

T-12327

T-12327

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-12327.....

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

Field Edited Map

### LOCALITY

State .... Alaska.....

General Locality Kamishak Bay, Cook Inlet.....

Locality ..Ursus..Cove.....

1967 TO 1972

### REGISTRY IN ARCHIVES

DATE .....

## DESCRIPTIVE REPORT - DATA RECORD

T -12327

①

PROJECT NO. (II):

PH-6301

FIELD OFFICE (III):

None

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center, Norfolk, VA

OFFICER-IN-CHARGE

J. Bull, Director

INSTRUCTIONS DATED (II) (III):

Office - March 18, 1965, Part I

Office - Feb. 10, 1968, Supplement I

Office - May 5, 1967, Supplement II

METHOD OF COMPILATION (III):

Wild B-8 plotter

MANUSCRIPT SCALE (III):

1:20,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:30,000 pantographed to 1:20,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

MAR 29 1976

DATE REGISTERED (IV):

N. Francis

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., ~~MEAN LOWER LOW WATER~~ mean lower low water

REFERENCE STATION (III):

CINCH, 1967

LAT.:

59°31'08.102" 250.7M

LONG.:

153°45'29.243" 459.8M

☐ ADJUSTED☒ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

Y = 2,016,178.75 ft.

X = 544,919.02 ft.

Alaska

5

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

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FIELD INSPECTION BY (III): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air photo compilation - July 9, 1967 Office interpretation		
PROJECTION AND GRIDS RULED BY (IV): A. Bethea		DATE 10/25/67
PROJECTION AND GRIDS CHECKED BY (IV): L.F. VanScoy		DATE 10/26/67
CONTROL PLOTTED BY (III): B. Barge		DATE 11/20/67
CONTROL CHECKED BY (III): L. Neterer, Jr.		DATE 11/20/67
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): P. Dempsey		DATE 11/67
STEREOSCOPIC INSTRUMENT COMPILATION (III):		PLANIMETRY DATE 12/67
		CONTOURS N.A. DATE
MANUSCRIPT DELINEATED BY (III): Shoreline, Cottonwood Bay C.H. Bishop A.L. Shands		DATE 12/68 12/67
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): L.L. Graves		DATE 3/69
REMARKS: Field edit by: Emerson G. Wood, June and July 1972		

DESCRIPTIVE REPORT - DATA RECORD

T-21327

CAMERA (KIND OR SOURCE) (III):

USC&GS Type "M"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
67M868	7/9/67	0929	1:60,000	2.2' below MLLW
67M-853 - 855	7/9/67	0912	1:60,000	2.4' below MLLW

Predicted TIDE (III)

Diurnal

		RATIO OF RANGES	MEAN RANGE	<del>SEMI</del> RANGE
REFERENCE STATION: Seldovia, Alaska			15.4	17.8
SUBORDINATE STATION: Iliamna Bay			12.3	14.5
SUBORDINATE STATION:				
WASHINGTON OFFICE REVIEW BY (IV): J.B. Phillips		DATE: Feb. 1976		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 1	RECOVERED: 1	IDENTIFIED: 1		
NUMBER OF BM(S) SEARCHED FOR (II): none	RECOVERED: none	IDENTIFIED none		
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): none				
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): none				

REMARKS:



## SUMMARY

T-12327 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 *June and July 1972*.

Final review was accomplished at the Rockville Office in *February 1976*.

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

T-12327

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit		
Alongshore area for hydro	12/67 & 8/68	Superseded
Alongshore area for hydro, (Cotton- wood Bay) traced from reduction of T-12323	12/4/68	Superseded
Field Edit applied Compilation complete	12/73	

FIELD INSPECTION

T12327

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.



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.

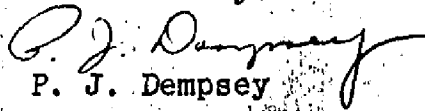
24. Supplemental Data

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

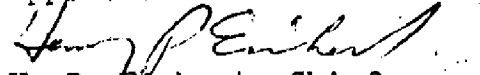
25. Photography

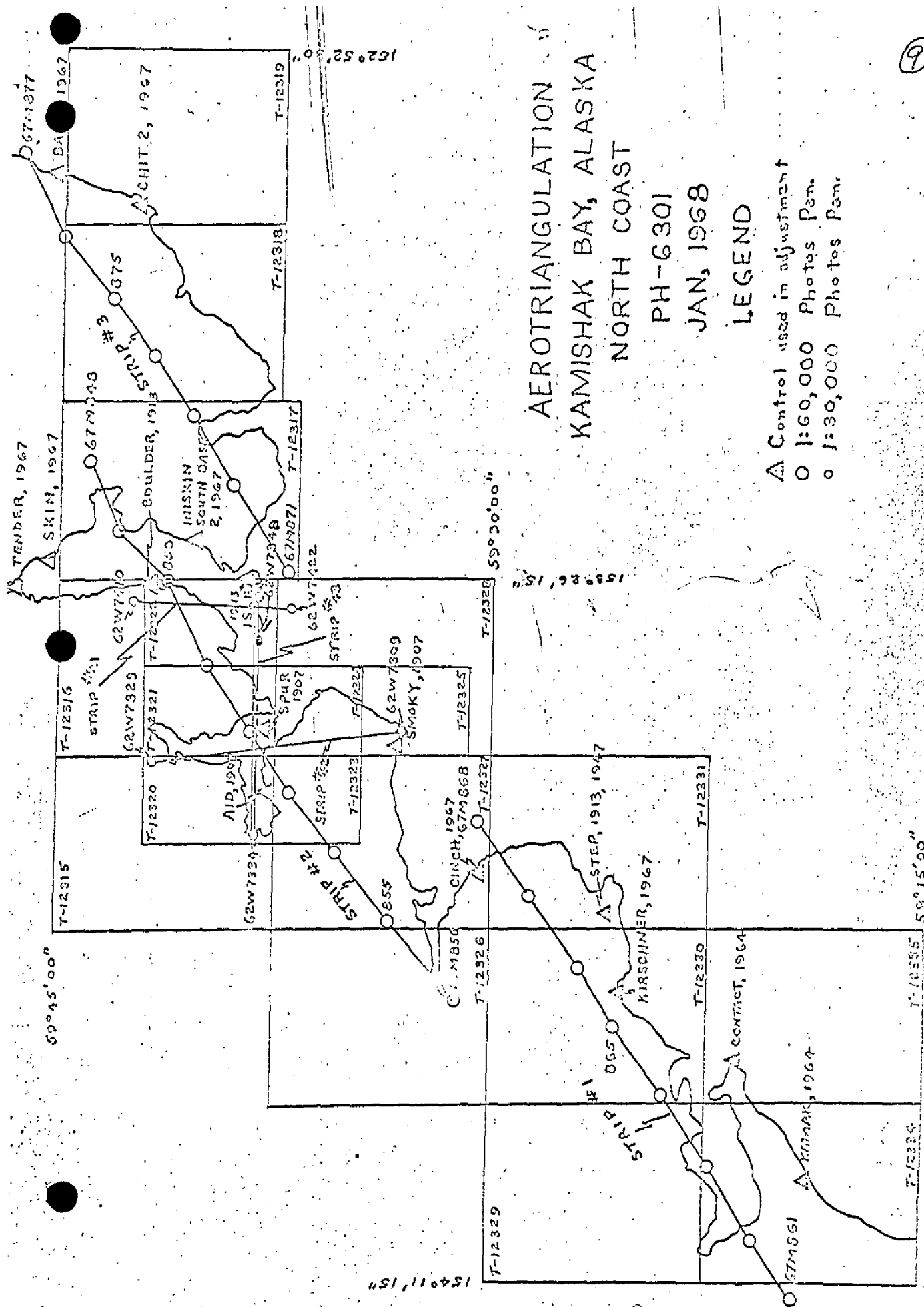
The definition and quality of the RC-9 and RC-8 photography were good. Ratio prints have been ordered to compilation scale.

Submitted by:

  
P. J. Dempsey

Approved and forwarded:

  
H. P. Eichert, Chief  
Aerotriangulation Section



Compilation Report  
Job PH-6301  
Map Manuscript T-12327

31. Delineation

The Wild B-8 stereoplotter was used.

There was no field inspection prior to compilation. Cottonwood Bay, at the top of this sheet, was traced from a reduction of 1:10,000 sheet T-12323.

32. Control

See Photogrammetric Plot Report dated January 22, 1968. (page 11)

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

The shoreline and all alongshore details were delineated from office interpretation of the photographs.

36. Offshore Details

All rocks, reefs, shoal, and foul areas were delineated from office interpretation.

37. Landmarks and Aids - None

38. Control for Future Surveys - None

39. Junctions

Junctions have been made with T-12325 (1:10,000), T-12324 (1:10,000) and T-12328 (1:20,000) to the east, T-12323 (1:10,000) and T-12315 (1:20,000) to the north, and T-12326 (1:20,000) to the west. There is no contemporary survey to the south.

32.  
CONTROL

Refer to Photogrammetric Plot Report, dated January 22, 1968.

Difficulty in holding control established by stereoplanigraph bridging of strips 41, 42, and 43 was encountered, initially. They were returned to the Bridging Section and their subsequent re-adjustment resulted in "Revisions" for strips 41 and 43.

Strip 42 had been compiled with little or no difficulty concerning the control. Although strip 41 also was compiled utilizing the original Bridge Strip, the comparison between the original and "Revised" strip #41 indicated a maximum change of approximately 0.3mm which proved to be of an insignificant effect. The compilations of these two strips were summarily considered to be of sufficient accuracy. Both of these strips were oriented in a general north-south direction.

The results of the "Revision" of strip 43 proved to be of a major change, and inasmuch as this strip was oriented in an east-west direction, intersecting both strips 41 and 42, an attempt to tie these together at their common models resulted in an error of tie-in between drilled pass points of strip 43 and shoreline pass points common to all strips.

When model 62W-7343 and 7346, of strip #43 was set, it was found that six of the seven drilled pass points would hold within tolerance, but none of the adjoining shoreline pass points from strips 41 and 42 would hold. When this model was re-scaled to all common shoreline points, the drilled points would not hold.

This same condition existed when model 62W-7334 and 7337 was set. Drilled pass points held within tolerance, but no common shoreline pass points between strip 42 and this model would hold.

It was evident at this time that no model work could be compiled from strip 43.

To further substantiate our decision, all five manuscripts were joined and a modified radial plot consisting of several processed ratio photos of each of strips 41, 42, and 43 was laid.

It was noted during this plot, that the tie points (from the stereoplanigraph bridges), and the field identified triangulation control, would hold well with the common shoreline pass points, but the drilled points would not. (A few of the drilled points at or near sea level were noticeably closer than those at the higher elevations.)

It was concluded therefore that strips 41 and 42 were tied together well and were geographically correct, and that a graphic solution and compilation of the two models in question on strip 43 could be made using the common shoreline pass points.

40. Horizontal and Vertical Accuracy - No statement.

41. thru 45. Inapplicable

46. Comparison with Existing Maps

Comparisons have been made with USGS Quadrangles Iliamna (C-3), Alaska, and Iliamna (C-2), Alaska, scale 1:63,360, dated 1954.

47. Comparison with Nautical Charts

Comparison was made with USC&GS chart 8554, 9th edition (Cook Inlet, Southern Part), scale 1:200,000, dated May 10, 1965.

Items to be Applied to Nautical Charts Immediately: None

Items to be Carried Forward: None

Submitted by,

A. L. Shands  
Carto Tech  
March 1969

Approved:

T-12327

(13)

FIELD EDIT REPORTS

Lower Cook Inlet, Alaska

OPR-429 FA-72

June-August 1972

MAPS

T-12320

T-12325

T-12321

T-12326

T-12323

T-12327

T-12324

T-12331

FIELD EDIT REPORTS

Lower Cook Inlet, Alaska

OPR-429

June-August 1972

INTRODUCTION

Field edit reports are attached for the following maps:


T-12320	T-12325
T-12321	T-12326
T-12323	<u>T-12327</u>
T-12324	T-12331

Field photographs and copies of the field edit ozalids were taken into the field. The mean high water line was verified by visual inspection of the shoreline and ozalids in the field. Sextant fixes were plotted on boat sheets FA-10-6-72 and FA-20-2-72. The hydrographic location was then compared with the photogrammetric position. Height data for all rocks and ledges is either written directly on the ozalid or entered in the field edit notebook along with position data, in which case the notebook and page number are referenced on the ozalid.

Notes have been made in violet on the field photographs and have been cross-referenced on the field edit ozalids by photograph number. All times are based on 135° W. meridian.

Compilation of the maps is good. Several discrepancies in the MLLW line were noted in Iliamna Bay, apparently as a result of uplifting from the 1964 earthquake. It is recommended that the maps be revised in accordance with notes on the photographs and in the field edit notebook before acceptance as advance manuscripts. Field inspection of these maps is complete.

Approved and Forwarded:

  
R. H. Houlder  
Captain, NOAA

## FIELD EDIT REPORT

Map T-12327

Ursus Cove, Alaska

June-July 1972

Field edit of Map T-12327 was done by LT (jg) Emerson G. Wood during June and July 1972. Inspection was done from a small boat and on foot when fixes on land were required.

METHOD

Field photographs and a copy of the field edit ozalid were examined in the field. The mean high water line was verified by visual comparison of the beach area and the ozalid in the field. Isolated rocks and ledges were located by sextant fixes and plotted on boat sheet FA-20-2-72. Heights of rocks, reefs, and high points of ledges are noted on the photograph, in the field edit notebook, or directly on the ozalid.

Photograph 67M-868 is the only one referenced on this map. All times are based on 135°W. meridian.

ADEQUACY OF COMPILATION

Compilation of this map is good. Hydrographic location of features compares well to photogrammetric location; Note is made of the following items:

The approximate area of Lat. 59°33'08"N, Long. 153°39'15"W. was found to be foul with rocks. No fix was taken due to lack of hydrographic control signals.

No rock was visible at low water at Lat. 59°32'20"N, Long 153°44'20"W., and none was indicated by hydrographic records for boat sheet FA-20-2-72. ✓

No rock exists at Lat. 59°31'38"N, Long. 153°46'08"W.

The channel and sand bar at the mouth of the river at the west end of Ursus Cove were found to have changed somewhat since the photographs were taken. Reference is made to photograph 67M-868.

No rocks were visible at low water at Lat. 59°30'25"N, Long. 153°43'10"W.

No rock was visible at low water at Lat. 59°30'24"N, Long. 153°42'36"W., although hydrographic records for boat sheet FA-20-2-72 indicate a shoal sounding of 2.4 fathoms in this area.

Field inspection of this map is complete.



RECOMMENDATIONS

It is recommended that the map be revised in accordance with the notes on the photograph and in the field edit notebook, and that the map be accepted as an advance manuscript.

Respectfully submitted,

*DE Natus*

for Emerson G. Wood  
LT (jg), NOAA

## PHOTOGRAMMETRIC OFFICE REVIEW

~~T-10363~~ T-12327

1. PROJECTION AND GRIDS LLG	2. TITLE LLG	3. MANUSCRIPT NUMBERS LLG	4. MANUSCRIPT SIZE
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY LLG	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NONE		7. PHOTO HYDRO STATIONS XX
8. BENCH MARKS XX	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT Wash. Science Center P.J.D.	11. BEARING POINTS Pass LLG (except 868)
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
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
23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
CULTURAL FEATURES			
27. ROADS	28. BUILDINGS	29. RAILROADS	30. OTHER CULTURAL FEATURES
BOUNDARIES			
31. BOUNDARY LINES		32. PUBLIC LAND LINES	
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 L.L. Graves		SUPERVISOR, REVIEW SECTION OR UNIT A.C. Rauck, Jr.	
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 F.R. Gustafson Reviewer: R.R. White		12/73 3/74 SUPERVISOR A.C. Rauck, Jr.	
43. REMARKS Field edit applied from: Field edit ozalid, photograph 67M868, Field edit notebook.			

Review Report T-12327  
Shoreline Survey  
February 1976

61. General Statement

Refer to the Hydrographic Survey Review Report for H-9327, page 3, Condition of Survey, Item 5. During final photogrammetric review, nothing could be found to indicate that information was omitted on T-12327 Class I manuscript from the field edit ozalid. However, the position for plotting one offshore rock was found in the Field Edit Notebook. This rock was plotted during review and the position is in agreement with the hydrographic location.

62. Comparison with Registered Topographic Surveys

T-3420, Part II, 1:40,000, March 1910.

This survey is superseded by the new map.

63. Comparison with Maps of Other Agencies

Refer to the Compilation Report, Item 46.

64. Comparison with Contemporary Hydrographic Surveys

H-9327, 1:20,000 June-August 1972

Comparison was made with the final reviewed hydrographic sheet. Foul *and many low water* lines were removed where they conflicted with information established by the hydrographer. Differences exist between the surveys in rock elevations, resulting primarily from the use of actual observed tides on the hydrographic survey. No discrepancies exist to be reported.

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 compiles with Bureau requirements.

Submitted by,

*J.B. Phillips*  
J.B. Phillips

Approved:

Chief, Photogrammetric Branch

*S. S. Blankinbake*  
*A.K. Heywood*  
Chief, Coastal Mapping Division

*[Signature]*

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-6301 (Cook Inlet, Alaska)

T-12327

Brown Peak

Chigmit Mountains

Cottonwood Bay

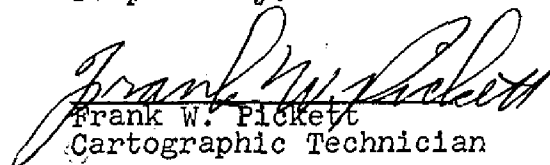
Ursus Cove

Approved by:

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A. Joseph Wraight  
Chief Geographer

Prepared by:

  
Frank W. Pickett  
Cartographic Technician

