

T-13278

T-13278

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-13278.....

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

Field Edited Map

LOCALITY

State Alaska

General Locality Kamishak Bay

Locality Bruin Bay, Contact Point

1962 TO 1968, 1971

REGISTRY IN ARCHIVES

DATE

①

DESCRIPTIVE REPORT - DATA RECORD

T-13278

PROJECT NO. (II):
PH-6301

FIELD OFFICE (II):
None

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):
Atlantic Marine Center, Norfolk, Virginia

OFFICER-IN-CHARGE
J. Bull, Director

INSTRUCTIONS DATED (III) (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 and Wild B-8 (See item 31)

MANUSCRIPT SCALE (III):
1:10,000 — 1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):
1:15,000 pantographed to 1:10,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

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~~ or mean lower low water

REFERENCE STATION (III):
Contact, 1964

LAT.:
59°21'29.3755" (909.0M)

LONG.:
153°57'02.7503" (43.5M)

ADJUSTED
 UNADJUSTED

PLANE COORDINATES (IV):
Y = 1,957,349.40 ft. X = 509,187.12 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

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FIELD INSPECTION BY (II): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air Photo compilation Dates of photography: June 18, 1962, June 1967		
PROJECTION AND GRIDS RULED BY (IV): A. Bethea	DATE 4/16/68	
PROJECTION AND GRIDS CHECKED BY (IV): L.F. VanScoy	DATE 4/16/68	
CONTROL PLOTTED BY (III): J. Steinberg	DATE 4/18/68	
CONTROL CHECKED BY (III): E. Serena	DATE 4/18/68	
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): P.J. Dempsey (for 1:20,000 compilation) T-12335	DATE 1/22/67	
STEREOSCOPIC INSTRUMENT COMPILATION (III): Wild B-8	PLANIMETRY A. Shands (Wild B-8 bluff and foreshore lines at 1:20,000)	DATE 12/17/67
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): B. Wilson	DATE 5/20/68	
SCRIBING BY (III):	DATE	
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): (Unknown)	DATE	
REMARKS: Field edited by Alan P. Vonderohe, July 1971 (field edit also accomplished in 1968)		

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DESCRIPTIVE REPORT - DATA RECORD
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CAMERA (KIND OR SOURCE) (III):

USC&GS Type "W" and "M" *

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
62W6637 thru 6639	6/18/62	1709	1:30,000	13.5' above MLLW
67M862-863	6/9/67	0927	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): 1 RECOVERED: 1 IDENTIFIED: 1

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-12335

SUMMARY

T-13278 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-13278

COMPILATION RECORD

COMPLETION DATE

REMARKS

Compilation complete pending field edit		
Alongshore area for hydro	5/68	Superseded
Field Edit applied	11/72	

FIELD INSPECTION

EB-T-13278

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

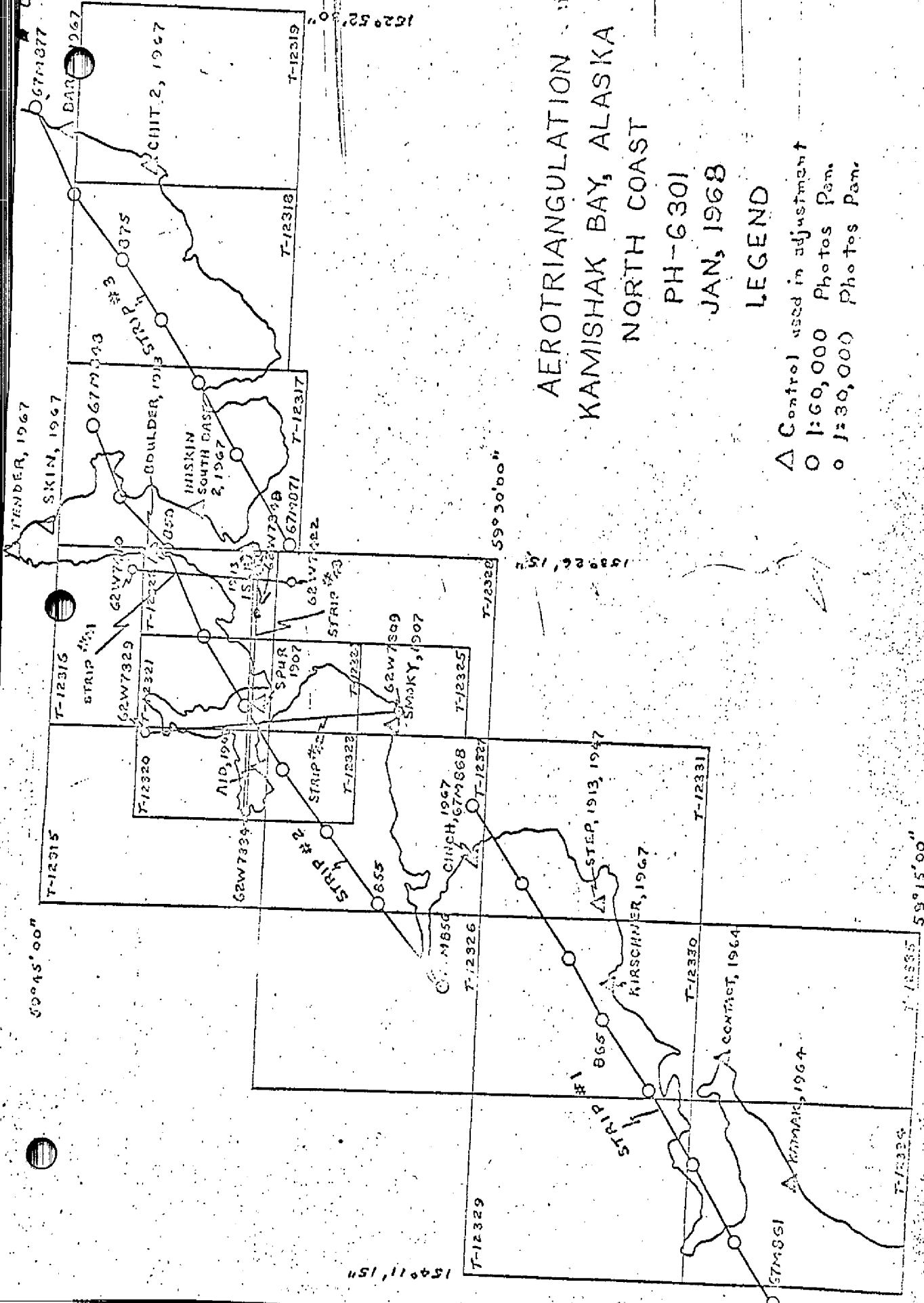
The definition and quality of the RC-9 and RC-8 photography were good. Ratio prints have been ordered to compilation scale.

Submitted by:

P. J. Dempsey
P. J. Dempsey

Approved and forwarded:

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



AEROTRIANGULATION
 KAMISHAK BAY, ALASKA
 NORTH COAST
 PH-6301
 JAN, 1968
 LEGEND

- △ Control used in adjustment
- 1:60,000 Photos Pan.
- 1:30,000 Photos Pan.

COMPILATION REPORT
T-13278

31. Delineation (see page 11)

There was no field inspection prior to compilation. Photography was satisfactory.

The area was compiled with the Wild B-8 plotter at 1:20,000 (SW corner of T-12335) using the "M" photos at extreme low tide.

The ledge, reef, sand-and-gravel limits and the top-of-bluff lines (except for minor graphic revisions of the latter) are a vertical projector enlargement of the 1:20,000 compilation. The buildings, mean high water line, and the rocks, bare and awash, were graphically compiled from the 1962 "W" photos.

32. Control

The same control that was used for the 1:20,000 compilation was used for this map, plus the points established during the Wild B-8 work. (These "Wild B-8 points" were scaled on the coordinatograph from the 1:20,000 map and plotted on the 1:10,000) However, many of them could not be transferred from the 1967 1:20,000 "M" photos to the 1962 1:10,000 "W" photos, so that there were not enough of these "control" points to establish the position of each "W" photo independently; but, good positioning of all of them was obtained by cutting in additional points with the "stronger" photos, using these to help establish the "weaker" photos.

33. Supplemental Data - None

34. Contours and Drainage

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

35. Shoreline and Alongshore Details

See Item 31.

The lines shown around ledge, sand, etc., should not be considered as low water lines, due to the extreme low tide of the "M" photos, which were the only photos from which these could be compiled.

36. Offshore Details

Two detached reefs are all that were suggested by the photography.

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

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T-13278

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 ^{the} 1962W photos, and the vertical projector ratio of 2X, and ^{the} essence of meeting the June 15, 1968 ship schedule, it ~~was decided~~ that the method used was the most expedient and accurate.

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

37. Landmarks and Aids

No photographic detail appeared to be in this category except possibly the buildings which were mapped.

38. Control for Future Surveys - None

39. Junctions

Satisfactory junctions have been made with T-13277 to the west, T-13275 to the north, T-12335 to the east (1:20,000) and T-12335 to the south.

40. Horizontal and Vertical Accuracy - No statement

41. thru 45. Inapplicable

46. Comparison with Existing Maps

Comparison has been made with USGS quadrangle ILIAMNA (B-3), Alaska, dated 1954, scale 1:63,360.

47. Comparison with Nautical Charts

Comparison has been made with 1:200,000 scale chart 8554, ninth edition, revised May 10, 1965.

Items to Be Applied to Nautical Charts Immediately - None

Items to be Carried Forward - The line of submerged rocks offshore.

Submitted by,

B. Wilson
Carto (tech)

Approved and forwarded:

J. Bull,
Director, AMC

Addendum to
Compilation Report
T-13278

41. Field Edit

The field edit was adequate and all questions posed by the compilation branch were answered. Foul line, rocks, and ledges were added to the manuscript from the field edit ozalid. During the 1968 season several rock heights were referenced to some mud datum. This, of course, is of no use to the office compilers in determining the elevations of these rocks which were positioned on the manuscript with no elevations. Also, the measurements given to the shoreline along the northern edge of Contact Point seem not to be consistent with photographic evidence and the resultant shoreline changes were not made.

FIELD EDIT REPORT

SHEET T-13278

LOWER COOK INLET

(BRUIN BAY)

PH-6301

JULY 1971

NOAA SHIP PATHFINDER

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

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 this compilation.

52 Adequacy of Compilation

Compilation of the manuscript was adequate and complete for all areas within the boundaries indicated on the field edit ozalid.

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 meters	LONGITUDE meters	ORIGIN OF POSITION	
			photo	triangulation station
001	59 23 0307.0	153 56 0879.0	T-13275	
002	59 23 1629.0	153 57 0343.0	T-13275	
003	59 23 0940.0	153 58 0613.0	T-13275	
004	59 22 0916.0	154 00 0387.0	T-13274	
006	59 23 0622.0	154 02 0272.0	T-13274	
008	59 22 0891.0	154 04 0548.0	T-13274	
009	59 21 1207.0	154 03 0350.0	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	59 21 0710.0	153 59 0642.0	T-13278	
016	59 22 0537.0	153 59 0243.0	T-13278	
100	59 23 1550.7	153 58 0796.8	T-13275	
101	59 23 0173.0	153 59 0698.7	T-13275	
102	59 22 1523.5	153 59 0432.2	T-13275	
103	59 21 1816.7	153 58 0707.7	T-13278	
104	59 21 1450.6	153 57 0664.3	T-13278	
Contact	59 21 0909.0	153 57 0043.3	T-13278	CONTACT
SAY	59 23 0461.4	153 56 0694.9	T-13275	SAY (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	



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY

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Date : Nov.21,1972

Reply to Attn. of:

To : Reviewers.

From : Albert C. Rauck, Jr.
Coastal Mapping

Subject: Field edit ozalids on Job Ph-6301

You will note that several of the field edit ozalids for this project have a multitude of 3-point fixes lettered in purple.

One sheet has as many as 168 fixes assigned to the location of the outer edge of rock ledge. All of these were plotted and checked and when thus located, were laid over the ozalid on a light table. It was found that the plotted positions of these fixes coincided exactly with those on the ozalid.

It was suspected and later proven by a phone call to Mr. George Fernandes, that this is exactly what the field editor did after he plotted his fixes on his film ozalid furnished for this purpose. Mr. Fernandes verified this by conversation with the field works officer and his officers.

It was found to be not practical to re-plot these fixes again and the data was taken directly from the ozalids and applied to the map manuscripts. Phone verification was made 12:45 P.M. Nov.21,1972.

PHOTOGRAMMETRIC OFFICE REVIEW

~~7-10363~~ T-13278

1. PROJECTION AND GRIDS		2. TITLE		3. MANUSCRIPT NUMBERS		4. MANUSCRIPT SIZE B.W.	
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 B.W.			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, 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 S. Kumer 11/72 Reviewer: A.L. Shands 1/73				SUPERVISOR A.C. Rauck			
43. REMARKS Field edit applied from field edit ozalid T-13278:							

Review Report T-13278
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. To avoid unnecessary repetition, T-12335 covering this same area at 1:20,000 scale was not reviewed and will remain a Class I manuscript. A note to this effect is on the 1:20,000 scale map.

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 Surveys

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

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. As a result of comparison with H-9100, review has included with this report a cartographic comparison print for identification of an object "awash MLLW", and another object, "awash MHW". The first object was not shown on the hydro survey and the other object, "awash MHW", had not been labeled on H-9100. This had been incorrectly shown on the T-sheet with a rock symbol and labeled "rock" without a reference to datum. This has been corrected during final review. A memorandum has been sent to the Chief, Hydrographic Survey Branch to bring this to his attention. (page 21)

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:
[Signature]
Chief, Photogrammetric Branch

[Signature]
Chief, Coastal Mapping Division

T-13278

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X = 500,000 FT. 154°00'00"

59'30"

59'

59°22'30"

Bruin Bay

Not shown

* Awash M.L.W.

Awash M.L.W. *

Reef (19) *

Bldgs.
Collecting basin

Ledge

22'

y = 1,960,000 FT.

Sand and Gravel

Not labeled

* Awash M.H.W.

Awash M.H.W.

Ledge

Mud

21'30"

Comparison with H-9100

* Awash M.H.W.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Rockville, Md. 20852

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Date : April 1976

Reply to Attn. of: C3421

To : Chief, Hydrographic Survey Branch

From : J. B. Phillips
Quality Control Group

Subject: Photogrammetric Review PH-6301 (Part 1) Manuscript T-13278, Comparison with H-9100, 1:10,000, 1968-1971

Refer to Item 64 of the Descriptive Report for T-13278. A Cartographic Comparison Print is included with the report for identification of two objects. One of which had not been carried forward to the hydro sheet, and the other has been changed on the Class I manuscript during review.



DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 13278 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 meter) FORWARD (BACK)	N.A. 1927 - DATUM
CONTACT, 1964	Vol IV P. 814	N.A. 1927	59° 21' 29.3755" 153° 57' 02.7503"	909.0 (947.7) 43.5 (904.5)	
COMPUTED BY A.C. Rauck, Jr.	DATE 4/22/68		CHECKED BY B. Wilson	DATE 5/22/68	(22)