

T-12323

T-12323

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-12323*.....

Classification No. *FINAL* Edition No. *1*.....

*(Field edited map)*

### LOCALITY

State .. *Alaska*.....

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

Locality .. *Cottonwood Bay*.....

19 62 TO 1972

### REGISTRY IN ARCHIVES

DATE .....

## DESCRIPTIVE REPORT - DATA RECORD

T - 12323

PROJECT NO. (II): PH-6301		
FIELD OFFICE (II): None		CHIEF OF PARTY
PHOTOGRAMMETRIC OFFICE (III): Atlantic Marine Center, Norfolk, VA		OFFICER-IN-CHARGE A.C. Holmes, 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): 1:15,000	
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 <del>MEAN SEA LEVEL</del> EXCEPT AS FOLLOWS: Elevations shown as (25) refer to mean high water Elevations shown as (5) refer to sounding datum i.e., <del>mean low water</del> or mean lower low water
REFERENCE STATION (III): AID, 1907		
LAT.: 59°37'48.468" 1499.9M	LONG.: 153°38'00.237" 3.7M	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): Y = 2,056,929.49ft. X = 567,857.13 ft.		STATE Alaska
		ZONE 5
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-12323

FIELD INSPECTION BY (III): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air photo compilation Date of photography: June 12, 1962 June 29, 1962		
PROJECTION AND GRIDS RULED BY (IV): J.F. VanScoy		DATE Nov. 9, 1967
PROJECTION AND GRIDS CHECKED BY (IV): J.C.		DATE Nov. 14, 1967
CONTROL PLOTTED BY (III): J. Steinberg		DATE Feb. 21, 1968
CONTROL CHECKED BY (III): F. Wilson		DATE Feb. 21, 1968
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): P.J. Dempsey		DATE Jan. 22, 1968
STEREOSCOPIC INSTRUMENT COMPILATION (III): Wild B-8	PLANIMETRY L.O. Neterer, Jr. & A.L. Shands	DATE July 26, 1968
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): L.O. Neterer, Jr.		DATE July 26, 1968
SCRIBING BY (III): Field Edit applied F. Gustofson		DATE March 1974
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): Compilation: R.J. Pate Field Edit: A.C. Rauck, Jr.		DATE Aug. 21, 1968 March 1974
REMARKS: Field edit notations on edit ozalid were very approximate. 3 rock fixes in Cottonwood Bay are approximate, as signals used for the fixes were too far away. Positions were plotted by latitude and longitude, provided by the editor. See field edit report. <i>Rocks<sup>re</sup> plotted from fixes during final review. (see Review Report)</i> <i>Field edit by Emerson G. Wood, 1972</i>		

## DESCRIPTIVE REPORT - DATA RECORD

T-12323

CAMERA (KIND OR SOURCE) (III):

USC&amp;GS Type "W"

## PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
62W6290 - 6294	6/18/62	1212	1:15,000	2.6' above MLLW
62W7334 62W7337	6/29/62	1549	1:30,000	5.5' above 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		12.3	14.5
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

J. B. Phillips

DATE:

January 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- 12323 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 1972

Final review was accomplished at the Rockville Office in Jan. 1976

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

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T-12323

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit		
Alongshore area for hydro	July 1968	Superseded
Field Edit Applied Compilation Complete	March 1974	

FIELD INSPECTION

**T-12323**

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.



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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*  
P. J. Dempsey

Approved and forwarded:

*H. P. Eichert*  
H. P. Eichert, Chief  
Aerotriangulation Section



Compilation Report  
T-12323 - PH-6301

31. Delineation

The Wild B-8 plotter was used for the MHWL and alongshore detail. Off-shore photos 1:15,000 scale were used to delineate the approximate MLLWL and offshore detail. The offshore photos computed a higher tide than the compilation photos, but more offshore detail was visible.

*Tide computations were checked during final review and they were found to be in error. See form 181c for correct stage of tide.*

3. 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.

33. Supplemental Data - None34. Contours and Drainage

Contours are inapplicable. The drainage was delineated from office interpretation.

35. Shoreline and Alongshore Detail

The shoreline and the alongshore detail were delineated by office interpretation.

36. Offshore Detail

All offshore detail was delineated from office interpretation.

37. Landmarks and Aids - None38. Control for Future Surveys - None39. Junctions

Junctions are in agreement with the 1:10,000 sheets, T-12320 in the north and T-12324 in the east. The junctions are in agreement with the 1:20,000 sheets T-12315 in the north, T-12328 in the east and T-12327 in the south and west.

40. Horizontal and Vertical Accuracy - Refer to item 32.



46. Comparison with Existing Maps

A comparison was made with USGS quadrangle Iliamna (C-2), Alaska, scale 1:63,360, dated 1958.

47. Comparison with Nautical Charts

A comparison was made with USC&GS charts #8554, 9th edition, (Cook Inlet-Southern part) scale 1:200,000, dated May 10, 1965, and #8665, 4th edition, dated 1964, Jan. 13(Iliamna Bay, Alaska) scale 1:20,000.

Items to be Applied to Nautical Charts Immediately: None

Items to be Carried Forward: None

Submitted by,

L.O. Neterer, Jr.  
Carto Tech  
July 1968

## 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  
Captain, NOAA



FIELD EDIT REPORT

Map T-12323

Iliamna Bay, Alaska

August 1972

Field edit of Map T-12323 was done by LT (jg) Emerson G. Wood during August 1972. Inspection was done from a small boat.

METHOD

Field photographs and a copy of the field edit ozalid were examined in the field. All items on the ozalid west of Long. 153°39'00"W. were determined to be above the zero fathom curve, therefore this entire area was marked foul. This agrees well with hydrographic records for boat sheet FA-10-6-72.

No photographs are referenced for Map T-12323. All times are based on 135°W. meridian.

ADEQUACY OF COMPILATION

Compilation of this map is good, with the exception of the MLLW line as noted above. Note is made of the following item: \*

Three rocks were found that were not shown on the ozalid, at the following positions:

<u>Lat.</u>	<u>Long.</u>	
59°38'07"N	153°37'48"W	- FIX 092 (Field Book) *
59°38'02"N	153°38'03"W	FIX-093 ( " " ) *
59°38'08"N	153°38'03"W	<del>FIX-094</del> No FIX in Field Book

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 that the map be accepted as an advance manuscript.

\* replotted during final review

\* MLLW line removed from map

Respectfully submitted,

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

## PHOTOGRAMMETRIC OFFICE REVIEW

~~10363~~ T-12323

1. PROJECTION AND GRIDS RJP	2. TITLE RJP	3. MANUSCRIPT NUMBERS RJP	4. MANUSCRIPT SIZE RJP
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RJP	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) XX		7. PHOTO HYDRO STATIONS XX
8. BENCH MARKS XX	9. PLOTTING OF SEXTANT FIXES XX	10. PHOTOGRAMMETRIC PLOT REPORT Bridge W.O.	11. DETAIL POINTS RJP
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE RJP	13. LOW-WATER LINE RJP	14. ROCKS, SHOALS, ETC. RJP	15. BRIDGES XX
16. AIDS TO NAVIGATION XX	17. LANDMARKS XX	18. OTHER ALONGSHORE PHYSICAL FEATURES RJP	19. OTHER ALONGSHORE CULTURAL FEATURES XX
PHYSICAL FEATURES			
20. WATER FEATURES XX	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 XX
CULTURAL FEATURES			
27. ROADS XX	28. BUILDINGS RJP	29. RAILROADS XX	30. OTHER CULTURAL FEATURES XX
BOUNDARIES			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES RJP		34. JUNCTIONS RJ P	35. LEGIBILITY OF THE MANUSCRIPT RJP
36. DISCREPANCY OVERLAY RJP	37. DESCRIPTIVE REPORT RJP	38. FIELD INSPECTION PHOTOGRAPHS XX	39. FORMS RJP
40. REVIEWER RJP Aug. 23, 1968		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 of field edit F.R. Gustafson 3/74		SUPERVISOR	
43. REMARKS			

Review Report T-12323  
Shoreline Survey  
January 1976

61. General Statement

This photogrammetric manuscript was compared with the final reviewed (and inspected) contemporary hydrographic smooth sheet (refer to heading 64 of this report). Applicable information concerning the results of the final review of the manuscript will be reported to the Chief, Hydrographic Survey Branch. (Refer to page 20)

62. Comparison with Registered Topographic Surveys

T-2822 1:20,000 1907

*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-9329 1:10,000 August 1972 & July 1973

Fixes for offshore rocks recorded in field edit sketchbooks (form 274) were plotted during final review. Fixes 92, 93, and a "RK awash MLLW" (unidentified by number) had been plotted on the Class I manuscript by the compiler during application of field edit using latitude and longitude values furnished in the August 1972 Field Edit Report for this sheet. (Refer to Remarks by compiler form 181b of the Descriptive Report) Four fixes are recorded in the sketchbook, page 26, which plot on this sheet. The fixes are listed as follows by number and with comments by the final reviewer:

22

Fix 092 - This rock was plotted by the compiler using latitude and longitude values furnished and listed in the Field Editor's Report August 1972 which resulted in a slightly different position on the manuscript from the plotted position obtained by the hydrographic reviewer using the photogrammetric field edit sextant fixes recorded in the Field Edit Sketchbook. Refer to hydrographic survey review H-9329 pages 2 & 3, item 4C. During the final photogrammetric review this fix was replotted on the manuscript and the position agrees with the position shown on the hydrographic survey.

Fix 093 - Comments on the plotting of this rock are the same as the comments for the plotting of Fix 092 with one exception. The plotted position obtained during final photogrammetric review does not agree with the position on the hydrographic survey. Unless there is additional information which review is unaware of, the position as now plotted on the manuscript is correct. A memorandum concerning this discrepancy with the smooth sheet will be sent to the hydrographic review section upon completion of the photogrammetric review.

Fix 094 - The fix position plotted during final review agrees with the position on the hydrographic survey.

Fix 095 - The position plotted during final review agrees with the position on the hydrographic survey. It is not known why this rock was not plotted on the Class I manuscript during the application of field edit.

(~~Page 21~~) (Page 21)

See Cartographic Comparison Print submitted with this report for the locations of the rocks discussed. There are differences between the surveys in rock heights. Predicted tide data was used in computing rock heights on the photogrammetric survey.

#### 65. Comparison with Nautical Charts

Chart #8665 1:20,000 5th edition, February 1972

#### 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. H. Blankenhorn*  
*A. K. Heywood*  
Chief, Photogrammetric Branch  
*James C. Carter*  
Chief, Coastal Mapping Division

copy

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Memorandum to the Chief, Hydrographic Survey Branch Concerning  
Photogrammetric Review of PH-6301 (Part I) Kamishak Bay, Alaska T-12323

From C3421

H-9329 1:10,000 August 1972 and July 1973

In making a comparison of T-12323 with the final reviewed hydrographic smooth sheet, it was noted that four rocks had been plotted by the hydrographic survey reviewer using sextant fixes recorded in the photogrammetric field editors sketchbook (form 274). These fixes were plotted during photogrammetric review, and as noted in the Review Report for this sheet, all of the plotted positions, with the exception of fix 093, agree with the position on the hydrographic survey. Refer to the Cartographic Comparison Print which is submitted with the Photogrammetric Review Report for T-12323.



153°37'30"  
59°38'20"  
Y=2,060,000 F

FIX 095

38°30'

X=565,000 FT  
39

39°30'

JOINS T-12315 1:20  
T-12320 1:10

AW MLLW PA

62-W-7337

62-W-6291

FIX 094

AW MLLW PA

BAY

AW MLLW PA

AW MLLW PA

FIX 092

AW MLLW PA

62-W-6290

FIX 093

38°

Foul with Rocks

NOTE:  
The delineation of features and high-water line on this survey is final. The contemporary survey of this area where available, for the final delineation.

AID 1907

AW MLLW

Sand

62-

JOINS T-12316 1:20

37°30'  
Y=2,055,000

(2)

Cartographic Comparison Print  
PH-6301  
T-12323



3-18-68

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6301 (Cook Inlet, Alaska)

T-12323

Cottonwood Bay

Approved by:

*A. Joseph Wraight*  
A. Joseph Wraight  
Chief Geographer

Prepared by:

*Frank W. Pickett*  
Frank W. Pickett  
Cartographic Technician

