

T-12046

T-12046-2

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Map No. T-12046(2)	Edition No. 2
Job No. PH-6013	
Map Classification FINAL MAP	
Type of Survey SHORELINE	
LOCALITY	
State ALASKA	
General Locality COOK INLET, KALGIN ISLAND TO ANCHORAGE	
Locality NIKISHKA BAY	
19 66 TO 19 76	
REGISTERED 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 OFFICER-IN-CHARGE Jeffrey G. Carlen, Cdr.		SURVEY XT-T-12046(2) MAP EDITION NO. (2) MAP CLASS Final Map JOB PH-6013 LAST PRECEDING MAP EDITION TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB PH-6013 MAP CLASS I SURVEY DATES: 1960 TO 1964	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Compilation 11/18/60 Compilation, Supplement 5 3/20/73 Compilation, Amend. 1 to Supp. 5 4/05/73 Aerotriangulation 8/13/73 Compilation, Amend. 2 to Supp. 5 1/31/74		Field 6/6/66 Field Supplement I 8/8/66 Field 3/30/73 Field 6/7/73	
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 1:20,000		STATE ZONE	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY		M. McGinley	9/74
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY		R. Robertson	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 L. O. Neterer NA NA	12/74 12/74
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: Smoothdrafted CONTOURS BY CHECKED BY SCALE: 1:20,000 HYDRO SUPPORT DATA BY CHECKED BY		Charles Parker C. E. Blood NA NA Charles Parker C. E. Blood	12/74 1/75
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		C. E. Blood	1/75
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY		David Butler Jim Byrd	12/76 1/77
7. COMPILATION SECTION REVIEW BY		Jim Byrd	1/77
8. FINAL REVIEW BY		C. E. Blood/J. Byrd	4/86
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		J. Byrd	9/86
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		P. Damprey	Oct. 1986
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		R. DAUGHERTY	DEC 86

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "L" and "E"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE		
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE Alaska		<input checked="" type="checkbox"/> STANDARD
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				MERIDIAN 150th		<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE		
* 67L3659 - 67L3663	6/23/67	10:53	1:40,000	3.6 ft. below MLLW		
** 67L(I)3488 - 67L(I)3489	6/22/67	13:55	1:20,000	12.1 ft. above MLLW		
** 67L(I)3510	6/22/67	14:15	1:20,000	13.9 ft. above MLLW		
** 72E(C)4904 - 72E(C)4906	7/05/72	09:15	1:20,000	14.4 ft. above MLLW		
** 72E(C)4914 - 72E(C)4916	7/05/72	09:15	1:20,000	14.4 ft. above MLLW		
* 67L3686 - 67L3689	6/23/67	11:30	1:40,000	3.4 ft. below MLLW		

REMARKS
*Bridge and compilation photos
**Hydro support photos

2. SOURCE OF MEAN HIGH-WATER LINE:

**The mean high water line was compiled from office interpretation of the above listed color photographs.

3. SOURCE OF MEAN LOW-WATER LINE:

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

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-12040(2)	None	T-12507 1:10,000	T-12045(2)
REMARKS			

T-12046 (2)

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: ☐ 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)

None

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12046(2)
HISTORY OF FIELD OPERATIONS1. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. B. Melby	6/73
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	NA NA NA
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	None None 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	None

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 ☒ 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)

None

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

T-12046(2)

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	CAPT R. E. Alderman, NOAA	7-8/76
2. HORIZONTAL CONTROL	RECOVERED BY LTJG G. P. Kosinski, NOAA ESTABLISHED BY ENS G. E. Leigh, NOAA PRE-MARKED OR IDENTIFIED BY	7-8/76
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	
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	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	

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)

72E4916

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

See Form 76-40

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)

Raw Field Edit Data (sketchbooks), OPR-469-FA-76, Volumes 1 and 2; Field Edit Reports, OPR-469-FA-76; Field Edit Ozalid, Map T-12046, master copy; Field Edit fix computations, Map T-12046; Field Edit Report, Map T-12046.

NOAA FORM 76-36C
(3-72)

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONT-12046(2)
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.	12/74	Class III Manuscript	3/25/75	3/24/75
Field edit applied.	12/76	Class I Manuscript	2/11/77	2/11/78
Final Review	3/86	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
1		2/6/78	Landmark for Charts

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT, BRANCH. DATE FORWARDED: February 6, 19783. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

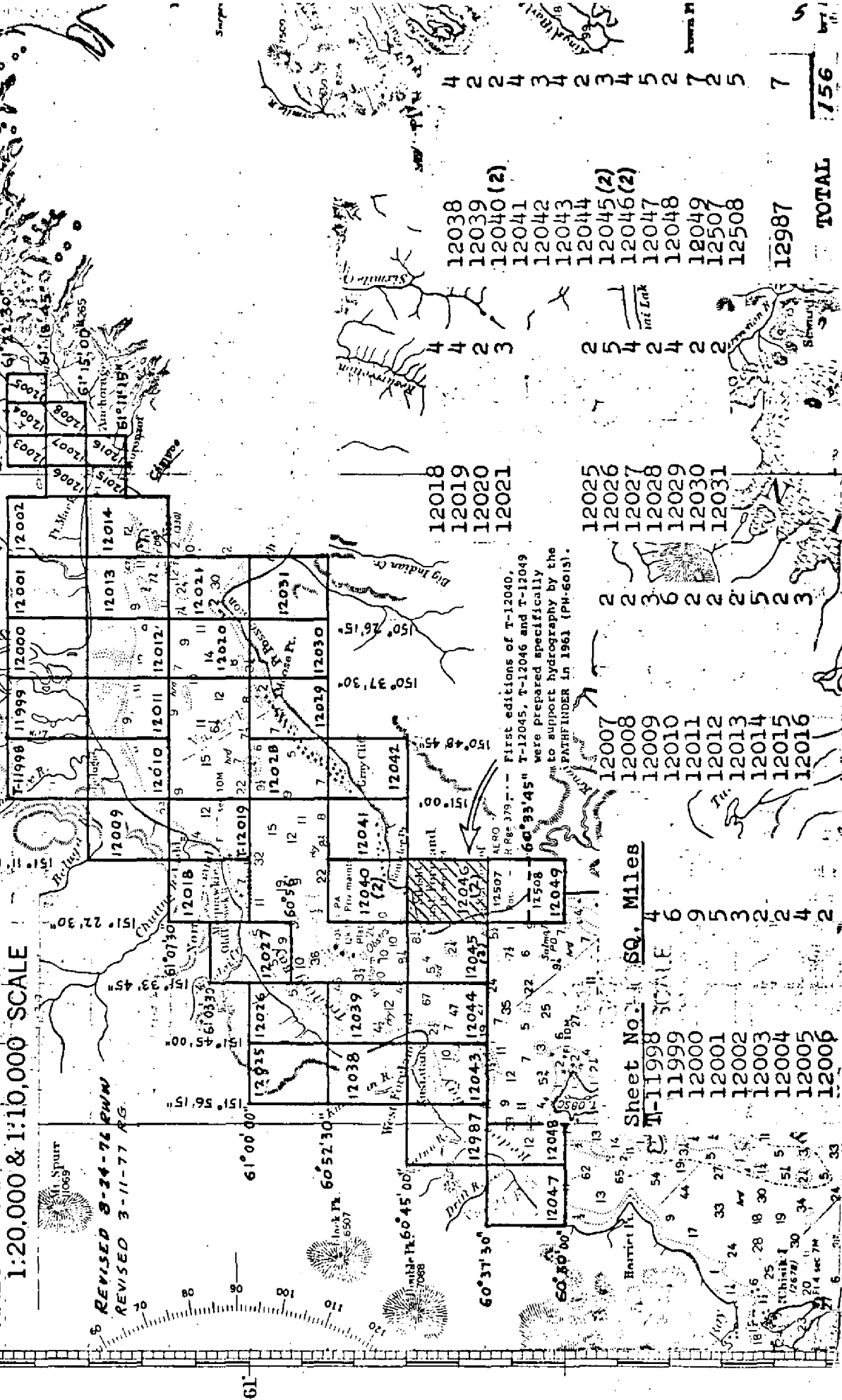
1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☒ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
 3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
 ACCOUNT FOR EXCEPTIONS:

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
	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

REVISED 8-34-76 PWN
REVISED 3-11-77 RG.



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

T-12046(2)

This 1:20,000 scale Final shoreline map is one of 44 maps designated as project PH-6013 Cook Inlet, Kalgin Island to Anchorage, Alaska. T-12045(2) is a post earthquake map, second edition of T-12045.

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 and June 1967 with the RC-8 "L" camera using panchromatic film at 1:40,000 scale and in June 1967 using infrared film at 1:20,000 scale. The area was reflown in July 1972 with the RC-8 "E" camera using color film at 1:20,000 scale.

Bridging was performed in the Washington office in September 1974.

T-12046(2) was compiled at the Norfolk office in January 1975.

Field edit was performed for T-12046(2) during the 1976 field season. Field edit data was applied at AMC in January 1977.

Final review was performed at the Atlantic Marine Center in April 1986.

This Descriptive Report contains all pertinent information used to compile this Final Map. The original base manuscript and all related data were 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.	

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.M. 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-12046(2)

There was no field inspection prior to the revision of this 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.

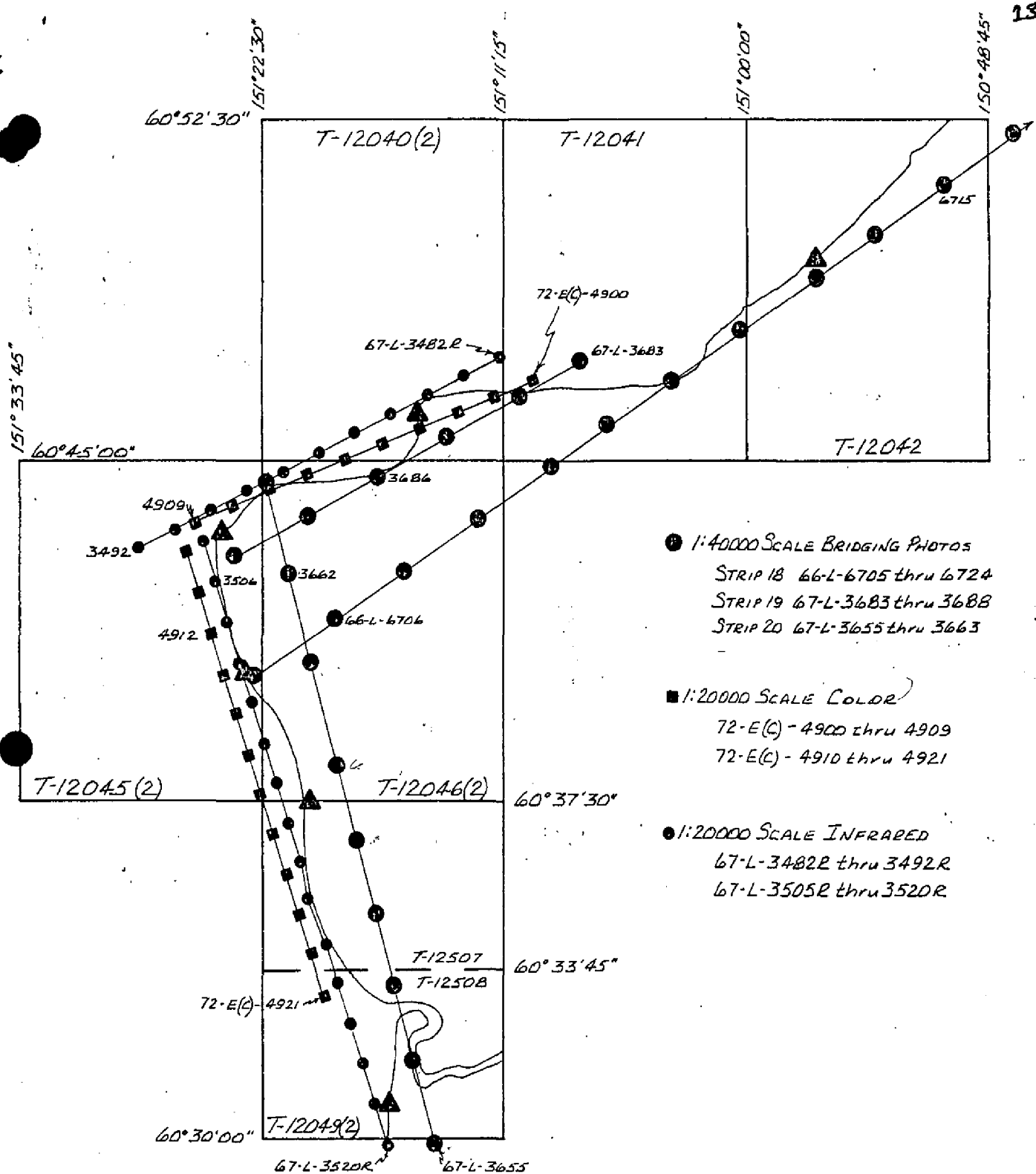
Approved by:

John D. Ferrow, Jr.

John D. Ferrow, Jr.
Chief, Aerotriangulation Section

Submitted by:

Michael L. McKinley
Michael L. McKinley



JOB PH-6013
 COOK INLET
 EAST FORELAND AREA
 ALASKA

COMPILATION REPORT

T-12046(2)

31. DELINEATION

Delineation was accomplished using the Wild B-8 stereoplotter, with 1:20,000 scale color photography.

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

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

36. OFFSHORE DETAILS

None.

37. LANDMARKS AND AIDS

No charted landmarks or aids were 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 ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with the following USGS Quadrangle: KENAI (C-4), ALASKA, 1952, scale 1:63,360.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with the following National Ocean Survey Chart: No. 8553, 13th Edition, February 26, 1972, scale 1:194,154.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Albert C. Rauck, Jr. FOR
Charles Parker
Cartographic Aid
December 31, 1974

Approved:

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

T-12046

MAP T-12046

NIKISHKA, AK

JULY-AUGUST, 1976

Field work on map T-12046 was completed by LTJG G.P. Kosinski and ENS N.G. Millett during July and August, 1976. The foreshore is composed of gravel with isolated rocks in the north, and sand, mud, gravel, and rocks in the south; it is relatively unfouled. Bluffs of charting value extend along the entire coastline as indicated on the ozalid. Inspections of the shoreline were made at various stages of the tide by skiff and on foot.

METHOD

Photographs and a copy of the field edit ozalid were examined in the field. The photos of regions south of $60^{\circ}40'N$ were less than useless in identifying offshore features, as they were all taken at high stages of the tide. Areas of the foreshore in that region that are characterized by rocks on the sand/mud flats are roughly 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 significance of the rocks and the pilings (meaning: their height), and their proximity to the MLLWL, they are not considered hazardous and are enclosed by the foul limit indicated on the ozalid.

Considerable dismantling work is presently being carried out on the outermost of the three rusty ship hulls at Nikishka No. 2 (north of $60^{\circ}44'N$, between $151^{\circ}18'W$ and $151^{\circ}19'W$). These three hulls form a landing, known locally as "Arneses Landing", and is shown on an inset of chart 16560. The name, "Arneses Landing", should replace "Nikishka No. 2" on that chart inset. As field edit operations were in progress, the outermost ship was refloated and moved. The position of its bow was scaled from the ozalid but never employed in any field edit fix computations. It is expected that the hull will no longer exist in a few months. Further information may be obtained from the Foss/Dillingham company, Nikishka, Alaska, who operates the landing facility of which the ship hull is a part.

Significant features not visible on the photographs were located by visual three-point sextant fixes utilizing signals located in 1975 by the NOAA Ship RAINIER (offshore oil platforms) or scaled from this map or the adjoining 1:20000 map, T-12040. A complete list of signals is appended to these reports. 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 and H-9621 for the hydrographic determination of the MLLWL; no changes were perceptible to the field editor and none are indicated on the ozalid.

A tower of landmark value was located by theodolite intersection and its position was computed using RK-300, Utility Package; see accompanying form 76-40.

ADEQUACY OF COMPILATION

Compilation of this map is good. The high tidal stage aerial photographs supplied to the field unit created difficulty in identifying features near the MLLWL. Refer to the introduction to these reports for details.

RECOMMENDATIONS

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

Respectfully submitted:

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

MAP T-12046
TABLE OF FIELD EDIT FIXES

<u>Fix Number</u>	<u>Object</u>	<u>Position</u>
214-01	Piling Awash at 0010Z day 214 ✓	60°44'46.125"N ✓ 151°17'23.758"W ✓
214-02	East end of bulkhead* ✓	60°44'14.122"N ✓ 151°20'46.856"W ✓
214-03	East end of bulkhead** ✓	60°44'12.819"N ✓ 151°21'02.560"W ✓
238-03A	Rock awash at 2059Z day 238 ✓	60°44'36.316"N ✓ 151°18'12.725"W ✓

* bulkhead (with sign) is 51.5 meters long, parallel to MHWL. See sketchbook, volume 1

** bulkhead is 45.3 meters long, parallel to MHWL. See sketchbook, vol. 1

REVIEW REPORT
T-12046(2)

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 SURVEYS

A comparison was made with the following Hydrographic Surveys:

H-9619, scale 1:20,000, dated April 11, 1978

H-9621, scale 1:20,000, dated June 1, 1978

H-9648, scale 1:20,000, dated November 15, 1978.

There were no major conflicts.

65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS charts:

16662, scale 1:100,000, 1st edition, April 9, 1893

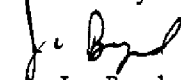
16660, scale 1:194,154, 22nd edition, May 8, 1982.

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

[illegible]

TYPE OF ACTION		RESPONSIBLE PERSONNEL	
		NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD		Gregory P. Kosinski, Lt. (jg), NOAA	<input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED		Gregory P. Kosinski, Lt. (jg), NOAA	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		David P. Butler, Cartographic Technician	<input type="checkbox"/> OFFICE ACTIVITY REPRESENTATIVE <input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'			
(Consult Photogrammetric Instructions No. 64.)			
OFFICE		FIELD (Cont'd)	
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		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	
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		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	
A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 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.			
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.			

