**Descriptive Report**

**Type of Survey**: Shoreline

**Job No.**: PH-6607

**Classification No.**: Edition No. 1

**Field Edited Map**

**Locality**

- **State**: Oregon
- **General Locality**: Umpqua River
- **Locality**: Umpqua Lighthouse, State Park

**Date**: 1971 TO 1974

**Registry in Archives**

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© U.S. GOVERNMENT PRINTING OFFICE: 1975-761-778
DESCRIPTIVE REPORT - DATA RECORD

PHOTOGRAMMETRIC OFFICE
Rockville, Maryland

OFFICER-IN-CHARGE
Jack Guth

I. INSTRUCTIONS DATED

1. OFFICE
Compilation, September 10, 1971
Aerotriangulation, August 11, 1971

2. FIELD
Field Support, May 7, 1971
Field Edit, August 1, 1972

II. DATUMS

1. HORIZONTAL: 1927 NORTH AMERICAN

2. VERTICAL:
MEAN HIGH-WATER
MEAN LOW-WATER
MEAN LOWER LOW-WATER
MEAN SEA LEVEL

3. MAP PROJECTION
Polyconic

4. GRID(S)
STATE
Oregon
ZONE
South

5. SCALE
1:10,000

III. HISTORY OF OFFICE OPERATIONS

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>NAME</th>
<th>DATE</th>
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<tbody>
<tr>
<td>1. AEROTRIANGULATION</td>
<td>D. Brant</td>
<td>9/71</td>
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<tr>
<td>METHOD: Analytic</td>
<td>LANDMARKS AND AIDS</td>
<td></td>
</tr>
<tr>
<td>2. CONTROL AND BRIDGE POINTS</td>
<td>D. Phillips</td>
<td>9/71</td>
</tr>
<tr>
<td>METHOD: Coradi</td>
<td>PLOTTED BY</td>
<td></td>
</tr>
<tr>
<td>3. STEREOSCOPIC INSTRUMENT</td>
<td>P. Dempsey</td>
<td>10/71</td>
</tr>
<tr>
<td>COMPILED BY Coradi</td>
<td>CHECKED BY</td>
<td></td>
</tr>
<tr>
<td>INSTRUMENT: B-8</td>
<td>J.P. Battley, Jr.</td>
<td>10/71</td>
</tr>
<tr>
<td>SCALE: 1:10,000</td>
<td>CONTOURS BY</td>
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<tr>
<td>4. MANUSCRIPT DELINEATION</td>
<td>P. Dempsey</td>
<td>10/71</td>
</tr>
<tr>
<td>METHOD:</td>
<td>CHECKED BY</td>
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<td>10/71</td>
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<td>H. Lucas</td>
<td>1972</td>
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<td>6. APPLICATION OF FIELD EDIT DATA</td>
<td>J.F. Battley, Jr.</td>
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<td>7. COMPILATION SECTION REVIEW</td>
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<td>BY</td>
<td>None</td>
<td></td>
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<td>8. FINAL REVIEW</td>
<td>F. A. Wright</td>
<td>8/75</td>
</tr>
<tr>
<td>BY</td>
<td>N.A.</td>
<td></td>
</tr>
<tr>
<td>9. DATA FORWARDED TO PHOTOGRAMMETRIC</td>
<td>F. A. Wright</td>
<td>8/75</td>
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<tr>
<td>BRANCH</td>
<td>CHECKED BY</td>
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<tr>
<td>10. DATA EXAMINED IN PHOTOGRAMMETRIC</td>
<td>K. T. Carter</td>
<td>12/74</td>
</tr>
<tr>
<td>BRANCH</td>
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<td></td>
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<tr>
<td>11. MAP REGISTERED - COASTAL SURVEY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SECTION</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**COMPILATION SOURCES**

### 1. COMPIlATION PHOTOGRAPHY

**CAMERA(S):**
- E 6" focal length

**TIDE STAGE REFERENCE**
- [ ] Predicted Tides
- [ ] Reference Station Records
- [ ] Tide Controlled Photography

**NUMBER AND TYPE** | **DATE** | **TIME** | **SCALE** | **STAGE OF TIDE**
--- | --- | --- | --- | ---
71E(C)7792-7799 | 9/3/71 | 0640 | 1:20,000 | N.A. | Pacific |
71E(C)7769-7779 | 9/3/71 | 0620 | 1:20,000 | N.A. |

**REMARKS**

1:20,000 scale ratioed to 1:10,000 manuscript scale.

### 2. SOURCE OF MEAN HIGH-WATER LINE:

Office interpretation from 1:40,000 photography on the B-8 and checked with 1:10,000 ratioed photographs.

### 3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

None

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

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<thead>
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<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
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<th>DATE(S)</th>
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### 5. FINAL JUNCTIONS

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<tr>
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**REMARKS**
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<tr>
<td>3. VERTICAL CONTROL</td>
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<th>STATION NAME</th>
<th>PHOTO NUMBER</th>
<th>STATION DESIGNATION</th>
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- Any data submitted by Field Party was lost.

#### III. SUPPLEMENTAL MAPS AND PLANS

#### OTHER FIELD RECORDS

(Sketch books, etc. DO NOT list data submitted to the Geodesy Division)
**HISTORY OF FIELD OPERATIONS**

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<td>RECOVERED BY N/A</td>
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<td>VERTICAL CONTROL</td>
<td>RECOVERED BY N/A</td>
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<td>LOCATED (Field Methods) BY R.P. Hewitt</td>
<td>11/71</td>
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### II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
   - None
2. VERTICAL CONTROL IDENTIFIED
   - None
3. PHOTO NUMBERS (Clarification of details)
   - All field edit photos to Federal Records Center
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED
   - See Form 76-40 in this report

### III. PHOTO NUMBERS

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### V. BOUNDARY AND LIMITS

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### VI. SUPPLEMENTAL MAPS AND PLANS

- None

### VIII. OTHER FIELD RECORDS

- Sketch books, etc. DO NOT list data submitted to the Geodesy Division
**NOAA FORM 76-36D**

**RECORD OF SURVEY USE**

### I. MANUSCRIPT COPIES

<table>
<thead>
<tr>
<th>Compilation Stages</th>
<th>Date</th>
<th>Remarks</th>
<th>Marine Charts</th>
<th>Hydro Support</th>
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<td>Final Review 8/75</td>
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<td>Oct 1 1975</td>
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### II. LANDMARKS AND AIDS TO NAVIGATION

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

<table>
<thead>
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### III. FEDERAL RECORDS CENTER DATA

1. Bridging Photographs; Duplicate Bridging Report; Computer Readouts.
2. Control Station Identification Cards; Form Nos 567 Submitted by Field Parties.
3. Source Data (except for Geographic Names Report) as Listed in Section II, NOAA FORM 76-36C. Account for Exceptions: None available

### IV. SURVEY EDITIONS

<table>
<thead>
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<th>Job Number</th>
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<td>II, III, IV, V, FINAL</td>
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<td>DATE OF FIELD EDIT</td>
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<td>REVISED &amp; RESURVEY</td>
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<table>
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<td>DATE OF FIELD EDIT</td>
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</table>
TP-00208 through TP-00213 at 1:10,000 scale and TP-00214 through TP-00216 at 1:20,000 scale comprise Project PH-6607, Umpqua and Smith Rivers, Oregon. The purpose of this project is to provide hydro support, new topography, and shoreline for use in constructing Nautical Chart 669-SC. Refer to the project diagram for the location of each sheet in the project.

The only field work preceding compilation was the premarking of control necessary for bridging. See Photogrammetric Plot Report for details.

Compilation and field edit was broken into two phases in this project with sheets 00208 through 00213 being compiled on the Wild B-8 plotter in September and October 1971.

Stable base copies and ratio color prints were furnished for hydro support and field edit. Field edit was accomplished in November 1971 on these sheets.

Compilation of TP-00214 through TP-00216 was accomplished on the Wild B-8 plotter in May 1972. Copies of map manuscripts and ratio color prints were furnished for field edit.

Field edit of these sheets was accomplished in September - October 1972.

Final review was accomplished in the Washington Office in 1972.

Copies of the final reviewed map were forwarded for record and registry.
JOB PH-6607
UMPQUA & SMITH RIVERS, OREGON

Chart Topography & Shoreline Mapping
SCALE 1:10,000 & 1:20,000

OFFICIAL MILEAGE
For Cost Accounts

Sheet No.  Sq. Miles  || Not Compiled
TP-00173  51
TP-00208  4
TP-00209  5
TP-00210  8
TP-00211  1
TP-00212  8
TP-00213  8
TP-00214  8
TP-00215  5
TP-00216  6

Total .... 51
PHOTOGRAMMETRIC PLOT REPORT
Umpqua and Smith Rivers, Oregon
Job PH-6607
May 1972

21. **Area Covered**

This report covers the area east from the mouth of the Umpqua and Smith Rivers to longitude 123° 40'. Control was extended for the compilation of six (6) 1:10,000 scale maps (TP-00206 thru TP-00213) for hydro support and four (4) 1:20,000 scale maps (TP-00214 thru TP-00216 and TP-00173) for chart compilation.

22. **Method**

Strips 1 and 2 (1:40,000 scale photography) and Strip 3 (1:30,000 scale photography) were bridged using analytic aerotriangulation methods. Sketch 1 shows the placement of control and the flight lines of the photography. Ties were made between all strips. Compilation points were located in strips 2 and 3 for the 1:20,000 scale compilation. Common points were located between the bridging photography and the 1:20,000 scale hydro support photography to determine the ratio for the 1:10,000 scale compilation. Sketch 2 shows the flight lines of the hydro support photography.

Natural objects (tanks, stacks, etc.) visible during bridging were located as aids for the hydro support party. All data for ruling projections and plotting of points for the compilation office were furnished to the Coredomat on the Oregon State (south zone) Plane Coordinate System.

23. **Adequacy of Control**

Horizontal control was premarked and was adequate for bridging.

24. **Photography**

The following RC-8 color photography was used in bridging:

- **1:40,000 scale**
  - Strip 1 - 71-E(C)-6947 thru 6942
  - Strip 2 - 71-E(C)-6969 thru 6980

- **1:30,000 scale**
  - Strip 3 - 71-E(C)-7757 thru 7774
The definition and quality of the photography was good except for some areas obscured by clouds. The clouds did not affect the accuracy of the bridge.

Respectfully by:

[Signature]
Donald M. Brant
Cartographer

Approved by:

[Signature]
Henry P. Eichert, Chief
Aerotriangulation Section
JOB PH-6807
UMPQUA & SMITH RIVERS
OREGON
CHART TOPOGRAPHY
AND
SHORELINE MAPPING
SCALE 1:10,000 & 1:20,000

Horizontal Control used in the
adjustment:
01:40,000 Photography
01:30,000 Photography
31. Delineation

The 1:40,000 scale photography was set on the B-8 stereoplotter and compiled at scale 1:10,000. Shoreline, alongshore, and a short distance inshore and aids to navigation along with points common with the 1:10,000 color ratioed photographs were plotted for hydro-support.

32. Control

Horizontal control was adequate for density and placement.

Vertical control was from USGS quadrangles and water level.

33. Supplemental Data - None

34. Contours & Drainage

Contours are inapplicable. Drainage- the shoreline of the Pacific Ocean was compiled.

35. Shoreline & Alongshore Detail

Shoreline was compiled on the B-8 by office interpretation. Also a jetty was compiled.

36. Offshore Details

See paragraph 49.

37. Landmarks & Aids

Landmark, Coast Guard Tower. Aids, Bar Range Lights Front & Rear, Umpqua River Lighthouse.

38. Control for Future Surveys

None.

39. Junctions

One junction only, north TP-00209.

40. Horizontal & Vertical Accuracy

See Photogrammetric Plot Report.

41. thru 45. Inapplicable.
46. **Comparison with Existing Maps** - None

47. **Comparison with Nautical Charts**

Comparison was made with Nautical Chart No. 6004, Umpqua River, scale 1:20,000.

Items to be applied to Nautical Charts Immediately - None.

Items to be Carried Forward - None

Submitted by,

[Signature]

P. J. Dempsey

Approved & forwarded

[Signature]

J.P. Battley, Jr.
Chief, Coastal Mapping Section
13 August 1975

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6607 (Oregon)

TP-00208

Pacific Ocean

Siuslaw National Forest

Umpqua Lighthouse State Park

Approved by

Chas. E. Harrington
Staff Geographer-651x2
FIELD EDIT REPORT
UMPQUA RIVER, OREGON
JOB PH 6607
OPR 498 - DAVIDSON
NOVEMBER, 1971

Field edit was accomplished in accordance with OPORDER, Pacific Marine Center (in conjunction with OPR 498) and current Photogrammetry Instructions.

Features, obstructions, aids and landmarks were located by intersection from triangulation stations and by sextant resections from triangulation, topographic and photo positions. All changes, deletions and additions to the manuscript are indexed on the field ozalid (paper) in violet ink with the exception of green ink for deletions. The cronaflex print contains all control used for hydrography and field edit as well as fix positions. Many items have been photo-identified, so labeled on the appropriate photograph and indexed on the field ozalid.

The Army Corps of Engineers maintains many dredge signals and ranges in this area which can be a useful aid to navigation if charted; these items, where so noted on the manuscript, should be charted and labeled but not in a landmark status.

The log rafts shown on photographs are in temporary storage areas; a storage area being any one of the piling and dolphin lines delineated on these manuscripts, from Cardiner Inter. Paper Co. eastward up the Umpqua River and Smith River.

All work may be considered correct as of November 20, 1971.
52. ADEQUACY OF COMPILATION

Compilation was adequate considering no previous field inspection. The parking lots at the end of the three beach access roads were omitted during compilation and have been shown on the appropriate photograph.

54. RECOMMENDATIONS

See TP 00211

56. GEOGRAPHIC NAMES

A specific geographic names investigation revealed no changes.

57. FIXED AIDS TO NAVIGATION AND LANDMARKS

Three fixed aids to navigation appear on this manuscript, one is a triangulation intersection station and two were located by theodolite intersection. One landmark located by theodolite intersection, was recommended for charting.

58. ADDITIONAL INFORMATION

The four towers plotted are Army Corps of Engineers dredge ranges; also four dredge signals were located. These are chartable features that can be an aid to navigation but are not classified as landmarks; see the field listing for description of signals. The Corps of Engineers also maintains a range used to locate and mark an underwater wave gage. All roads were classified and two triangulation stations recovered and a form 526 submitted for each. Photo 7797 and 7798 contain field edit notes.
52. ADEQUACY OF COMPILATION

Compilation was only fair even considering that there was no previous field inspection. Four triangulation stations were not plotted: AT, GRAHAM, GARDINER INTERNATIONAL PAPER CO. STACK, and THREEMILE DIRECTIONAL LIGHT. U.S. HIGHWAY 101 bridge over the Umpqua River at Reedsport is a swing bridge, as indicated on chart 6004. Two stacks exist at Gardiner International Paper Co., one of them being a triangulation station; this stack is the taller and has been recommended for a landmark. Fourmile Light was mis-identified; see cronaflex print for correct location as determined by theodolite intersection. Channel Daybeacon "22" was not delineated or reported on the compiler-originated 76-40; it has been photo-identified and indexed. Roads and several large buildings in the area of Gardiner International Paper Co., have been delineated wrong or omitted; see photo 6866 for correct delineation. The railroad bridge at Reedsport contains 8 spans north of the swing span, not five as mapped; see photo 6860.

54. RECOMMENDATIONS

It is respectfully recommended that the paper ozalids should be printed with detail in black, as have been in the past, rather than blue. Violet ink used in field edit does not have as much contrast on the blue-printed ozalids.

56. GEOGRAPHIC NAMES

A specific geographic names investigation revealed no changes.

57. FIXED AIDS TO NAVIGATION AND LANDMARKS

Fourteen aids to navigation appear on this map; eight were office identified and field verified; three are triangulation and field recovered; two were located by theodolite intersection and one by sextant resection (also photo-identified).

Three Landmarks were recommended for charting; one triangulation and two office identified. Two landmarks were recommended for deletion.
61. **General Statement**

See summary; page 6 of this report.

62. **Comparison with Registered Topographic Surveys**

T-8952, July 1952, scale 1:10,000.

That portion which is covered by this sheet is superseded for charting.

63. **Comparison with Maps of Other Agencies**

No comparison was made. Only 1:62,500 scale quad available.

64. **Comparison with Contemporary Hydrographic Surveys**


Wave gage pole at Lat. 124°12'02", Long. 43°39'08" wrong position on Hydro sheet. Position was wrong on Class I manuscript.

65. **Comparison with Nautical Charts**


No discrepancies noted.

66. **Adequacy of Results and Future Surveys**

This map complies with the project instructions and meets the National Standards of Map Accuracy.

Submitted by,

Frank A. Wright

Approved & forwarded

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division
<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>METHOD AND DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
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|              |             |          | D.M. Meters | D.P. Meters | OFFICE | FIELD
| Bar Range Front Light | UMPQUA RIVER | 43 39 | 51.58 | 124 11 | Nov. 1971 | 6004 |
| Bar Range Rear Light | | 43 39 | 50.58 | 124 11 | | |
| Umpqua River Light House, 1908 | | 43 39 | 44.84 | 124 11 | Trianglated | |
|             |             |          |           |              | Verified | 6004 |
|             |             |          |           |              | Nov. 1971 | 5802 |
**PHOTOMETRIC FIELD POSITIONS ARE DEPENDENT**

**EXAMPLE:** V-V1s. and date. Enter V-V1s. and date. Position Verified Visually on Photograph.

**EXAMPLE:** T-T1g. Rec. Rec. with date of recovery. Angulation Station is Recovered, enter T-T1g. When a Landmark or aid which is also a T-T1g.

**EXAMPLE:** 48R(C)2982 8-12-75. Example: P-B-Y graph used to locate or identify the object. Date of field work and number of the photo.

**EXAMPLE:** 75R(C)6942 8-12-75. Also identify and locate the object. Day, and year of the photograph used to enter the number and date (including month).

**FIELD POSITION DETERMINED OR VERIFIED**

<table>
<thead>
<tr>
<th>OFFICE IDENTIFIED AND LOCATED OBJECTS</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITIES</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>REVIEWER Activity Representative</td>
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<tr>
<td>REVIEWER</td>
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<tr>
<td>Office Activity Representative</td>
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<tr>
<td>Field Activity Representative</td>
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<tr>
<td>OTHER (Supplement)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Ecological Party</td>
<td></td>
<td></td>
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<tr>
<td>Hydrographic Party</td>
<td></td>
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<tr>
<td>Photo Field Party</td>
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</tr>
</tbody>
</table>

**REPRESENTATIVE**

- Quality Control and Review Group
- Reviewer
- Office Activity Representative
- Field Activity Representative

**INSTRUCTIONS FOR ENTRIES UNDER METHOD AND DATE OF LOCATION**

- KEATING
- HEMITTE

- Positions Determined and/or Verified Objects Inspected From Swaard

**RESPONSIBLE PERSONAL**

- NAME
- TYPE OF ACTION
The following objects **HAVE** 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>
<th>OFFICE</th>
<th>FIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOWER</td>
<td>Lookout Tower, ht=40(80)</td>
<td>43 39</td>
<td>124 11</td>
<td>Nov. 1971</td>
<td>6004</td>
</tr>
</tbody>
</table>

 Datum: N.A. 1927

<table>
<thead>
<tr>
<th>METHOD AND DATE OF LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>(See instructions on reverse side)</td>
</tr>
</tbody>
</table>

CHARTS AFFECTED: 6004
By photogrammetric methods, field positions are determined by field observer.

EXAMPLE: F-2-6-L

A. Field positions determined by method of

7. Intersection
6. Traverse
5. Field identified
4. - V S
3. Intersection 7. - Field identified
2. Traverse
1. Intersection

EXAMPLE: V-S, 7-6-1

B. Photogrammetric field positions required

EXAMPLE: P-8-V

Field (cont'd)

Instructions for entries under method and date of location

Responsible Personnel

Office Activity Representative Quality Control and Review Group

Office Activity Representative

Field Activity Representative

Other (Specify) Recorded Party Departmental Party

Hydrographic Party

Photo Field Party

Make

Type of Action

Office

ACTIVITIES

AND REVIEW GROUP AND FINAL REVIEW

FORMS ORIGINATED BY QUALITY CONTROL

L. Keating

P. Hewitt

Positions determined and/or verified

Objections inspected from standpoint of

Date of Field and Locatable Objects

Method and Date of Location