

ORIGINAL

T-12643

T-12643

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey Shoreline
Job No. PH-6502 Map No. T-12643
Classification No. III Edition No. ...1.....

LOCALITY

State Alaska
General Locality Glacier Bay
Locality Bartlett Cove

19 61 TO 1972

REGISTRY IN ARCHIVES

DATE

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		SURVEY TP. <u>12643</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>III</u> JOB <u>PH. 6502</u>	
DESCRIPTIVE REPORT - DATA RECORD				LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB <u>PH. _____</u> MAP CLASS <u>_____</u> SURVEY DATES: 19 <u> </u> TO 19 <u> </u>			
PHOTOGRAMMETRIC OFFICE Portland Photogrammetric Office, Portland, Oregon Coastal Mapping Division, Norfolk, VA. OFFICER-IN-CHARGE P. A. Stark, P.P.O. Jeffrey G. Carlen, C.M.D, Norfolk							
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
Compilation Nov. 16, 1964 Aerotriangulation May 18, 1973 Compilation, Supp. II Jun 14, 1973 Final Review Jun 03, 1973				February 17, 1970			
II. DATUMS							
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input checked="" type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION Polyconic				4. GRID(S) STATE <u>Alaska</u> ZONE <u>1</u>			
5. SCALE 1:10,000				STATE <u> </u> ZONE <u> </u>			
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY				D. O. Norman		Jul 1973	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY				Allen		Jul 1973	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY				R. R. White		Sep 1973	
INSTRUMENT: Wild B-8 CONTOURS BY				L. O. Neterer		Sep 1973	
SCALE: 1:15,000 CHECKED BY				NA			
4. MANUSCRIPT DELINEATION PLANIMETRY BY				C. Bishop, F. Gustafson		Dec '64 Sep '73	
METHOD: Graphic (Partial) CHECKED BY				C. Bishop, A. Shands		Dec '64 Sep '73	
Smooth drafting CONTOURS BY				NA			
SCALE: 1:10,000 HYDRO SUPPORT DATA BY				F. R. Gustafson		Sep 1973	
CHECKED BY				A. L. Shands		Sep 1973	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				A. L. Shands		Sep 1973	
6. APPLICATION OF FIELD EDIT DATA BY				None			
CHECKED BY							
7. COMPILATION SECTION REVIEW BY				C. H. Bishop		Sep 1977	
8. FINAL REVIEW BY				C. H. Bishop		Sept. 1977	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				C. H. Bishop		Dec. 1977	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				J. B. Phillips		Jan. 1978	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				R. T. Cator		Mar. 1978	

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12643
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E" & RC-9 "M"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE JUNEAU		(C) COLOR X (P) PANCHROMATIC X (I) INFRARED		ZONE Pacific	<input checked="" type="checkbox"/> STANDARD
<input checked="" type="checkbox"/> PREDICTED TIDES Bartlett Cove				MERIDIAN 120th	<input type="checkbox"/> DAYLIGHT
<input type="checkbox"/> REFERENCE STATION RECORDS					
<input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY					

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
72E(C) 4801-4803	7/04/72	14:51	1:30,000	4.4 ft. above MLLW
72E(C) 4769-4770	7/04/72	14:28	1:30,000	3.7 ft. above MLLW
64M(P) 3629-3631	6/12/64	09:18	1:40,000	3.9 ft. below MLLW
*62328	7/25/61	14:29	1:10,000	10.2 ft. above MLLW
*62410	7/25/61	16:03	1:10,000	6.4 ft. above MLLW

REMARKS

*Field inspection

2. SOURCE OF MEAN HIGH-WATER LINE:

Field inspection and office interpretation of the photographs
(Bartlett Cove).Office interpretation of the 1972 color photography. (all
other areas)

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

Office interpretation of the 1972 and 1964 photography.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
T-12798	No contemp- orary survey	T-12644	T-12642

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12643
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. A. Houlder	1964
2. HORIZONTAL CONTROL	RECOVERED BY None ESTABLISHED BY None PRE-MARKED OR IDENTIFIED BY Not known	1964
3. VERTICAL CONTROL	RECOVERED BY NA ESTABLISHED BY NA PRE-MARKED OR IDENTIFIED BY NA	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None LOCATED (Field Methods) BY None IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY Not known	1964
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY None	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED			2. VERTICAL CONTROL IDENTIFIED	
PHOTO NUMBER	STATION NAME		PHOTO NUMBER	STATION DESIGNATION
62328	PARK	1959		
62328	COVE	1938		
3. PHOTO NUMBERS (Clarification of details) 62328 & 62410				
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED None				
PHOTO NUMBER	OBJECT NAME		PHOTO NUMBER	OBJECT NAME
5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE			6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE	
7. SUPPLEMENTAL MAPS AND PLANS None				
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) None				

NOAA FORM 76-36C
(3-72)

NOAA FORM 76-36D
(3-72)T-12643
RECORD OF SURVEY USEU. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Bartlett Cove compiled for smooth sheet processing	Dec. 1964	ADVANCE		
1964 compilation traced to new projection; compilation complete, pending field edit.	Sept 1973	Class III		
Final Review, prior to registration	Sept 1977	Class III; MLLWL added, major corrections to MHWL.	Nov. 1977	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

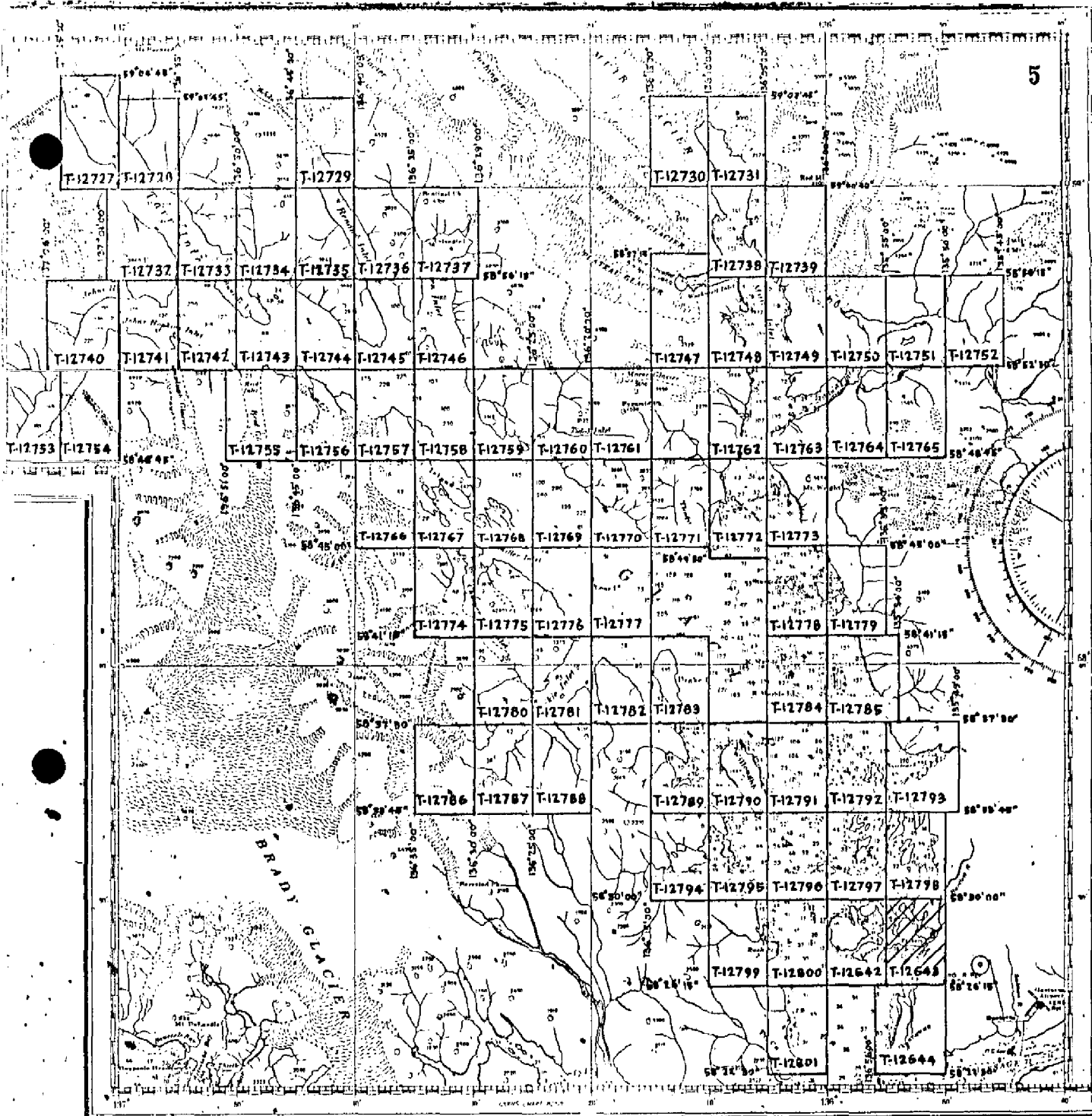
III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
 3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
 ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	



JOB PH-6502
GLACIER BAY,
ALASKA

Shoreline Mapping

SCALE 1:10,000

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12643

This 1:10,000 scale shoreline manuscript is one of 80 maps that comprise Project PH-6502, Glacier Bay, Alaska. The job diagram shows its location in the project.

Prior to compilation, field inspection of the Bartlett Cove area was done on 9-lens photography taken in July 1961. There was no field inspection for the remainder of the area.

Compilation of the Bartlett Cove area was done by graphic methods in the Portland Photogrammetric Office in November and December 1964 and traced to a new projection, now designated as the original manuscript, at the Atlantic Marine Center in September 1973.

There is no field edit for any part of this map.

Final review was done at the Atlantic Marine Center in September 1977.

The original manuscript was a stabilene sheet 3' 45" in latitude by 5' in longitude. It was forwarded to Rockville for processing a film positive for filing in the Archives, one reproduction negative to be filed in the Reproduction Branch, and two negatives to be forwarded to the Photo Map and Imagery Section for dispersal.

PHOTOGRAMMETRIC PLOT REPORT

MAP MANUSCRIPT T-12642, T-12643 AND T-12644

PROJECT 21511

NOV 27 1964

21. AREA COVERED:

THE PROJECT COVERS A PORTION OF THE EAST SHORE OF GLACIER BAY, INCLUDING BARTLETT COVE AND INCLUDES THE MAP MANUSCRIPTS SHOWN ABOVE.

22. METHOD:

THE GRAPHIC METHOD OF EXTENDING CONTROL WAS USED. FIELD IDENTIFIED CONTROL, OFFICE SELECTED PASS POINTS AND CONJUGATE CENTERS WERE PRICKED ON THE 1:10,000 RATIO PRINTS OF THE SEVEN SINGLE LENS "M" PHOTOGRAPHS. HAND DRAWN CLEAR VINYLITE TEMPLETS WERE MADE FOR EACH OF THE PHOTOGRAPHS. THESE TEMPLETS WERE THEN LAID, HOLDING TO THE IDENTIFIED CONTROL PLOTTED ON THE THREE JOINED MANUSCRIPTS. GOOD CLOSURE WAS OBTAINED. POSITIONS OF THE PASS POINTS AND PHOTOGRAPH CENTERS WERE THEN PRICKED AND INKED ON THE MANUSCRIPTS.

ADEQUATE COVERAGE WAS PROVIDED BY THE SINGLE LENS 1964 PHOTOGRAPHY AND THE 1961 NINE-LENS PHOTOGRAPHS WERE NOT USED IN THE RADIAL PLOT.

23. ADEQUACY OF CONTROL:

IDENTIFIED CONTROL AS FURNISHED BY THE FIELD UNIT WAS ADEQUATE TO CONTROL THE RADIAL PLOT FOR SHORELINE MAPPING.

24. SUPPLEMENTAL DATA:

NONE.

25. PHOTOGRAPHY:

PHOTOGRAPHY WAS ADEQUATE IN COVERAGE, OVERLAP AND DEFINITION.

APPROVED:

SUBMITTED:

P. A. STARK, CDR, C&GS
PORTLAND FIELD OFFICER

JAMES L. HARRIS
CARTOGRAPHER

*This report applies only to the south shore of
Young and Lester Islands, Bartlett Cove, and southward
to Pt. Gustavus.*

*Charles H. Bishop
Final Reviewer
9-26-77*

GLACIER BAY, ALASKA

Southern Part

Job PH-6502

July 1973

21. Area Covered. This report pertains to twenty-two sheets in the southern part of Glacier Bay, Alaska. The sheets covered are T-12773, T-12778, T-12779, T-12783 thru T-12785, T-12789 thru T-12801, and T-12642 thru T-12644.

22. Method. Five strips of RC-8 photography at 1:40,000 scale were bridged by analytic aerotriangulation methods and adjusted to ground using Alaska state plane coordinates, zone 1. Points were established for setting 1:30,000 scale compilation photography. Points were also established for determining ratios of this photography. These points were plotted by the Coradomat.

23. Adequacy of Control. The control was adequate.

24. Supplemental Data. USGS topographic quadrangles were used in determining elevations for strip adjustments.

25. Photography. The photography was adequate; however, points should not be established for the compilation of islands on sheets T-12784, T-12791, and T-12796. These islands will have to be put in by a field party.

Submitted by,

Don D. Norman

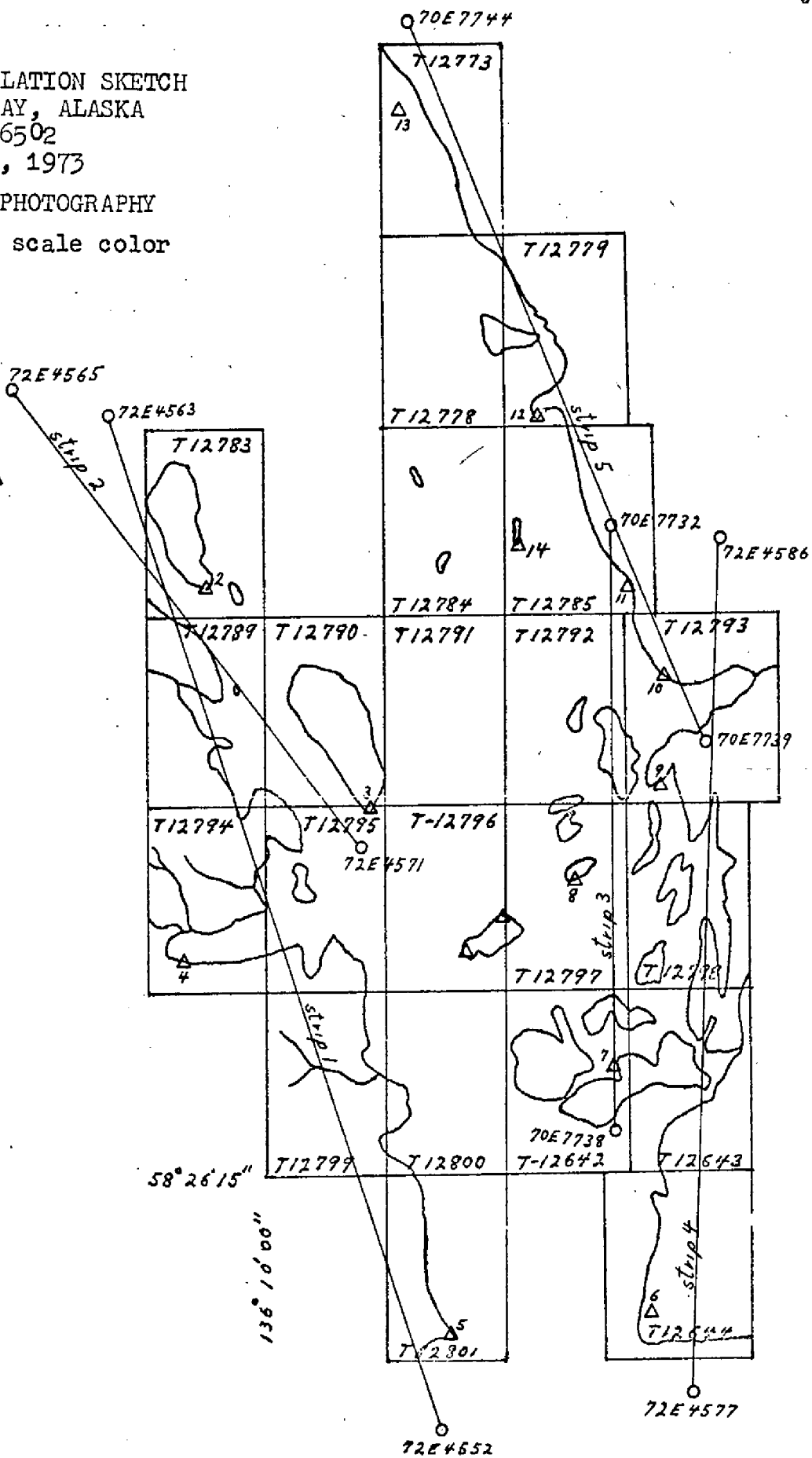
Don D. Norman

approved by:

John D. Perrow, Jr.
John D. Perrow, Jr.
Chief, Aerotriangulation
Section

AEROTRIANGULATION SKETCH
GLACIER BAY, ALASKA
PH-6502
JULY, 1973

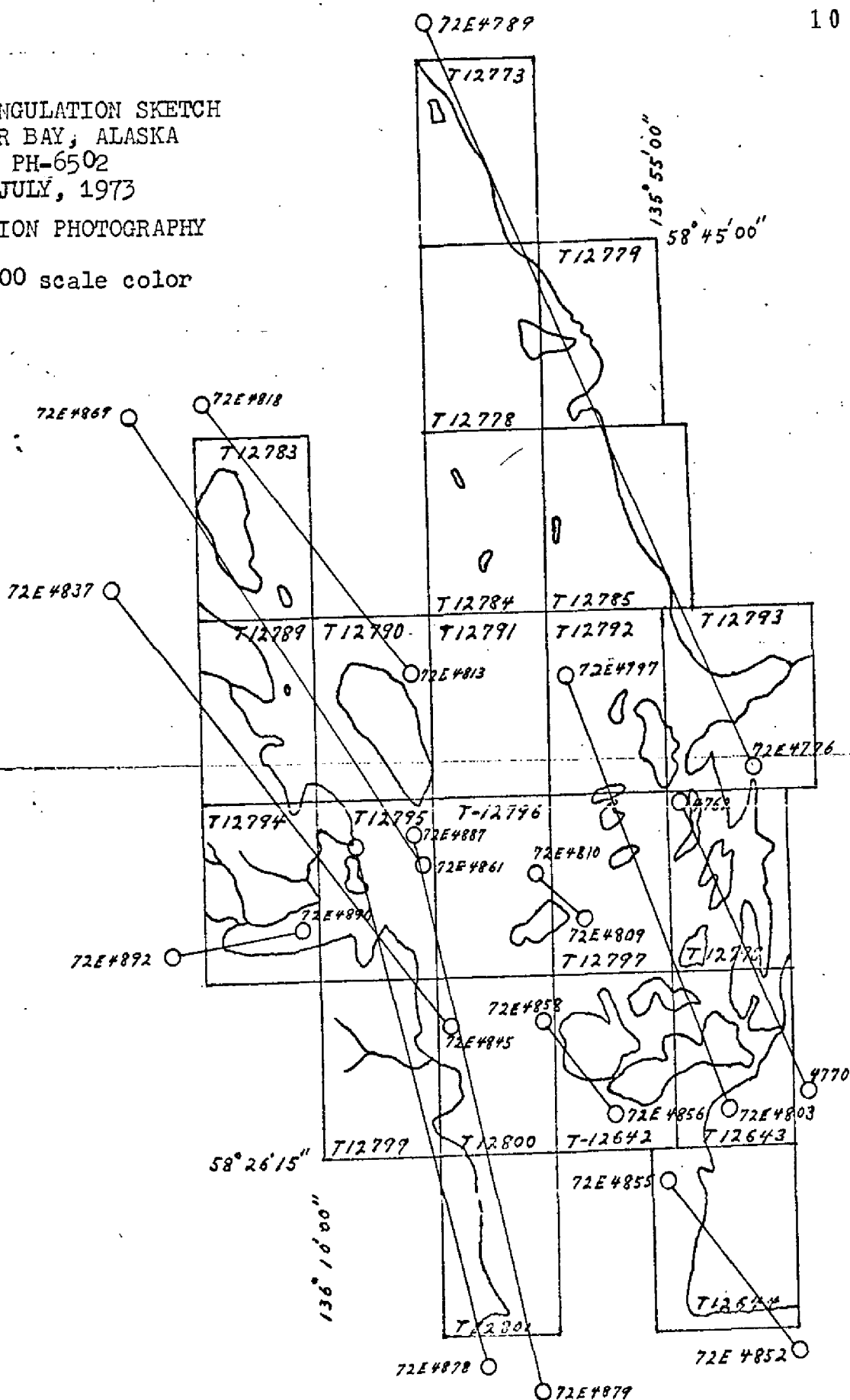
BRIDGING PHOTOGRAPHY
1:40000 scale color



AEROTRIANGULATION SKETCH
GLACIER BAY, ALASKA
PH-6502
JULY, 1973

COMPILATION PHOTOGRAPHY

01:30000 scale color



COMPILATION REPORT

T-12643

31. DELINEATION:

The Bartlett Cove area was delineated by graphic methods in the Portland Photogrammetric Office in November and December 1964, using single-lens panchromatic low water photography taken in June 1964. A copy of this compilation was traced onto a new projection at the Atlantic Marine Center in September 1973. At that time, the remainder of the map was delineated with the Wild B-8 Plotter from color photography taken in July 1972. Coverage and definition were adequate.

32. CONTROL:

See the attached Photogrammetric Plot Reports, dated July, 1973 and November 27, 1964, bound with this Descriptive Report.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to the project. Drainage was delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

Alongshore details were delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

The mean high water line was delineated from the photographs.

36. OFFSHORE DETAILS:

None.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

See the attached Form 76-36b, item #5 of the Descriptive Report concerning junctions.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with the following USGS Quadrangle: JUNEAU (B-6), ALASKA, scale 1:63,360, dated 1948.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with the following Coast & Geodetic Survey chart: 8202, 15th edition, scale 1:209,978, dated October 21, 1968.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Albert C. Rauck, Jr. FOR
F. R. Gustafson
Cartographic Aid
September 14, 1973

Approved:

Albert C. Rauck, Jr.
Albert C. Rauck, Jr.
Chief, Coastal Mapping Section

ADDENDUM TO COMPILATION REPORT

T-12643

The mean lower low water line was added during Final Review. This line was determined by comparing the 1964 photography, taken at a predicted tide stage of 3.9 feet below mean lower low water, with the 1972 color photography, taken at a predicted tide stage of 4.4 feet above mean lower low water. Major corrections were made to the mean high water line. Some rock awash symbols were removed--they were similar to others in the foreshore area, which is labeled "Gravel and boulders".

No corrections were made to the part of the map (Bartlett Cove) that was compiled in 1964, except that photo-hydro stations were not mapped.

Charles H. Bishop

Final Review

Sept. 29, 1977

GEOGRAPHIC NAME

FINAL NAME SHEET

PH-6502 (Glacier Bay, Alaska)

T-12643

Bartlett Cove

Bartlett River

Beardslee Islands

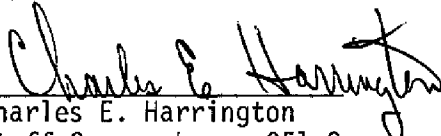
Glacier Bay

Lagoon Island

Lester Island

Glacier Bay National Monument

Approved by:


Charles E. Harrington
Staff Geographer - C51x2

NOAA FORM 75-74
(7-75)U.S. DEPARTMENT OF COMMERCE
NOAA
NATIONAL OCEAN SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

TP - 12643

1. PROJECTION AND GRIDS ALS	2. TITLE ALS	3. MANUSCRIPT NUMBERS ALS	4. MANUSCRIPT SIZE ALS
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY ALS	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NA		7. PHOTO HYDRO STATIONS NA
8. BENCH MARKS NA	9. PLOTTING OF SEXTANT FIXES NA	10. PHOTOGRAMMETRIC PLOT REPORT ALS	11. DETAIL POINTS ALS
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE ALS	13. LOW-WATER LINE ALS	14. ROCKS, SHOALS, ETC. ALS	15. BRIDGES ALS
16. AIDS TO NAVIGATION ALS	17. LANDMARKS ALS	18. OTHER ALONGSHORE PHYSICAL FEATURES ALS	19. OTHER ALONGSHORE CULTURAL FEATURES ALS
PHYSICAL FEATURES			
20. WATER FEATURES ALS	21. NATURAL GROUND COVER NA		22. PLANETABLE CONTOURS NA
23. STEREOSCOPIC INSTRUMENT CONTOURS NA	24. CONTOURS IN GENERAL NA	25. SPOT ELEVATIONS NA	26. OTHER PHYSICAL FEATURES ALS
CULTURAL FEATURES			
27. ROADS ALS	28. BUILDINGS ALS	29. RAILROADS ALS	30. OTHER CULTURAL FEATURES ALS
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES ALS	34. JUNCTIONS ALS		35. LEGIBILITY OF THE MANUSCRIPT ALS
36. DISCREPANCY OVERLAY ALS	37. DESCRIPTIVE REPORT ALS	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS ALS
40. REVIEWER <i>A. L. Shands</i> A. L. Shands 9/28/73		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> Albert 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		SUPERVISOR	
43. REMARKS			

REVIEW REPORT

T-12643

SHORELINE

September 1977

61. GENERAL STATEMENT:

See Summary, which is page 6 of this Descriptive Report.

No comparison print was made.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison of the Bartlett Cove area was made with a copy of Survey T-6628, 1:10,000 scale, dated July 1938. No significant differences were noted in this area.

The remainder of the map was compared with a copy of Survey T-6677, 1:20,000 scale, dated Sept. 1938, June-Sept. 1939. Numerous shoreline differences were noted. Possible reasons for this are errors in office interpretation of the photographs and natural changes that have occurred in the last forty years.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with USGS Quadrangle JUNEAU (B-6), ALASKA, 1:63,360 scale, dated 1948. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

None. No contemporary hydrographic survey was available for comparison.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 17300 (8202), 1:209,978 scale, 20th edition, dated Jan. 1, 1977. No significant differences were noted.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with Project Instructions and meets requirements for Bureau Standards and National Standards of Map Accuracy.

Submitted by:

Charles H. Bishop

Charles H. Bishop
Cartographer
Sept. 29, 1977

Approved for forwarding:

Joseph W. Vonasek

Joseph W. Vonasek
Chief, Photogrammetric Branch, AMC

Approved:

D. K. H. [Signature]

Chief, Photogrammetric Branch

J. [Signature]

Chief, Coastal Mapping Div.