324) PA rock position was disproved with VBES search radius of 100x50m with 3m visibility, calm seas, and a 5 minute duration. The AWOIS and slide area were covered with additional VBES mainscheme at 50m line spacing and 100% SWMB inshore to 3m depth. Detached positions were obtained for a CFF rock-DP#213244 inshore of the charted position, a new rock-DP#1124270 to the south, a new rock DP#1124288 to the east, and the high point of the ledge at DP#213246. Also two hundred meters to the west of the reported geographic position is a verified charted reef.

Feature Correlation

Address	Feature	Range	Azimuth	Status
OPR-O112-RA-03_H11112	AWOIS # 52936	0.00	000.0	Primary

Hydrographer Recommendations

CHARTING RECOMMENDATION (HYDROGRAPHER): The Hydrographer recommends removal of the charted (17324) PA rock and charting the area with data from the present survey.

Office Notes

Concur

Subject: DTON RA-15-03 (H11112)

Date: Thu, 04 Dec 2003 17:43:31 +0000

From: FOO Rainier <foo.rainier@ranems.pmc.noaa.gov>

To: MCD DTON <mcd.dton@noaa.gov>

CC: "Swallow, Jon" <Jon.Swallow@noaa.gov>, "Lowell, John" <John.Lowell@noaa.gov>

Attached is a zip of the DTON xml file, three shoal soundings, for survey H11112.

--

LT(jg) Stephanie Koes, NOAA
Field Operations Officer, RAINIER
1801 Fairview Ave. E.
Seattle, WA 98102

tel; (206)553-4794

cell; (206)660-8747

fax; (206)553-5306

<http://www.moc.noaa.gov/ra>



H11112_DT0N1.zip

Name: H11112_DT0N1.zip

Type: Zip Compressed Data (application/x-zip-compressed)

Encoding: base64

H11112 DTON Report

Registry Number: H11112
State: AK
Locality: Salisbury Sound
Sub-locality: Southeast Salisbury Sound and Sukoi Inlet
Project Number: OPR-O112-RA-03
Survey Dates: 05/02/2003 - 05/26/2003

Charts Affected

Number	Version	Date	Scale
17323	10th Ed.	07/10/93	1:40000
17324	13th Ed.	03/25/89	1:40000
17325	7th Ed.	10/13/90	1:40000
17320	15th Ed.	03/06/99	1:217828
16016	19th Ed.	07/10/93	1:969756
531	21st Ed.	02/02/02	1:2100000
500	7th Ed.	06/01/96	1:3500000
530	30th Ed.	03/23/02	1:4860700
50	5th Ed.	07/30/94	1:10000000

Features

Feature Type	Survey Depth [m]	Survey Latitude	Survey Longitude
Sounding	1.18 m	057° 19' 14.179" N	135° 38' 31.762" W
Sounding	1.97 m	057° 17' 52.137" N	135° 41' 04.885" W
Sounding	3.55 m	057° 18' 00.841" N	135° 41' 14.856" W

1.1) Profile/Beam - 305/240 from h11112 / r4re_2003 / 2003-122 / 240_2246**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 057° 19' 14.179" N, 135° 38' 31.762" W
Least Depth: 1.18 m
Timestamp: 2003-122.22:46:34.307 (05/02/2003)
Survey Line: h11112 / r4re_2003 / 2003-122 / 240_2246
Profile/Beam: 305/240
Charts Affected: 17323_1, 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Shoal sounding

Feature Correlation

Line	Feature	Range	Azimuth	Status
i:/hdcx_data/h11112/r4re_2003/2003-122/240_2246	305/240	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding

1.2) Profile/Beam - 1946/64 from h11112 / r4re_2003 / 2003-130 / 308_2326**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 057° 17' 52.137" N, 135° 41' 04.885" W
Least Depth: 1.97 m
Timestamp: 2003-130.23:29:08.002 (05/10/2003)
Survey Line: h11112 / r4re_2003 / 2003-130 / 308_2326
Profile/Beam: 1946/64
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Shoal sounding

Feature Correlation

Line	Feature	Range	Azimuth	Status
i:/hdcx_data/h11112/r4re_2003/2003-130/308_2326	1946/64	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding

1.3) Profile/Beam - 195/73 from h11112 / r5re_2003 / 2003-146 / 235_2225**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 057° 18' 00.841" N, 135° 41' 14.856" W
Least Depth: 3.55 m
Timestamp: 2003-146.22:25:33.943 (05/26/2003)
Survey Line: h11112 / r5re_2003 / 2003-146 / 235_2225
Profile/Beam: 195/73
Charts Affected: 17324_1, 17325_1, 17320_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Shoal sounding

Feature Correlation

Line	Feature	Range	Azimuth	Status
i:/hdc_data/h11112/r5re_2003/2003-146/235_2225	195/73	0.00	000.0	Primary

Hydrographer Recommendations

Chart sounding



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: December 18, 2003

HYDROGRAPHIC BRANCH: Pacific
HYDROGRAPHIC PROJECT: OPR-0112-RA-2003
HYDROGRAPHIC SHEET: H11112-revised

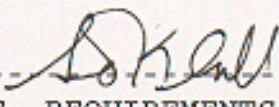
LOCALITY: Salisbury Sound, Alaska
TIME PERIOD: April 22 - June 10, 2003

TIDE STATION USED: 945-1600 Sitka
Lat. 57° 03.1' N Lon. 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: SEA201A

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 new 1983-2001 National Tidal Datum Epoch (NTDE).

For -----
CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION

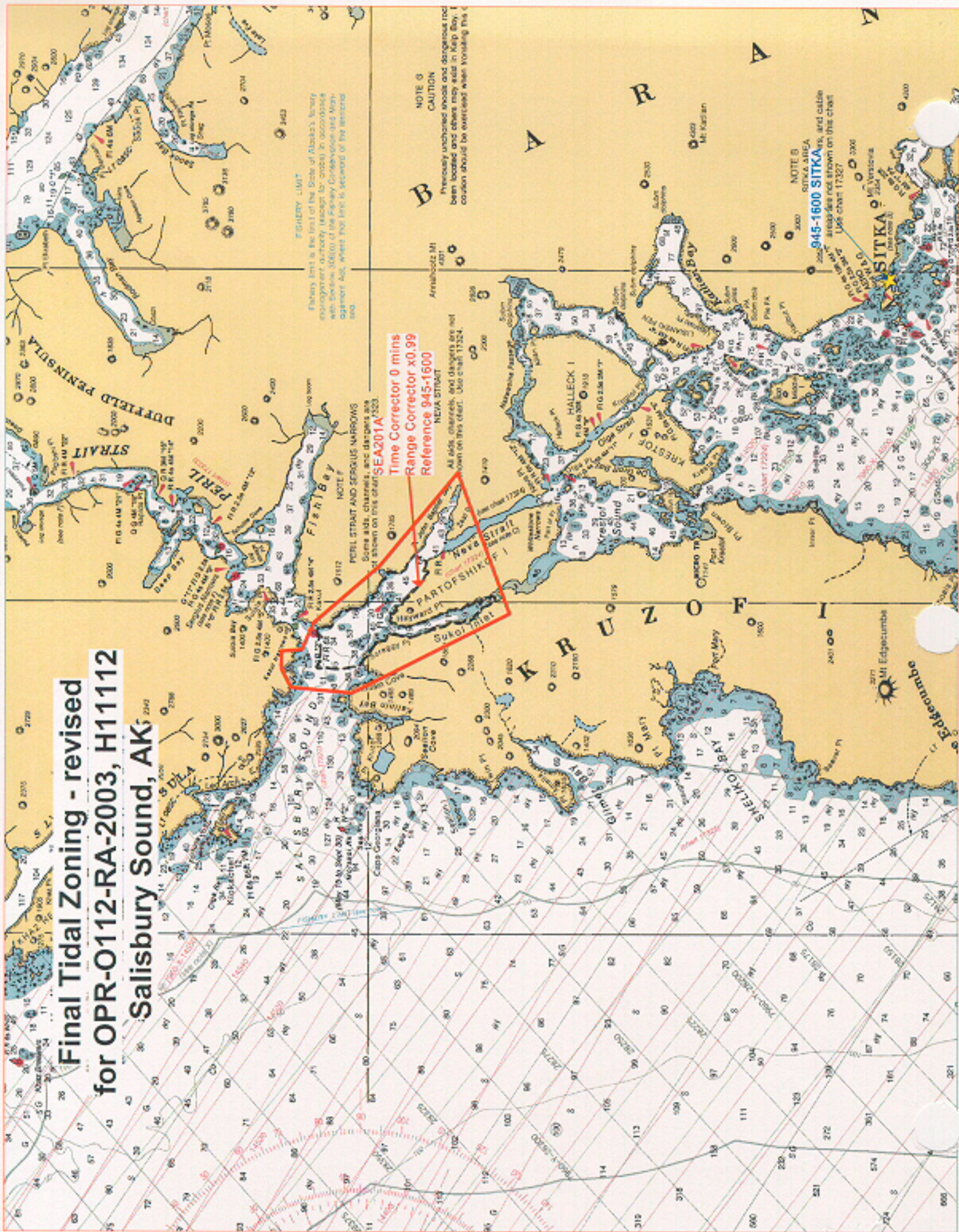


Final tide zone node point locations for OPR-O112-RA-2003, H11112

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 Order	AVG Time Correction	Range Correction
Zone SEA201A	945-1600	0	0.99
-135.751821 57.374727			
-135.75757 57.34186			
-135.677763 57.256337			
-135.536277 57.284567			
-135.629869 57.326705			
-135.687406 57.362636			
-135.713991 57.368695			
-135.715543 57.379779			
-135.733426 57.379779			
-135.751821 57.374727			

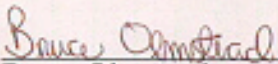
**Final Tidal Zoning - revised
for OPR-O112-RA-2003, H11112
Salisbury Sound, AK**



APPROVAL SHEET
H11112

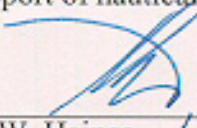
Initial Approvals:

The survey and associated records have been inspected with regard to survey coverage, delineation of the depth curves, development of critical depths, cartographic symbolization, and verification or disproof of charted data. The survey records and digital data comply with NOS requirements except where noted in the Descriptive Report and are adequate to supersede prior surveys and nautical charts in the common area.


Bruce Olmstead
Cartographic Team
Pacific Hydrographic Branch

Date: 4/5/2006

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


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

Date: 6 April 2006