NOAA FORM 76-35 (6-80)
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

THIS MAP EDITION WILL NOT BE FIELD EDITED

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TP-00085</td>
<td>1</td>
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<table>
<thead>
<tr>
<th>Job No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH-6906</td>
</tr>
</tbody>
</table>

Map Classification
CLASS III FINAL

Type of Survey
SHORELINE

LOCALITY

State
ALASKA

General Locality
CONTROLLER BAY

Locality
CAPE ST. ELIAS

1969 TO 19

REGISTERED IN ARCHIVES

DATE

"U.S. GOVERNMENT PRINTING OFFICE, 1980-656-115"
**DESCRIPTIVE REPORT - DATA RECORD**

**PHOTOGRAMMETRIC OFFICE**
Coastal Mapping Unit, Atlantic Marine Center, Norfolk, VA

**OFFICER-IN-CHARGE**
A. Y. Bryson, CDR

---

**I. INSTRUCTIONS DATED**

<table>
<thead>
<tr>
<th>1. OFFICE</th>
<th>2. FIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerotriangulation</td>
<td>September 21, 1970</td>
</tr>
<tr>
<td>Compilation</td>
<td>November 20, 1970</td>
</tr>
<tr>
<td>Memo</td>
<td>April 10, 1984</td>
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**II. DATUMS**

<table>
<thead>
<tr>
<th>1. HORIZONTAL:</th>
<th>2. VERTICAL:</th>
<th>3. MAP PROJECTION</th>
<th>4. GRID(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 1927 NORTH AMERICAN</td>
<td>□ MEAN HIGH-WATER</td>
<td>Polyconic</td>
<td>STATE:</td>
</tr>
<tr>
<td></td>
<td>□ MEAN LOW-WATER</td>
<td></td>
<td>ZONE:</td>
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<tr>
<td></td>
<td>□ MEAN LOWER LOW-WATER</td>
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<tr>
<td></td>
<td>□ MEAN SEA LEVEL</td>
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**III. HISTORY OF OFFICE OPERATIONS**

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AEROTRIANGULATION</td>
<td>I. Saperstein</td>
<td>Nov. 1970</td>
</tr>
<tr>
<td>METHOD: Analytic</td>
<td>H. Eichert</td>
<td>Nov. 1970</td>
</tr>
<tr>
<td>2. CONTROL AND BRIDGE POINTS</td>
<td>J. Sauer</td>
<td>Nov. 1970</td>
</tr>
<tr>
<td>METHOD: Corodomat</td>
<td>H. Eichert</td>
<td>Nov. 1970</td>
</tr>
<tr>
<td>3. STEREOSCOPIC INSTRUMENT COMPOSITION</td>
<td>R. Pate</td>
<td>Dec. 1970</td>
</tr>
<tr>
<td>SCALE: 1:20,000</td>
<td>N.A.</td>
<td></td>
</tr>
<tr>
<td>4. MANUSCRIPT Delineation</td>
<td>E. Pursel</td>
<td>Jan. 1971</td>
</tr>
<tr>
<td>METHOD: Smooth drafted</td>
<td>L. Graves</td>
<td>Feb. 1971</td>
</tr>
<tr>
<td>SCALE: 1:20,000</td>
<td>N.A.</td>
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</tr>
<tr>
<td>HYDRO SUPPORT DATA</td>
<td>E. Pursel</td>
<td>Jan. 1971</td>
</tr>
<tr>
<td>5. OFFICE INSPECTION PRIOR TO FIELD EDIT</td>
<td>L. Graves</td>
<td>Feb. 1971</td>
</tr>
<tr>
<td>6. APPLICATION OF FIELD EDIT DATA</td>
<td>L. Graves</td>
<td>Feb. 1971</td>
</tr>
<tr>
<td>7. COMPOSITION SECTION REVIEW</td>
<td>F. Mauldin</td>
<td>Jan. 1984</td>
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<tr>
<td>CLASS III</td>
<td></td>
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<tr>
<td>8. FINAL REVIEW</td>
<td>L. O. Neterer, Jr.</td>
<td>April 1984</td>
</tr>
<tr>
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<td>9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH</td>
<td>L. O. Neterer, Jr.</td>
<td>SEP 1984</td>
</tr>
<tr>
<td>10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH</td>
<td>R. S. Kornspan</td>
<td>DEC 1984</td>
</tr>
<tr>
<td>11. MAP REGISTERED - COASTAL SURVEY SECTION</td>
<td>R. S. Kornspan</td>
<td>FEB 1985</td>
</tr>
</tbody>
</table>
1. COMPILATION PHOTOGRAPHY

**CAMERA(S)**
RC-8" E"  Focal Length =152.71 mm

**TYPES OF PHOTOGRAPHY LEGEND**
- (C) COLOR
- (P) PANCHROMATIC
- (I) INFRARED

**TIDE STAGE REFERENCE**
- PREDICTED TIDES
- REFERENCE STATION RECORDS
- TIDE CONTROLLED 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>69 E(C) 1396 - 1405</td>
<td>Aug.13,1969</td>
<td>11:38</td>
<td>1:20,000</td>
<td>6.0 ft. above MLLW</td>
</tr>
<tr>
<td>69 E(C) 1447 - 1457</td>
<td>Aug.13,1969</td>
<td>12:27</td>
<td>1:20,000</td>
<td>7.3 ft. above MLLW</td>
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<tr>
<td>69 E(C) 1457 - 1466</td>
<td>Aug.13,1969</td>
<td>12:42</td>
<td>1:20,000</td>
<td>7.9 ft. above MLLW</td>
</tr>
</tbody>
</table>

**REMARKS**
Mean Tide Range=7.7 ft.

2. SOURCE OF MEAN HIGH-WATER LINE:
The mean high water line was compiled from the above listed photography.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:
There was no mean lower low water line compiled.

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>
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5. FINAL JUNCTIONS

<table>
<thead>
<tr>
<th>NORTH (scale</th>
<th>EAST</th>
<th>SOUTH</th>
<th>WEST</th>
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<tr>
<td>TP-00083 1:10,000</td>
<td>No Survey</td>
<td>No Survey</td>
<td>No survey</td>
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**REMARKS**
### HISTORY OF FIELD OPERATIONS

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CHIEF OF FIELD PARTY</td>
<td>R. Melby</td>
<td>May - June 1970</td>
</tr>
<tr>
<td>2. HORIZONTAL CONTROL</td>
<td>R. Melby</td>
<td>May - June 1970</td>
</tr>
<tr>
<td>3. VERTICAL CONTROL</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>4. LANDMARKS AND AIDS TO NAVIGATION</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>5. GEOGRAPHIC NAMES INVESTIGATION</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>6. PHOTO INSPECTION</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>7. BOUNDARIES AND LIMITS</td>
<td>None</td>
<td>None</td>
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</tbody>
</table>

### SOURCE DATA

1. **HORIZONTAL CONTROL IDENTIFIED**
   - Photo Number: None
   - Station Name: None

2. **VERTICAL CONTROL IDENTIFIED**
   - Photo Number: None
   - Station Designation: None

3. **PHOTO NUMBERS (Clarification of details)**
   - None

4. **LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED**
   - Photo Number: None
   - Object Name: None

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 Geodesy Division)**
   - 1 Form 152
   - 1 Field Report
### I. MANUSCRIPT COPIES

<table>
<thead>
<tr>
<th>COMPILED STAGES</th>
<th>DATE</th>
<th>REMARKS</th>
<th>DATE MANUSCRIPT FORWARDED</th>
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<tbody>
<tr>
<td>Compilation complete</td>
<td>Jan. 1971</td>
<td>Class III manuscript SUPERSEDED</td>
<td>Feb. 1971</td>
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<tr>
<td>Final Review, Class III</td>
<td>April 1984</td>
<td>Final Class III Map No field edit performed</td>
<td>NOV 30 1984</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</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. NOT SUBMITTED BY FIELD PARTIES.
3. SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.

### IV. SURVEY EDITIONS

<table>
<thead>
<tr>
<th>EDITION</th>
<th>SURVEY NUMBER</th>
<th>JOB NUMBER</th>
<th>TYPE OF SURVEY</th>
<th>MAP CLASS</th>
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</thead>
<tbody>
<tr>
<td>SECOND</td>
<td>TP - (2)</td>
<td>PH -</td>
<td>REVISED</td>
<td>II, III, IV, V, FINAL</td>
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<tr>
<td>THIRD</td>
<td>SURVEY NUMBER</td>
<td>JOB NUMBER</td>
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<td>II, III, IV, V, FINAL</td>
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<tr>
<td>FOURTH</td>
<td>SURVEY NUMBER</td>
<td>JOB NUMBER</td>
<td>REVISED</td>
<td>II, III, IV, V, FINAL</td>
</tr>
</tbody>
</table>
This 1:20,000 scale shoreline map is one of fourteen maps that comprise project PH-6906, Controller Bay, Alaska.

This project encompasses Controller Bay from Kayak Island, latitude 59°45'00" and the east end of Controller Bay, longitude 144°00'00" northwest to the Copper River, latitude 60°20'00", longitude 145°00'00".

In accordance with the memo dated April 10, 1984, all maps will be registered as Class III.

Field work prior to compilation was accomplished during May thru June 1969 and May thru June 1970. It consisted of the identification of horizontal control by both photo-identification and premarking methods to meet aerotriangulation requirements.

Photographic coverage was provided in August 1969 for aerotriangulation using color film with the "E" camera (focal length 152.71 millimeters) and infrared photography taken with the "F" camera (focal length of 151.77 millimeters). Both sets of photography are 1:20,000 scale. The infrared photography was not used for bridging or compilation.

Preliminary analytic aerotriangulation was completed in November 1970 and the final analytic aerotriangulation was performed in February 1971 at the Washington Science Center.

Compilation was performed at the Atlantic Marine Center in February 1971 from office interpretation of the color photographs.

Final review was performed at the Atlantic Marine Center in April 1984. Without any field verification, this map is required to be registered as a final Class III map.
FIELD INSPECTION REPORT
Project PH-6906 (OPR-487)
Shoreline Mapping
Gulf of Alaska, Cape Suckling to Copper River Flats
May - June 1970
Sheets TP - 00071 through TP - 00085

Purpose: To panel horizontal control stations in advance of aerial photography.

Horizontal Control: (Geodetic)

The triangulation stations were recovered in the designated areas. Additional control was established in areas not covered by existing triangulation. Second order methods were used in determining the new monumented stations. Distances were determined by the Model MRA 3-MRA2 Tellurometer. Seven lines were measured. On two separate occasions, the tellurometers failed to measure the line between HAM and GRAVIE. Moving the instruments to an eccentric station did not resolve the problem. Apparently some type of radio interference exists between the two stations. However, the lines measured from these two stations to other points were satisfactory.

Field computations were based on the positions furnished by the Chief, Triangulation Branch, dated May 5, 1969, on the "Anchorage-Prince William Sound Area, Alaska; Free Adjustment - 1964-1965 Surveys, Supplemental Stations". The field work by the Ship FAIRWEATHER in 1969 was also based on the same adjustment. A letter dated May 20, 1970, from Chief, Triangulation Branch to Director, Pacific Marine Center, indicates a final adjustment has been completed. The computations and adjustments of the 1969 and 1970 field seasons work, based on stations CASTLE, 1965; FOX, 1903; HAM, 1959; and BRUCE 2, 1965, could be finalized. This would combine all of the paneled stations on the same interrelated adjustment.

Horizontal Control (Photogrammetry):

All the stations were paneled with the white, polyethylene plastic material at the prescribed dimensions.

In the 1:60,000 scale flight line, Station KNIN 1970 was photographed in addition to the five required stations. This station is at the Southeast end of Controller Bay. Two of the 1:10,000 scale panels on Wingham Island are along the east shore of the storm high water line (driftwood and debris) and the base of the brushy bluffs.
Station TIPS, 1969 was photo-identified. The 1969 center panel was still in place, although the rays were torn and grown over with grass. All panels for the 1970 season photography were in place by 10 June 1970. Form 152, "Control Station Identification", was submitted for each station paneled.

A helicopter was used to furnish transportation of personnel and equipment. This mode of transportation provided ready access to the remote areas and permitted the advantage of utilizing the favorable conditions of the ever-changing weather patterns.

Respectfully submitted,

Robert B. Melby
Surveying Technician, USC&GS
Pacific Marine Center
Preliminary Photogrammetric Plot Report
Job PH-6905
Controller Bay, Alaska

November 4, 1970

This report covers three (3) 1:10,000 scale sheets, TP-00079, TP-00083, TP-00084 and one (1) 1:20,000 scale sheet TP-00085.

Three strips of color photographs were bridged by analytic methods (see Aerotriangulation Sketch) as follows:

1. Strip 5 1:20,000 scale 69-E(C)-1396 thru 1411
2. Strip 6 1:20,000 scale 69-E(C)-1378 thru 1392
3. Strip 7 1:10,000 scale 70-E(C)-7161 thru 7169

See sketch for control used in the bridge adjustment. Numerous tie points were used to control Strip 6. The closure to control can be found on the readout for each strip.

Ratios have been ordered for each strip bridged plus the offshore photography (see offshore photography sketch).

The southwest tip of Wingham Island (TP-00083) is not covered by the bridging photography. The compiler should drop points from model 70-E(C)-7167/7168 to ratio photo 69-E(C)-2110 in order to compile graphically this tip of the island.

It will be noted that one photograph 69-E(C)-1396 on Strip 5 was cantilevered because it was beyond control. However, it is believed to be within mapping standard accuracy.

Definition and quality of the color photography is good.

Projection, grid and bridging points have been plotted by the Coradi.

This report will be superseded when the job is completed and a new photogrammetric plot report written.

Respectfully submitted,

[Signature]

I. I. Saperstein

Approved and forwarded,

[Signature]

Henry P. Eichert
Chief, Aerotriangulation
Section
Photogrammetric Plot Report
Job PH-6906
Controller Bay, Alaska
February 11, 1971

21. Area Covered

The area of the project covers Controller Bay, Copper River Flats and Kayak Island, Alaska, and consists of eleven (11) 1:10,000 scale sheets TP-00073 thru TP-00081, TP-00083, TP-00084, and three (3) 1:20,000 scale sheets TP-00071, TP-00072 and TP-00085. It will be noted that photographs covering TP-00082 were not bridged due to the fact that station BRUCE 2, 1965 was outside the limits of photography, and could not be used for a terminal for Strip 1.

22. Method

Strips 1, 2, 3, 5, 6, 7, 8, 9, and 14 were bridged by analytic aerotriangulation methods. Compilation points were located for strips 4, 10, 11, 12, and 13 from the applicable bridged strips, so that the models can be set on the B-8.

Compilation points were not located on photos 69-E(C)-2141 and 2142 on strip 11. It was impossible to find common points between the 1:60,000 scale pan. and 1:30,000 scale color photography in the water and shoal area of the above model. When the adjoining models are set on the B-8, it may be possible for the compiler to drop points on the above photos to control this one model.

Photographs covering the Bering River in the eastern part of TP-00075 was not bridged due to lack of control.

The attached sketch of the strips bridged shows the placement of triangulation used in the final strip adjustments.

The following is a listing of closures to control in feet:
<table>
<thead>
<tr>
<th>Location</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. P. KWIN, 1970</td>
<td>-2.4</td>
<td>-3.5</td>
</tr>
<tr>
<td>S. P. KANAK, 1969</td>
<td>+6.6</td>
<td>+7.3</td>
</tr>
<tr>
<td>PALM, 1969</td>
<td>-2.0</td>
<td>+0.3</td>
</tr>
<tr>
<td>COTTONWOOD, 1969</td>
<td>-4.0</td>
<td>-10.2</td>
</tr>
</tbody>
</table>

(+0.5, -1.8 Strip 14)

Bridging points on Alaska Zone 3 plane coordinate system have been plotted by Coradimat.

23. Adequacy of Control

The number of horizontal control stations in Controller Bay and Copper River Flats was minimal. Strips 1, 5, and 7 were bridged using triangulation stations only as horizontal control in the adjustments. The other bridged strips were adjusted using triangulation stations and tie points as control. Two strips (8 and 9) were bridged using the tie points only.

At the time we were ready to adjust our photogrammetric strips in the northern part of the project, we discovered that a readjustment of control in the project area was pending in the Division of Geodesy as a result of geodetic work performed subsequent to the Alaskan earthquake of 1964. At our request, they performed the adjustment so we could make our delivery deadline for compilation. A partial list was received by us and used. The shift in datum was about 30 feet.

We were also informed by Geodesy that a shift of about the same magnitude would apply to the area in the southern part of the project which had already been bridged and compiled. This, of course, required a photogrammetric readjustment of the bridging in that area.
When this work was completed, we were furnished with a complete list of readjusted positions covering the project area. It was then discovered that there were some discrepancies in position between this list and the partial list previously submitted. The largest discrepancies were in positions for stations COTTONWOOD, 1965 and KWIN, 1970. Geodesy has stated that the position for COTTONWOOD is weak, there being a poor triangle closure.

No further photogrammetric adjustment was made to the strips already bridged, notably strip 1, in order to meet deadlines. Points taken from strip 1 will necessarily be slightly out of position also. The differences of position between the Preliminary Office Computations (partial list) and the final positions for station COTTONWOOD are x-4.8 ft., y+2.2 ft. and KWIN x+2.4 ft., y+0.2 ft.

It is believed, however, the maps will meet the standards of map accuracy.

24. Supplemental Data

Vertical control needed for the adjustment was taken from U.S.G.S. Quadrangles.

25. Photography

The definition and quality of the RC-9 "M" and RC-8 "E" photography was poor and good respectively. Coverage was adequate to compile all sheets except those mentioned under Item 21 and 22.

The following is a listing of photographs for each strip:

Strip 1 -- 70-M-301 thru 315
Strip 2 -- 70-M-289 thru 294
Strip 3 -- 70-M-233 thru 238
Strip 4 -- 70-E(C)-7030 thru 7039
Strip 5 -- 69-E(C)-1396 thru 1411
Strip 6 -- 69-E(C)-1378 thru 1393
Strip 7 -- 70-E(C)-7161 thru 7169
Strip 8 -- 69-E(C)-2113 thru 2119
Strip 9 -- 69-E(C)-2152 thru 2161
Strip 10 -- 69-E(C)-2123 thru 2131
Strip 11 -- 69-E(C)-2134 thru 2144
Strip 12 -- 69-E(C)-2182 thru 2185
Strip 13 -- 69-E(C)-2178 thru 2179
Strip 14 -- 69-E(C)-2167 thru 2174

Strips 1, 2, and 3 -- 1:60,000 scale photographs
Strips 4, 5, 6, and 8 thru 14 -- 1:30,000 scale photographs
Strip 7 -- 1:10,000 scale photographs

Ratio prints have been ordered to facilitate compilation, and for photo-hydro support.

Respectfully submitted,

[Signature]
I. E. Saperstein

Approved and forwarded,

[Signature]
Henry P. Reichert
Chief, Aerotriangulation Section
<table>
<thead>
<tr>
<th>STATION NAME</th>
<th>SOURCE OF INFORMATION (Index)</th>
<th>AEROTRIANGULATION POINT NUMBER</th>
<th>COORDINATES IN FEET</th>
<th>GEOGRAPHIC POSITION</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRAVIE, 1969</td>
<td>G.P.</td>
<td>G-145.11</td>
<td>x=</td>
<td>φ 59°52'02.23520&quot;</td>
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<tr>
<td></td>
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<td></td>
<td>y=</td>
<td>λ 144°31'26.70098&quot;</td>
<td></td>
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<tr>
<td>ELI, 1969</td>
<td>G.P.</td>
<td>G-145.11</td>
<td>x=</td>
<td>φ 59°49'10.44719&quot;</td>
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<td></td>
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<td>y=</td>
<td>λ 144°34'42.96611&quot;</td>
<td></td>
</tr>
<tr>
<td>GRAVIE RM. 3, 1970</td>
<td>G.P.</td>
<td>G-145.11</td>
<td>x=</td>
<td>φ 59°32'02.21792&quot;</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>y=</td>
<td>λ 144°31'26.54300&quot;</td>
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</tr>
</tbody>
</table>

COMPUTED BY: R. White  DATE: 2/2/71  COMPUTATION CHECKED BY: Billy H. Barnes  DATE: 2/2/71

LISTED BY: DATE:  LISTING CHECKED BY: DATE:

HAND PLOTTING BY: DATE:  HAND PLOTTING CHECKED BY: DATE:

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

The manuscript was compiled using the B-8 stereoplotting instrument with 1969 color photographs taken with the "E" camera. The offshore delineation was done graphically using offshore hydro support photography.

32 - CONTROL

The horizontal control was adequate. Refer to the Photogrammetric Plot Report, dated February 11, 1971.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

Contours are not applicable. Drainage was compiled from office interpretation of the photographs.

35 - SHORELINE AND ALONGSHORE DETAILS

Shoreline and alongshore details were compiled on the Wild B-8 stereoplotting instrument by office interpretation of the photographs.

36 - OFFSHORE DETAIL

Offshore details were compiled from the offshore hydro support color photography.

37 - LANDMARKS AND AIDS

Appropriate copies of 76-40's are submitted with this report.

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

Refer to Data Record form 76-36B, item Number 5.

40 - HORIZONTAL AND VERTICAL ACCURACY

46 - COMPARISON WITH EXISTING MAPS

A comparison has been made with U.S.G.S. Quadrangle Middleton Island (D-1 and D-2), Alaska, scale 1:63,360, dated 1955.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with USC&GS chart 8513, scale 1:100,000, dated August 9, 1969. Corrected N.M. 32/69.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by,

[Signature]

Elmer Pursel, Jr.
Cartographic Technician
January 27, 1971

Approved,

[Signature]

James L. Byrd, Jr.
Chief, Coastal Mapping Unit
61. **GENERAL STATEMENT**

   See Summary included with this report.

62. **COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS**

   Not applicable.

63. **COMPARISON WITH MAPS OF OTHER AGENCIES**

   A comparison was made with U.S.G.S. Quadrangle: Middleton Island (D-1 and D-2), Alaska, dated 1955, scale 1:63,360.

64. **COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS**

   There was no contemporary hydrographic survey conducted within the limits of this map.

65. **COMPARISON WITH NAUTICAL CHARTS**

   A comparison was made with N.O.S. Chart: 16723, dated December 27, 1980, 13th edition, scale 1:100,000.

66. **ADEQUACY OF RESULTS AND FUTURE SURVEYS**

   The horizontal control meets the accuracy requirements insuring this map complies with the project instructions and meets the prerequisite for National Standards of Map Accuracy.

Submitted by,

Lowell O. Neterer, Jr.
Final Review

Approved for forwarding,

Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved,

Chief, Photogrammetric Section, Rockville

Chief, Photogrammetry Branch, Rockville
March 22, 1984

GEOGRAPHIC NAMES
FINAL NAME SHEET
PH - 6906 (Controller Bay, Alaska)
TP - 00085

Cape St. Elias
Gulf of Alaska
Kayak Island
Pinnacle Rock

Approved by;

[Signature]
Charles E. Harrington
Chief Geographer
Nautical Charting Division
<table>
<thead>
<tr>
<th>GPR PROJECT NO.</th>
<th>JOB NUMBER</th>
<th>SURVEY NUMBER</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>OFFICE</th>
<th>FIELD</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>487</td>
<td>PH-6906</td>
<td>TP-00085</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
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</table>

The following objects HAVE NOT been inspected from seaward to determine their value as landmarks.
**PHOTOGRAMMETRIC FIELD POSITIONS ARE DEPENDENT**

**EXAMPLE:**

- **8-21-75**
- **V-15**
- **V, V', V**
- **AND DATE.**

1. **POSITION VERIFIED VISUALLY ON PHOTOGRAPH.**

**EXAMPLE:**

- **8-21-75**
- **TRIANGULATION STATION RECEIVED.**

**74PL(2982)**

**EXAMPLE:**

- **P-8-65**
- **IDENTITY AND DATE OF OBSERVER.**

1. **VERIFIED VISUALLY.**

**EXAMPLE:**

- **75PL(65)**
- **IDENTITY AND DATE OF OBSERVER.**

1. **OBJECT VERIFIED AND LOCATED.**

**CAUTION:**

1. **OBJECT VERIFIED AND LOCATED.**

**ACTIVITIES:**

- **QUALITY CONTROL AND REVIEW GROUP.**
- **REVIEWER.**

**FIELD ACTIVITY REPRESENTATIVE:**

- **OTHER (Specify):**
- **GOVERNMENT PARTY.**
- **HYDROGRAPHIC PARTY.**
- **PHOTO FIELD PARTY.**
# NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

<table>
<thead>
<tr>
<th>OPR PROJECT NO.</th>
<th>JOB NUMBER</th>
<th>SURVEY NUMBER</th>
<th>DATUM</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE (°/')</th>
<th>LONGITUDE (°/')</th>
<th>OFFICE</th>
<th>FIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>487</td>
<td>PH-6906</td>
<td>TP-00085</td>
<td>NA 1927</td>
<td>LIGHT</td>
<td>Cape St. Elias Light</td>
<td>59 47</td>
<td>144 35</td>
<td>69 E(C) 1396</td>
<td>8-13-69</td>
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<td></td>
<td></td>
<td></td>
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<td>RADIO</td>
<td>298 KHz</td>
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</tr>
</tbody>
</table>

**CHARTS AFFECTED**
- 69 E(C) 1396
- 8-13-69

**NOT VISIBLE**
**Field Positions are determined by Field Observer.**

**Example:** P-2-6-L  
Locate position and date of field work.

1. Field positions require entry of method of:
   - Location
   - Photograph
   - Field Identification

2. VLS - Visually
3. Intersection
4. Traverse

When a landmark or aid which is also a feature.

**Example:** 74L(C) 2959

**Example:** 8-12-75

**Field Station (Cont'd)**

<table>
<thead>
<tr>
<th>Field Activity Representative</th>
<th>Field Activity Representative</th>
<th>Other (Specify)</th>
<th>Geodetic Party</th>
<th>Hydrographic Party</th>
<th>Photo Field Party</th>
</tr>
</thead>
</table>

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

- Review by QA Control and Review Group
- F-65-4(0) 6054
- Inspection
- Field Activity Representative
- Other (Specify)
- Geodetic Party
- Hydrographic Party
- Photo Field Party

**Type of Action:**

<table>
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<tr>
<th>Originator</th>
<th>Responsible Personnel</th>
</tr>
</thead>
</table>

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

- Form reviewed by QA Control
- F-65-4(0) 6054
- Objects Inspected from Seaward
- Field Activity Representative
- Other (Specify)
- Geodetic Party
- Hydrographic Party
- Photo Field Party

**Field Positions are determined by Field Observer.**

**Example:** P-2-6-L  
Locate position and date of field work.

1. Field positions require entry of method of:
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**Example:** 74L(C) 2959

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- F-65-4(0) 6054
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- Field Activity Representative
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**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 Re-

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