

TP-001186

TP-01186

NOAA FORM 76-35
(6-80)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

THIS MAP EDITION WILL NOT BE FIELD EDITED.

<i>Map No.</i> TP-01186	<i>Edition No.</i> 1
<i>Job No.</i> CM-8207	
<i>Map Classification</i> CLASS III (FINAL)	
<i>Type of Survey</i> SHORELINE	
LOCALITY	
<i>State</i> ALASKA	
<i>General Locality</i> TOGIK BAY TO CAPE CONSTANTINE	
<i>Locality</i> SUMMIT ISLAND	
19 ₈₃ TO 19	
REGISTERED IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY		SURVEY TP. 01186	
DESCRIPTIVE REPORT - DATA RECORD				<input checked="" type="checkbox"/> ORIGINAL		MAP EDITION NO. (1)	
				<input type="checkbox"/> RESURVEY		MAP CLASS III (Final)	
				<input type="checkbox"/> REVISED		JOB CM-8207	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Unit, Atlantic Marine Center, Norfolk, VA				LAST PRECEDING MAP EDITION			
OFFICER-IN-CHARGE A. Y. Bryson, CDR				TYPE OF SURVEY		JOB PH. _____	
				<input type="checkbox"/> ORIGINAL		MAP CLASS _____	
				<input type="checkbox"/> RESURVEY		SURVEY DATES:	
				<input type="checkbox"/> REVISED		19__ TO 19__	
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
Aerotriangulation August 13, 1985				Control March 25, 1983			
Office March 18, 1986							
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 type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION				4. GRID(S)			
Transverse Mercator Projection				STATE Alaska		ZONE 6	
5. SCALE 1:20,000				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY				L. Harrod		Sept 1985	
METHOD: Analytic LANDMARKS AND AIDS BY				L. Harrod		Sept 1985	
2. CONTROL AND BRIDGE POINTS PLOTTED BY				F. Mauldin		Jan 1986	
METHOD: Xynetics 1201 CHECKED BY				F. Mauldin		Jan 1986	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY				R. Kravitz		Feb 1986	
COMPILATION CHECKED BY				L. Neterer		Feb 1986	
INSTRUMENT: Wild B-8				CONTOURS BY		N.A.	
SCALE: 1:20,000				CHECKED BY		N.A.	
4. MANUSCRIPT DELINEATION PLANIMETRY BY				R. Kravitz		Feb 1986	
CHECKED BY				F. Mauldin		Mar 1986	
METHOD: Smooth drafted				CONTOURS BY		N.A.	
CHECKED BY				N.A.			
SCALE: 1:20,000 HYDRO SUPPORT DATA BY				R. Kravitz		Feb 1986	
CHECKED BY				F. Mauldin		Mar 1986	
5. OFFICE INSPECTION PRIOR TO INDEXED Final Review BY				F. Mauldin		Mar 1986	
6. APPLICATION OF FIELD EDIT DATA BY				N.A.			
CHECKED BY				N.A.			
7. COMPILATION SECTION REVIEW Class III BY				F. Mauldin		Mar 1986	
8. FINAL REVIEW Class III BY				L. O. Neterer, Jr.		Apr 1986	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				L. O. Neterer, Jr.		May 1986	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				P. Dampsey		Sept. 1986	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				P. Dampsey		Sep 1986	

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) (Focal length = 152.74 mm)
Wild R.C. 10(B)TYPES OF PHOTOGRAPHY
LEGEND

TIME REFERENCE

TIDE STAGE REFERENCE

☒ PREDICTED TIDES *☐ REFERENCE STATION RECORDS☐ TIDE CONTROLLED PHOTOGRAPHY(C) COLOR
(P) PANCHROMATIC
(I) INFRARED

ZONE

Alaska

MERIDIAN

150°W

☒ STANDARD☐ DAYLIGHT

NUMBER AND TYPE

DATE

TIME

SCALE

STAGE OF TIDE

* 83B(C) 5087-5089

07-31-83

10:53

1:50,000

4.2 ft. above MLLW

* 83B(C) 5813-5817

08-27-83

14:36

1:50,000

4.1 ft. above MLLW

Mean tide range 7.6 ft.

REMARKS *Compilation/bridging photographs based on predicted tide data, using reference station Nushagak Bay and subordinate station Black Rock (Walrus Islands).

2. SOURCE OF MEAN HIGH-WATER LINE:

The Mean High Water Line was compiled from office interpretation of the above listed compilation/bridging color photographs using stereo instrument methods.

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

There was no mean lower low water line compiled on this map.

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
TP-01176	TP-01187	No Survey	No Survey

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-01186

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION (Premarking) ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Melby	Jul 1983
2. HORIZONTAL CONTROL	RECOVERED BY R. Melby	Jul 1983
	ESTABLISHED BY N.A.	
	PRE-MARKED OR IDENTIFIED BY R. Melby	Jul 1983
3. VERTICAL CONTROL	RECOVERED BY N.A.	
	ESTABLISHED BY N.A.	
	PRE-MARKED OR IDENTIFIED BY N.A.	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY N.A.	
	LOCATED (Field Methods) BY N.A.	
	IDENTIFIED BY N.A.	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION	
	<input type="checkbox"/> COMPLETE BY	
	<input type="checkbox"/> SPECIFIC NAMES ONLY	
	<input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY N.A.	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
Premarking2. VERTICAL CONTROL IDENTIFIED
None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
83B(C)5088	OWENS, 1948		

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

1 NOAA Form 76-53 CSI card

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete	Mar. 1986	Class III Manuscript	None	None
Final Reviewed	Apr. 1986	Final Class III	July 17, 1986	July 17, 1986

II. LANDMARKS AND AIDS TO NAVIGATION

None

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: None3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

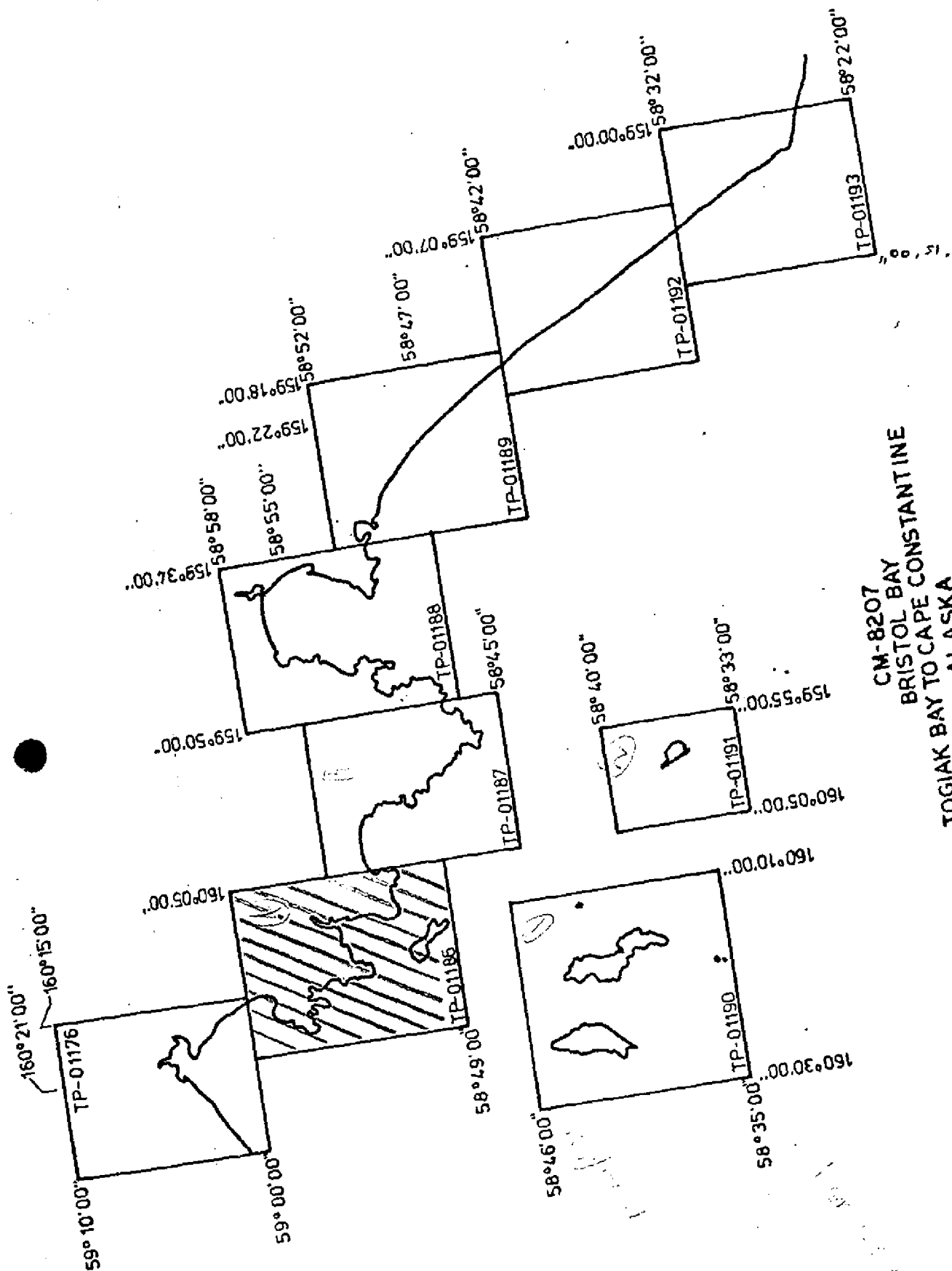
III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS. 76-40 ☒ 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	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	



CM-8207
 BRISTOL BAY
 TOGIAK BAY TO CAPE CONSTANTINE
 ALASKA
 SCALE 1:20,000

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-01186

This 1:20,000 scale map is one of nine maps that comprise project CM-8207, Bristol Bay, Cape Constantine to Togiak, Alaska latitude 58°22'00", longitude 159°00'00" west latitude 59°10'00" longitude 160°30'00", including the offshore Walrus Islands.

Photographic coverage was provided in August 1983 with color film at 1:50,000 scale. The Wild RC-10 "B" camera (focal length 152.74 mm) was used for all photography.

Field work prior to compilation accomplished in July 1983 included the identification of horizontal control by premarking techniques to meet aerotriangulation requirements. There was no field inspection of the shoreline.

Analytic aerotriangulation was adequately performed at the Washington Science Center in September 1985. The manuscripts were ruled at the Atlantic Marine Center from data furnished by the aerotriangulation process.

Compilation was performed at the Atlantic Marine Center from office interpretation of the color photographs in March 1986.

Final Review was performed at the Atlantic Marine Center in April 1986. A Chart Maintenance Print and Hydro Print were prepared and forwarded to the Marine Charts Branch and Hydrographic Branch. This map is to be registered as a Final Class III map.

This Descriptive Report contains all pertinent information used to compile this Final Class III Map.

The original base map and all pertinent data were forwarded to the Washington Science Center for final registration.

FIELD INSPECTION

TP-01186

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.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Pacific Marine Center
1801 Fairview Avenue East
Seattle, Washington 98102

August 11, 1983

N/MOP222/RBM

TO: N/CG2313 - Howard D. Wolfe

FROM: N/MOP222 - Robert B. Melby

SUBJECT: Photo, Field Operations Report, Job CM-8207, Bristol Bay, Togiak Bay
to Cape Constantine, Alaska, Shoreline Mapping

This report covers the shoreline area of the portion of Bristol Bay from Cape Constantine to the vicinity of the village of Togiak on Togiak Bay, Alaska.

Air photo panels were placed in each office-selected area and, when required, distances and directions were observed in the field to permit the computation of the coordinates of the substitute stations. Most of the stations were paneled direct.

Two additional 1:50,000 horizontal control photo panels were placed on Round Island. The diagram did not indicate a requirement for paneling on this island, although a control flight line was indicated. ROUND 1948 substitute station and ROUND 1948 AZ MK 1983 substitute station were the extra paneled stations.

Six points were paneled at 1:30,000 scale to permit the photo-location of these marks to determine their horizontal position. They could be used as hydrographic control stations in the future.

Each photo-panel has been entered on a form 76-53, Control Station Identification, with information pertinent to the involved station.

Four additional horizontal control stations were established by Third Order Class I methods in paneling areas that did not have an existing horizontal control station.



Photogrammetric Plot Report
Bristol Bay
Togiak Bay to Cape Constantine, Alaska
September 1985

21. Area Covered

This report covers the shoreline area of the portion of Bristol Bay from Cape Constantine to the vicinity of the Village of Togiak on Togiak Bay, Alaska. It is covered by nine 1:20,000 scale manuscripts; TP-01176 and TP-01186 through TP-01193.

22. Method

Seven strips of 1:50,000 scale, and one strip of 1:30,000 scale photography were bridged by analytic aerotriangulation methods and adjusted to ground based on the Alaska State Plane Coordinate System, Zone 6. Panoled control was provided. Strip 50-4 was measured on the NOSAP and was adjusted to ground using the GIANT program. All the other strips were measured on the STK comparator and adjusted to ground with the Analytic Program. Ratio values were determined for the bridging photography. No manuscripts were generated by this unit. Five hydrographic control stations were positioned from the 1:50,000 scale bridging photography. One station, TC-04, was not positioned.

23. Adequacy of Control

The control was adequate. The project meets NOS requirements.

Strip 30-11 was a 3 photo strip of Round Island on TP-01191. This strip was adjusted using two control stations. There were no check points.

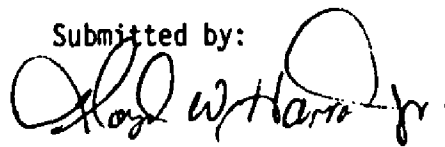
24. Supplemental Data

Quads and charts were used.

25. Photography

The coverage and quality of the photographs proved adequate for the project.
No MHW or MLW infrared photographs were available.

Submitted by:



Lloyd W. Harrod, Jr.

Approved and Forwarded:



Don O. Norman
Chief, Aerotriangulation Section

Togiak Bay to Cape Constantine, Alaska

CM-8207

Fit to Control - X and Y in Feet

<u>Strip 50-1</u>	<u>Point No.</u>	<u>X</u>	<u>Y</u>
▲ 8. Kulukak 1948	(872100)	-1.5	-.8
▲ 9. Dry Bay 1947	(876100)	3.1	.3
▲ 10. Pike 1947	(880100)	-.6	2.4
▲ 11. Judith 1947 RM2	(885101)	-2.5	-3.5
▲ 12. See 1910	(889100)	1.5	1.6

<u>Strip 50-3</u>			
▲ 8. Kulukak 1948	(872100)	.1	-.1
▲ 7. Metervik	(054101)	-.4	.8
▲ 6. Metervik AZ MK 1983	(055100)	.3	-.8
▲ 5. Right Hand 1948	(057100)	-.0	.1

<u>Strip 50-4</u>			
▲ 1. Ekilik 1954	(082100)	.4	1.3
▲ 2. Togiak 1948 RM1	(085101)	-.3	-1.3
3. Owens 1948	(088100)	-1.2	4.1
▲ 4. Nuna 1983	(090100)	-.4	-1.0
▲ 5. Right Hand 1948	(057100)	.4	.9

<u>Strip (A) 50-6</u>			
▲ Tie from Strip 50-4	(809801)	-6.2	-1.9
▲ Tie from Strip 50-4	(809802)	-1.0	-.8
▲ Tie from Strip 50-4	(809803)	1.1	2.2
▲ Tie from Strip 50-4	(810801)	3.4	-.4
▲ Tie from Strip 50-4	(810802)	3.7	-.1
▲ Tie from Strip 50-4	(810803)	6.5	1.3
▲ Tie from Strip 50-4	(811801)	-2.6	1.1
▲ Tie from Strip 50-4	(811802)	-4.7	-.9
▲ Tie from Strip 50-4	(811803)	-.1	-.4

Strip 50-6

▲ 3. Owens 1948	(088100)	- .9	-2.5
Tie from Strip 50-4	(813801)	6.1	3.5
▲ Tie from Strip 50-4	(813802)	1.0	1.2
" " " "	(813803)	.2	1.4
▲ " " " "	(814801)	-.7	-.3
" " " "	(814802)	-.1	.6
" " " "	(814803)	-2.0	1.3
" " " "	(815801)	7.8	4.9
" " " "	(815802)	13.3	5.5
" " " "	(815803)	3.0	1.0
▲ " " " "	(816801)	2.3	1.6
" " " "	(816802)	4.9	4.4
" " " "	(816803)	.7	-.8
▲ 4. Nuna 1983	(090100)	2.2	1.2
▲ Tie from Strip 50-4	(817801)	-3.9	-1.1
" " " "	(817802)	-2.4	-4.3
Tie from Strip 50-4	(817803)	-6.3	-6.3

Strip 50-7

▲ 15. Crooked 1948 AZ MK	(104100)	-4.2	-.4
▲ 14. Crooked 1948	(105100)	6.1	4.3
▲ 13. High 1948	(107100)	-1.9	-3.9

Strip 50-9

▲ 14. Crooked 1948	(105100)	5.5	3.7
▲ Tie from Strip 50-7	(979801)	3.0	.5
▲ " " " "	(979802)	1.0	2.4
▲ " " " "	(979803)	-2.1	-4.8
▲ " " " "	(980801)	-2.4	1.8
▲ " " " "	(980802)	-2.4	-1.0
▲ " " " "	(980803)	-2.0	-2.5
▲ " " " "	(981801)	4.3	5.0
▲ " " " "	(981802)	-5.0	-5.2
Tie from Strip 50-7	(981803)	5.7	-.3

Strip 30-11

▲ 16. Round 1948 AZ MK Sub Pt.	(468101)	.0	-.0
▲ 17. Round 1948 Sub Pt.	(469101)	.0	.0

▲ Stations held in the Strip Adjustments

Togiak Bay to Cape Constantine, Alaska

CM-8207

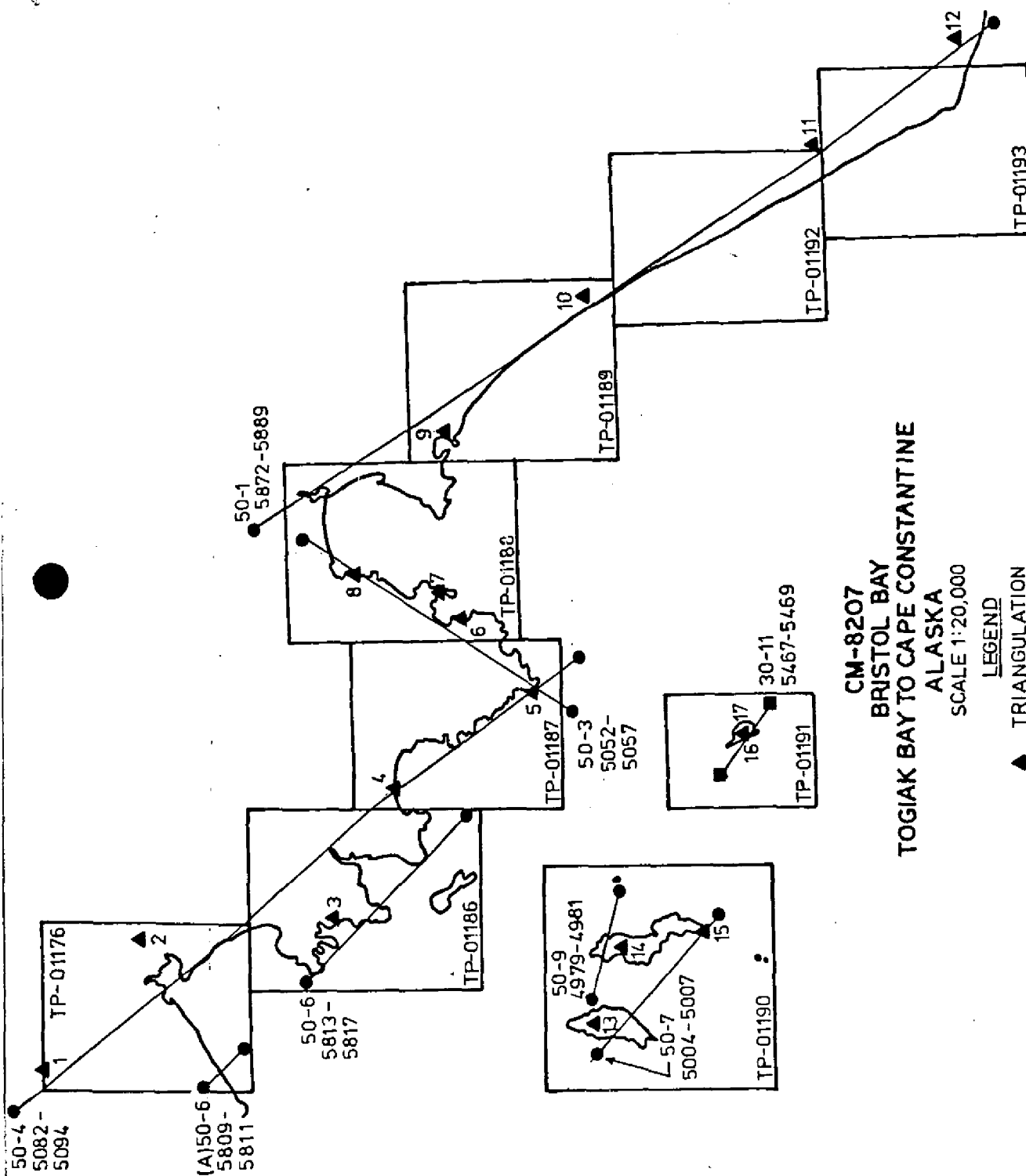
September 1985

Ratio values for 1:50,000 scale color bridging photographs.

83-B-(C) 4978-4981	X 2.55
5004-5007	X 2.52
5052-5057	X 2.55
5082-5094	X 2.56
5813-5817	X 2.51
5872-5889	X 2.53

Ratio values for 1:30,000 scale color bridging photographs.

83-B-(C) 5467-5469	X1.50
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COMPILATION REPORT
TP-01186

31 - DELINEATION

Delineation was accomplished using stereo instrument compilation methods. Instrument compilation was used to delineate shoreline, alongshore, and interior detail based upon office interpretation of the 1:50,000 scale bridging/compilation color photographs. All photographs used to compile this map are listed in NOAA form 76-36B. The photography was adequate; however, in some areas glare on the water made the selection of offshore rocks difficult. There are no mean lower low water infrared photographs for this project.

32 - CONTROL

The horizontal control was adequate. Refer to the Photogrammetric Plot Report, dated September 1985.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

Contours are not applicable to this project. Drainage was compiled from office interpretation of the photographs.

35 - SHORELINE AND ALONGSHORE DETAIL

The mean high water line was compiled from office interpretation of the compilation/bridging color photographs as described in item #31. There was no mean lower low water line compiled on this project.

36 - OFFSHORE DETAILS

Offshore details were compiled by instrument methods as described in item #31.

37 - LANDMARKS AND AIDS

There are no landmarks or aids to navigation within the limits of this manuscript.

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

Refer to the Data Record Form 76-36B, Item 5, of the Descriptive Report.

TP-01186

40 - HORIZONTAL AND VERTICAL ACCURACY

See item #32.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the following U.S. Geological Survey Quadrangles and U.S. Coast and Geodetic Survey topographic maps:
Hagemeister Island (D-1), Alaska; dated 1952; scale 1:63,360 (USGS)
T-9237; scale 1:20,000; compiled 1950 and 1951 (USC&GS)
T-9242; scale 1:20,000; compiled 1950 and 1951 (USC&GS).

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following National Ocean Service Charts:
16011; 31st edition, dated June 29, 1985; scale 1:1,023,188
16315; 1st edition, dated May 9, 1985; scale 1:100,000 (provisional).

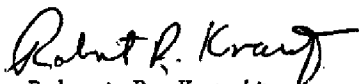
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

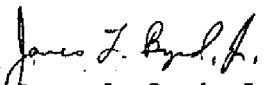
ITEMS TO BE CARRIED FORWARD

None.

Submitted by


Robert R. Kravitz
Cartographic Technician
27 February 1986

Approved


James L. Byrd, Jr.
Chief, Coastal Mapping Unit

18
MAR 31 1986

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-8207 (Togiak Bay to Cape Constantine, Alaska)

TP-01186

Bristol Bay

Negukthlik River

Nunavachak Bay

Rocky Point

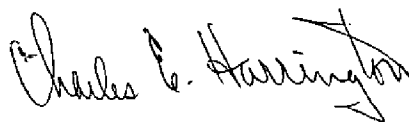
Summit Island

Togiak Bay

Ungalikthluk Bay

Ungalikthluk River

Approved:



Charles E. Harrington
Chief Geographer
Nautical Charting Division
Charting and Geodetic Services

REVIEW REPORT
SHORELINE

TP-01186

61 - GENERAL STATEMENT

See Summary included with this report.

62 - COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A comparison was made with U.S.C. & G.S. Topographic Map T-9237 and T-9242, both 1:20,000 scale, compiled from September 1948 photography.

63 - COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with U.S.G.S. Quadrangle: Hagemeister Island (D-1) Alaska, scale 1:63,360, dated 1952.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

There are no contemporary hydrographic surveys within the limits of this map.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following N.O.S. chart: 16011, 31st edition, dated June 29, 1985, scale 1:1,023,188 and Provisional Chart 16315, 1st edition, dated May 9, 1985, scale 1:100,000.

66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

Submitted by

Lowell O. Neterer, Jr.
Lowell O. Neterer, Jr.
Final Reviewer
4 April, 1986

Approved for forwarding

Billy H. Barnes
Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved

John A. McInerney
Chief, Photogrammetric Section,
Rockville

Ronald K. Brewer
Chief, Photogrammetry Branch,
Rockville

