

T 12507

T-12507

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-6013 Map No. T-12507

Classification No. Final Map Edition No. 1

LOCALITY

State Alaska

..... Cook Inlet

General Locality Kalgin Island to Anchorage

Locality Salamatof

1966 TO 1976

REGISTRY IN ARCHIVES

DATE

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division Atlantic Marine Center, Norfolk, VA		SURVEY 76 T-12507 MAP EDITION NO. (1) MAP CLASS Final Map JOB PH-6013	
OFFICER-IN-CHARGE Jeffrey G. Carlen, Cdr.		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB PH- MAP CLASS SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Aerotriangulation 3/26/64 Aerotriangulation 8/13/73 Compilation, Amend. 2 to Supp. 5 1/31/74		Field 6/6/66 Field 8/8/66 Field 3/30/73	
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 Alaska ZONE 4	
5. SCALE 1:10,000		STATE ZONE	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY		M. McGinley 9/74	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Calcomp CHECKED BY		Keating 9/74 Keating 9/74	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: Wild B-8 SCALE: 1:20,000 CONTOURS BY CHECKED BY		R. R. White 12/74 L. O. Neterer 12/74 NA NA	
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY METHOD: Smoothdrafted SCALE: 1:10,000 HYDRO SUPPORT DATA BY CHECKED BY		J. R. Minton 1/08/75 F. Margiotta 1/75 NA NA J. R. Minton 1/75 F. Margiotta 1/75	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		F. Margiotta 1/75	
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY		D. P. Butler 1/77 J. L. Byrd 2/77	
7. COMPILATION SECTION REVIEW BY		J. L. Byrd 2/77	
8. FINAL REVIEW BY		J. L. Byrd/C. E. Blood 2/86	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		J. L. Byrd 9/86	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		P. Dempsey 8/1/1986	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		E. L. DAUGHERTY Dec 86	

T-12507
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S)

Wild RC-8 "L" and "E"

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

☒ STANDARD

MERIDIAN

150th

☐ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
* 67 L(P) 3657-3659	6/23/67	10:53	1:40,000	3.5 ft. below MLLW
** 67 L(I) 3512-3515	6/22/67	14:15	1:20,000	13.9 ft. above MLLW
** 72 E(C) 4918-4920	7/05/72	09:21	1:20,000	14.4 ft. above MLLW

REMARKS

*Bridge and compilation photos
**Hydro support photos.

2. SOURCE OF MEAN HIGH-WATER LINE:

*The mean high water line was compiled from the above listed photographs.

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

*The mean lower low water line was compiled from the above listed photographs,
below mean low water

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-12046(2)	No Survey	T-12508	No Survey

REMARKS

T-12507

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	A. Wardwell	4/61 - 7/61
2. HORIZONTAL CONTROL	RECOVERED BY G. Saladin	4/61 - 7/61
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
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 None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY NA	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED None		2. VERTICAL CONTROL IDENTIFIED NA	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
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: <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)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12507
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. B. Melby	6/73
2. HORIZONTAL CONTROL	R. B. Melby	6/73
RECOVERED BY	None	
ESTABLISHED BY	L. L. Riggers	6/73
PRE-MARKED OR IDENTIFIED BY	NA	
3. VERTICAL CONTROL	NA	
RECOVERED BY	NA	
ESTABLISHED BY	NA	
PRE-MARKED OR IDENTIFIED BY	None	
4. LANDMARKS AND AIDS TO NAVIGATION	None	
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	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
		NA	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
67L3659	LOUISE RM 2, 1961		

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)

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

T-12507

HISTORY OF FIELD OPERATIONS

I. <input type="checkbox"/> FIELD INSPECTION OPERATION				<input checked="" type="checkbox"/> FIELD EDIT OPERATION					
OPERATION				NAME		DATE			
1. CHIEF OF FIELD PARTY				CAPT R. E. Alderman, NOAA		8/76			
2. HORIZONTAL CONTROL				RECOVERED BY		LTJG G. P. Kosinski, NOAA			
				ESTABLISHED BY					
				PRE-MARKED OR IDENTIFIED BY					
3. VERTICAL CONTROL				RECOVERED BY					
				ESTABLISHED BY					
				PRE-MARKED OR IDENTIFIED BY		NA			
4. LANDMARKS AND AIDS TO NAVIGATION				RECOVERED (Triangulation Stations) BY					
				LOCATED (Field Methods) BY		NA			
				IDENTIFIED BY					
5. GEOGRAPHIC NAMES INVESTIGATION				TYPE OF INVESTIGATION		BY			
								<input type="checkbox"/> COMPLETE	
								<input type="checkbox"/> SPECIFIC NAMES ONLY	
								<input type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION				CLARIFICATION OF DETAILS BY		NA			
7. BOUNDARIES AND LIMITS				SURVEYED OR IDENTIFIED BY		NA			
II. SOURCE DATA									
1. HORIZONTAL CONTROL IDENTIFIED				2. VERTICAL CONTROL IDENTIFIED					
PHOTO NUMBER		STATION NAME		PHOTO NUMBER		STATION DESIGNATION			
		NA				NA			
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: <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)									
Raw Field Edit Data (sketchbook), OPR-469-FA-76, Vol. 1; Field Edit Reports OPR-469-FA-76; Field Edit Ozalid, Map T-12507, master copy; Field Edit Fix Computations, Map T-12507; Field Edit Report, T-12507; Reduced Film Copy with Field Edit.									

NOAA FORM 76-36C
(3-72)

NOAA FORM 76-36D (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION T-12507 RECORD OF SURVEY USE		
I. MANUSCRIPT COPIES				
COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Boatsheet data transferred to manuscript.	10/64	Advance Manuscript Superseded		
Compiled from 1962 photography and furnished for hydro.	5/64	Class III Superseded		
Recompiled on new base using new bridge and 1972 photography.	1/75	Class III Manuscript Superseded	3/25/75	3/24/75
Field edit applied. Compilation complete.	1/77	Class I Manuscript	2/11/77	2/11/77
Final Review	2/86	Final Map		
II. LANDMARKS AND AIDS TO NAVIGATION				
1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH				
NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS	
2. <input checked="" type="checkbox"/> REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: <u>February 6, 1978</u> 3. <input type="checkbox"/> REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____				
III. FEDERAL RECORDS CENTER DATA				
1. <input checked="" type="checkbox"/> BRIDGING PHOTOGRAPHS; <input checked="" type="checkbox"/> DUPLICATE BRIDGING REPORT; <input checked="" type="checkbox"/> COMPUTER READOUTS. 2. <input checked="" type="checkbox"/> CONTROL STATION IDENTIFICATION CARDS; <input checked="" type="checkbox"/> FORM NOS 567 SUBMITTED BY FIELD PARTIES. 3. <input checked="" type="checkbox"/> SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS: _____ 4. <input type="checkbox"/> 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	

JOB PH-6013 SHORELINE MAPPING COOK INLET ALASKA KALGIN ISLAND TO ANCHORAGE 1:20,000 & 1:10,000 SCALE

REVISED 8-24-76 RWM
REVISED 3-11-77 AG

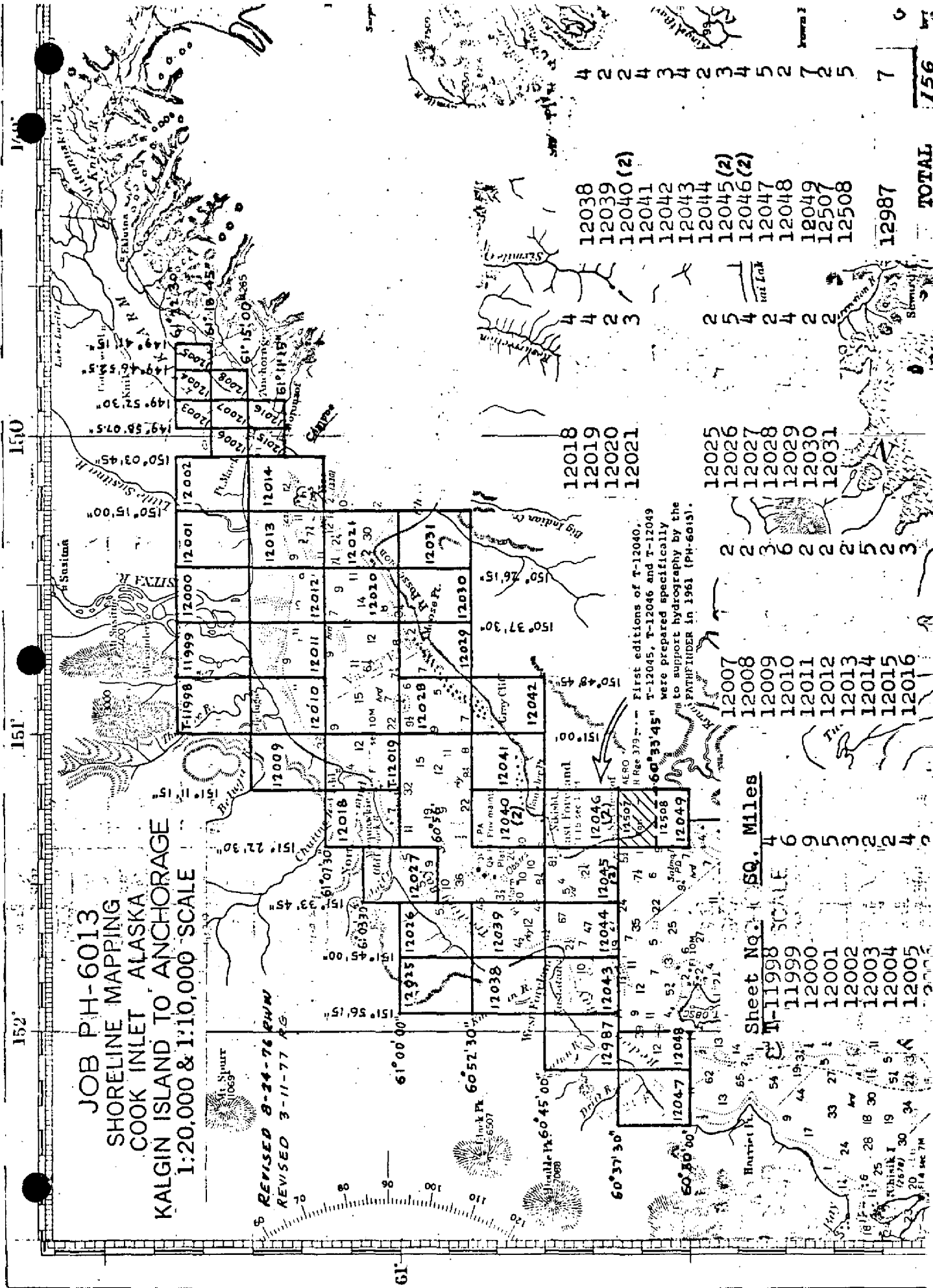
Sheet No.	SQ. Miles
PH-11998	4
11999	6
12000	9
12001	5
12002	3
12003	2
12004	2
12005	4

12018	12019	12020	12021	12025	12026	12027	12028	12029	12030	12031	12038	12039	12040 (2)	12041	12042	12043	12044	12045 (2)	12046 (2)	12047	12048	12049	12507	12508	12987	TOTAL
2	2	3	6	2	2	3	6	2	2	2	5	2	5	2	4	2	3	2	4	2	2	2	2	2	7	156

150° 48' 45"

First editions of T-12040, 5" T-12045, T-12046 and T-12049 were prepared specifically to support hydrography by the PATHFINDER in 1961 (P4-6013).

First editions of T-12040, T-12045, T-12046 and T-12049 were prepared specifically to support hydrography by the PATHFINDER in 1961 (PH-6013).



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

T-12507

This 1:10,000 scale Final shoreline map is one of 44 maps designated as project PH-6013 Cook Inlet, Kalgin Island to Anchorage, Alaska. T-12507 and T-12508 at 1:10,000 replaced and superseded the "cancelled" T-12049 (2) a 1:20,000 second edition after earthquake sheet.

The purpose of this map was to provide contemporary shoreline in support of hydrographic operations and to aid in chart revision.

Field work prior to compilation in the 1961 field season consisted of recovery of horizontal control and limited field inspection. Field work in 1966 consisted of premarking of horizontal control for aerotriangulation.

This area was flown in June 1967 with the RC-8 "L" camera in black-and-white at 1:40,000 scale and also in June 1967 in infrared at 1:20,000 scale. The area was re flown in July 1972 with the RC-8 "E" camera in color at 1:20,000 scale.

Bridging was performed in the Washington office in September 1974.

T-12507 was compiled at the Norfolk office in January 1975.

Field edit was performed for T-12507 during 1976 field season. Field edit data was applied at AMC in February 1977.

Final Review was performed at AMC in February 1986. T-12507 was forwarded to the Washington Science Center for final registration.

FIELD INSPECTION REPORT

COOK INLET, ALASKA

PROJECT SP-1-61 1961

USC&GS Ship PATHFINDER

Arthur L. Wardwell, CAPT., Comdg.

MANUSCRIPTS:-

12049, 12046, 12045, 12040, 12031, 12032, 12026, 12027, 12028, 12020, 12021, 12022, 12017, 12015, 12016, 12014, 12013, 12008, 12007, 12006, 12003, 12004, 12005, 12002, 12001, 12000, 12012, 11999, 12011, 11998, 12010, 12009, 12019, 12018, 12023, 12025, 12024, 12029, 12030, 12035, 12034, 12033, 12037, 12036

AERIAL FIELD INSPECTION:-

Areas inspected were as follows: Manuscripts No. 12049, 12046, 12045, 12040, Kenai to Boulder Point, all shoreline and alongshore features.

Balance of above listed manuscripts were used only for horizontal control identification.

The area is primarily moderately timbered with spruce, fir, alder and bear claw above the mean high water line. Shoreline varies from fine black silt at the mouth of the Kenai River mouth to large fragmented boulders at Boulder Point. Most of the beachline is sand and shingle interspersed with boulders of varying sizes. Numerous underground springs and some small creeks discharge small quantities of silt and water and are subject to constant change.

The area was inspected by cruising alongshore by launch and by walking the beach and bluff line. Foul areas now indicated on Chart No. 8553 are adequate. Two primary foul areas were noted as follows:

Kenai River Mouth

East Foreland to Moose Point

Quality of photographs was excellent. Areas of shadow were limited to the shoreline east of East Foreland and upper Knik Arm. No attempt was made to sketch in the mean high water line. Enough open areas in shadowed areas are available to adequately delineate mean high water line.

HORIZONTAL CONTROL:-

Four additional second-order triangulation stations were established between Kenai and East Foreland to supplement existing control in the area of hydrography. They were identified as follows:

AUDRY 1961	Manuscript No. 12049	Photo No. 1397
LOUISE 1961	" " 12049	" " 1402
BOO 1961	" " 12045	" " 1420
HELEN 1961	Traverse from East Foreland Light 1960.	

-(2)-

Additional horizontal control recovery was made in upper Cook Inlet in accordance with project instructions. All stations were searched for and approximately 75 percent were recovered. Most of the stations not recovered are considered lost. It is recommended that the next vessel assigned to this project be given a Tellurometer. Simple traverse between recovered triangulation stations would adequately control presently un-controlled flight lines.

In many cases the listed triangulation station was not recovered and a U.S. Engineers' triangulation station was used as a substitute. It appears that the U.S. Engineers could not recover listed C&GS control and substituted their own stations.

Great assistance was rendered by the 5040 Air Transport Squadron at Elmendorf AFB in furnishing helicopter service. Three days of flying enabled personnel to cover shoreline control stations over the greater part of upper Cook Inlet.

If additional control is required in the vicinity of Elmendorf AFB, use can be made of triangulation now being observed by a C&GS geodetic party. Triangulation station DORF 1961 (in the vicinity of LOOP 2) is to be set in the roof of a building on the base. By use of the description written by the observing party, an accurate office identification can be made.

Triangulation not plotted on the Photo Index was identified where it was on photographs. This control was established by G.W.M. in 1959 and H.G.C. in 1960.

VERTICAL CONTROL:-

None recovered or established.

CONTOURS AND DRAINAGE:-

No contouring was attempted.

Primary drainage features are the Kenai, Matanuska, Little Susitna, Susitna, Beluga, Kustitan, and Drift Rivers. Tidal sweep keeps some of the rivers from building up deltaic features. An extremely flat foreshore on the Matanuska, Little Susitna, Susitna and Beluga rivers give rise to wide deltas that change seasonally. Many small streams discharge around Cook Inlet but have no apparent seasonal change.

WOODLAND COVER:-

The major portion of the area is wooded and interspersed with muskeg and open grassy areas. These are easily identifiable on the photographs. In areas of increasing cultural activity, the woodland cover is being removed. No attempt was made to indicate these areas.

SHORELINE AND ALONGSHORE FEATURES:-

The mean high water line is adequately delineated on manuscripts 12049, 12046, 12045, 12040. In the area of photo hydro signals IVY and EGG, east of East Foreland, the mean high water line is as follows:

IVY 30 meters inside MHW

EGG on piles at MHW

- (3) -

Most of the shoreline signals are located at MHW along the beach. Many of the fishing huts set on piles at the base of the bluff were used as signals.

No attempt was made to delineate the low water line. Hydrography in the area should be satisfactory.

The foreshore area is primarily sand, small stones and boulders. The normal gradation from stones at MHW to sand at MLW exists in all areas, except south of the Kenai River. In this area a heavy layer of silt is found in the tide zone.

OFFSHORE FEATURES:-

All offshore features are located by the hydrographer.

LANDMARKS AND AIDS:-

There are two fixed aids to navigation within the limits of the hydrographic project:

EAST FORELAND LIGHT

KENAI RIVER ENTRANCE RANGE

Both are located on Chart No. 8553.

One floating aid is also located on Chart No. 8553. Another can buoy is maintained by the oil company and is located just north of the pier.

One landmark for charts is recommended in the Descriptive Report for SP-1-61. This landmark is identified as follows:

KENAI TANK 1959, located by G.W.H. and identified on Photo No. 60W1400.

BOUNDARIES, MONUMENTS AND LINES:-

None shown.

OTHER CONTROL:-

Photo hydro signals were located in accordance with standard instructions. Signal IVY was found in error and relocated photogrammetrically, then verified by hydrographic cuts. Final location is shown on manuscript 12045.

Final location of photo hydro signals will remain in their relative position with the shoreline. Final compilation will cause a datum shift which will move both hydrography and signals the same relative amount.

DATUM DIFFERENCES:-

Radial plotting of photo identified control stations was made in the field. The following discrepancies were noted between plot positions and geographic positions.

EAST FORELAND LIGHT 1960	Lat. -13.8 meters
	Long. -75.4 meters
BOULDER (USE)	Lat. -37.0 meters
	Long. -45.2 meters
KENAI CHURCH STEEPLE 1909	Lat. -15.3 meters
	Long. -23.6 meters

-(4)-

CULTURAL FEATURES:-

Numerous fishing shacks are located along high water line in the area of hydrography. These huts are subject to damage by winter storms and are in a constant state of transition. No attempt was made to locate current huts.

The Nikiski Oil Pier was under construction at the time of photography. The completed dimensions are available from a blueprint of the structure submitted with descriptive report for Project SP-1-61.

Respectfully submitted,

Robert E. Williams,
Lieut. Comdr., C&GS

Gerald C. Saladin
Gerald C. Saladin
LTJG, C&GS

Arthur L. Wardwell
Arthur L. Wardwell,
Captain, C&GS
Comdg., Ship PATHFINDER

FIELD INSPECTION

T-12507

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.

9/9/74

PHOTOGRAMMETRIC PLOT REPORT
Job PH-6013
Cook Inlet
East Foreland Area
Alaska

21. Area Covered

This project covers the eastern shoreline of Cook Inlet from Kenai to just north of Number Three Bay. Included are seven T-sheets: T-12040(2), T-12041, T-12042, T-12045(2), T-12046(2), and ~~T-12049(2)~~ at 1:20,000 scale, and T-12507, T-12508, at 1:10,000 scale.

22. Method

Three strips of 1:40,000 scale panchromatic photography (strips 18, 19, and 20) were bridged on the Wild STK-1 in order to obtain pass point positions and exact scale ratios to be used during compilation.

Strip 20 was adjusted on four field identified triangulation stations with checks obtained from two additional triangulation stations and two tie points. Strip 18 was adjusted on four field identified triangulation stations with two tie points as checks. Strip 18 was adjusted on six tie points. All adjustments were performed on the IBM 6600. All sheets were ruled and plotted on the Calcomp.

Ratios at 1:20,000 scale were ordered for the entire project with additional 1:10,000 scale ratios for the area covering sheets T-12507 and T-12508. Ratios at 1:20,000 scale of the bridging photography were also ordered for the portion of the project not covered by the offshore photography.

The horizontal control utilized in the adjustments held within National Map Accuracy.

24. Supplemental Data

Vertical control for bridging only was obtained from local USGS quads.

25. Photography

Photography was adequate as to overlap, definition, and coverage.

Approved by:

John D. Perrow

John D. Perrow, Jr.
Chief, Aerotriangulation Section

Submitted by:

Michael L. McKinley
Michael L. McKinley

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	GEODETTIC DATUM		ORIGINATING ACTIVITY		REMARKS
					N.A. 1927	Mapping Division, Norfolk, VA			
					COORDINATES IN FEET		GEOGRAPHIC POSITION		
					STATE	ZONE	ALASKA	ϕ LATITUDE	
							4	λ LONGITUDE	
LOUISE RM 2, 1961			Bridge Form 164		x=	2,420,980.89	ft.	ϕ	
			P. 1 of 3		y=	259,105.75		λ	
					x=			ϕ	
					y=			λ	
					x=			ϕ	
					y=			λ	
					x=			ϕ	
					y=			λ	
					x=			ϕ	
					y=			λ	
					x=			ϕ	
					y=			λ	
COMPUTED BY	A. C. Rauck, Jr.				COMPUTATION CHECKED BY F. Margiotta			J. Desch	DATE 10/04/74
LISTED BY					LISTING CHECKED BY				DATE
HAND PLOTTING BY					HAND PLOTTING CHECKED BY				DATE

SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.

COMPILATION REPORT

T-12507

31. DELINEATION

Delineation was accomplished using the Wild B-8 stereoplotter. Photography was adequate, except as noted in Item 35.

The original 1:20,000 scale compilation of this map was accomplished in May 1964 from 1962 photographs. It is superseded by this 1:10,000 survey on a new base, using the 1967 bridge/compilation photographs and 1972 ratio photographs.

32. CONTROL

See the attached Photogrammetric Plot Report dated September 1974.

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

The 72E(C) photography was not used for mean high water line compilation because shoreline pass points common to both 1967 and 1972 photos were not identifiable during instrument compilation. These photos were processed for hydro-support and their centers were shown on the manuscript.

36. OFFSHORE DETAILS

None, except rocks offshore.

37. LANDMARKS AND AIDS

One charted aid noted during compilation.

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 CONTROL:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with the following USGS Quadrangle: KENAI (C-4), ALASKA, 1951, 1964 Revision, 1:63,360 scale.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with the following National Ocean Survey Chart: No. 16660 (C&GS No. 8553), Cook Inlet, Northern Part, 1:194,154 scale, 13th Edition, February 1972.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

James R. Minton

J. R. Minton
Cartographic Technician
January 8, 1975

Approved:

Albert C. Rauck, Jr.

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

FIELD EDIT REPORT

MAP T-12507

SALAMATOF

AUGUST 1976

Field work on map T-12507 was accomplished by LTJG G.P. Kosinski and ENS N.G. Millett during August, 1976. The foreshore consists of sand, gravel, mud, and isolated rocks; it is relatively unfouled. Bluffs of charting value extend along the entire coastline as indicated by the compiler on the ozalid. Inspections of the shoreline were made at various stages of the tide by skiff and on foot. Field work on this map is complete except for one item, noted below.

METHOD

Photographs and a copy of the field edit ozalid were examined in the field. Again, the photographs were entirely useless in identifying offshore features, as they were all taken at high stages of the tide. Areas of the foreshore that are characterized by rocks on the sand/mud flats are indicated on the ozalid without fixes. Several groups of short, cut-off pilings are also found in the area. Considering the depth of the nearby water, the height of the rocks and pilings above the mud (0-3 ft), and their proximity to the MLLWL, they were not considered hazardous.

Significant features not visible on the photographs (fixes 238-05B through 238-07B) were located by visual three-point sextant fixes utilizing signals located by the NOAA Ship RAINIER in 1975 (offshore oil platforms), signals scaled from this ozalid or the adjoining manuscript, T-12508, or signals that are existing triangulation stations. A complete list of signals is appended. Refer to the field edit fix computations, the observed angles found in the sketch books, the master field edit ozalid, and the following Table of Field Edit Fixes.

See survey records H-9619 for the hydrographic determination of the MLLWL; no changes were perceptible to the field editor and none are indicated on the ozalid.

Time and project limitations precluded the acknowledgement or disapproval of the charted aero beacon located at $60^{\circ}36.1'N, 151^{\circ}12.6'W$. This is the only item remaining to be investigated in the field. It is presumed that it can quite easily be picked up when the adjoining map T-12508 (KENAI RIVER) is field inspected in the future.

ADEQUACY OF COMPILATION

Compilation of this map is good. See comments under this section in the Field Edit Report for map T-12046.

RECOMMENDATIONS

It is recommended that this map be revised in accordance with the notes on this ozalid and, consistent with the above notes, be accepted as an advanced manuscript.

Respectfully submitted:

Gregory P. Kosinski
Gregory P. Kosinski, LTJG, NOAA

MAP T-12507
TABLE OF FIELD EDIT FIXES

<u>Fix Number</u>	<u>Object</u>	<u>Position</u>
238-05B	Rock bares 2 ft at 2005Z day 238 ✓	60°33'57.278"N ✓ 151°18'53.695"W ✓
238-06B	Rock bares 2 ft ✓ at 2012Z day 238	60°33'55.741"N ✓ 151°19'06.350"W ✓
238-07B	Rock awash at 2019Z day 238 ✓	60°33'56.6306"N ✓ 151°19'04.9319"W ✓

✓ RYM

REVIEW REPORT
T-12507

SHORELINE

61 - GENERAL STATEMENT

See Summary included with this Descriptive Report.

62 - COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Not applicable.

63 - COMPARISON WITH MAPS OF OTHER AGENCIES

Not applicable.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEY

A comparison was made with verified copy of H-9619 (1976) and H-8789 (1964). There were no major conflicts.

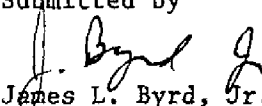
65 - COMPARISON WITH NAUTICAL CHART

A comparison was made with Chart 16660 scale 1:194,154 22nd edition May 8/82 and Chart 16662 inset scale 1:50,000 1st ed. April 9/83. There were no major conflicts.

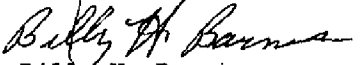
66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

Submitted by


James L. Byrd, Jr.
Final Reviewer

Approved for forwarding


Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved


Chief, Photogrammetric Production Sec.


Chief, Photogrammetry Branch

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]