

# 11471

Diag. Cht. Nos. 8802 and 8860-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)

Field No. Ph-92 Office No. T-11471

### LOCALITY

State Alaska

General locality North Shore Alaska Peninsula

Locality Amak Island - Seal Lion Rock

1945

### CHIEF OF PARTY

Norman E. Sylar, Chief of Party

Fred Natella, Portland Photo. Office

### LIBRARY & ARCHIVES

DATE \_\_\_\_\_

11471

T-11471

Project No. (II): Ph-92

Quadrangle Name (IV):

Field Office (II): Thornbrough Air Force Base,  
Cold Bay, Alaska

Chief of Party: Norman E. Sylar

Photogrammetric Office (III): Portland, Oregon

Officer-in-Charge: Fred Natella

Instructions dated (II) (III): Project G-1119, dated 4/14/52  
Project Ph-92(G-1119) dated 5/2/52(supp)  
Project Ph-92 dated 8/16/54 ) Office  
Project Ph-40 dated 11/29/54 )  
Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

MAR 1 1955

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

7 July 1960

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N. A. 1927

Vertical Datum (III): X

Mean sea level except as follows:  
Elevations shown as (25) refer to mean high water  
Elevations shown as (5) refer to sounding datum  
i.e., mean low water or mean lower low water

Reference Station (III): AMAK, 1952

Lat.: 55° 25' 25.689"(794.5m)

Long.: 163° 07' 29.025"(510.5m)

Adjusted X  
Unadjusted

Plane Coordinates (IV):

State:

Zone:

Y=

X=

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

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


Areas contoured by various personnel  
(Show name within area)  
(II) (III)

DESCRIPTIVE REPORT - DATA RECORD

Page 4

Field Inspection by (II): C. H. Bishop and H. R. Moore

Date: May - Sept. 1952

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): May - Sept. 1952, located on 1942 photographs and transferred to 1952 photographs by stereoscopic examination.

Projection and Grids ruled by (IV):

Date:

Projection and Grids checked by (IV):

Date:

Control plotted by (III): J. L. Harris

Date: 11/23/54

Control checked by (III): D. N. Williams

Date: 11/23/54

Radial Plot or Stereoscopic

Date: 11/29/54

Control extension by (III): J. L. Harris

Stereoscopic Instrument compilation (III):  
Planimetry  
Contours

Date:

Date:

Manuscript delineated by (III): L. L. Graves

Date: 12/31/54

Photogrammetric Office Review by (III): J. E. Deal

Date: 2/9/55

Elevations on Manuscript

checked by (II) (III): J. E. Deal

Date: 2/9/55

Camera (kind or source) (III): U.S.C. & G.S. 9-lens - focal length 8.25 inches

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
38634 thru 38638	8/13/52	15:15	1:20,000	6.6 ft. above M.L.L.W.

**Note:**

A stage of tide 7.4 ft. would result if the ratio of range was used in computation.

**Tide (III)**

Reference Station: Dutch Harbor, Alaska  
 Subordinate Station: AMAK ISLAND  
 Subordinate Station:

Ratio of Ranges	Mean Range	Diurnal
		Spring Range
2.4	5.2	7.4

Washington Office Review by (IV):

Date: June 1960

Final Drafting by (IV):

Date: Dec. 24 - Febr. 55

Drafting verified for reproduction by (IV):

Date: June 1960

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 5.5

Shoreline (More than 200 meters to opposite shore) (II): 16 statute miles

Shoreline (Less than 200 meters to opposite shore) (II): none

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II):

Recovered:

Identified:

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): none

Number of Temporary Photo Hydro Stations established (III): none

Remarks:

6

SUMMARY  
TO ACCOMPANY  
SHORELINE MANUSCRIPTS  
T-11471

Within the limits of subject survey there are only two islands. The larger (Amak Island) covers approximately  $5\frac{1}{2}$  square statute miles and the smaller (Sea Lion Rock) measures only about 150 meters across. It is one of 18 shoreline surveys comprising project PH-92, situated off the west shore of the Alaska Peninsula in the State of Alaska.

Along with the other sheets of this project, T-11471 was assigned to and completed by the Portland Photogrammetric Office according to instructions of April 1952 and supplements. Compiled from December 1954 to February 1955, it is based on nine-lens photography of August 1952 and field inspection of the same year. Subject survey's advanced shoreline and control was made available in support of a hydrographic field edit by the hydrographic party, the results of which were considered during final Washington Office Review.

A cronar film positive at the compilation scale of 1:20,000 and the Descriptive Report will be registered and filed in the Bureau Archives.

June 1960

FIELD INSPECTION REPORT

Map Manuscript T-11471

Project Ph-92

Refer to "Seasons Report", Project Ph-92 (G-1119), Norman E. Sylar,  
Chief of Party, 1952.

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-11471

Project Ph-92

21. Area Covered:

This radial plot covers Amak Island and Sea Lion Rock located in the Bering Sea just off the North Shore, Alaska Peninsula. It includes map manuscript T-11471.

22. Method:

The same methods described for the radial plot for T-11472 thru T-11477 were used.

Only one flight of nine lens photographs taken in 1952 was available. The field inspection was done on 1942 photography which had been out for field work purposes.

23. Adequacy of Control:

The horizontal control stations were adequate.

24. Supplemental Data:

None

25. Photography:

For this small land area the one flight of photographs were adequate and satisfactory for coverage, overlap and definition.

Approved and forwarded:



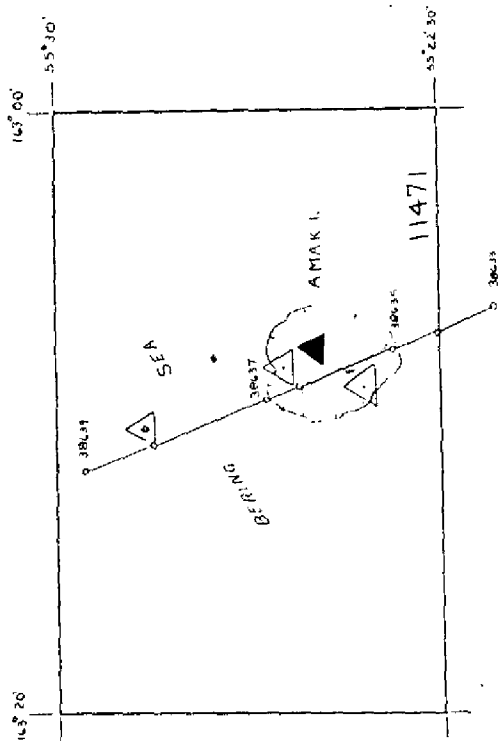
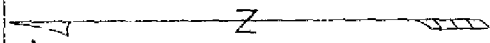
Fred Natella  
Comdr., USC&G Survey  
Officer-in-Charge

Respectfully submitted:



J. Edward Deal, Jr.  
Cartographer  
USC&GS





SKETCH  
 PHOTOGRAMMETRIC PLOT  
 AREA T-11471  
 SCALE 1:253,000 (Approx.)

LEGEND  
 ▲ TRIANGULATION STATION IDENTIFIED  
 ▲ TRIANGULATION STATION

MAP T- 11471	PROJECT NO. Ph-92	SCALE OF MAP	SCALE FACTOR
		1:20,000	None

[illegible]

COMPILATION REPORT

Map Manuscript T-11471

Project Ph-92

31. Delineation:

Graphic methods were used for the compilation work.

No attempt was made to illustrate the conical peak on Amak Island with hachures or form lines because the U.S.G.S quadrangle FORT RANDALL shows 200 foot contours for the area. The base of the conical peak has been located and is shown by a light hachure symbol.

32. Control:

The horizontal control was adequate.

33. Supplemental Data:

None.

34. Contours and Drainage:

Contours are not applicable. There are no permanent streams visible on the photographs or indicated by field inspection.

35. Shoreline and Alongshore Details:

Data on the location of the mean high-water line was entered by the field inspector on the 1942 photographs. With the aid of this data the 1952 photographs were examined stereoscopically and the mean high water line was determined.

The predicted tide of the 1952 photography is 6.6 ft. above M.L.L.W. There was no data furnished the compilation office on the height of mean high water in this area so all rocks are referenced to M.L.L.W.

There are no alongshore structural features.

Foreshore areas and approximate low-water lines were not visible on the photographs.

36. Offshore Details:

Rocks indicated on nautical chart No. 8860 offshore from Sea Lion

Rock were not visible on the photographs.

A large rock about 1.1 miles north of Amak Island was located. Because the height of mean high water was not available this rock has been referenced to M.L.L.W.

37. Landmarks and Aids:

Forms 567 are being submitted for this feature for the entire project.

38. Control for Future Surveys:

There was no control located for future surveys. Several triangulation stations are available.

39. Junctions:

Water areas are at all map limits and no junctions other than a projection junction with T-11472 are necessary.

40. Horizontal and Vertical Accuracy:

Vertical accuracy is not applicable. There are no sub-normal areas of horizontal accuracy.

46. Comparison with Existing Maps:

Comparison was made with the U.S.G.S. Fort Randall, Alaska, one degree quadrangle, Scale, 1:250,000, Edition of 1950.

47. Comparison with Nautical Charts:

Comparison was made with nautical chart No. 8860, Scale, 1:300,000 at Lat.  $54^{\circ} 20.5'$ , published Dec. 1942 (12th edition) last corrected 7/20/53.

Comparison was made with nautical chart No. 8802, Scale 1:1,023, 188 at Lat.  $56^{\circ} 00'$ , published Dec. 1952 (18th edition) last corrected 12/29/52.

Due to the small scale of both charts a detailed comparison was not possible.

"Items to be applied to nautical charts immediately". None.

"Items to be carried forward",     None.

Approved and forwarded:



Fred Natella  
Comdr., USC&G Survey  
Officer-in-Charge

Respectfully submitted:



J. Edward Deal, Jr.  
Cartographer  
USC&GS

GEOGRAPHIC NAMES LIST

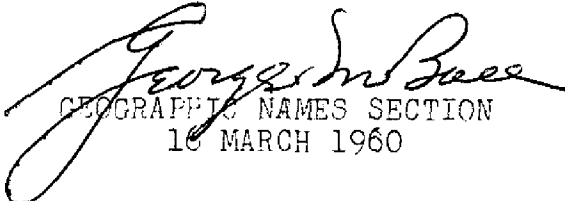
\*Alaska Peninsula (TITLE)

\*Bering Sea

Amak Island

Sea Lion Rock

\* B.G.N. Decision

  
GEOGRAPHIC NAMES SECTION  
18 MARCH 1960

49. Notes to the Hydrographer:

There were no photo-hydro stations or recoverable topographic stations located at the photogrammetric office.

The predicted tide at the time of photography is 6.6 ft. above M.L.L.W. The photogrammetric office was not furnished data on height of M.H.W. and for this reason the small rock north of Amak Island has been referenced to M.L.L.W.

A note has been lettered on the manuscript at Sea Lion Rock giving two elevations of this rock which differ greatly. It is suggested that the elevation be again determined so that the correct height may be truly known.

Remarks contained in Notes to the Hydrographer for T-11473 are applicable to this manuscript.

REVIEW REPORT  
OF  
SHORELINE MANUSCRIPT  
T-11471  
June 1960

62. Comparison with Registered Topographic Surveys

There are no registered topographic surveys of this area.

63. Comparison with Maps of Other Agencies

Fort Randall, Alaska 1:250,000 1953 U.S. Geological Survey

Amak Island, which is the major land area of subject survey is in good agreement with U.S. Geological Survey Map. However, Sea Island Rock is positioned almost due north of Amak Island on the Geological Survey Map. On subject survey this rock is northwest of Amak Island (about 3 minutes west of G.S. position) and in agreement with hydrographic survey 8297.

64. Comparison with Contemporary Hydrographic Surveys

H-8297 1:20,000 1956

There is good agreement between these surveys.

65. Comparison with Nautical Charts

8860 1:300,000 (with inset of Amak Island at 1:80,000)  
Revised to 10/19/59  
8802 1:1,023,188 Revised to 12/21/59

There is good agreement.

66. Adequacy of Results and Future Surveys

Subject survey was compiled according to project instructions and meets the requirements of adequacy and accuracy.

Reviewed by:

  
Josef J. Streifler



Approved:

L. C. Lande  
 Chief, Review & Drafting Sec.  
 Photogrammetry Division

J. E. Wauson  
 Nautical Chart Division,  
 Office of Cartography,  
 Chief, Nautical Chart ~~Branch~~  
 Charts Division 5/18/61

L. W. Swanson  
 Chief, Photogrammetry Division  
 20 April 1961

K. J. Crosby  
 Chief, Coastal Surveys Division  
 Assistant Director for Oceanography

## NAUTICAL CHARTS BRANCH

SURVEY NO. T11471

## Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.