T-12017

T-12017

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. CM-7310 *Map No.* T-12017

Classification No. III *Edition No.* 1

LOCALITY

State Alaska

General Locality Knik Arm - Anchorage

Locality Point Campbell

1973 TO 1974

REGISTRY IN ARCHIVES

DATE

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-762-901

NOAA FORM 76-36A (3-72) — U. S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY: [X] ORIGINAL [ ] RESURVEY [ ] REVISED

SURVEY T-12017

MAP EDITION NO. (1)

MAP CLASS III

JOB ~~PH~~. CM-7310

PHOTOGRAMMETRIC OFFICE
Coastal Mapping Division
Atlantic Marine Center, Norfolk, VA

OFFICER-IN-CHARGE
Jeffrey G. Carlen, Cdr., NOAA

LAST PRECEEDING MAP EDITION
TYPE OF SURVEY: [ ] ORIGINAL [ ] RESURVEY [ ] REVISED
JOB PH- ____
MAP CLASS ____
SURVEY DATES: 19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE	2. FIELD
Compilation 12/73	Field 5/73 Supplement 1 6/73

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [X] MEAN HIGH-WATER [ ] MEAN LOW-WATER [X] MEAN LOWER LOW-WATER [ ] 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	DATE
1. AEROTRIANGULATION METHOD: Analytic	BY	R. Kelly	1/74
	LANDMARKS AND AIDS BY	R. Kelly	1/74
2. CONTROL AND BRIDGE POINTS METHOD: Calcomp	PLOTTED BY	Robertson	1/74
	CHECKED BY	Robertson	1/74
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: Wild B-8 SCALE: 1:15,000	PLANIMETRY BY	L. O. Neterer, Jr.	2/74
	CHECKED BY	R. R. White	2/74
	CONTOURS BY	NA	
	CHECKED BY	NA	
4. MANUSCRIPT DELINEATION METHOD: Smooth Drafted SCALE: 1:10,000	PLANIMETRY BY	C. Blood	2/74
	CHECKED BY	A. L. Shands	2/74
	CONTOURS BY	NA	
	CHECKED BY	NA	
	HYDRO SUPPORT DATA BY	C. Blood	2/74
	CHECKED BY	A. L. Shands	2/74
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	A. L. Shands	2/74
6. APPLICATION OF FIELD EDIT DATA None One Landmark	BY	L. O. Neterer, Jr.	1/75
	CHECKED BY	C. E. Blood	1/75
7. COMPILATION SECTION REVIEW	BY	C. Blood	1/75
8. FINAL REVIEW	BY	Jim Byrd	6/79
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY	Jim Byrd	7/79
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	E.L. Rolle	9/79
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	E.L. DAUGHERTY	NOV 1979

NOAA FORM 76-36A — SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)

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

T-12017

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S): Wild RC-8 "E" & "K"

TIDE STAGE REFERENCE
- [X] PREDICTED TIDES
- [ ] REFERENCE STATION RECORDS
- [X] TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR
(P) PANCHROMATIC
(I) INFRARED

TIME REFERENCE
ZONE: Alaska — [X] STANDARD
MERIDIAN: 150th — [ ] DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
73E(C) 9330 thru 9332	6/29/73	12:58	1:30,000	0.8 ft. below MLLW
73E(C) 9336 thru 9338	6/29/73	13:15	1:30,000	1.0 ft. above MLLW
*73E(C) 9448 thru 9450	7/13/73	11:38	1:30,000	±0.2 ft. of MLLW
*73E(C) 9453 and 9454	7/13/73	11:45	1:30,000	±0.2 ft. of MLLW
*73K(I) 8811 and 8812	7/13/73	13:21	1:30,000	±0.2 ft. of MLLW
*73K(I) 9906 thru 8808	7/13/73	11:38	1:30,000	±0.2 ft. of MLLW

REMARKS

*Tide controlled photography.

2. SOURCE OF MEAN HIGH-WATER LINE:

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

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

*The mean lower low water line was compiled from the above listed 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-12015(2) ✓	No Survey ✓	No Survey	PH-6013 ✓ T-12014

REMARKS

* U. S. GOVERNMENT PRINTING OFFICE: 1974-768-078

NOAA FORM 76-36C
(3-72)

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

T-12017

HISTORY OF FIELD OPERATIONS

I. [X] FIELD INSPECTION OPERATION [ ] FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R. Melby	6/73
2. HORIZONTAL CONTROL	RECOVERED BY	R. Melby	6/73
	ESTABLISHED BY	None	
	PRE-MARKED OR IDENTIFIED BY	R. Melby	6/73
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 [ ] COMPLETE [ ] SPECIFIC NAMES ONLY [X] NO INVESTIGATION BY		
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
73E(C) 9331	POINT 2 (USE), 1964		

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 [X] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [X] NONE

7. SUPPLEMENTAL MAPS AND PLANS
None

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

NOAA FORM 76-36C
(3-72)

☆U.S. Government Printing Office: 1975 – 665-661/1110, Region No. 6

NOAA FORM 76-36C
(3-72)

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

T-12017

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		K. Jeffers	5-8/74
2. HORIZONTAL CONTROL	RECOVERED BY	G. Stroble	5-8/74
	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	G. Stroble	5/74
	LOCATED *(Field Methods)* BY	None	
	IDENTIFIED BY	None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION — BY		
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: ☐ REPORT ☒ NONE

6. 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 Field Edit Ozalid (unedited, except for one landmark)
1 Form 76-40

☆U.S. Government Printing Office: 1975 — 665-661/1110, Region No. 6

NOAA FORM 76-36D
(3-72)

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

T-12017

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete, pending field edit.	2/74	Class III Manuscript	3/74	3/74
No field edit accomplished. One landmark submitted.	1/75	Class III Manuscript	2/75	
Final Review	6/79	Class III Manuscript		

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		2/07/75	Landmark for charting.

2. [X] REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: February 7, 1975
3. [ ] REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. [X] BRIDGING PHOTOGRAPHS; [X] DUPLICATE BRIDGING REPORT; [X] COMPUTER READOUTS.
2. [X] CONTROL STATION IDENTIFICATION CARDS; [X] 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:

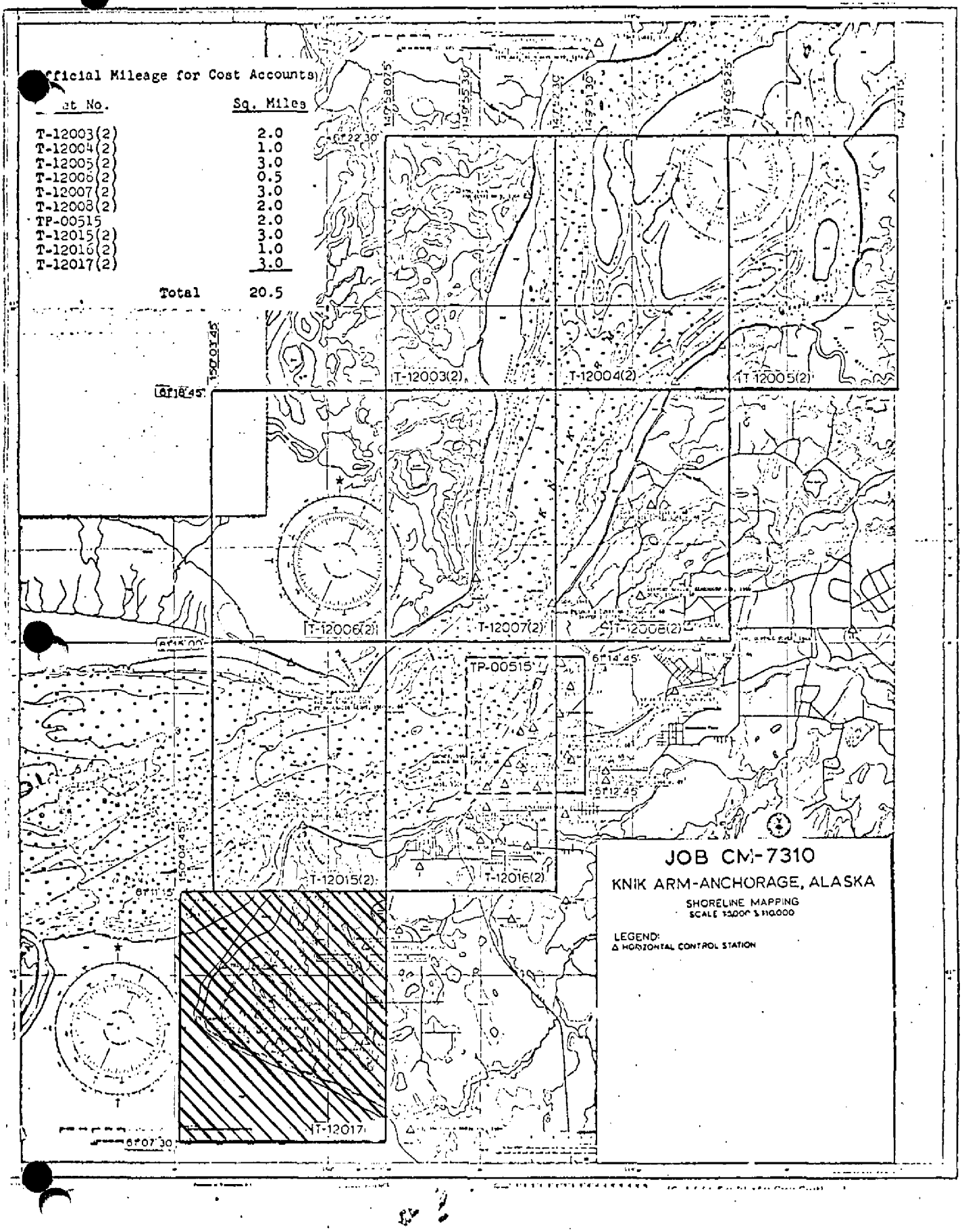
4. [ ] DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
SECOND EDITION	TP - _____ (2)	PH - _____	[ ] REVISED [ ] RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS [ ] II. [ ] III. [ ] IV. [ ] V. [ ] FINAL
THIRD EDITION	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
	TP - _____ (3)	PH- _____	[ ] REVISED [ ] RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS [ ] II. [ ] III. [ ] IV. [ ] V. [ ] FINAL
FOURTH EDITION	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
	TP - _____ (4)	PH - _____	[ ] REVISED [ ] RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS [ ] II. [ ] III. [ ] IV. [ ] V. [ ] FINAL

NOAA FORM 76-36D

☆U. S. GOVERNMENT PRINTING OFFICE: 1973--778075/1077 REGION NO. 6


Official Mileage for Cost Accounts
Sheet No. Sq. Miles
T-12003(2) 2.0
T-12004(2) 1.0
T-12005(2) 3.0
T-12006(2) 0.5
T-12007(2) 3.0
T-12008(2) 2.0
TP-00515 2.0
T-12015(2) 3.0
T-12016(2) 1.0
T-12017(2) 3.0
Total 20.5
T-12003(2)
T-12004(2)
T-12005(2)
T-12006(2)
T-12007(2)
T-12008(2)
TP-00515
T-12015(2)
T-12016(2)
T-12017
JOB CM-7310
KNIK ARM-ANCHORAGE, ALASKA
SHORELINE MAPPING
SCALE 1:20,000 & 1:10,000
LEGEND:
Δ HORIZONTAL CONTROL STATION

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORTS

T12003(2) Thru T12008(2), T12015(2), T12016(2), T12017 and TP00515

Project CM-7310 covers Knik Arm--Anchorage, Alaska from Point Campbell Northeasterly to Goose Creek and including Eagle Bay.

There were ten maps assigned in this project T-12003(2) thru T-12008(2), T-12015(2), T-12016(2), T-12017 were at scale 1:10,000. One sheet TP-00515 was at 1:5000 scale. The purpose of these maps as a second edition of job PH 6013 was to provide contemporary shoreline data in the support of hydrographic operations and to aid in nautical chart revision.

Field work prior to compilation in May - June 1973 consisted of paneling horizontal control stations in advance of aerial photography and also all field operations required to provide ground support needed to obtain the tide coordinated photography.

The area was flown in June 1973 with a combination of 1:15,000 and 1:30,000 scale "E" camera, "K" scale photography with both color and tide controlled infrared.

Analytic aerotriangulation was performed at the Washington Science Center in January 1974.

The maps were compiled at AMC in February and March 1974.

Field edit was completed in October 1974 on all sheets except for T-12017 for which only a partial field edit was performed (Landmarks and Aids). It was applied to the maps at AMC in January and February 1975.

Final Review was performed at AMC in April-July 1979. The original second edition base maps and all pertinent data was forwarded to the Washington Science Center for final Registration. Sheet T-12017 was reviewed and will be rigistered as a ClassIII Map since the field edit was "cancelled" at time of final review.

FIELD INSPECTION

T-12017

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
Knik Arm - Anchorage, Alaska
Job CM-7301
January 1974

21. Area Covered

This report covers nine 1:10,000 sheets, T-12003(2), T-12004(2) T-12005(2), T-12006(2), T-12007(2), T-12008(2), T-12015(20, T-12016(2) T-12017(2), and one 1:5,000 sheet, TP-00515 of Knik Arm - Anchorage, Alaska.

22. Method

Three strips 1:30,000 scale color photography were bridged by analytic aerotriangulation methods and adjusted to ground on Alaska State plane coordinate system, Zone 4. Bridge points were used on 1:15,000 and 1:30,000 scale infrared photography for ratioing photography to be used in compiling the mean low and mean high-water line. Ratio prints of infrared photography covering mean low and mean high water were ordered. (One each of cronapaque.) One cronapaque and one matte each were ordered of the bridging photographs. For the 1:5,000 scale sheet pass points were determined and positioned to control models of the 1:15,000 scale strip of photography. Data for plotting manuscripts for compilation were assembled for ruling and plotting by the Coradomat.

23. Adequacy of Control

The horizontal control provided was adequate and held well within the accuracy required by National Standards of Map Accuracy at 1:5,000 and 1:10,000 scale. Tie points and airport control were used to augment datum tie.

24. Supplemental Data

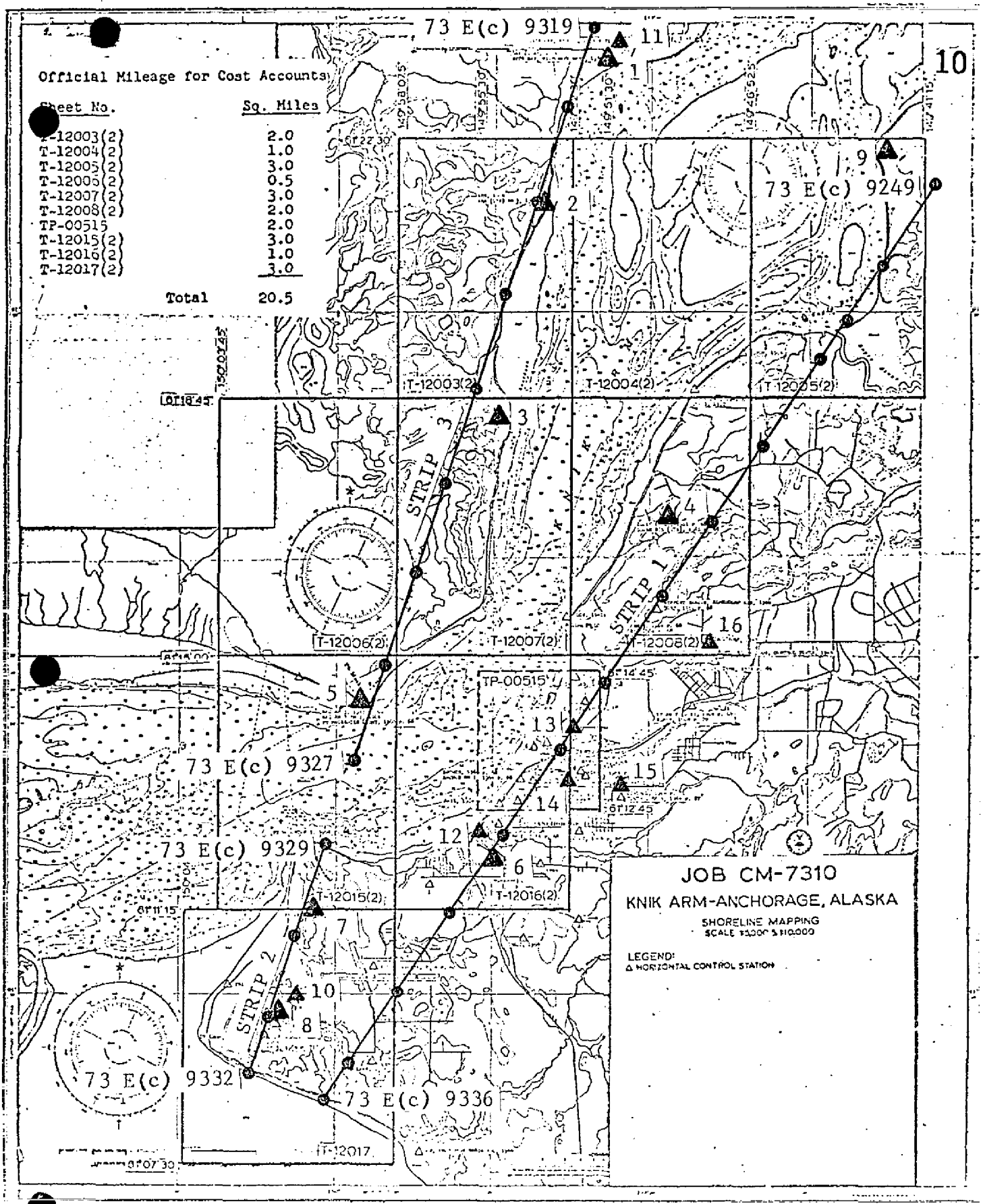
U.S. Geological Survey quadrangles were used to provide elevations for vertical adjustments of bridges.

25. Photography

RC-8 color film positives were adequate as to coverage, overlay, and definition.

Submitted by,
Robert B. Kelly
Robert B. Kelly

Approved and forwarded:
John D. Perrow
John D. Perrow
Chief, Aerotriangulation


Official Mileage for Cost Accounts
Sheet No. Sq. Miles
T-12003(2) 2.0
T-12004(2) 1.0
T-12005(2) 3.0
T-12006(2) 0.5
T-12007(2) 3.0
T-12008(2) 2.0
TP-00515 2.0
T-12015(2) 3.0
T-12016(2) 1.0
T-12017(2) 3.0
Total 20.5
73 E(c) 9319
73 E(c) 9249
73 E(c) 9327
73 E(c) 9329
73 E(c) 9332
73 E(c) 9336
STRIP 1
STRIP 2
STRIP 3
T-12003(2)
T-12004(2)
T-12005(2)
T-12006(2)
T-12007(2)
T-12008(2)
T-12015(2)
T-12016(2)
T-12017
TP-00515
JOB CM-7310
KNIK ARM-ANCHORAGE, ALASKA
SHORELINE MAPPING
SCALE 1:5000 & 1:10,000
LEGEND:
△ HORIZONTAL CONTROL STATION

1 BAY(USE) 1964

2 ARM(USE) RM 3, 1964

3 MULE, 1973

4 GLOBE BIE (USE) 1961

5 PT. MACKENZIE LIGHT, 1973

6 SPENARD, 1964

7 VANCE, 1964

8 PT. 2(USE) 1964

9 PAL 2 , 1973

10 SITE PT. RADOME

11 SITE BAY, RADOME, 1964

12 ANCHORAGE, RADIO SATION KENI, TOWER, 1954

13 ANCHORAGE, ACS MICROWAVE RELAY TOWER, 1960

14 ANCHORAGE, TV STATION KTVA, TOWER, 1964

15 ANCHORAGE, MERRILL FIELD, CONTROL TOWER, 1964

16 ELMENDORF AFB WATER TANK BEACON, 1964

NOAA FORM 76-41
(6-75)

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

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY
T-12017	CM-7310	NA 1927	Coastal Mapping Division, AMC, Norfolk, Virginia

STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET (STATE / ZONE)	GEOGRAPHIC POSITION (φ LATITUDE / λ LONGITUDE)	REMARKS FORWARD	REMARKS BACK
TRIP, 1941	Quad 61150 P. 001		x=	φ 61 10 12.171	376.7	(1480.5)
			y=	λ 150 03 27.843	416.3	(480.7)
POINT 2 (USE), 1964	Quad 611502 P. 045		x=	φ 61 09 23.47496	726.6	(1130.6)
			y=	λ 150 02 14.97119	223.9	(673.5)
SITE POINT RADOME, 1964	Quad 611502 P. 047		x=	φ 61 09 34.03449	1053.5	(803.7)
			y=	λ 150 01 54.68726	817.9	(79.4)
			x=	φ		
			y=	λ		
			x=	φ		
			y=	λ		
			x=	φ		
			y=	λ		
			x=	φ		
			y=	λ		
			x=	φ		
			y=	λ		
			x=	φ		
			y=	λ		
			x=	φ		
			y=	λ		

COMPUTED BY	DATE	COMPUTATION CHECKED BY	DATE
A. C. Rauck, Jr.	1/25/74	F. R. Gustafson	1/25/74
LISTED BY	DATE	LISTING CHECKED BY	DATE
HAND PLOTTING BY	DATE	HAND PLOTTING CHECKED BY	DATE

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

COMPILATION REPORT

T-12017

31. DELINEATION:

All detail was compiled from stereoscopic models produced on the Wild B-8 stereoplotter. 1:30,000 scale color photography was used.

Due to the lack of water surface coverage and the monotone characteristic of the mud flat areas around Campbell Point, the compiler was not able to adequately level his models. This made the identification of the mean high water line difficult.

Tide controlled infrared photography was used for the graphic delineation of the mean lower low water line.

32. CONTROL:

See the attached Photogrammetric Plot Report dated January 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:

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:

Compilation office prepared work copies of Forms 76-40 were forwarded to the field editor for verification, location and/or deletion.

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 Quadrangles: TYONEK (A-1), ALASKA, dated 1952 and ANCHORAGE (A-8), ALASKA, dated 1952, scale 1:63,360.

47. COMPARISON WITH NAUTICAL CHARTS:

47.

A comparison has been made with the following National Ocean Survey Chart: No. 8557, 1:40,000 scale, dated October 19, 1971.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Charles Blood

C. E. Blood
Cartographic Tecnhician
February 25, 1974

Approved for forwarding:

Albert C. Rauck Jr.

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

T-12017

49. NOTES FOR THE HYDROGRAPHER:

Because of the lack of water surface and other vertical control, the stereoplotter operator was not able to adequately level his models. This, coupled with the monotone characteristic of the mud flats around Point Campbell, made the identification of the mean high water line difficult.

Please confirm the line delineated by giving measurements to the mean high water line from photo identifiable points.

April 12, 1979

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7310 (Knik Arm - Anchorage, Alaska)

TP-12017

Knik Arm

Point Campbell

Turnagain Arm

Approved by:

Charles E. Harrington

Charles E. Harrington
Chief Geographer, C3x5

FORM C&GS-1002 (9-66)

U.S. DEPARTMENT OF COMMERCE
ESSA
COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

T- 12017

1. PROJECTION AND GRIDS	2. TITLE	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
ALS	ALS	ALS	ALS

CONTROL STATIONS

5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY *(Topographic stations)*	7. PHOTO HYDRO STATIONS
ALS	ALS	ALS

8. BENCH MARKS	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
NA	CB	ALS	ALS

ALONGSHORE AREAS *(Nautical Chart Data)*

12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
ALS	ALS	ALS	NA

16. AIDS TO NAVIGATION	17. LANDMARKS	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
CB	CB	ALS	ALS

PHYSICAL FEATURES

20. WATER FEATURES	21. NATURAL GROUND COVER	22. PLANETABLE CONTOURS
ALS	NA	NA

23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
NA	NA	NA	ALS

CULTURAL FEATURES

27. ROADS	28. BUILDINGS	29. RAILROADS	30. OTHER CULTURAL FEATURES
ALS	ALS	ALS	ALS

BOUNDARIES

31. BOUNDARY LINES	32. PUBLIC LAND LINES
NA	NA

MISCELLANEOUS

33. GEOGRAPHIC NAMES	34. JUNCTIONS	35. LEGIBILITY OF THE MANUSCRIPT
ALS	ALS	ALS

36. DISCREPANCY OVERLAY	37. DESCRIPTIVE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
ALS	ALS	NA	ALS

40. REVIEWER	SUPERVISOR, REVIEW SECTION OR UNIT
A. L. Shands 2/26/74	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
Lee O. Neterer, Jr. 1/07/75	Albert C. Rauck, Jr.
Reviewer C. E. Blood 1/10/75	Albert C. Rauck, Jr.

43. REMARKS

Field edit not done. Only one landmark recovered.

~~See Form 76-36C, Item 8.~~

FIELD EDIT REPORT

OPR-469-RA-1974

UPPER COOK INLET, KNIK ARM

ALASKA

T-12000 thru T-12008
T-12012 thru T-12016
T-12021
T-12031
TP- 00515

NOTE: Maps T-12003 thru T-12008 and T-12015 and T-12016, in Job CM-7310, referred to in this Field Edit Report, are SECOND EDITION MAPS.
E. Rolle
9/24/79

NOAA Ship RAINIER

CDR K. William Jeffers

Commanding

INTRODUCTION

Field edit was completed on selected "minus tide days" during the period from mid-May through the end of August. Work was carried out on shore and land.

Field edit was started in the Port of Anchorage and continued north up Knik Arm to Latitude 61°22.0', the northern limit of shoreline control. Field edit was completed on the north side of Cook Inlet westward to Longitude 150°37.0'. Shoreline around Fire Island was inspected on the northwest side from North Point to West Point. Approximately 3 miles of shoreline wereinspected in the immediately vicinity of Pt. Possession.

Photographs used in the field edit are from jobs CM-7310 and PH-6013. Height data on all rocks was estimated. Times were referenced to 0° Longitude.

Adequacy of Compilation

All rocks and offshore features are labeled on the field edit ozalids, and whereever possible, verified on the field photos. Compilation of the MHWL was excellent on the manuscripts. Verification of MLLW was done by launch hydrography and is clearly deliniated on the boat-sheets.

Shoreline Summaries

T-12000, T-12001, T-12002, T-12012, T-12013 (Northern Half), T-12014 (Northern Half)

This group of manuscripts includes the northern part of Cook Inlet fromSusitna River to Pt. Mackenzie. The area is one of extensive mud flats. One discrepancy was noted on the shoreline junction between T-12002 (1966 shoreline manuscript) and T-12006 (1973 shoreline manuscript). The 1973 shoreline manuscript extended the shoreline up to the forest edge. The MHWL is along a marsh that extends south from the forest edge. Therefore the shoreline was adjusted to follow the MHWL along the marsh.

T-12013 and T-12014 (southern Half)

The shoreline in this area covers Fire Island. The shoreline of Shelter Bay is muddy. The northern side of the island has a rocky beach with some detached rocks, none extending more that a quarter mile off shore. The southern andeastern side of Fire Island was not field edited, therefore, the Field Edit Ozalids should be returned to the RAINIER as soon as possible.

T-12021 and T-12031

The vicinity of Point Possession is foul with offshore rocks. The west side of Pt. Possession is very foul with rocks extending out 3/4 mile. This area was not completely field edited, therefore, the manuscripts and field edit ozalids should be returned to the RAINIER as soon as possible.

T-12006 (2), T-12015 (2), T-12016 (2), TP-00515

This area includes Anchorage Harbor and the area extending westward to Pt. Mackenzie and Pt. Woronzof. The southern shore is primarily mud flats, almost entirely free of offshore rocks. The northern shore has many offshore rocks awash at MLLW. TP-00515 is a 1:5,000 scale inset of Anchorage Proper. Pier heights and additional data arerecorded on the Field Edit Ozalid.

T-12007 (2), T-12008 (2)

Lower Knik Arm-- The east and west shore are foul with many rocks and boulders awash at MLLW.

T-12003 (2), T-12004 (2), T-12005 (2)

This area includes upper Knik Arm to the extent of the 1973 photo coverage. The east and west shores are mud with very few dangerous rocks.

Recommendations

Much of the area included in this survey project lacked good photo support. The 1973 photo support in Knik Arm and Anchorage Harbor was excellent, however, the 1966-1967 coverage westward into Cook Inlet was very sparse. Of special concern is the fact that the T-sheet and flight-line index showed many flight lines of photos which were never received and would have aided our field operations considerably. If these flights lines or even parts of them are not available, a complete inventory should be supplied for our records.

respectfully submitted,

Garth Stroble LTJG,NOAA

MANUSCRIPT-PHOTO INDEX

~~T~~-SHEET	PHOTOS
T-12000	66L-6673
T-12003(2)	73K-8871,8872
T-12004(2)	73K-8863
T-12005(2)	73K-8863,8864,8865
T-12007(2)	73K-8832,8833,8872,8873
T-12008(2)	73K-8835
T-12014	66W-1328
T-12015(2)	73K-8828,8831
T-12016(2)	73K-8831,8832,8848
T-12021	66L-6725
TP-00515	73K-8846,8847,

	RANGE STATIONS	CODE	ELEV		LATITUDE	LONGITUDE
101	ZOF 1974	4-2-4-3	43	M	61 12 15.360	150 00 49.560
102	ANCHOR 1964 (ECC)	2-1	29	M	61 13 11.576	149 54 05.541
103	MAC RM3 1947 RM1 1960	3	28	M	61 14 19.454	149 59 05.884
104	KEN 1974	3	28	M	61 14 20.461	149 58 56.770
105	PIPE 1974	1-4	53	M	61 18 23.036	149 54 32.781
106	DAVE 1974	2	21	M	61 18 30.504	149 49 02.633
107	SKI 1974	1	44	M	61 19 24.380	149 47 05.491
108	ARN USE 1941 1964	3	60	M	61 21 38.998	149 53 20.460
109	LAC 1974	4	40	M	61 22 13.504	149 48 59.984
110	POSE 1914 1964	2	24	M	61 [illegible] 22.216	149 40 45.257
111	PETERS V BASE 1982 1964	4	16	M	61 25 46.302	149 29 19.288
112	SIT 1966	2	17	M	61 15 51.370	150 12 37.662
113	RACE POINT RM3 1964	1	*53	M	61 10 04.988	150 13 21.466
114	MISERY 3 1944	4	25	M	61 16 38.012	150 28 14.734
115	FIRE ISLAND LT 1966	3-2-4	12	M	61 07 35.754	150 16 48.987
116	POSSESSION 1909	2-3	37	M	61 02 16.381	150 23 43.391
117	PHILLIPS PLATFORM A 1974	2	36	M	61 04 36.172	150 56 53.605
118	BIRCH HILL USE 1941	4	48	M	60 55 16.723	150 44 58.088
119	MOOSE POINT LT 1966	4	12	M	60 57 22.872	150 41 01.945
120	RACE POINT LT 1966	1	61	M	61 10 17.462	150 12 35.026

*50 M PRIOR TO 13JUL74

	VISUAL SIGNALS	LATITUDE	LONGITUDE
201	SITE POINT RADOME 1964	61 09 34.034	150 01 54.683
202	PT WORONZOF 6 1969	61 12 11.079	150 00 50.182
203	ANCH RADIO STA KENI TWR 1954 1964	61 12 25.181	149 55 [illegible]7.367
204	ANCHORAGE TV STA KENI MAST 1964	61 13 07.869	149 53 32.868
205	ANCH TV STA KTVA TOWER 1954 1964	61 13 09.991	149 52 31.162
206	ANCHOR 1964	61 13 12.285	149 54 03.699
207	ANCHORAGE MUNICIPAL TANK 1964	61 13 46.510	149 52 35.348
208	ANCH ACS MICROWAVE TOWER 1960 1964	61 13 55.988	149 52 21.661
209	PT MACKENZIE LIGHT 1973	61 14 19.534	149 59 06.010
210	SANDAC 1960 1964	61 14 40.491	149 52 21.193
211	SAWYER 2 USE 1963 1964	61 15 13.767	149 50 56.051
212	GLOBE DIE USE 1961 1964	61 17 01.974	149 49 22.604
213	MULE 1973	61 19 05.814	149 54 57.722
214	BIRCH USE 1941 1964	61 19 23.850	149 47 06.044
215	ARN USE RM3 1964	61 21 38.149	149 53 20.857
216	PAL 2 1973	61 22 19.513	149 43 06.059
217	SITE BAY RADOME 1964	61 23 48.762	149 51 10.551
218	AIRPORT BEACON ELMENDORF AFB 1963	61 15 40.264	149 49 44.198
219	RACE PT LIGHT 1966 - SAME AS 120	61 10 17.462	150 12 35.026
220	PT POSSESSION LT 1974	61 02 03.927	150 24 10.774
221	PT WORONZOF INTAKE TANK 1974	61 12 15.438	150 01 00.889
222	FIRE ISLAND FAA RADOME 1974	61 08 36.166	150 12 53.478
223	WEST POINT BARGE HYDRO SIGNAL 1974	61 07 43.480	150 16 32.666
224	SHELTER BAY HYDRO SIGNAL 1974	61 08 04.144	150 14 42.380
225	PT WORONZOF RANGE FRONT LT 1974	61 12 09.025	150 01 11.115
226	PT WORONZOF RANGE REAR LT 1974	61 12 10.372	150 00 53.363
227	PT MACKENZIE RANGE FRONT LT 1974	61 14 22.600	149 59 17.331
228	PT MACKENZIE RANGE REAR LT 1974	61 14 29.170	149 58 52.579
229	FIRE ISLAND RANGE FRONT LT 1974	61 10 22.677	150 11 51.555
230	FIRE ISLAND RANGE REAR LT 1974	61 10 15.509	150 12 19.148

orig to charts
2/5/75

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

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

[redacted] LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- [ ] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [XX] COMPILATION ACTIVITY
- [ ] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

- [X] TO BE CHARTED
- [ ] TO BE REVISED
- [ ] TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office): Coastal Mapping Div. AMC, Norfolk, Va.

STATE: Alaska

LOCALITY: Knik Arm-Anchorage

DATE: Jan. 1975

The following objects HAVE [XX] HAVE NOT [ ] been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
469	CM-7310	T-12017 (2)	N.A.1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° / // D.M. Meters	POSITION LONGITUDE ° / // D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
RADOME	(Site Point Radome, 1964)	61-09 34.034 1053.5	150-01 54.687 817.9	73E(C)-9450 07-13-73	Triang. Rec. May, 1974	8553 8557

25

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	Garth Stroble,Lt(jg)	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	Garth Stroble,Lt.(jg)	FIELD ACTIVITY REPRESENTATIVE
	Lowell O. Neterer,Jr.	OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - Visually
V - Verified	
1 - Triangulation	5 - Field identified
2 - Traverse	6 - Theodolite
3 - Intersection	7 - Planetable
4 - Resection	8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-665-073/1030 Region 6

REVIEW REPORT T-12017

SHORELINE

June 20, 1979

61. GENERAL STATEMENT:

This map will be registered as a Class III. See Summary which is page 6 of 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 SURVEYS:

A comparison was made with verified copy of H-9441. No significant differences were noted.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 16660 scale 1:194,154 19th Ed. September 10/77 and Chart 16664 scale 1:40,000 16th Ed. May 28/77. There were no significant differences.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Submitted by:

Jim Byrd

Final Reviewer

Approved for forwarding:

Billy H. Barnes

Chief Photogrammetric Branch, AMC

Approved:

John D Perreault Jr.

Chief Photogrammetric Branch

FOR

Chief ~~Coastal Mapping~~ Photogrammetry Division