NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE

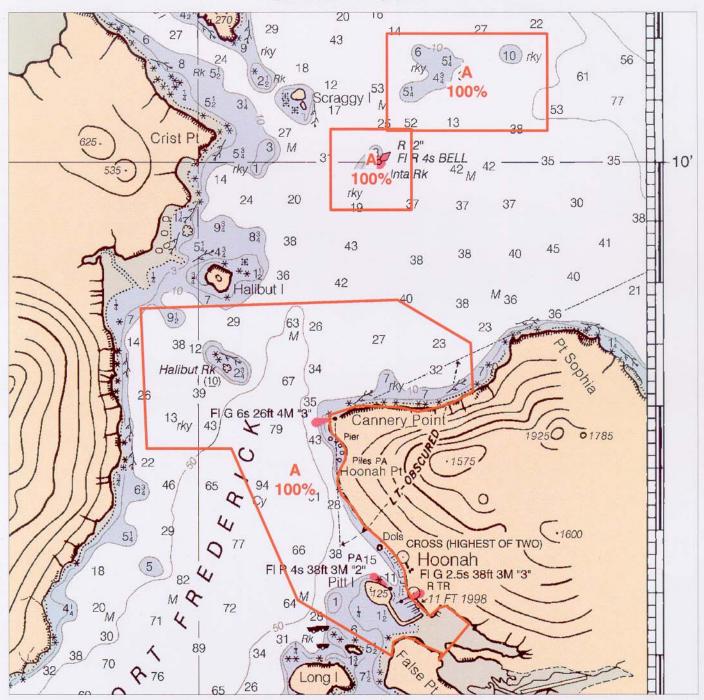
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SERVICE

DESCRIPTIVE REPORT

| Type of Survey | HYDROGRAPHIC |
|----------------|------------------------------------------|
| Field No. | RA-10-18-04 |
| Registry No. | Н-11358 |
| | |
| | LOCALITY |
| State | Alaska |
| | Port Frederick |
| Sublocality | Hoonah Point and Pinta Rock |
| | 2004 |
| | CHIEF OF PARTY CDR J.W.Humphrey, NOAA |
| | LIBRARY & ARCHIVES |
| DATE | |
| | |

| NOAA FORM 77-28 (11-72) | | ATMOSPHERIC ADMINISTRATION | REGISTER NO. |
|-----------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------|--------------------------|
| | HYDROGRAPHIC TITLE SHEET | - | H11358 |
| INSTRUCTIONS - filled in as completely as po | The hydrographic sheet should be accompa assible, when the sheet is forwarded to the off | • | FIELD NO. RA-10-18-04 |
| State | Alaska | | |
| General Locality | Port Frederick | | |
| Sublocality | Hoonah Point and Pinta Rock | | |
| Scale | 1:10,000 | Date of Survey <u>9/17/04-9/19</u> | /04 |
| Instructions Dated | 16-Aug-04 | Project No. OPR-O905-I | RA-04 |
| Vessel | Hull # RA5(1006), RA4(1016), RA2(11 | 03) | |
| Chief of Party | CDR J.W. Humphrey, NOAA | | |
| Surveyed by | RAINIER Personnel | | |
| Graphic record scaled by Graphic record checked by | RAINIER Personnel RAINIER Personnel | | |
| Evaluation by | B. Olmstead | Automated plot b HP Designje | ± 1050C |
| Verification by | Bonnie Johnston and Elias Domingo | | |
| Soundings in | Fathoms and tenths | at MLLW | |
| REMARKS: | Time in UTC. UTM Projection Zone 8 | | |
| | | | |
| | Revisions and annotations appearing | as endnotes were generated | |
| | during office processing. As a result | , page numbering may be | |
| | interrupted or non-sequential. | | |
| | All separates are filed with the hydro | graphic data. | |
| | | | |
| | | | |

Progress Sketch S-O905-RA-04 September, 2004 Chart 17302



| Project | Sheet_Letter | H_num | HQ_Est_SNI\ | CumIPercCompPrev | CumlPercCompCur | SNM_CompCurN | CumSNMcor |
|---------|--------------|--------|-------------|------------------|-----------------|--------------|-----------|
| S-0905 | A | H11358 | 4.04 | 0 | 100 | 4.04 | 4.04 |
| S-O905 | Α | H11358 | 0.43 | 0 | 100 | 0.43 | 0.43 |
| S-0905 | А | H11358 | 1.02 | - 0 | 100 | 1.02 | 1.02 |

| Project | Month | LNM_Hydr | LNM_MB | SV_Casts | Bottom_Sam | AWOIS_items | Tide_Guage_In | DAS | DTime_equ | DTime_We | D_Time_c | Inport_H |
|---------|-----------|----------|--------|----------|------------|-------------|---------------|------|-----------|----------|----------|----------|
| S-O905 | September | 23.13 | 82.50 | 6.00 | 0.00 | 0.00 | 0.00 | 9.00 | 0.00 | 0.00 | 0.00 | 168.00 |

Descriptive Report to Accompany Hydrographic Survey H11358

Project S-0905-RA-04 Hoonah, AK Scale 1:10,000 September 17-19, 2004

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 S-0905-RA-04, dated August 16, 2004, Draft Standing Project Instructions dated March 21, 2001, and NOS Hydrographic Specifications and Deliverables dated March 2003. The survey area is Port Frederick, Alaska. This survey corresponds to sheet A 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 as much as 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.¹

Data acquisition was conducted from DN 261 to 263.²

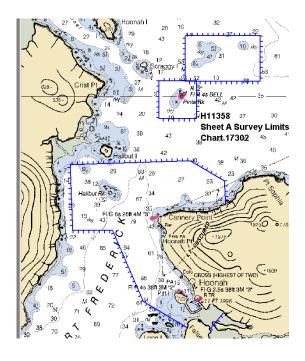


Figure 1. H11358 Survey Limits

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-P132-RA-04 *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 were acquired by launches 1006, 1016, 1103. Launches 1006 and 1016 were used to acquire shallow-water multibeam (SWMB) soundings and sound velocity profiles. Launch 1103 was used to acquire Vertical Beam Echo Sounder (VBES) and Detached Positions.

A complete description of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods can be found in the OPR-P132-RA-04 *Data Acquisition and Processing Report* (DAPR), submitted under separate cover. Project OPR-P132-RA-04 was conducted in Eastern Prince William Sound, AK during August through September 2004. The same vessels and vessel configurations were used in OPR-P132-RA-04 as were used in S-P908-RA04. Items specific to this survey are discussed in the following sections.

No unusual vessel configurations were used for data acquisition.

B2. Quality Control

Crosslines

Vertical Beam Echo Sounder (VBES) crosslines including buffer lines totaled 23.13 nautical miles, comprising 32.5% of mainscheme hydrography. Crosslines generally agreed within 0.5 meter of mainscheme hydrography.

Shallow-Water Multibeam (SWMB) crosslines totaled 6.9 nautical miles, comprising 9.1% of SWMB hydrography. The mainscheme bathymetry was manually compared to the XL nadir beams in CARIS subset mode and agreed well with differences averaging approximately 0.5 meter.

A statistical Quality Control Report was generated for RESON SWMB data acquired on the Lake Washington Reference Surface at the start of the season to validate launch offsets and sonar biases. A copy of this report is included in the OPR-P183-RA-04 DAPR.⁵

A Pydro Checkpoint Report was created on representative RESON 8101, RESON 8125, and ELAC data. A copy of this report is submitted digitally in the quality control folder. The report was generated using checkpoints created at the intersections of mainscheme lines and crosslines. A total of 11 checkpoints were created in areas surveyed using Reson 8101 on RA5 (1006), Reson 8125 on RA4 (1016) and Elac on RA4 (1016). All checkpoint

comparisons passed IHO Order One depth accuracy standards with the exception of a few ELAC beams on checkpoint numbers 1, 8 and 9. The checkpoint locations of these comparisons were on steep slopes, and can reasonably be discounted.

Through manual examination of the data and statistical analysis of data accuracy standards for this survey have been met.⁶

Junctions

There are no junction surveys for sheet H11358.⁷

Data Quality Factors

After correction for sound velocity in CARIS HIPS & SIPS, a small amount of lines west of Halibut Rock still exhibited the characteristic "smiles" indicative of inaccurate sound velocity corrections (*see Figure 2*). All areas of problematic data were surveyed using the Reson 8101 on RA5 (1006). Despite the best efforts of the Hydrographer to conduct sufficient sound velocity casts distributed both spatially and temporally, and to correct for sound velocity errors in post processing, sound velocity errors were still noticeable. To compensate, the Hydrographer, where possible, increased filtering and rejected soundings obviously in error on the outer beams.⁸

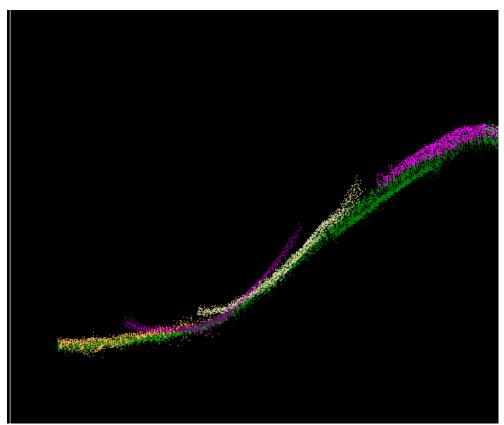


Figure 2. Inaccurate Sound Velocity Resulting in "Smiles"

B3. Data Reduction

Data reduction procedures for survey H11358 conform to those detailed in the OPR-P132-RA-04 *DAPR*.

C. VERTICAL AND HORIZONTAL CONTROL

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 Gustavus (288 kHz) were utilized during this survey.

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 Juneau, AK (945-2210) served as control for datum determination and as the primary source for water level reducers for survey H11358.

No secondary gauges were required.

All data were reduced to MLLW using unverified observed tides from station Juneau, AK using the tide file 9452210.tid and time and height correctors using the zone corrector file 0905RA2004CORP.

The Pacific Hydrographic Branch will apply final approved (smooth) tides to the survey data during final processing. A request for delivery of final approved (smooth) tides for survey H11358 was forwarded to N/OPS1 on September 21, 2004. A copy of the request is included in Appendix IV. 10

D. RESULTS AND RECOMMENDATIONS

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

No Automated Wreck and Obstruction Information System (AWOIS) items were located within the limits of H11358. 11 of this survey. 12

D.2 Chart Comparison

Survey H11358 was compared with chart 17302 (18th Ed.; March 2, 2002, 1:80,000). 13

4

Chart 17302

Depths from survey H11358 generally agreed with depths on chart 17302 within one fathom. In many instances, surveyed depths were found to be slightly deeper then charted depths.¹⁴

Final chart comparisons will be made at the Pacific Hydrographic Branch after the application of smooth tides. 15

D.3 Shoreline

Shoreline Source

Vector photogrammetric project TP-01313 was supplied by N/CS31 in the form of cartographic feature files (CFF). In addition, features and shoreline shown on the current editions of chart 17302 that were not depicted or depicted differently 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) 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 plot in MapInfo format is provided showing all detached positions 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 H11358_CFF_SHORELINE and shown in black. New MLLW features and changes to the MLLW shoreline, CFF or charted, are displayed in pink on the "H11358_SHORELINE_UPDATES" MapInfo table. Charted shoreline, when used for reference purposes or when source data were not available, is depicted in the MapInfo table "H11358_CHD_17302_SHORELINE" and displayed in brown. ¹⁶

Source Shoreline Changes and New Features

The CFF rock at 58°09'56.732" N, 135°27'17.791"W was disproved after conducting one hundred percent shallow water multibeam over the CFF rock position. The least depth found in this area is 6.7 meters.¹⁷

Charted Features

The charted (17302) rock at 58°08'02.283"N, 135°26'31.228"W was disproved after conducting a five-minute visual search and a VBES search over the investigation area. Sea conditions were flat. Water visibility in this area was clear to the bottom with a depth of 1.5 meters. 18



Recommendations

The Hydrographer recommends that the shoreline as depicted on the Detached Position and final sounding Mapinfo digital file supersede and complement shoreline information compiled on the 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 "H11358_ShorelineNotes." ¹⁹

D.4 Dangers to Navigation

No danger to navigation items were located within the limits of H11358. 20 of this survey. 21

D.5 Aids to Navigation

Survey H11358 included four (4) aid to navigation (ATON). All ATONs were found to be correctly charted and serve their intended purpose. ²²

E. APPROVAL²³

As Chief of Party, I have ensured that standard field surveying and processing procedures were followed in producing this survey 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 H11358 is complete and adequate to supersede charted soundings²⁴ in their common areas. No additional work is required for this survey.

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

| <u>Title</u> | Date Sent | Office |
|---------------------------------------------------------|------------------|---------------|
| Data Acquisition and Processing Report (OPR-P132-RA-04) | 02/15/2005 | N/CS34 |

Approved and Forwarded:

John W. Humphrey
Commander, NOAA
Commanding Officer

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

Survey Sheet Manager:

Misty M. Watson
Ensign, NOAA

Field Operations Officer:

Keyind Stover
Lieutenant, NOAA

Revisions Compiled During Office Processing and Certification

- ¹ Concur
- ² September 17-19, 2004
- ³ Filed with the project records
- ⁴ Strikethrough S-P908-RA04 replace with S-0905-RA-04
- ⁵ Strikethrough OPR-P183-RA-04 replace with OPR-P132-RA-04
- ⁶ Concur
- ⁷ Concur. A comparison of depths and standard depth curves with Charts 17302 and 17316 reveals good agreement within the common areas.
- ⁸ A comparison of soundings in these areas reveals no significant discrepancies.
- ⁹ Filed with the hydrographic records
- ¹⁰ Appendix IV is filed with the hydrographic records. Approved tide note dated April 6, 2005 is attached this report.
- ¹¹ Concur.
- ¹² Strikethrough of this survey and end sentence with H11358.
- ¹³ Chart 17316 20th edition, dated April 20, 2002, 1:80,000 was also compared with during office processing. The evaluator recommends that MCD consider adding an inset of Hoonah Harbor and ferry terminal. The 1:80,000 scale charts portraying this area lack the detail that might be better in a larger scale format. In addition, the ten fathom curve shown on H-drawing 17302 was copied to the H-drawing for chart 17316 and placed on level 7. MCD may want to evaluate this curve for use in future chart editions.
- ¹⁴ Do not concur. A comparison of survey depths with charts 17302 and 17316 indicate a slightly shoal bias differing within one fathom. In addition, charted depth curves generally reveal good agreement with those shown on the smooth sheet.
- ¹⁵ See endnote 13
- ¹⁶ Mean high water line and features shown in brown on the smooth sheet originate with chart 17302 18th edition and are for orientation only. All mean high water line shown in black on the smooth sheet originates from TP-01313.
- ¹⁷ Concur. Recommend CFF rock not be charted.
- ¹⁸ Concur. Recommend to delete the charted rock.
- ¹⁹ Concur with clarification. Shoreline verification has been analyzed during office processing and shown on the smooth sheet as warranted.
- ²⁰ Concur
- ²¹ Strikethrough of this survey and end sentence with H11358.
- ²² Concur. The evaluator recommends that MCD use the latest ATONIS information to chart these fixed and floating aids.
- ²³ The descriptive report was not signed by the Survey Sheet Manager but has been approved by the Chief of Party.
- ²⁴ and features

H11358 DP shoreline report

Registry Number: H11358

State: Alaska

Locality: Port Frederick

Sub-locality: Hoonah Point and Pinta Rock

Project Number: S-O905RA-04 **Survey Dates:** 9/17/04 - 9/19/04

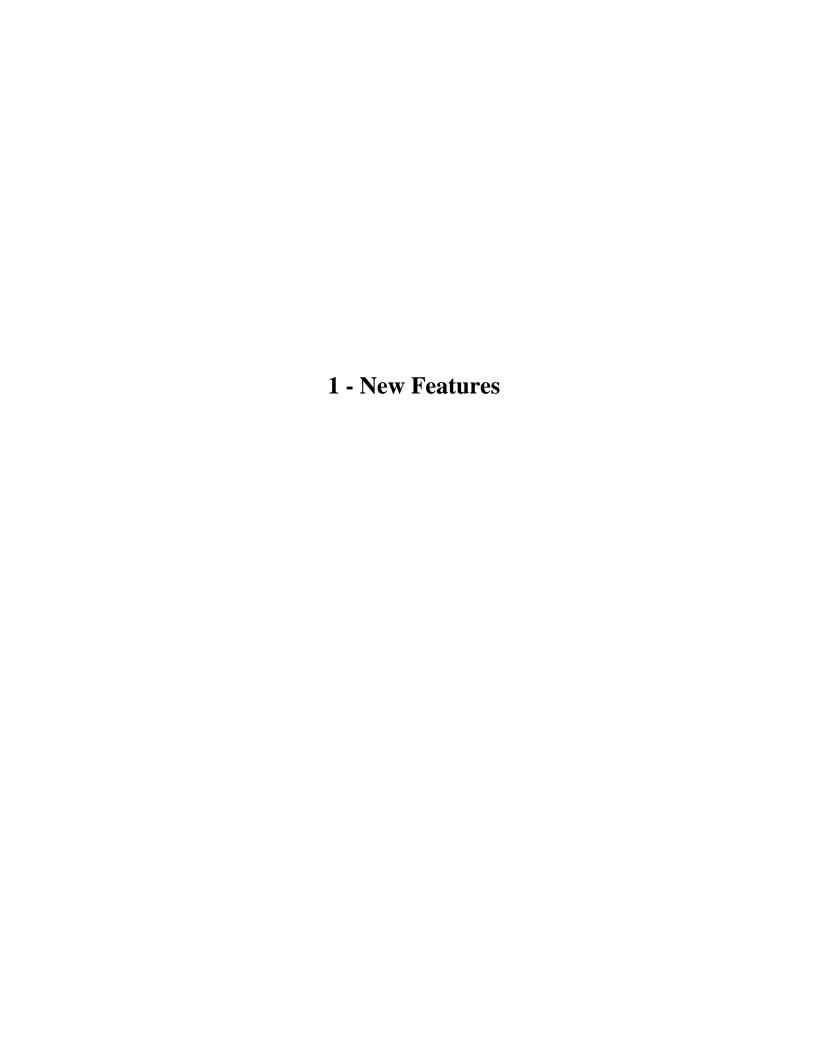
Charts Affected

| Number | Number Version | | Scale |
|--------|----------------|----------|------------|
| 17302 | 18th Ed. | 03/02/02 | 1:80000 |
| 17316 | 20th Ed. | 04/20/02 | 1:80000 |
| 17300 | 30th Ed. | 10/01/02 | 1:209978 |
| 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 |
|------|-------------------|-----------------|--------------------|---------------------|
| 1.1 | Sounding | -1.34 m | 58° 08' 02.824" N | 135° 26' 57.298" W |
| 1.2 | Sounding | -1.72 m | 58° 08' 02.921" N | 135° 27' 09.786" W |
| 1.3 | Sounding | -1.04 m | 58° 08' 01.759" N | 135° 27' 33.339" W |
| 1.4 | Sounding | -1.36 m | 58° 07' 57.948" N | 135° 27' 54.547" W |
| 1.5 | Sounding | -3.73 m | 58° 06' 07.316" N | 135° 27' 07.850" W |
| 1.6 | Sounding | -2.37 m | 58° 06' 10.564" N | 135° 27' 06.383" W |
| 1.7 | Red buoy, lighted | -0.26 m | 58° 10' 00.485" N | 135° 27' 13.186" W |
| 1.8 | Pile | -0.68 m | 58° 07' 46.020" N | 135° 27' 56.638" W |
| 1.9 | Sounding | -0.16 m | 58° 07' 41.676" N | 135° 27' 50.383" W |
| 1.10 | Dolphin | -6.12 m | 58° 07' 36.191" N | 135° 27' 48.010" W |
| 1.11 | Pile | -0.42 m | 58° 07' 37.600" N | 135° 27' 46.684" W |

| 1.12 | Dolphin | -7.13 m | 58° 07' 00.860" N | 135° 27' 31.724" W |
|------|-------------------|----------|-------------------|--------------------|
| 1.13 | Sounding | -7.13 m | 58° 06' 58.245" N | 135° 27' 25.371" W |
| 1.14 | Lighted structure | -12.14 m | 58° 06' 30.971" N | 135° 27' 00.168" W |
| 1.15 | Lighted structure | -12.16 m | 58° 06' 25.257" N | 135° 26' 55.423" W |
| 1.16 | Pile | -1.24 m | 58° 06' 33.610" N | 135° 26' 50.445" W |



1.1) 1103_261_239

Survey Summary

Survey Position: 58° 08' 02.824" N, 135° 26' 57.298" W

Least Depth: -1.34 m

Timestamp: 2004-261.18:04:58.000 (09/17/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-261 / dp_1103_261

Profile/Beam: 1/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CFF RK HP E. EXT NEW LDG

During shoreline verification the CFF rock was found to be the highpoint and eastern extent of a new ledge.

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
0 3/4fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
0fm 4ft (531_1)
-1.4m (500_1, 50_1)
```

Office Notes

Concur. CFF rock is part of ledge as shown on the smooth sheet. The evaluator recommends to chart ledge and delete CFF rock.

1.2) 1103_261_241

Survey Summary

Survey Position: 58° 08' 02.921" N, 135° 27' 09.786" W

Least Depth: -1.72 m

Timestamp: 2004-261.18:13:40.000 (09/17/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-261 / dp_1103_261

Profile/Beam: 3/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CFF RK HP NEW LDG

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
1fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
0fm 5ft (531_1)
-1.7m (500_1, 50_1)
```

Office Notes

Concur. CFF rock is part of ledge as shown on the smooth sheet. The evaluator recommends to chart ledge as shown on the smooth sheet and delete CFF rock.

1.3) 1103_261_242

Survey Summary

Survey Position: 58° 08' 01.759" N, 135° 27' 33.339" W

Least Depth: -1.04 m

Timestamp: 2004-261.18:25:12.000 (09/17/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-261 / dp_1103_261

Profile/Beam: 4/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CFF RK E. EXT NEW LDG

During shoreline verification the CFF rock was found to be the eastern extent of a new ledge.

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
0 ½fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)

0fm 3ft (531_1)

-1.1m (500_1, 50_1)
```

Office Notes

Concur. The evaluator recommends to chart ledge as shown on the smooth sheet and delete CFF rock.

1.4) 1103_261_245

Survey Summary

Survey Position: 58° 07' 57.948" N, 135° 27' 54.547" W

Least Depth: -1.36 m

Timestamp: 2004-261.18:34:38.000 (09/17/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-261 / dp_1103_261

Profile/Beam: 7/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CFF RK E. EXT NEW LDG

During shoreline verification the CFF rock was found to be the eastern extent of a new ledge.

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
0 3/4fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
0fm 4ft (531_1)
-1.4m (500_1, 50_1)
```

Office Notes

Concur. The evaluator recommends to chart ledge as shown on the smooth sheet and delete CFF rock.

1.5) 1103_261_380

Survey Summary

Survey Position: 58° 06′ 07.316″ N, 135° 27′ 07.850″ W

Least Depth: -3.73 m

Timestamp: 2004-261.19:38:06.000 (09/17/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-261 / dp_1103_261

Profile/Beam: 9/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CFF RK HP W EXT NEW LDG

During shoreline verification the CFF rock was found to be the western extent of a new ledge.

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
-2fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
```

-2fm 0ft (531_1)

-3.8m (500_1, 50_1)

Office Notes

Concur. Chart ledge as shown on the smooth sheet and delete CFF rock.

1.6) 1103_261_381

Survey Summary

Survey Position: 58° 06′ 10.564″ N, 135° 27′ 06.383″ W

Least Depth: -2.37 m

Timestamp: 2004-261.19:39:58.000 (09/17/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-261 / dp_1103_261

Profile/Beam: 10/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CFF RK E EXT NEW LDG

During shoreline verification the CFF rock was found to be the eastern extent of a new ledge.

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
-1 <sup>1</sup>/<sub>4</sub>fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
```

- -1fm 2ft (531_1)
- -2.4m (500_1, 50_1)

Office Notes

Concur. Chart ledge as shown on the smooth sheet and delete CFF rock.

1.7) 1103_262_663

Survey Summary

Survey Position: 58° 10′ 00.485″ N, 135° 27′ 13.186″ W

Least Depth: -0.26 m

Timestamp: 2004-262.17:17:29.000 (09/18/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-262 / dp_1103_262

Profile/Beam: 1/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

PINTA ROCK LIGHTED BUOY

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
0fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
0fm 1ft (531_1)
-.3m (500_1, 50_1)
```

Office Notes

Chart floating aid based on the latest ATONIS information.

1.8) 1103_262_668

Survey Summary

Survey Position: 58° 07' 46.020" N, 135° 27' 56.638" W

Least Depth: -0.68 m

Timestamp: 2004-262.17:35:39.000 (09/18/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-262 / dp_1103_262

Profile/Beam: 2/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CHD(17302) PILE VERIFIED

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
0 ¼fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)

0fm 2ft (531_1)

-.7m (500_1, 50_1)
```

Office Notes

Concur. Chart pile uncovers as shown on the smooth sheet.

1.9) 1103_262_669

Survey Summary

Survey Position: 58° 07' 41.676" N, 135° 27' 50.383" W

Least Depth: -0.16 m

Timestamp: 2004-262.17:39:59.000 (09/18/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-262 / dp_1103_262

Profile/Beam: 3/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

EXT FLOATING PIER

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
0fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
0fm 0ft (531_1)
-.2m (500_1, 50_1)
```

Office Notes

Concur. Chart floating pier as shown on the smooth sheet.

1.10) 1103_262_670

Survey Summary

Survey Position: 58° 07' 36.191" N, 135° 27' 48.010" W

Least Depth: -6.12 m

Timestamp: 2004-262.17:52:08.000 (09/18/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-262 / dp_1103_262

Profile/Beam: 4/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

NEW DOL

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
-3 \(^4\text{fm}\) (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
```

-3fm 2ft (531_1)

-6.1m (500_1, 50_1)

Office Notes

Concur. Chart mean high water dol as shown on the smooth sheet.

1.11) 1103_262_671

Survey Summary

Survey Position: 58° 07' 37.600" N, 135° 27' 46.684" W

Least Depth: -0.42 m

Timestamp: 2004-262.17:55:59.000 (09/18/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-262 / dp_1103_262

Profile/Beam: 5/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

NEW PILE

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
0 ¼fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)

0fm 1ft (531_1)

-.4m (500_1, 50_1)
```

Office Notes

Concur with clarification. Cannot chart pile at scale. Chart floating dock in same vicinity as shown on the smooth sheet.

1.12) 1103_262_672

Survey Summary

Survey Position: 58° 07' 00.860" N, 135° 27' 31.724" W

Least Depth: -7.13 m

Timestamp: 2004-262.18:01:19.000 (09/18/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-262 / dp_1103_262

Profile/Beam: 6/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

W EXT NEW FERRY PIER

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
-3 3/4fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
```

-3fm 5ft (531_1)

-7.2m (500_1, 50_1)

Office Notes

Concur. Chart ferry pier and dolphins as shown on the smooth sheet.

1.13) 1103_262_673

Survey Summary

Survey Position: 58° 06′ 58.245″ N, 135° 27′ 25.371″ W

Least Depth: -7.13 m

Timestamp: 2004-262.18:07:30.000 (09/18/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-262 / dp_1103_262

Profile/Beam: 7/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

E EXT NEW FERRY PIER

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
-3 3/4fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
```

-3fm 5ft (531_1)

-7.2m (500_1, 50_1)

Office Notes

Concur. Chart ferry pier and dolphins as shown on the smooth sheet.

1.14) 1103_262_674

Survey Summary

Survey Position: 58° 06′ 30.971″ N, 135° 27′ 00.168″ W

Least Depth: -12.14 m

Timestamp: 2004-262.18:13:37.000 (09/18/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-262 / dp_1103_262

Profile/Beam: 8/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CHD(17302) LIGHT VERIFIED

Hoonah Breakwater Light "2" verified

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
-6 ½fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
```

-6fm 4ft (531_1)

-12.2m (500_1, 50_1)

Office Notes

Chart fixed aid based on the latest ATONIS information.

1.15) 1103_262_675

Survey Summary

Survey Position: 58° 06' 25.257" N, 135° 26' 55.423" W

Least Depth: -12.16 m

Timestamp: 2004-262.18:18:28.000 (09/18/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-262 / dp_1103_262

Profile/Beam: 9/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

CHD(17302) LIGHT VERIFIED

Hoonah Breakwater Light "3" verified

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
-6 ½fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)
```

-6fm 4ft (531_1)

-12.2m (500_1, 50_1)

Office Notes

Chart fixed aid based on the latest ATONIS information.

1.16) 1103_262_676

Survey Summary

Survey Position: 58° 06' 33.610" N, 135° 26' 50.445" W

Least Depth: -1.24 m

Timestamp: 2004-262.18:32:32.000 (09/18/2004)

DP Dataset: h11358 / 1103_nonechosounder_dp / 2004-262 / dp_1103_262

Profile/Beam: 10/1

Charts Affected: 17302_1, 17316_1, 17300_1, 16016_1, 531_1, 500_1, 530_1, 50_1

Remarks:

EXT NEW PILES

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

```
0 ½fm (17302_1, 17316_1, 17300_1, 16016_1, 530_1)

0fm 4ft (531_1)

-1.3m (500_1, 50_1)
```

Office Notes

Concur. Chart pile symbol with notation piles.



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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: April 6, 2005

HYDROGRAPHIC BRANCH: Pacific

HYDROGRAPHIC PROJECT: S-0905-RA-2004

HYDROGRAPHIC SHEET: H11358

LOCALITY: Hoonah Point and Pinta Rock, AK

TIME PERIOD: September 17 - 19, 2004

TIDE STATION USED: 945-2210 Juneau, AK

Lat. 58° 17.9'N Lon.134° 24.7'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 4.676 meters

REMARKS: RECOMMENDED ZONING

Use zone(s) identified as: SEA57 & SEA59

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).

CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION





Final tide zone node point locations for S-O905-RA-2004, H11358

Format:

-135.410569 58.14037

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 SEA57 -135.410569 58.14037 -135.30313 58.257005 -135.450465 58.44808 -135.497408 58.437591 -135.483732 58.38105 | 945-2210 | 0 | 0.91 |
| -135.536729 58.175477 -135.529119 58.156155 -135.410569 58.14037 | 0.45.0010 | | 1.5 |
| Zone SEA59 -135.410569 58.14037 -135.382939 58.091154 -135.670126 57.937662 -135.83115 57.985857 -135.805444 58.061242 -135.529119 58.156155 | 945-2210 | 0 | 0.92 |

APPROVAL SHEET H11358

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 disproval 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.

Date: 2/26/2008

Date: 2/26/2008

Gary Nelson

Chief, Cartographic Team Pacific Hydrographic Branch

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.

David O. Neander

CDR, NOAA

Chief, Pacific Hydrographic Branch

MARINE CHART BRANCH

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. 4 11358

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.

In "Remarks" column cross out words that do not apply.
 Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

| CHART | DATE | CARTOGRAPHER | REMARKS |
|-------------------|----------|--------------|-------------------------------------------------------------------------|
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| 17316 | 211/08 | B. Olmstead | Full Part Before After Marine Center Approval Signed Via Application of |
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