U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: Topographic

Field No.: T-5616

LOCALITY

State: Alaska
General locality: Adak Island
Locality: Cape Adagdak

CHIEF OF PARTY

K.T. Adams

LIBRARY & ARCHIVES

DATE: October 23, 1947
Refer to Consolidation report
Paragraphs 28, 29, 30, 44, 445
Since none of the work on
this sheet was checked in
the field, only outermost
rocks shown on T 7035a
within the common area of
the two tops surveys should
be applied to Chart 9/93.
Therefore this survey is not
applied to chart 9/93. L.S.S.
7/25/51
DATA RECORD

T-5616

Quadrangle (II): Project No. (II):

USC&GS Ship

Field Office: DERICKSON Chief of Party: I. E. Rittenburg


Instructions dated (II III): Copy filed in Descriptive Report No. T-5616 (VI)

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed: Applied to chart No. Date:

Redrafting Completed:

Registered:

Compilation Scale: 1:10,000 Published Scale:

Scale Factor (III): 1

Geographic Datum (III): N.A. 1927 Datum Plane (III): MHW

Reference Station (III): North, 1934 (U.S.N.)

Lat.: 51°57' 25.791" Long.: 176° 33' 57.212'' Adjusted

(797.1 m) (1092.5 m)

State Plane Coordinates (VI):

X = None Y =

Military Grid Zone (VI) None
PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>STR8-V-14</td>
<td>7-27-?</td>
<td></td>
<td>1:10,000</td>
<td></td>
</tr>
<tr>
<td>to 8-V-17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14577</td>
<td>7-16-43</td>
<td>1:23</td>
<td></td>
<td></td>
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<tr>
<td>to 14579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STR7-V-1</td>
<td>7-27-?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tide from (III):

Mean Range: 3.2'
Spring Range: 6''

Camera: (Kind or source) 6'' Single lens and nine lens

Field Inspection by: I. E. Bittenburg date: 8-16-46

Field Edit by: date:

Date of Mean High-Water Line Location (III):
None shown

Projection and Grids ruled by (III) T. L. Jansen date: 7-2-47

" " " checked by: T. L. Jansen date: 7-2-47

Control plotted by: L. Gazik date: 7-28-47

Control checked by: B. J. Colner date: 7-29-47

Radial Plot by: L. Gazik date: 8-8-47

Detailed by: L. Gazik date: 9-10-47

Reviewed in compilation office by: L. C. Landis date: 9-20-47

Elevations on Field Edit Sheet checked by: date:
STATISTICS (III)

Land Area (Sq. Statute Miles):

Shoreline (More than 200 meters to opposite shore):

Shoreline (Less than 200 meters to opposite shore):

Number of Recoverable Topographic Stations established: 13

Number of Temporary Hydrographic Stations located by radial plot: 1

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:

Seventeen stations used as control in the radial plot are listed as follows:

<table>
<thead>
<tr>
<th>Station</th>
<th>Kind</th>
<th>Source</th>
<th>Identification</th>
<th>Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN</td>
<td>Topo.</td>
<td>T-7035a</td>
<td>Field</td>
<td>Held</td>
</tr>
<tr>
<td>SHE</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
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<tr>
<td>YEL</td>
<td>&quot;</td>
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<tr>
<td>RUM</td>
<td>&quot;</td>
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<tr>
<td>OAK</td>
<td>&quot;</td>
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</tr>
<tr>
<td>MAX</td>
<td>&quot;</td>
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<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>SET</td>
<td>&quot;</td>
<td>&quot;</td>
<td>Office</td>
<td>&quot;</td>
</tr>
<tr>
<td>JAP</td>
<td>&quot;</td>
<td>&quot;</td>
<td>Field</td>
<td>&quot;</td>
</tr>
<tr>
<td>NEW</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>ICE</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>POT</td>
<td>&quot;</td>
<td>&quot;</td>
<td>Office</td>
<td>&quot;</td>
</tr>
<tr>
<td>NIL</td>
<td>&quot;</td>
<td>&quot;</td>
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<td>&quot;</td>
</tr>
<tr>
<td>MAN</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>LAD</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>PIN</td>
<td>Hydro</td>
<td>H-6971</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>NORTH</td>
<td>Δ</td>
<td>G.P.</td>
<td>Field</td>
<td>&quot;</td>
</tr>
<tr>
<td>BAT 2</td>
<td>Δ</td>
<td>G.P.</td>
<td>Office</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

Triangulation stations CLAM (USN) 1934 and FOLLY (USN) (USE 1944) could not be identified in the office. The four topographic stations LOW, KEY, HIS, and CENTER OF LONE SQUARE SHACK on T-7035a were not identified on field photographs and could not be identified in the office.

27. Radial Plot.

Transparent acetate templets were made from 4 single lens ratio prints and 3 nine lens photographs.

More control could have been used in the western portions of the plot but PIN and BAT 2 held strongly (good azimuths and pass point intersections) with ample control along the eastern shore.

The azimuth between V-17 and V-16 was not held due to great displacement and water which made identification difficult. But V-17 did tie in well with the azimuth from the nine lens photograph 14579.

The northern shoreline near Lat. 52°00', Long. 176°36' was obscured on photographs V-17 and V-16 by the shadows cast by the shoreline bluffs and on the nine lens photographs by displacement. This stretch of shoreline was detailed from photo G-V-17.

Detail and stations in red acetate ink have been transferred from T-7035a with the exception of PIN (also in red acetate ink) which was transferred from H-6971.

Shoreline was compiled directly from the photographs with little use of the projector as there was little scale difference on some of the photographs.

Chief topographic and planimetric features in the interior were mainly cut in.

29. Supplemental Data.

The graphic control from T-7035a (1:10,000) and H-6971 (1:4,800), both on the Unalaska Datum, was transferred to N.A. 1927 Datum.

After close inspection of the ratio print V-15 which is about the same scale as the manuscript, it is recommended that the discrepancies between the shorelines of T-7035a (in red) and T-5616 (manuscript) at ICE, MAX, and OAK be resolved in favor of the manuscript. The western side of the island was compiled without benefit of topographic surveys or field inspection of photographs.

30. Mean High Water Line.

The MHW line was compiled by office interpretation and compilation from the photographs without benefit of field inspection.

32. Details Offshore from the High-Water Line.

Rocks offshore were difficult to ascertain due to the fuzziness of the ratio prints, clouds, and water glare. Further investigation by a hydrographic party of these offshore features is to be desired.

The rocks awash indicated on T-7035a could not be verified or identified on the photographs used in compilation.

Many rocks are not identified on H-6971 (survey by USN) either. L.S. T. 1951.
36. Landing Fields and Aeronautical Aids.

Position of the seaplane base in Andrew Lagoon is indicated.

44. Comparison with Existing Topographic Quadrangles.

Sheet 2 of 10, Adak I. by the U.S.E. (1:25,000) was available for reference. This quad. was compiled with multiplex, chiefly, it seems, for contours. The shoreline and offshore features are somewhat generalized.

45. Comparison with Nautical Charts.

Charts in this area are at small scales - #9193 at 1:120,000 and #8863 at 1:301,800.

Compiled by: Martin Jagd

Approved by: L. C. Lande

NOTE:

T-5616 was compiled for use in determining the position of a new Loran station on Cape Adagdak as discussed in the attached correspondence.
To: Supervisor, Northwestern District
   U. S. Coast and Geodetic Survey
   400 Insurance Building
   Seattle 4, Washington

Subject: Survey data for proposed loran station, Cape Adagdak, Adak Island, Alaska

Ref.: Your letter dated 26 May 1947-File B-4 JS/et

Consideration has been given to the recent request by the Seventeenth Coast Guard District, Ketchikan, Alaska, regarding the furnishing of a position for a proposed loran station in the vicinity of Cape Adagdak, Adak Island, Alaska.

It is planned to furnish the United States Coast Guard with a detailed topographic sheet and a single-lens photograph of the immediate vicinity of Cape Adagdak. This sheet will be compiled from single-lens photographs (1:20,000 scale, ratioed to 1:10,000) furnished by the United States Army and compiled in this office. It will be based on a planetable-traverse run to within two miles of the proposed loran site. The purpose of the single-lens photograph is to provide a means of identifying natural objects with reference to the map. This will permit the graphical scaling of a position after the actual point of the station has been selected.

This method is the only means at present for furnishing a preliminary position for the proposed site and it is believed the geographic position will be accurate to within about 30 feet. Nine-lens photographs of this area will be available in the fall of 1947, but it is anticipated that the results of that radial plot will not appreciably change the position of topographic detail in the immediate vicinity of Cape Adagdak.

(Signed) L. OL COLBERT
Director

Excerpt from July 1947 monthly report of the Ship PIONEER, dated 28 July 1947:

"The vessel arrived at Adak on July 25 for fuel and supplies. Two weesels and two trailers will be picked up at Sand Bay for the EXPLORER as requested by Capt. Siems. While in Adak assistance is being given to the Coast Guard in determining the position of the new LORAN station to be located on Cape Adagdak. This will be used in connection with new stations on Attu and Cape Sariehef."

(Signed) FRANK S. BORDEN
AIR MAIL

To: Director
U. S. Coast & Geodetic Survey
Commerce Bldg.
Washington 25, D. C.

Subject: Survey data for locating proposed Loran station on Cape Adagdak, Adak Island

26 May 1947

With further reference to my telegram of April 28th and data furnished by your office, viz., description of triangulation stations, geographic positions, description of stations and correction factor to N.A. 1927 positions as per your telegram of May 2nd, your further advice is desired on the best method of locating a proposed Loran station on Cape Adagdak.

Lt. Comdr. T. G. Byrne, Chief of the Civil Engineering Section of the 17th Coast Guard District, Ketchikan, Alaska, called at this office and explained his problem which is to locate accurately a point on Cape Adagdak and provide an azimuth for take off as required. The triangulation data is three to five miles southeast of the cape and it appears doubtful that the triangulation can be extended around the cape. Progress sketches are not immediately at hand, but from the chart it appears that a location of a point on Cape Adagdak would have to be obtained from offlying islands to the eastward about 20 miles away unless photographs are available to locate with precision two points in the immediate vicinity of Cape Adagdak.

Comdr. Byrne remarked that he believed there was a road from Clam Lagoon to the north coast. However, I do not see how a traverse is feasible because of the rugged terrain.

(Signed) JACK SENIOR

Supervisor, NW District
U.S. Coast & Geodetic Survey
17 October 1947

To: The Commanding Officer
U.S.C.& G.S. Ship PIONEER.
P. O. Box 2039
Oakland, California

Subject: Location of proposed Loran station on Cape Adagdak, Adak Island, Alaska

References: (1) Letter from the Supervisor, Northwestern District to the Director, dated 26 May 1947, copy enclosed.
(2) Letter from the Director to the Supervisor, Northwestern District, dated 9 June 1947, copy enclosed.
(3) Your Monthly Report for July 1947. An excerpt from this report is enclosed.

The topographic sheet (T-5616) referred to in reference (2) has been completed, but considering your assistance to the Coast Guard in determining the position of the new station on Adak Island a copy of the topographic sheet (T-5616) is being forwarded to you for evaluation. If after examining the topographic sheet (T-5616) and the accompanying data you decide that it will be of value to the 17th Coast Guard District, you may forward it to them with such of the instructions contained in this letter as you think desirable.

This office is forwarding a 1:10,000 scale film positive of the topographic manuscript (T-5616) together with single lens ratio prints covering Cape Adagdak, a copy of the descriptive report, and the U. S. Engineers topographic quadrangle of the area. These data need not be returned to the Washington Office.

The accuracy of position of shoreline details around Cape Adagdak is based on planetable station INN and is about as good as, and no better than, the original planetable location for which azimuth and distance were carried about 2½ miles by a planetable stadia traverse.

The Loran station can be located on the manuscript as follows:

(a) Coast Guard personnel must identify the station on at least one photograph by field inspection.
(b) By holding the photograph under a transparent copy of the map, the identified position can then be transferred to the map and its position scaled, provided the station is on the shore.

(c) If the Loran station is placed on a knoll or hill, it will need to be identified on the photograph, using a stereoscope. The photograph showing the station identification must then be returned to Washington so that we can locate the position by intersection.

(d) If the Loran station is located in the hills above Cape Adagdak, the approximate position should be spotted on the U. S. Engineers map and a written description furnished in addition to identification on the photograph. This precaution should be taken since personnel not accustomed to using photographs in the field or using the stereoscope may make a considerable error in identification which possibly can be corrected in the office, provided we know that it is on the highest point of a particular knoll.

These data are being forwarded to you for evaluation because it appears from your July report that you may already have located the Loran station and the location by means of the topographic sheet (T-5616) may be unnecessary. If the station is to be located by means of a topographic map as discussed in this letter, you may forward the data to the Coast Guard with such excerpts from this letter as you consider desirable. A stereoscope will be loaned to the Coast Guard upon request from you or from Lt. Comdr. Byrne of the 17th Coast Guard District.

Acting Director.