NOAA FORM 76-35

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

DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Shoreline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job No.</td>
<td>PH-6211</td>
</tr>
<tr>
<td>Map No.</td>
<td>T-12251</td>
</tr>
<tr>
<td>Classification No.</td>
<td>Final Field Edited</td>
</tr>
<tr>
<td>Edition No.</td>
<td>1</td>
</tr>
</tbody>
</table>

LOCALITY

<table>
<thead>
<tr>
<th>State</th>
<th>Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Locality</td>
<td>Hood Canal</td>
</tr>
<tr>
<td>Locality</td>
<td>Dabob Bay</td>
</tr>
<tr>
<td>Whitney Point-Quilcene Bay</td>
<td></td>
</tr>
</tbody>
</table>

1962 TO 1969

REGISTRY IN ARCHIVES

DATE

* U.S. GOVERNMENT PRINTING OFFICE: 1975-761-778
MAP NOT INSPECTED BY

QUALITY CONTROL OF PHOTOGRAMMETRY DIVISION

PRIOR TO REGISTRATION
**DESCRIPTIVE REPORT - DATA RECORD**

**PHOTOMETRIC OFFICE**
Rockville, MD

**OFFICER-IN-CHARGE**
V. Ralph Sobieralski

### I. INSTRUCTIONS DATED

<table>
<thead>
<tr>
<th>Original</th>
<th>Office</th>
<th>June 15, 1964</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amendment No. 1</td>
<td>Nov. 22, 1965</td>
<td></td>
</tr>
<tr>
<td>Amendment No. 2</td>
<td>Feb. 16, 1966</td>
<td></td>
</tr>
<tr>
<td>Amendment No. 3</td>
<td>July 1, 1966</td>
<td></td>
</tr>
<tr>
<td>Amendment No. 4</td>
<td>April 5, 1967</td>
<td></td>
</tr>
</tbody>
</table>

Field - Feb. 5, 1963
Field Supplemental Feb. 23, 1967

### II. DATUMS

<table>
<thead>
<tr>
<th>1. HORIZONTAL:</th>
<th>2. VERTICAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1927 North American</td>
<td>Mean High Water</td>
</tr>
</tbody>
</table>

**OTHER (Specify)**

### III. HISTORY OF OFFICE OPERATIONS

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AEROTRIANGULATION C-8 Stereoplanigraph</td>
<td>J. Gerlach</td>
<td>Jan 1965</td>
</tr>
<tr>
<td>METHOD: and Analytic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LANMARKS AND AIDS BY</td>
<td>J. Gerlach</td>
<td></td>
</tr>
<tr>
<td>H. Lucas</td>
<td>June 1967</td>
<td></td>
</tr>
<tr>
<td>J. Richert</td>
<td>June 1967</td>
<td></td>
</tr>
<tr>
<td>K. Maki</td>
<td>June 1967</td>
<td></td>
</tr>
<tr>
<td>2. CONTROL AND BRIDGE POINTS</td>
<td>H. Lucas</td>
<td>June 1967</td>
</tr>
<tr>
<td>METHOD: Hand Plot</td>
<td>J. Gerlach</td>
<td>5/1/67</td>
</tr>
<tr>
<td>CHECKED BY</td>
<td>H. Lucas</td>
<td></td>
</tr>
<tr>
<td>3. STEREOSCOPIC INSTRUMENT</td>
<td>K. Maki</td>
<td>June 1967</td>
</tr>
<tr>
<td>COMPILATION</td>
<td>Graphic B-8 Worksheet</td>
<td></td>
</tr>
<tr>
<td>INSTRUMENT:</td>
<td>CHECKED BY</td>
<td>N/A</td>
</tr>
<tr>
<td>Wild B-8 Stereoplotter</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>SCALE:</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1:30,000</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4. MANUSCRIPT DELINEATION</td>
<td>H. Lucas</td>
<td>June 1967</td>
</tr>
<tr>
<td>METHOD:</td>
<td>K. Maki</td>
<td>June 1967</td>
</tr>
<tr>
<td>Graphic B-8 Worksheet</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CHECKED BY</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>SCALE:</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1:10,000</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>5. OFFICE INSPECTION PRIOR TO FIELD EDIT</td>
<td>H. Lucas</td>
<td>June 1967</td>
</tr>
<tr>
<td>METHOD:</td>
<td>P. Dempsey</td>
<td>Oct. 1976</td>
</tr>
<tr>
<td>CHECKED BY</td>
<td>K. Maki</td>
<td>June 1967</td>
</tr>
<tr>
<td>6. APPLICATION OF FIELD EDIT DATA</td>
<td>J. Richert</td>
<td>April 1972</td>
</tr>
<tr>
<td>CHECKED BY</td>
<td>P. Dempsey</td>
<td>Oct. 1976</td>
</tr>
<tr>
<td>7. COMPIILATION SECTION REVIEW</td>
<td>P. Dempsey</td>
<td>Oct. 1976</td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. FINAL REVIEW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. DATA FORWARDED TO PHOTOGRAPHIC BRANCH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. DATA EXAMINED IN PHOTOGRAPHIC BRANCH</td>
<td>H. D. Waltz</td>
<td>MAR 1 1967</td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. MAP REGISTERED - COASTAL SURVEY SECTION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

2. Survey No. 12251, Field Survey No. PH. 6211.
1. COMPILATION PHOTOGRAPHY

<table>
<thead>
<tr>
<th>NUMBER AND TYPE</th>
<th>DATE</th>
<th>TIME</th>
<th>SCALE</th>
<th>STAGE OF TIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>62-W-5383</td>
<td>7 Jun 62</td>
<td>11:00</td>
<td>1:30,000</td>
<td>3.9 Above MLW</td>
</tr>
<tr>
<td>5385</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>5387</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>5389</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

**TIDE STAGE REFERENCE**
- ❌ PREDICTED TIDES
- ☑ REFERENCE STATION RECORDS
- ☑ TIDE CONTROLLED PHOTOGRAPHY

**COLOR LEGEND**
- (C) COLOR
- (P) PANCHROMATIC
- (I) INFRARED

**TIME REFERENCE**
- ❌ STANDARD
- ☑ DAYLIGHT
- Pacific
- 185th

**REMARKS**

2. SOURCE OF MEAN HIGH-WATER LINE:
Office interpreted from computed tide values which determined the stage of tide at the time of photography.

3. SOURCE OF MEAN LOWER LOW-WATER LINE:
There is no MLLW line on this manuscript.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

<table>
<thead>
<tr>
<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
<th>SURVEY COPY USED</th>
<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
<th>SURVEY COPY USED</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-12246</td>
<td>EAST</td>
<td>T-12252</td>
<td>SOUTH</td>
<td>WEST</td>
<td>T-12256</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No contemporary Survey</td>
</tr>
</tbody>
</table>

**REMARKS**

"U.S. GOVERNMENT PRINTING OFFICE: 1974-768-078"
**HISTORY OF FIELD OPERATIONS**

1. **FIELD INSPECTION OPERATION**
   - **OPERATION**: CHIEF OF FIELD PARTY
     - **RECOVERED BY**: R.B. Melby
     - **DATE**: May 1963

2. **FIELD EDIT OPERATION**
   - **OPERATION**: HORIZONTAL CONTROL
     - **RECOVERED BY**: R.B. Melby
     - **DATE**: May 1963
     - **PRE-MARKED OR IDENTIFIED BY**: R.B. Melby
     - **DATE**: May 1963

3. **VERTICAL CONTROL**
   - **RECOVERED BY**: N/A
   - **ESTABLISHED BY**: N/A
   - **PRE-MARKED OR IDENTIFIED BY**: N/A

4. **LANDMARKS AND AIDS TO NAVIGATION**
   - **RECOVERED (Triangulation Stations) BY**: N/A
   - **LOCATED (Field Methods) By**: N/A
   - **IDENTIFIED BY**: N/A

5. **GEOGRAPHIC NAMES INVESTIGATION**
   - **COMPLETE**: N/A
   - **SPECIFIC NAMES ONLY**: N/A
   - **NO INVESTIGATION**: N/A

6. **PHOTO INSPECTION**
   - **CLARIFICATION OF DETAILS BY**: N/A

7. **BOUNDARIES AND LIMITS**
   - **SURVEYED OR IDENTIFIED BY**: N/A

**SOURCE DATA**

1. **HORIZONTAL CONTROL IDENTIFIED**
   - **One station**
   - **PHOTO NUMBER**: 62W5069
   - **STATION NAME**: Computer Bldg. (USN) 1961

2. **VERTICAL CONTROL IDENTIFIED**

3. **PHOTO NUMBERS (Clarification of details)**

4. **LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED**

5. **GEOGRAPHIC NAMES**: [ ] REPORT [X] NONE

6. **BOUNDARY AND LIMITS**: [ ] REPORT [X] NONE

7. **SUPPLEMENTAL MAPS AND PLANS**
   - **NONE**

8. **OTHER FIELD RECORDS** (Sketch books, etc. DO NOT list data submitted to the Geodetic Division)
   - **NONE**
HISTORY OF FIELD OPERATIONS

1. FIELD INSPECTION OPERATION
   - OPERATION
   - NAME: R. E. Moses
   - DATE: April 1969

2. HORIZONTAL CONTROL
   - RECOVERED BY: N/A
   - PRE-MARKED OR IDENTIFIED BY: N/A
   - ESTABLISHED BY: N/A

3. VERTICAL CONTROL
   - RECOVERED BY: N/A
   - PRE-MARKED OR IDENTIFIED BY: N/A

4. LANDMARKS AND AIDS TO NAVIGATION
   - RECOVERED (Triangulation Station) BY: R. E. Moses
   - LOCATED (Field Methods) BY: R. E. Moses
   - IDENTIFIED BY: R. E. Moses

5. GEOGRAPHIC NAMES INVESTIGATION
   - TYPE OF INVESTIGATION
     - COMPLETE: N/A
     - SPECIFIC NAMES ONLY: N/A
     - NO INVESTIGATION: N/A

6. PHOTO INSPECTION
   - CLARIFICATION OF DETAILS BY: N/A

7. BOUNDARIES AND LIMITS
   - SURVEYED OR IDENTIFIED BY: N/A

II. SOURCE DATA
1. HORIZONTAL CONTROL IDENTIFIED
2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER | STATION NAME
--------------|----------------

3. PHOTO NUMBERS (Clarification of details)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED
   - One landmark and two aids to navigation

PHOTO NUMBER   | OBJECT NAME
---------------|----------------
6265386        | N. E. corner large white blôg.
Triang.        | Whitney Point Warning Light, 1963
Triang.        | Dabob Bay Dolphin Antenna, 1961

5. GEOGRAPHIC NAMES:
   - REPORT: N/A
   - NONE: N/A

6. BOUNDARY AND LIMITS:
   - REPORT: N/A
   - NONE: N/A

7. SUPPLEMENTAL MAPS AND PLANS
   - None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)
   - None
### RECORD OF SURVEY USE

**NOAA FORM 76-36D**

**U. S. DEPARTMENT OF COMMERCE**  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

**DATA COMPILED**  
**DATE**  
**REMARKS**  
**MARINE CHARTS**  
**HYDRO SUPPORT**

<table>
<thead>
<tr>
<th>Shoreline, photo-hydro support points</th>
<th>June 1967</th>
<th></th>
<th>June 1967</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field edit applied</td>
<td>April 1972</td>
<td>Class I map</td>
<td></td>
</tr>
</tbody>
</table>

### II. LANDMARKS AND AIDS TO NAVIGATION

1. **REPORT TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>CHART LETTER NUMBER ASSIGNED</th>
<th>DATE forwarded</th>
<th>REMARKS</th>
</tr>
</thead>
</table>

2. [ ] REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE forwarded:

3. [ ] REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE forwarded:

### III. FEDERAL RECORDS CENTER DATA

1. [ ] BRIDGING PHOTOGRAPHS; [ ] DUPLICATE BRIDGING REPORT; [ ] COMPUTER READOUTS.
2. [ ] CONTROL STATION IDENTIFICATION CARDS; [ ] FORM NOS 587 SUBMITTED BY FIELD PARTIES.
3. [ ] SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:

4. [ ] DATA TO FEDERAL RECORDS CENTER. DATE forwarded: 11/22

### IV. SURVEY EDITIONS

**IV. SURVEY EDITIONS** *(This section shall be completed each time a new map edition is registered)*

<table>
<thead>
<tr>
<th>SECOND EDITION</th>
<th>SURVEY NUMBER</th>
<th>JOB NUMBER</th>
<th>TYPE OF SURVEY</th>
<th>MAP CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TP. 2</td>
<td>PH.</td>
<td></td>
<td>FINAL</td>
</tr>
<tr>
<td>DATE OF PHOTOGRAPH</td>
<td>DATE OF FIELD EDIT</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THIRD EDITION</th>
<th>SURVEY NUMBER</th>
<th>JOB NUMBER</th>
<th>TYPE OF SURVEY</th>
<th>MAP CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TP. 3</td>
<td>PH.</td>
<td></td>
<td>FINAL</td>
</tr>
<tr>
<td>DATE OF PHOTOGRAPH</td>
<td>DATE OF FIELD EDIT</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FOURTH EDITION</th>
<th>SURVEY NUMBER</th>
<th>JOB NUMBER</th>
<th>TYPE OF SURVEY</th>
<th>MAP CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TP. 4</td>
<td>PH.</td>
<td></td>
<td>FINAL</td>
</tr>
<tr>
<td>DATE OF PHOTOGRAPH</td>
<td>DATE OF FIELD EDIT</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This 1:10,000 scale shoreline manuscript is one of 17 maps that comprise Project Ph-621l, which covers an area in the Northern part of Hood Canal from Port Gamble Southward to Hood Point and includes all of Dabob Bay. All maps in this project were field edited and reviewed. The field edit was accomplished by the hydrographic field party for project OPR-412.

The initial purpose of this map was to provide support for our nautical and aeronautical charting program and provide photo-hydro support data for hydrography scheduled in the area.

A field investigation was performed prior to compilation in April to June 1963. This investigation was to establish control, in order to meet aerotriangulation requirements, and to locate all landmarks and aids previously undetermined. All fixed aids to navigation not previously located by triangulation were located by triangulation or traverse at this time.

Photo coverage for compilation and aerotriangulation was flown in June 1962 with the "W" wild Aviogon camera at a scale of 1:30,000 with panchromatic film and in August 1965 with the "L" Wild camera at a scale of 1:30,000 (ratio to 1:10,000) with panchromatic film. The 1:10,000 scale ratio prints were used for field notes.

Analytical aerotriangulation was adequately provided by the Rockville office.

Compilation was performed at both the Rockville office and the Atlantic Marine Center. Five sheets (T-12248, T-12249, T-12250, T-12253 and T-12254) were compiled in the AMC office in July, August and September 1966. The other twelve sheets were compiled in the Rockville office in April, May and June 1967. The field edit was applied in the Rockville office only.

Final review for this map was performed in the Rockville office in 1961.
FIELD INSPECTION

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification of the horizontal control necessary for the aerotriangulation of the project.

See attached report on panelling of control.
Horizontal Control and Identification Report
Project Ph-62ll
Hood Canal, Washington
April–June 1963

The following comments and remarks are pertinent to the conditions and methods utilized to perform the required photo-control in Project Ph-62ll. (Reference control diagram Ph-62ll, Hood Canal, Wash.)

Sheet T-12246

Station T.T. 1 RB (USGS), 1955 was identified by the substitute station method, incorporating a dog-leg traverse to one of the substitute stations.

Station LEAND, 1955 was not identified. See station LARSON, 1955 north of sheet T-12247.

Sheet T-12247

Station LARSON, 1955 was identified in lieu of station LEAND, 1955. Station SANDY SHORE, 1955 was identified by a traverse to the substitute stations. A sun azimuth was observed at both ends of the traverse to secure adequate azimuth control of the traverse of the traverse line.

Station GRASS 2, 1955 was identified by the substitute station method.

Sheet T-12248

Station HOOD CANAL LIGHT 4, 1961 was identified direct and by the reverse, substitute station method.

Sheet T-12249

Station SET 2, 1934 was identified by a single substitute station,
determined by a dog-leg traverse. Station HOOD CANAL LIGHT NO.1, 1945 was identified direct. The light is near SET 2, 1934 and can serve as a second identified point. Station WHITE, 1934 was identified by the substitute station method, using a dog-leg traverse to determine one of the substitute stations.

During the location of station SISTERS ROCK LIGHT, 1963, observations involving station SHINE, 1927 failed to provide adequate azimuth checks.

Sheet T-12250
North of this sheet station HEAD, 1927 was identified by a single substitute station. Nearby station POINT HANNON LIGHT, 1945 was identified direct to afford another identified point. Station NORTH BASE, 1915 was identified by the substitute station method. Station FORT, 1927 was identified by the substitute station method.

Sheet T-12251
Station COMPUTER BLDG (USN), 1961 was identified by the substitute station method.

Sheet T-12252
Station HOOD CANAL LIGHT 10, 1963 was identified direct. A suitable substitute station could not be found, therefore station Currant 2, 1934, about 1/3 mile to the southwest was identified with a single substitute station.

Sheet T-12253
No stations were identified in this sheet.

Sheet 12254
Station HOOD CANAL LIGHT NO. 1, 1945 was identified direct to augment identification of nearby station SET 2, 1934.
Sheet T-12255
Station SYLOPASH POINT LIGHT, 1963, was identified by the reverse substitute station method.

Sheet T-12256
Station PULALI 2, 1961 was identified direct. A suitable substitute could not be found.

Sheet T-12257
Station CURRANT 2, 1934 was identified with a single substitute station. This can serve as the second identification point in this area as HOOD CANAL LIGHT 10 1963 was identified direct. Station HAZEL POINT LIGHT, 1963 was identified direct. Nearby station OAK HEAD LIGHT, 1963 in sheet T-12261 was also identified direct to serve as the other required identified point. In the course of the location of station HAZEL POINT LIGHT, 1963, station HAZEL POINT 3, 1945 was found to be in error by about 36 feet. The azimuth of the line CHUTE 3, 1945-HAZEL POINT 3 1945 was in error by 10 minutes. A new position of HAZEL POINT 3, 1945 was determined by the field unit. Station TABOOK POINT LIGHT, 1963 was identified direct.

Sheet T-12258
Station BANGOR, 1955 was identified by a single substitute station. Nearby station BANGOR LOOKOUT TOWER, 1955 was identified direct.

Sheet T-12259
Station QUATSAP 2, 1934 was identified by the substitute station method utilizing a single closed triangle observation.

Sheet T-12260
Station BOULDER, 1878 was identified by two substitute stations.

Sheet T-12261
Station ISHAL ROCK
Station LONE ROCK, 1878 was identified by the substitute station method by a single closed triangle observation.

Sheet T-12214

No station were identified in the sheet.

None of the control identification was considered substandard.

Landmarks and aids

All landmarks and aids previously undetermined were located at this time. All fixed aids to navigation not previously located by triangulation were located by triangulation or traverse methods at this time.

Respectfully submitted

[Signature]

Robert B. Melby
Surveying Technician
PHOTOGRAHMETRIC PLOT REPORT
JOB PH-6211
HOOD CANAL, WASHINGTON
PART III

May 1, 1967

21. Area Covered

The area covered by this report is the west shore of Dabob Bay and the portion of Hood Canal at the mouth of Dabob Bay. It includes T-sheets 12246, 12251, 12255, 12256 and 12259 thru 12261.

22. Method

Two strips were bridged, one (#32, 62-W-5088 thru 5093) on the C-8 stereoplanigraph and the other (#12, 62-W-5374 thru 5401) by analytic methods. Strip #32 was adjusted on four control stations. Strip #12 was adjusted on five control stations.

23. Adequacy of Control

Control was adequate and complied with job instructions. Stations PULAI 2, 1961 and COMPUTER BUILDING (USN) 1961, subpoint "B", could not be held in the bridge due to the poor image quality of the points.

24. Supplemental Data

Local USGS quads were used to provide vertical control for the bridging process. Ratio prints were provided for compilation.

25. Photography

Photography was adequate as to coverage, overlap and definition. Strip #12 could not be bridged by stereoplanigraph methods due to film shrinkage along one edge. This problem was eliminated by using analytic methods.

Submitted by:

John D. Perrow, Jr.

Approved by:

Henry P. Eichert
Aerotriangulation Report
Charge No. 21053
Hood Canal, Washington

21. Area Covered

The bridging covers the area of Hood Canal, approximately 20 miles northwest of Seattle, Washington.

22. Method

Six strips were bridged on the Zeiss C-8 stereoplanigraph to provide control for compilation of shoreline (see attached sketch). Strip 2 was not bridged because the area was duplicated by Strip 1. Strip 7 was adjusted on the IBM 650 and all other strips on the IBM 1620.

23. Adequacy of Control

Control positions were adequate for bridge adjustment. However, sub stations of Pulall 2, 1961 and Computer Building (USN) 1961 were impossible to locate with any accuracy due mainly to poor images. Sisters Rock Light, 1963 also had a very poor image on the photographs in strip 6.

No explanation could be found for the discrepancy of Tabook Point Light, 1963 and sub-station B of Hoods Point, 1878. Sub station B of Hoods Point was within accuracy limits on Strip 3.

All other points held within accuracy requirements.

24. Supplemental Data

Common tie points were hit between adjoining bridges and were averaged. Vertical control points were taken directly from the quads and can be expected to have only the accuracy of the contours of the quad itself.

25. Photography

Photography was adequate as to coverage. The overlap was too great on Strip 1, necessitating the use of every other photograph in the bridge. Definition was poor on the strips to the west, partially because of sun reflections.

Submitted by:

John T. Gerlach

Approved by:

John D. Perrow, Jr.
# Project PH-6211
## Shoreline Mapping
### Washington
#### Hood Canal

**Scale 1:10,000**

<table>
<thead>
<tr>
<th>Sheet No.</th>
<th>Square Miles</th>
<th>Linear Miles</th>
<th>Sheet No.</th>
<th>Square Miles</th>
<th>Linear Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>12246</td>
<td>10</td>
<td>6</td>
<td>12255</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>12247</td>
<td>10</td>
<td>6</td>
<td>12256</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>12248</td>
<td>11</td>
<td>4</td>
<td>12257</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>12249</td>
<td>3</td>
<td>11</td>
<td>12258</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>12250</td>
<td>11</td>
<td>13</td>
<td>12259</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>12251</td>
<td>5</td>
<td>12</td>
<td>12260</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>12252</td>
<td>8</td>
<td>6</td>
<td>12261</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>12253</td>
<td>3</td>
<td>9</td>
<td>12314</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>12254</td>
<td>13</td>
<td>2</td>
<td><strong>TOTALS</strong></td>
<td><strong>129</strong></td>
<td><strong>150</strong></td>
</tr>
<tr>
<td>STATION NAME</td>
<td>SOURCE OF INFORMATION (Index)</td>
<td>COORDINATES IN FEET</td>
<td>GEOGRAPHIC POSITION</td>
<td>REMARKS</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------------------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>Dabob Bay Dolphin Antenna, 1961</td>
<td>Horizontal Control Data Pg. 171</td>
<td>$x = 1,511,321.08$</td>
<td>$\phi = 49^\circ 47'13.40''$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$y = 293,404.72$</td>
<td>$\lambda = 122^\circ 49'16.94''$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dabob Bay Range Marker, 1961</td>
<td>Pg. 171</td>
<td>$x = 1,511,638.20$</td>
<td>$\phi = 47^\circ 47'27.30''$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$y = 294,605.10$</td>
<td>$\lambda = 122^\circ 47'12.83''$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Bldg. (USN) 1961</td>
<td>Pg. 152</td>
<td>$x = 1,504,207.64$</td>
<td>$\phi = 47^\circ 45'36.28''$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$y = 283,746.05$</td>
<td>$\lambda = 122^\circ 50'57.37''$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whitney Point Warning Light Tower 1963</td>
<td>Pg. 428</td>
<td>$x = 1,504,148.63$</td>
<td>$\phi = 47^\circ 45'40.52''$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$y = 284,176.96$</td>
<td>$\lambda = 122^\circ 50'58.40''$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMPUTED BY J. Perrow DATE June 1964
COMPUTATION CHECKED BY J. Gerlach DATE June 1964
LISTED BY DATE
LISTING CHECKED BY DATE
HAND PLOTTING BY H. Lucas DATE June 1967
HAND PLOTTING CHECKED BY J. Richter DATE June 1967

SUPERScedes NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.
31. **DELINEATION**

The Wild B-8 stereoplotter was used to compile the work sheets for this manuscript.

Ratio photographs at scale 1:10,000 were also used during compilation. Several objects that appeared in the B-8 models on map manuscript T-12251 in Quilcene Bay and Dabob Bay could not be identified by photointerpretation.

These objects have been plotted from stereomodels and appear as dashed line circles on the map manuscript.

During field inspection or edit, it is requested that these objects be identified and positions verified. These objects have been scaled from the map manuscript, and their positions appear below:

- **West Buoy**
  \[ Y = 289,770 \text{ Ft.}, \ X = 1,504,340 \text{ Ft.} \]
  \[ \text{Lat.} \ 47^\circ 46'35.7'' , \ \text{Long.} \ 122^\circ 50'57.8'' \]

- **East Buoy**
  \[ Y = 289,810 \text{ Ft.}, \ X = 1,509,450 \text{ Ft.} \ (420 \text{ ft. to shoreline}) \]
  \[ \text{Lat.} \ 47^\circ 46'36.1'', \ \text{Long.} \ 122^\circ 50'56.3'' \]

- **Object near fisherman's Pt.**
  \[ Y = 293,140 \text{ Ft.}, \ X = 1,503,950 \text{ Ft.} \]
  \[ \text{Lat.} \ 47^\circ 47'08.9'', \ \text{Long.} \ 122^\circ 51'04.8'' \]

- **Object near Lindsays Beach**
  \[ Y = 296,070 \text{ Ft.}, \ X = 1,512,190 \text{ Ft.} \ (80 \text{ ft. to shoreline}) \]
  \[ \text{Lat.} \ 47^\circ 49'05.0'', \ \text{Long.} \ 122^\circ 47'39.9'' \]

32. **CONTROL**

Bridge points were furnished by the Aerotriangulation Section (see Photogrammetric Report, Part III) for control. B-8 models were leveled using Geological Survey quads for vertical control.

33. **SUPPLEMENTAL DATA**

None

34. **CONTOURS AND DRAINAGE**

Contours inapplicable. Interior drainage was limited to a few larger streams along the shoreline.
35. **SHORELINE AND ALONGSHORE DETAILS**

Shoreline and alongshore details were delineated by office interpretation from the photographs and computed tides.

36. **OFFSHORE DETAILS**

See 35.

37. **LANDMARKS AND AIDS**

Form 76-40 was submitted for two nonfloating aids, dated June 20, 1963. One landmark form 76-40.

38. **CONTROL FOR FUTURE SURVEYS**

None

39. **JUNCTIONS**

Junctions have been made with adjoining maps and all junctions are in agreement.

40. **HORIZONTAL AND VERTICAL ACCURACY**

All manuscripts in this project comply with the National Standards of Accuracy.

41 Thru 45. Inapplicable

46. **COMPARISON WITH EXISTING MAPS**


47. **COMPARISON WITH NAUTICAL CHARTS**

A comparison was made with nautical charts 6422, 3rd edition, corrected to 2/8/65 and 6450, 13th edition, corrected to 8/8/66.

Items to be Applied to Nautical Charts Immediately - None

Items to be Carried Forward - None

48. **GEOGRAPHIC NAME LIST**

See Item 48 Attached sheet, Geographic Names. Submitted by

Henri Lucas

Approved:

K. N. Maki
Chief, Compilation Section
FIELD EDIT REPORT
HOOD CANAL AND DEBOB BAY, WASHINGTON
MARCH, APRIL 1969
PROJECT OFR-412

This report covers the area in Hood Canal from Carson Point south to Quatsap Point and the entire Debob and Quilcene Bays.

The entire shore line was inspected using a small boat. The Field Edit copies (Discrepancy Prints) of the map manuscripts were used as a guide and all corrections, except as noted below, were recorded on them.

ADEQUACY OF COMPILATION:

The extent and accuracy of the maps appear to be reasonably complete, considering the compilation was accomplished without the benefit of Field Inspection.

METHODS:

The shoreline was inspected primarily with respect to the Discrepancy Prints of the map manuscript. All items specifically noted on the prints were investigated thoroughly. All shoreline was inspected and any comments were recorded on the Discrepancy Print. Where positions were needed, sextant cuts on Hydrographic Signals were recorded. These positions were numbered and plotted on the appropriate Boat Sheet of the area. The proper sheet is stated on the individual Discrepancy Prints.

Mean High Water was established with sextant angles and references to along shore objects and Hydrographic Signals. The shore is generally a sand gravel composition with areas cluttered with medium size boulders. The Dashed Line shown on the manuscripts were generally excellently positioned to indicate areas or limits of shoal water.

There are numerous homes and summer homes along the shore. Many have private railways or small mooring buoys offshore. The positions of the larger, most dangerous items have been noted.

SHEET T-12261:
Refer to Sheet DA-10-7-69.

Area is well settled. The major change in shoreline is the slide area on the upper right. The outline is as of the time noted.
SHEET T-12260:

Refer to Sheet DA-10-2-69.

Area is well settled. Shoreline of Misery Point is rocky and rises sharply from the beach. The area is prone to slides.

SHEET T-12259:

Refer to Sheet DA-10-2-69.

The area at the mouth of the Duckabush River is extremely shallow and sandy. The high water line appears satisfactory, but is difficult to determine.

SHEET T-12257:

Refer to Sheet DA-10-1-69.

This area is generally uninhabited. Fisherman's Harbor is accessible only at or near high tide.

SHEET T-12256:

Refer to Sheet DA-10-1-69.

This area is well inhabited. The dashed shoreline is generally very steep with trees growing to the high water line.

SHEET T-12256:

Refer to Sheet DA-10-1-69.

SHEET T-12255:

Refer to Sheet DA-10-1-69.

The area is well inhabited. The Brinnon Flats area is very shallow. The high water line is as good as can be expected, considering the sand shoreline and the river mouth.

SHEET T-12252:

Refer to Sheet DA-10-3-69.

SHEET T-12251:

Refer to Sheet DA-10-3-69.

There are numerous buoys owned and maintained by the Navy off of the southern end of Bolton Peninsula. These are positioned on DA-10-3-69.
Sheet T-12246:

Refer to Sheet DA-10-3-69, Photo 625383, and Sketch Book.

The north end of Guilceme Bay is very shallow with miscellaneous piles, etc. Filings, bulkheads, etc. near East Guilceme have been Photo Identified on Photo 625383.

Sheet T-12314:

Refer to Sheet DA-10-1-69 and DA-10-2-69.

Sheet T-12247:

Refer to Sheet DA-10-3-69.

Tarboo Bay is dry, except for a shallow stream, and inaccessible at low water.

Respectfully Submitted,

[Signature]

Kazeto A. Domoto
LT, USESSA
Operations Officer
USCGGS DAVIDSON

Approved & Forwarded:

[Signature]

Ray E. Moses
CDR, USESSA
Comdg. Officer
USCGGS DAVIDSON
REVIEW REPORT
T-12251
SHORELINE
AUGUST 10, 1981

61. GENERAL STATEMENT

The dotted line outside the MHW line shows the limits of foreshore area visible on photography. There is no MLLW line on this manuscript.

See the included summary for this final Class I map.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

N/A

63. COMPARISON WITH MAPS OF OTHER AGENCIES

N/A

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with smooth sheet H-9038. The hydrographic survey used parts of the manuscript's foreshore line as their MLLW line. The rest of the surveys are in agreement.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with chart 6422, scale 1:25,000, 3rd edition, Feb. 8, 1965, corrected to June 11, 1966. No significant changes were noted.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This map complies with project instructions and meets the requirements for Bureau standards and National Standards of Map Accuracy.

Submitted by:

P. Dempsey
Final Reviewer

Approved:

Chief, Photogrammetric Branch    Chief, Photogrammetry Division
GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-6211 (Hood Canal, Wash.)
T-12251

Bees Mill
Bolton Peninsula
Broad Spit
Dabob Bay
Fishermans Point
Frenchmans Point
Lindsay's Beach
Quilcene Bay
Quilcene Boat Haven
Red Bluff
Whitney Point

Approved by:
A. J. Wright
Chief Geographer

Prepared by:
Frank W. Pickett
Cartographic Technician
Project PH-6211 Material on File
Hood Canal, Washington

Federal Records Center

Control Station Identification Cards
Field Edit Photographs
Computer Readouts
Field Edit Photographs
Field Edit Ozalids (Discrepancy Prints) for each map

Project Completion Report

Bureau Archives

Registered Copy of each map
Descriptive Report of each map

Reproduction Division

8x Reduction Negative of each map

Office of Staff Geographer

Geographer Names Standard
The following objects **HAD NOT** been inspected from seaward to determine their value as landmarks.

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.E. Corner</td>
<td>North East Corner large</td>
<td>42.2</td>
<td>58.5</td>
</tr>
<tr>
<td>Building</td>
<td>White Building</td>
<td>47°45'</td>
<td>122°50'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>METHOD AND DATE OF LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFICE</td>
</tr>
<tr>
<td>P-5</td>
</tr>
<tr>
<td>6/20/63</td>
</tr>
</tbody>
</table>
By photogrammetric methods, each field position is determined by field observation. Positions based upon ground survey methods, field positions are determined by field observer.

**Example:**

Field positions are determined by field observation.

1. **Position Determined by Field Observation**

   - Example: V-V, I-V, S, T


1. **Photogrammetric Station Recovered**

   - Example: 79-11-77

   Enter 79-11-77, and date.

1. **Photogrammetric Station Recovered by Field Observation**

   - Example: V-V, I-V, S, T


1. **Photogrammetric Station Recovered by Field Observation**

   - Example: 79-11-77

   Enter 79-11-77, and date.

**Instructions for Entries Under Method and Date of Location**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Office Activity Representative</th>
<th>Field Activity Representative</th>
<th>Other Activity (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Control and Review Group</td>
<td>Reviewer</td>
<td>Quality Control and Review Group</td>
<td>Reviewer</td>
</tr>
<tr>
<td>Office Activity Representative</td>
<td>Field Activity Representative</td>
<td>Office Activity Representative</td>
<td>Field Activity Representative</td>
</tr>
<tr>
<td>Name:</td>
<td>Name:</td>
<td>Name:</td>
<td>Name:</td>
</tr>
<tr>
<td>Organization:</td>
<td>Organization:</td>
<td>Organization:</td>
<td>Organization:</td>
</tr>
</tbody>
</table>

*For each photogrammetric station:*

1. **Office Identified and Located Objection**

   - Example: V-V, I-V, S, T

   Enter V-V, I-V, S, T, and date.

2. **Office Identified and Located Objection**

   - Example: V-V, I-V, S, T

   Enter V-V, I-V, S, T, and date.

3. **Office Identified and Located Objection**

   - Example: V-V, I-V, S, T

   Enter V-V, I-V, S, T, and date.

4. **Office Identified and Located Objection**

   - Example: V-V, I-V, S, T

   Enter V-V, I-V, S, T, and date.

5. **Office Identified and Located Objection**

   - Example: V-V, I-V, S, T

   Enter V-V, I-V, S, T, and date.

6. **Office Identified and Located Objection**

   - Example: V-V, I-V, S, T

   Enter V-V, I-V, S, T, and date.

7. **Office Identified and Located Objection**

   - Example: V-V, I-V, S, T

   Enter V-V, I-V, S, T, and date.

8. **Office Identified and Located Objection**

   - Example: V-V, I-V, S, T

   Enter V-V, I-V, S, T, and date.

9. **Office Identified and Located Objection**

   - Example: V-V, I-V, S, T

   Enter V-V, I-V, S, T, and date.

10. **Office Identified and Located Objection**

     - Example: V-V, I-V, S, T

     Enter V-V, I-V, S, T, and date.
## Nonfloating Aids or Landmarks for Charts

The following objects HAVE NOT been inspected from seaward to determine their value as landmarks.

### Charting Details

<table>
<thead>
<tr>
<th>Charting Name</th>
<th>Description</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Office</th>
<th>Field</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>47°45'</td>
<td>122  50</td>
<td>5/23/63</td>
<td>6450</td>
</tr>
<tr>
<td></td>
<td></td>
<td>47°47'</td>
<td>122 49</td>
<td>5/23/63</td>
<td>6450</td>
</tr>
</tbody>
</table>


| Field Positions are determined by field operator.
| 8-12-75

**Example:** F-2-6-7

Location and date of field work.

A. Field positions require entry of method of

| 4 - Association
| 2 - Traverse
| 3 - Intersection
| 1 - Trilateration
| 5 - Field Verified
| 7 - Permanent
| 6 - Triangulation
| L - Cocketed

**Expression**

Enter the applicable data by symbols as follows:

1. NWM Position determined or Verified Field of a Photograph

2. Field Control Station Recovered

3. Field Verified & Permanent

4. Photogrammetric Field Positions Requires

5. Field Verifies date of recovery of the object

6. Code 96-642

7. Permanent

8. Field Control Station Recovered

9. Field Verified

10. NWM Position determined or Verified Field of a Photograph

For entries under Method and Date of Location:

- Code 96-642
- Permanent
- Field Control Station Recovered
- Field Verified
- NWM position determined or Verified Field of a Photograph

**Actions**

- Originator
- Activity Representative
- Field Representative
- Office Representative
- Geodetic Party
- Holographic Party
- Photo Field Party

**Forms**

- Field Control and Review
- Field Representative
- Office Representative
- Geodetic Party
- Holographic Party
- Photo Field Party

**Activities**

- Quality Control and Review
- Field Representative
- Office Representative
- Geodetic Party
- Holographic Party
- Photo Field Party

**Position Determined and/or Verified**

- Objects Inspected from ground
- Objects Inspected from seaward
**INSTRUCTIONS**

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

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

<table>
<thead>
<tr>
<th>CHART</th>
<th>DATE</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
</tr>
</tbody>
</table>