

T-12325

T-12325

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-12325

Classification No. Final Edition No.1

Field Edited Map

LOCALITY

State Alaska

General Locality Kamishak Bay, Cook Inlet

Locality Ursus Head

19 62 TO 19 72

REGISTRY IN ARCHIVES

DATE

DESCRIPTIVE REPORT - DATA RECORD
T-12325

PROJECT NO. (II): FM 6301		
FIELD OFFICE (II): None		CHIEF OF PARTY
PHOTOGRAMMETRIC OFFICE (III): Atlantic Marine Center, Norfolk, Virginia		OFFICER-IN-CHARGE J. Bull, Director
INSTRUCTIONS DATED (II) (III): March 18, 1965 Office - Part I Feb. 10, 1966 - Office - Supplement I May 5, 1967 - Office, Supplement II Dec. 27, 1967 - Office, Supplement III		
METHOD OF COMPILATION (III): Wild B-8 plotter		
MANUSCRIPT SCALE (III): 1:10,000		STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:5,000 Pantographed to 1:10,000
DATE RECEIVED IN WASHINGTON OFFICE (IV):		DATE REPORTED TO NAUTICAL CHART BRANCH (IV):
APPLIED TO CHART NO.	DATE: MAR 29 1976	DATE REGISTERED (IV): <i>N. Francis</i>
GEOGRAPHIC DATUM (III): N.A. 1927		VERTICAL DATUM (III): MHW MEAN LOW WATER 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 mean lower low water
REFERENCE STATION (III): SMOKY, 1967		
LAT.: 59°33'14.635" 452.9M	LONG.: 153°37'02.890" 45.4M	<input type="checkbox"/> ADJUSTED <input checked="" type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): Y = 2,029,146.83 ft. X = 570,965.75 ft.		STATE Alaska
		ZONE 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

T-12325

FIELD INSPECTION BY (II): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): June 1962 Air Photo compilation, office interpretation		
PROJECTION AND GRIDS RULED BY (IV): A. Bethea		DATE: 11/13/67
PROJECTION AND GRIDS CHECKED BY (IV): J.C.		DATE: 11/14/67
CONTROL PLOTTED BY (III): J. Steinberg		DATE: 2/21/68
CONTROL CHECKED BY (III): F. Wilson		DATE: 2/21/68
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): P.J. Dempsey		DATE: 1/22/68
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY A. Shands	DATE: 6/68
	CONTOURS	DATE:
MANUSCRIPT DELINEATED BY (III): A. Shands		DATE: 6/68
SCRIBING BY (III):		DATE:
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): C. Bishop		DATE: 6/68
REMARKS: Field edit by: Emerson G. Wood 7/72		

DESCRIPTIVE REPORT - DATA RECORD

T-12325

C&GS (KIND OR SOURCE) (III):

U.S.C&G.S. Type "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
62W-7309 & 7312	6/29/62	15:37	1:30,000	6.0 ft. above MLLW
62W6309 - 6312	6/18/62	12:25	1:15,000	3.8' above MLLW
62W6314 - 6316	6/18/62	12:30	1:15,000	3.9 ft. above MLLW

Predicted

TIDE (III)

Diurnal

	RATIO OF RANGES	MEAN RANGE	MEAN RANGE
REFERENCE STATION: Seldovia, Kachemak Bay, Alaska		15.4	17.8
SUBORDINATE STATION: Iliamna Bay, Alaska		12.3	14.5
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): J.B. Phillips

DATE:

February 1976

PROOF EDIT BY (IV):

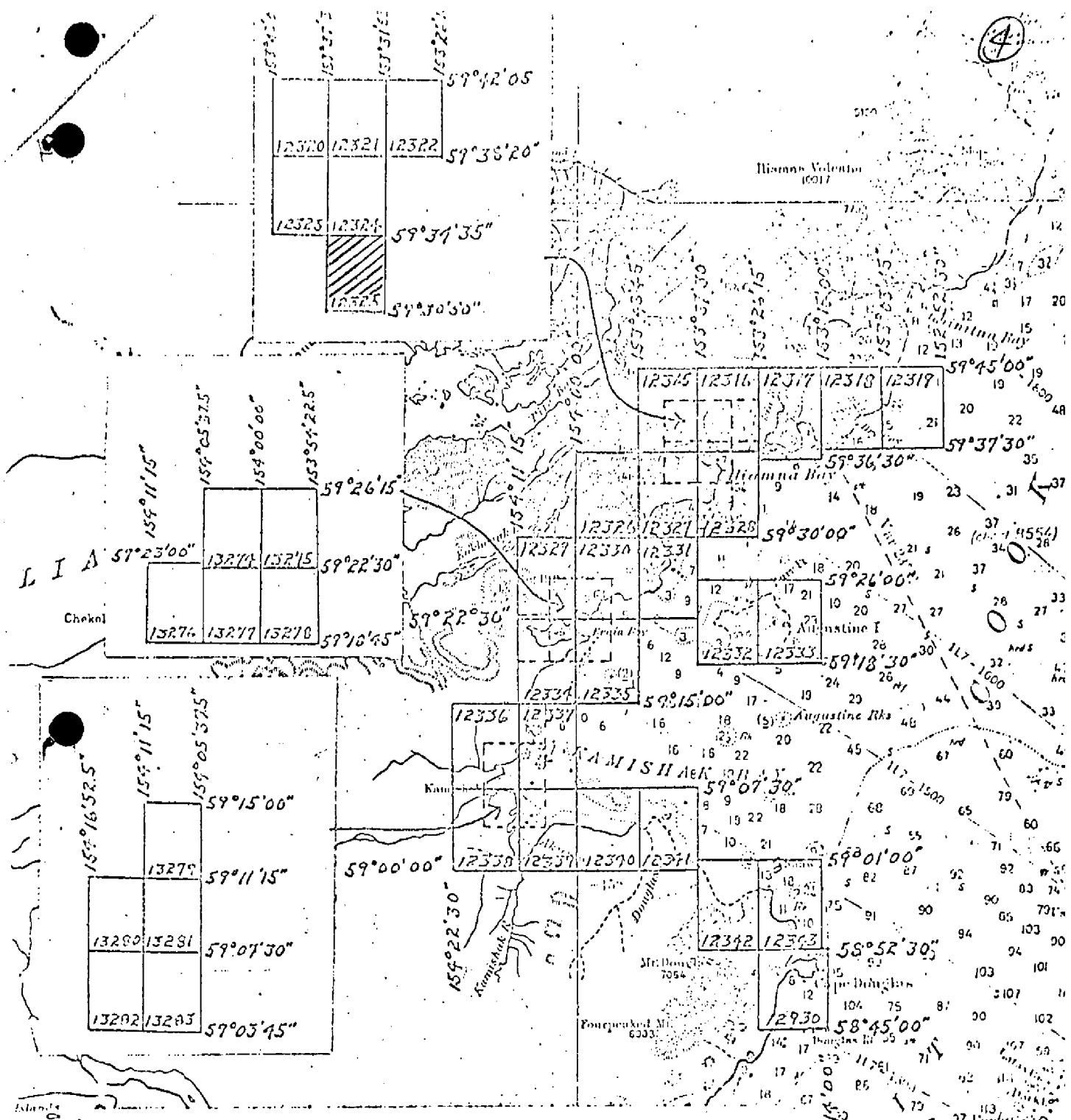
DATE:

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:

Though the stage of tide of the two 1:15,000 scale flights as computed from the predicted tide tables is shown to be above the stage of tide of the 1:30,000 scale flight, a visual inspection of the two flights would indicate the reverse as true. (Refer to heading 61, final review report)

④



JOB PH-6301 (PART-1)

COOK INLET, ALASKA

SHORELINE MAPPING

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

Revised 4-3-68 LFK

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SUMMARY

T-12325 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 *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-12325

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit		
Alongshore area for hydro	June 1968	Superseded
Field Edit applied. Compilation complete	December 1973	

FIELD INSPECTION

■-T-12325

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.

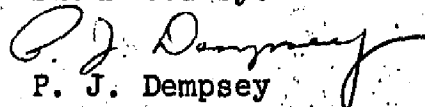
24. Supplemental Data

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

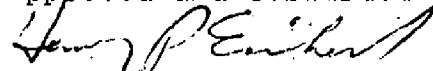
25. Photography

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

Compilation Report
Map Manuscript T-12325
Project PH-6301

31. Delineation

The Wild B-8 plotter was used. Some of the offshore and foreshore area detail was compiled graphically from offshore photographs of 1:15,000 contact scale. There was no field inspection prior to compilation.

32. Control *(on separate page)*

See Photogrammetric Plot Report, dated January 22, 1968

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 rocks, ledges, sand and boulder limits were delineated from office interpretation of the photographs.

36. Offshore Details

All rocks, reefs, and foul areas were delineated from office interpretation; see item #31.

37. Landmarks and Aids - None

38. Control for Future Surveys - None

39. Junctions

Junctions were made and found to be in agreement with T-12324 (1:10,000) and T-12328 (1:20,000) to the north, T-12328 (1:20,000) to the south, T-12328 (1:20,000) to the east, and T-12327 to the west.

40. Horizontal and Vertical Accuracy - No comment

32.
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.

41 thru 45. Inapplicable

46. Comparison with Existing Maps

Comparison has been made with U.S.G.S. quadrangle Iliamna (C-2), Alaska, scale 1:63,360, dated 1958.

47. Comparison with Nautical Charts

A comparison has been made with U.S.C. & G.S. Chart #8554, 9th edition, (Cook Inlet, Southern Part) scale 1:200,000, dated May 10, 1965, and with U.S.C. & G.S. Chart #8665, Iliamna Bay, Alaska, 4th Ed., dated Jan. 13, 1964, scale 1:20,000.

Items to be Applied to Nautical Charts Immediately - None

Items to be Carried Forward - None

Submitted by,

Arnold L. Shands
Carto (Tech)
March 1969

Approved:

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	T-12327
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

R. H. Houlder
Captain, NOAA

FIELD EDIT REPORT

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Map T-12325

Ursus Cove, Alaska

July 1972

Field edit of Map T-12325 was done by LT (jg) Emerson G. Wood during 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 in the field edit notebook or directly on the ozalid.

No photographs are referenced for Map T-12325. 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:

No rocks or reef exist in the vicinity of Lat. 59°34'20"N, Long. 153°34'00"W.

The building shown at Lat. 59°34'13"N, Long. 153°34'18"W. was found to be a barge that had washed up on the beach.

No rock was visible at low water at Lat. 59°33'00"N, Long. 153°34'10"W. However, hydrographic records for boat sheet FA-20-2-72 show a shoal in the area of Lat. 59°32'54"N, Long. 153°34'22"W., with a least depth of 0.0 fathoms.

No rock was visible at low water at Lat. 59°33'15"N, Long. 153°34'28"W.

A shoal with a least depth of 2.0 fathoms was located at Lat. 59°32'³⁴17"N, Long. 153°33'21"W. (See hydrographic records for boat sheet FA-20-2-72)

Field inspection of this map is complete.

RECOMMENDATIONS

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

Respectfully submitted,

for *DE Wood*
Emerson G. Wood
LT (jg), NOAA

PHOTOGRAMMETRIC OFFICE REVIEW

T-12325 ~~F40363~~

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)		7. PHOTO HYDRO STATIONS
8. BENCH MARKS	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 XX		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 XX	39. FORMS
40. REVIEWER C.H. Bishop		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 F.R. Gustafson 12/73		SUPERVISOR A.C. Rauck	
43. REMARKS Field Edit Applied from Field Edit Ozalid and Field Edit Notebook			

Review Report T-12325
Shoreline Survey
February 1976

61. General Statement

During this review, errors were found in the computed stage of tide at the time of photography. Apparent conflicts in data discussed by the compiler under "Remarks", form 181c of the Data Record, resulted from these errors. The data record has been corrected during this review to reflect the correct stage of tide. None of the several flights of photographs covering this map were taken at the time of mean lower low water. As a result, much of the photogrammetrically compiled ledge and foul limits were removed from the manuscript during final review as discussed under heading 64 of this report.

62. Comparison with Registered 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 Item 46 of the Descriptive Report.

64. Comparison with Contemporary Hydrographic Surveys

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

This manuscript has been compared with the final reviewed hydrographic sheet. For the reasons mentioned in item 61 of this report, much of the ledge and foul limits were removed during final review from the Class I manuscript. There are no discrepancies between the two surveys.

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:
S. G. Blankenbaker
for *A. K. Heywood*
Chief, Photogrammetric Branch
Sam Cotton
Chief, Coastal Mapping Division

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6301 (Cook Inlet, Alaska)

T-12325

Cook Inlet

Ursus Cove

Ursus Head

Approved by:

A. Joseph Wraight

A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician

DESCRIPTIVE REPORT, CONTROL RECORD

MAP T. 12325

PROJECT NO. PH-6301

SCALE OF MAP 1:10,000

SCALE FACTOR	None
1	1
2	2
3	3
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100	100

[illegible]

A. C. Rauck, Jr.

CHECKED BY
A.L. Shands

DATE
March 13, 1968

DATE

(19)