

T-13275

T-13275

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey ... Shoreline (Photogrammetric)...

Job No. PH-6301..... Map No. T-13275.....

Classification No. Final Edition No. ...1.....

Field Edited Map

LOCALITY

State ... Alaska

General Locality ... Kamishak Bay

Locality Bruin Bay, Kirschner Lake

1962 TO 1968-1971

REGISTRY IN ARCHIVES

DATE

①

DESCRIPTIVE REPORT - DATA RECORD

T-13275

PROJECT NO. (iii):
PH-6301

FIELD OFFICE (iii): None	CHIEF OF PARTY
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PHOTOGRAMMETRIC OFFICE (iii): Atlantic Marine Center - Norfolk, VA	OFFICER-IN-CHARGE J. Bull, Director
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INSTRUCTIONS DATED (ii) (iii):

OFFICE, March 18, 1965
 OFFICE, Supplement I - February 10, 1966
 OFFICE, Supplement II - May 5, 1967
 OFFICE, Supplement III - December 27, 1967
 OFFICE, Supplement IV - April 2, 1968
 OFFICE, Supplement V - April 9, 1968

METHOD OF COMPILATION (iii):
Graphic

MANUSCRIPT SCALE (iii): 10,000	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (iii):
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DATE RECEIVED IN WASHINGTON OFFICE (iv):	DATE REPORTED TO NAUTICAL CHART BRANCH (iv):
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APPLIED TO CHART NO.	DATE: MAY 1976	DATE REGISTERED (iv): K. CATDR
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GEOGRAPHIC DATUM (iii): N.A. 1927	VERTICAL DATUM (iii): MHW 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., LOW WATER or mean lower low water
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REFERENCE STATION (iii):
KIRSCHNER, 1967

LAT.: 59°25'10.175" (314.9M)	LONG.: 153°53'07.112" (112.2M)	<input type="checkbox"/> ADJUSTED <input checked="" type="checkbox"/> UNADJUSTED
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PLANE COORDINATES (iv): 979,779.31ft. X=521,361.98 ft.	STATE Alaska	ZONE 5
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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.

DESCRIPTIVE REPORT - DATA RECORD

T-13275

FIELD INSPECTION BY (III): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Office interpretation of photography taken in June 1962 and July 1967		
PROJECTION AND GRIDS RULED BY (IV): A. Bethea		DATE April 15, 1968
PROJECTION AND GRIDS CHECKED BY (IV): L.F. VanScoy		DATE April 16, 1968
CONTROL PLOTTED BY (III): J. Steinberg		DATE April 18, 1968
CONTROL CHECKED BY (III): V.E. Serena		DATE April 18, 1968
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): P.J. Dempsey (for 1:20,000 compilation) T-12330		DATE Jan. 22, 1968
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY A.L. Shands	DATE May 13, 1968
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): L.L. Graves		DATE May 20, 1968
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): (Unknown)		DATE
REMARKS: Field edit by Alan P. Vonderohe, July 1971. (Field edit also 1968 same ozalid).		

DESCRIPTIVE REPORT - DATA RECORD

T-13275

C (KIND OR SOURCE) (III):
U.S. C&GS Type "W" and "M" *

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
62W7187 thru 7190	6/27/62	1445	1:30,000	8.5' above MLLW
62W6637	6/18/62	1509	1:30,000	13.5' above MLLW
67M863 thru 865	7/9/67	0929	1:60,000	2.2' below MLLW

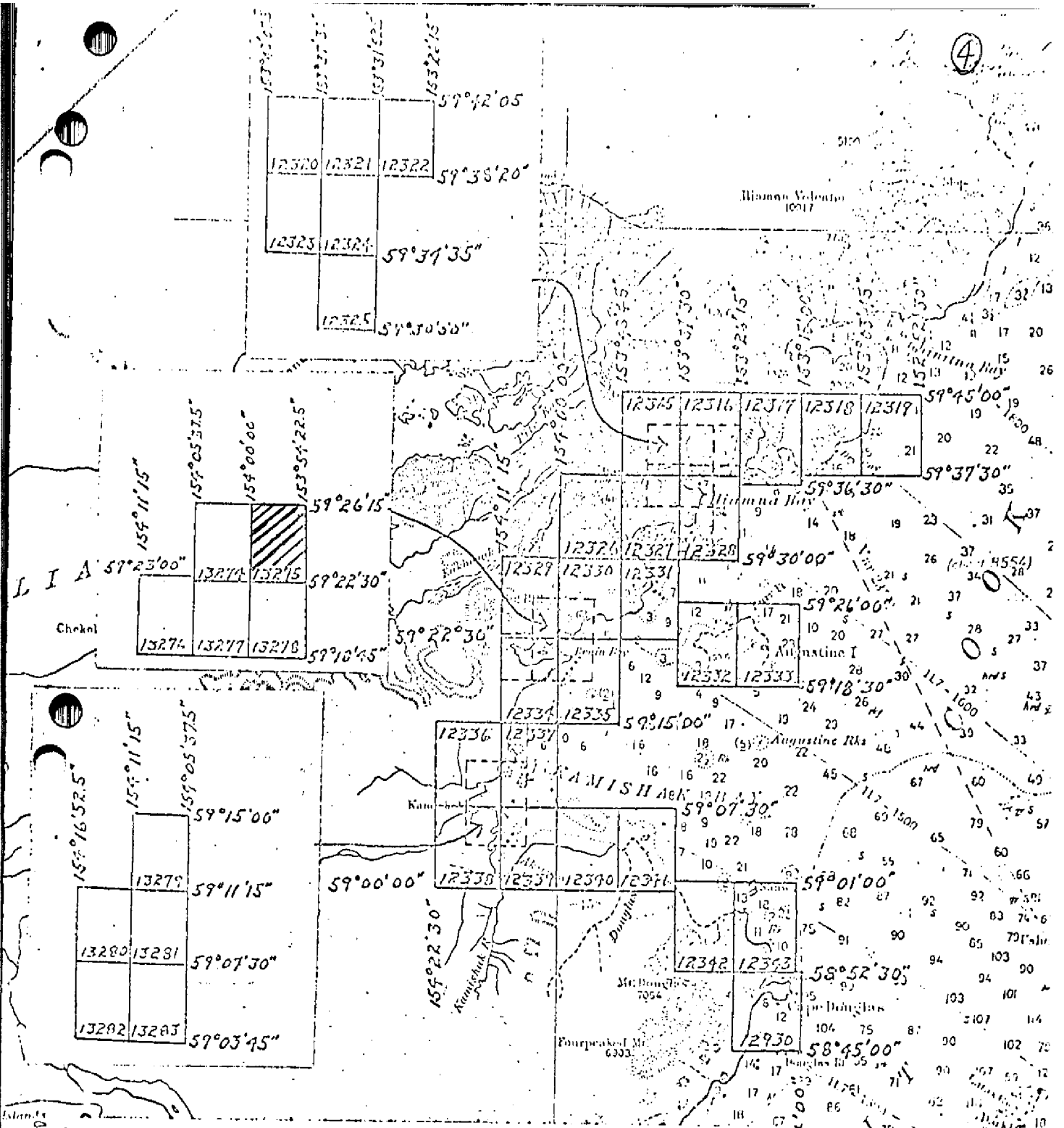
PREDICTED TIDE (III)

DIURNAL

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: SELDOVIA, KACHEMAK BAY, ALASKA		15.4	17.8
SUBORDINATE STATION: ILIAMNA BAY, ALASKA	H=0.81 L=0.87	12.3	14.5
SUBORDINATE STATION:			
WASHINGTON OFFICE REVIEW BY (IV): J.B. Phillips	DATE: April 1976		
PROOF EDIT BY (IV):	DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 0	RECOVERED: 0	IDENTIFIED: 0	
NUMBER OF BM(S) SEARCHED FOR (II): 0	RECOVERED: 0	IDENTIFIED: 0	
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): 0			
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): 0			

REMARKS:

*"M" photography at 1:60,000 scale used for compilation of T-12330.



JOB PH-6301 (PART-1)

COOK INLET, ALASKA

SHORELINE MAPPING

Scale 1:10,000 & 1:20,000

SUMMARY

T-13275 is one of 40 shoreline maps comprising Job PH-6301 (Part I) compiled for use in contemporary hydrographic survey and nautical charting operations.

Field work, prior to compilation, consisted of the recovery and identification of horizontal control.

Compilation was by Wild B-8 stereoplotter, using 1:30,000 scale color photography. Cronaflex positives and ozalids of the manuscript were forwarded for the use of the field editor and the preparation of the hydrographer's boat sheets. Accompanying these were specially prepared ratio photographs to aid in the location of hydrographic signals.

Final edit was accomplished during 1968-1971

Final review was accomplished at the Rockville Office in April 1976

A cronaflex positive copy of the map and a Descriptive Report will be registered in the NOS Archives.

T-13275

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit		
Alongshore area for hydro	May. 17, 1968	Superseded
Field Edit Applied	Nov. 1972	

FIELD INSPECTION

61-T-13275

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.

8

PHOTOGRAMMETRIC PLOT REPORT
Job PH-6301
Kamishak Bay, Alaska

January 22, 1968

21. Area Covered

This report covers the northern part of Kamishak Bay, Alaska, consisting of thirteen (13) 1:20,000 scale map manuscripts -- T-12315 thru T-12319, T-12326 thru T-12331, T-12334 and T-12335, and six (6) 1:10,000 scale map manuscripts -- T-12320 thru T-12325.

22. Method

Analytic aerotriangulation methods were used to bridge strips 1, 2 and 3 at 1:60,000 scale using premarked and field identified control. Numerous tie points were located to control strips 41, 42 and 43, which were bridged by stereoplanigraph.

The attached sketch of strips bridged shows the placement of triangulation used in the final strip adjustments. Closures to control are shown on the IBM readouts along with all the bridge points.

23. Adequacy of Control

Horizontal control was adequate for bridging strips 1, 2 and 3. Strips 41, 42 and 43 were bridged using tie points and are adequate. The premarked paneling at Station OIL, 1913 was removed prior to photography and could not be identified. Station TENDER, 1967 fell off of model and was not used. SKIN, 1967, Subpoint A and Subpoint B, were too poor to read and were not used in the adjustment.

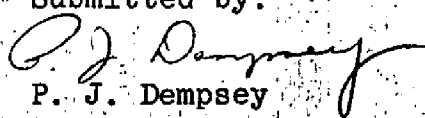
24. Supplemental Data

Vertical control needed for the adjustment was taken from USGS quadrangles.

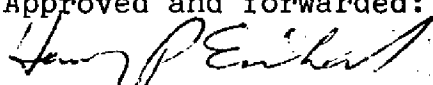
25. Photography

The definition and quality of the RC-9 and RC-8 photography were good. Ratio prints have been ordered to compilation scale.

Submitted by:


P. J. Dempsey

Approved and forwarded:

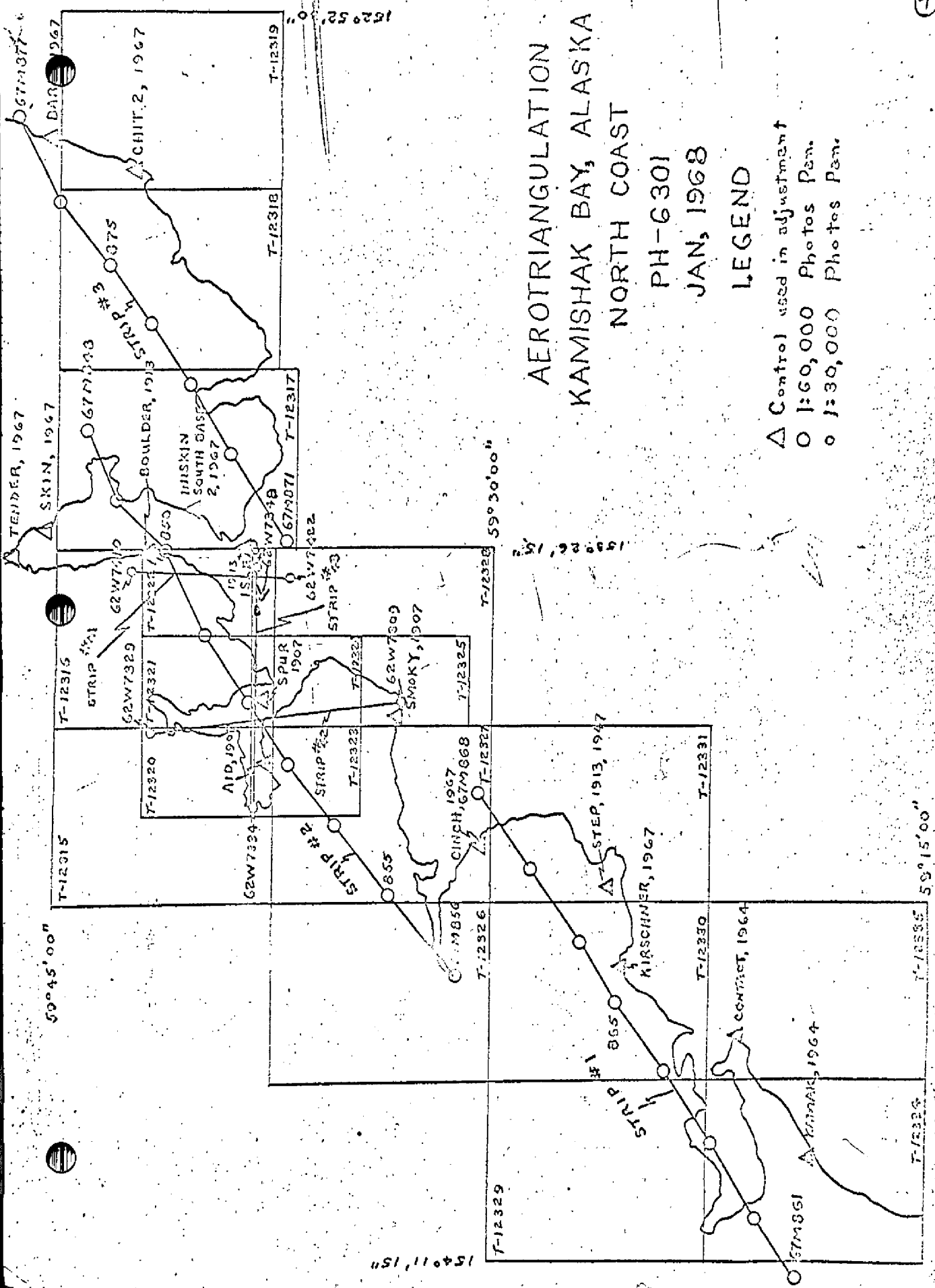

H. P. Eichert, Chief
Aerotriangulation Section

AEROTRIANGULATION KAMISHAK BAY, ALASKA NORTH COAST

PH-6301
JAN, 1968

LEGEND

- Δ Control used in adjustment
- \circ 1:60,000 Photos Pan.
- \circ 1:30,000 Photos Pan.



Compilation Report
T-13275
April 1976

31. Delineation

The planimetry and shoreline was delineated by graphic methods, using ratioed "W" photography taken in 1962. Photography was adequate, however, the scale was considerably larger than the manuscript scale. Additional detail points were used in the compilation so as to adjust the ratio scale to that of the manuscript. (Refer to page 11 of this report.)

32. Control

See photogrammetric plot report for 1:20,000 scale manuscript, T-12330.

Shoreline passpoints of the 1:20,000 scale manuscript were scaled and the positions were plotted onto this manuscript. Bridging control was also used for the control of this manuscript.

Shoreline passpoints of the 1:20,000 scale or "M" photography used for the compilation of sheet T-12330 was transferred to the 1:10,000 scale "W" photography.

33. Supplemental Data - None

34. Contours and Drainage

Contours are inapplicable. Drainage was delineated from office interpretation of the photographs.

35. Shoreline and Alongshore Details

Rocks, ledge, and reef areas were delineated from office interpretation of the photographs. Ledge and bottom features were taken from the 1:20,000 scale manuscript, T-12330, because these areas were covered by higher tide on the "W" photography. There was no MLLWL shown.

36. Offshore Details

Bottom features were taken from the 1:20,000 scale manuscript. These features were most apparent on the "M" photography since the photographs were taken at a lower stage of tide.

37. Landmarks and Aids - None

38. Control for Future Surveys - None

31

NOTES FOR REPORTS FOR THE FOLLOWING T-SHEETS COVERING
MC NEIL COVE AND BRUIN BAY:

11

T-13275

T-13274 through T-13283

PLEASE USE THIS NOTE FOR EACH REPORT UNDER ITEM #31 DELINEATION.

The area of this manuscript was previously compiled at 1:20,000 scale under one of the following manuscripts: T-12329, T-12330, T-12334, T-12335, T-12336, T-12337, T-12338 or T-12339, using 1962 and 1967 "M" photography at 1:50,000 scale, June 18, 1962 and 1:60,000 scale, July 9, 1967, respectively.

Other "W" photography taken in 1962, also dated June 18, cover these areas. These were used to supplement the shoreline delineation of the "M" photos, especially in areas of shoreline layover.

The new or more recent re-compilation of this sheet at 1:10,000 scale was accomplished in the following manner:

1. Shoreline passpoints from the 1:20,000 compilations were scaled on the coordinatograph and recorded.
2. The same passpoints were re-plotted on the 1:10,000 projection sheets.
3. Readout positions of bridge passpoints for the 1:20,000 sheets were also plotted on the 1:10,000 scale sheets.
4. The entire shoreline was graphically delineated, then edited and revised, if necessary, through the use of the processed 1962 "W" ratio prints. Areas where these revisions were deemed necessary will be reduced with the vertical projector and corrected on the 1:20,000 manuscripts.

The remaining alternative for the compilation of these 1:10,000 scale sheets would be by the ratio of 5X and 6X of the 1962 and 1967 "M" photos. Inasmuch as these ratios would far exceed the 3X ratios of 1962 "W" photos, and the vertical projector ratio of 2X, and, in essence of meeting the June 15, 1968 ship schedule, it was determined that the method used was the most expedient and accurate.

WAS DISCUSSED WITH THE ROCKVILLE, MD, PHOTO OFFICE WHO CONCURRED

39. Junctions

Junctions are in agreement with T-12330, 1:20,000 scale to the north, T-12330, ^{1:20,000 scale} to the east, T-12335, 1:20,000 scale and T-13278, 1:10,000 scale, to the south, T-12329, 1:20,000 scale and T-13274, 1:10,000 scale to the west.

40. Horizontal and Vertical Accuracy - No statement

41. thru 45. Inapplicable.

46. Comparison with Existing Maps

A comparison was made with USGS quadrangle Iliamna (8-3) Alaska, scale 1:63,360, dated 1954.

47. Comparison with Nautical Charts

A comparison was made with Nautical Chart 8554, (Cook Inlet--Southern Part), 9th Edition, dated May 10, 1965.

Items to be Applied to Nautical Charts Immediately - None

Items to be Carried Forward - None

Submitted by,

L.L. Graves
Carto (Tech)
May 1968

Approved and forwarded:

J. Bull, RAdm, UESSA
Director, Atlantic Marine Center

PH-6301
T-13275

49. NOTES FOR THE HYDROGRAPHER AND/OR THE FIELD EDITOR

It has been considered good practice to delineate upon the manuscript all shoal and shallow areas which might be considered as a danger to navigation to the Hydrographer. The use of color photography often intensifies these features so that, that which is delineated as a shoal or shallow, might be only a bottom change, or a change in marine vegetation. These shoal or shallow lines should be verified, or deleted if they do not exist.

The process of bringing a manuscript from "Incomplete" to Advance" necessitates a complete application of field or hydro edit. This "Advance" copy is required in order to furnish a "smooth shoreline" for boat sheets and/or the processing of hydro sounding data. If extraneous information is not deleted from our "field edit ozalid" by the field and/or hydro editor, it can inadvertently be carried forward to the "Advance" copy and eventually become a detriment to the hydro processor.

Your cooperation in applying all of your edit corrections, deletions, explanatory notes, fix information, dangers or aids, or other items to be delineated on the manuscripts directly to the ozalid copies and/or field (matte) photos, will greatly facilitate the complete conclusion of an "Advance" copy. Your return of this information to the compilation office from whence it originated, will do much to alleviate the problem of keeping all edit material together for more complete application.

Items of questionable nature, requiring your attention, which are not noted hereon, will be found on the accompanying "field edit ozalid".

FIELD EDIT REPORT

SHEET T-13275

LOWER COOK INLET

(BRUIN BAY)

PH-6301

JULY 1971

NOAA SHIP PATHFINDER

CAPT. H.R. LIPPOLD JR., CMDG.

T-13275

51 Methods

The field edit of this map was done in accordance with photogrammetric instructions and project instructions to the Commanding Officer, NOAA SHIP PATHFINDER, dated 26 March 1971. A gently sloping beach made surf landings in skiffs a necessity when shore inspection was required. Sextant fixes were used to verify and locate objects that could not be seen or positively verified on the photographs.

All deletions, additions, verification and corrections to be applied to the manuscript appear on the field edit ozalid. This ozalid is an index and inventory of all field edit work performed. All features marked in green on the ozalid are to be deleted. Red circles on the ozalid indicate the approximate location of the signals used in the field work. Cross references on the field edit ozalid to the photographs are also a part of the compilation.

52 Adequacy of Compilation

There is a reef in the area Latitude 59° 22' 45" N., Longitude 153° 57' 00" W., which shows up clearly on photographs 67-M-863, 67-M-864, and 67-M-865. Otherwise, this manuscript has been compiled accurately from what is visible on the photographs.

54 Recommendations

None

56 Additional Information

Field edit was accomplished on this sheet in both 1968 and 1971. The data presented on the field edit ozalid has been color-coded to distinguish between these two year's work.

Time meridian 135°W was used for all the work on this sheet.

All photogrammetric and ground survey signals used during the project are listed on a sheet attached to the field edit ozalid and are also included in this report. Signals used for field edit fixes are included in the list.

All fixes taken during the field edit are identified by number on the field edit ozalid and also on the mylar prints. A running tabulation of this data appears on the field edit ozalid.

Alan P. Vonderohe

Alan P. Vonderohe
LTJG, NOAA
Photo Officer

Horizontal Control

Bruin Bay, Kamishak Bay

SIGNAL NAME	LATITUDE		LONGITUDE		ORIGIN OF POSITION	triangulation station
	'	meters	'	meters		
001	59 23	0307.0	153 56	0379.0	T-13275	
002	59 23	1629.0	153 57	0543.0	T-13275	
003	59 23	0940.0	153 58	0613.0	T-13275	
004	59 22	0916.0	154 00	0837.0	T-13274	
006	59 23	0522.0	154 02	0272.0	T-13274	
008	59 22	0891.0	154 04	0543.0	T-13274	
009	59 21	1207.0	154 03	0860.0	T-13277	
010	59 21	1768.0	154 03	0460.0	T-13277	
011	59 20	1660.0	154 03	0715.0	T-13277	
012	59 21	1280.0	154 02	0459.0	T-13277	
013	59 21	0534.0	154 02	0027.0	T-13277	
014	59 22	0098.0	154 01	0355.0	T-13277	
015 ←	Back 59 22 1146.7 59 21 0710.0	Back 154 00 0305.2 153 59 0542.0			T-13278	
016	59 22	0537.0	153 59	0243.0	T-13278	
100	59 23	1550.7	153 58	0796.3	T-13275	
101	59 23	0173.0	153 59	0598.7	T-13275	
102	59 22	1523.5	153 59	0482.2	T-13275	
103	59 21	1816.7	153 58	0707.7	T-13278	
104 ←	Back 59 22 906.1 59 21 1450.6	153 58 283.9 153 57 0564.3			T-13278	
Contact	59 21	0909.0	153 57	0043.3	T-13278	CONTACT (1964)
BAY	59 23	0461.4	153 56	0694.9	T-13275	BAY (1913)
KIRSCHNER	59 25	0314.2	153 53	0111.9	T-12330	KIRSCHNER (1967)
200	59 24	0727.4	153 55	0193.6	T-13275	

PHOTOGRAMMETRIC OFFICE REVIEW

T-10363 T-13275

1. PROJECTION AND GRIDS	2. TITLE	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) XX		7. PHOTO HYDRO STATIONS
8. BENCH MARKS XX	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES XX
16. AIDS TO NAVIGATION	17. LANDMARKS	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
PHYSICAL FEATURES			
20. WATER FEATURES	21. NATURAL GROUND COVER		22. PLANETABLE CONTOURS XX
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES
CULTURAL FEATURES			
27. ROADS	28. BUILDINGS	29. RAILROADS XX	30. OTHER CULTURAL FEATURES
BOUNDARIES			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES		34. JUNCTIONS	35. LEGIBILITY OF THE MANUSCRIPT
36. DISCREPANCY OVERLAY	37. DESCRIPTIVE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
40. REVIEWER Unknown		SUPERVISOR, REVIEW SECTION OR UNIT A.C. Rauck	
41. REMARKS (See attached sheet)			
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT			
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.			
COMPILER C. Parker 11/27/72 Susan Kumer 12/14/72		SUPERVISOR A.C. Rauck	
43. REMARKS Field edit applied from field edit ozalid. T-13275 (1:10,000) Photographs: 62W6637 Reef was taken from 1:20,000 photographs 67M863 and 865 enlarged by projection to 1:10,000 and applied to manuscript.			

Review Report T-13275
Shoreline Survey
April 1976

61. General Statement

Refer to item 31 in the Descriptive Report for detailed information concerning the unusual handling of the compilation of this map. During final photogrammetric review, many discrepancies were found in the application of field edit to the area common to both the 1:20,000 scale (T-12330) and the 1:10,000 scale (T-13275) sheets. For this reason, the 1:20,000 scale map (T-12330) should not be used within the area common to T-13275 (1:10,000 scale). The hydrographic survey reviewer used both manuscripts for his review of the hydro sheet H-9100. The results of those portions of this review which apply to reviewed hydrographic surveys will be brought to the attention of the Chief, Hydrographic Survey Branch by memorandum.

62. Comparison with Registered Topographic Surveys - None

63. Comparison with Maps of Other Agencies

Refer to the Compilation Report, Item 46.

64. Comparison with Contemporary Hydrographic Surveys

- H-9072 1:20,000 1969-1971
- H-9100 1:10,000 1968-1971

Comparison has been made with both of the final reviewed hydrographic surveys. Differences exist in elevations of rocks, due to the hydrographer's use of actual tide readings and difficulties encountered in tide determinations by the hydrographer. Refer to the Hydrographic Survey Report for H-9100.

During review many ledge, reef, and foul limit lines were removed from the Class I manuscript since they conflicted with soundings and depth curves that had been developed by the hydrographer.

Two islets at Long. 154°59'30" were inspected by the field editors in 1968 and 1971. The elevation information reported was not consistent. The hydrographer also inspected these islands and determined that the most southerly of the two should be larger than originally shown on the Class I manuscript. The photogrammetric reviewer has changed the island to agree with the hydrographer's findings and the elevations accepted and shown on both surveys are those of the 1968 field edit.

65. Comparison with Nautical Charts

Chart 8554 1:200,000 13th Edition, May 1974

66. Adequacy of Results and Future Surveys

This map meets the National Standards of Map Accuracy and complies with Bureau requirements.

Submitted by,
J. B. Phillips
J. B. Phillips

Approved:
D. K. Thompson
Chief, Photogrammetric Branch
James Coburn
Chief, Coastal Mapping Division

The rock at approx. lat. $59^{\circ}23'45''$ long. $153^{\circ}55'30''$ has been removed from the manuscript. Hydrographer sounded area at minus mean lower low water tide stage and did not find a rock at this location. The data available was insufficient for plotting during final review (no signal position, weak fix). Rock was removed from map, negative and copies, after conference with Hydro-survey Quality Control Section. Charts will remove the rock at the next printing.

J. B. Phillips

8/5/76

v. 105

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 13275 PROJECT NO. PH-6301 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 FT. = 3048006 meters) FORWARD	N.A. 1927 DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 FT. = 3048006 meters) (BACK)
BAY, 1913	G.P. Vol 5 Page 401	N.A. 1927	59°23'14.91"	0461.4	1395.3
			153°56'44.02"	0694.9	252.4