TP-00616

NOAA FORM 76-35
(6-80)

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

DESCRIPTIVE REPORT

Map No.	*Edition No.*
TP-00616	1

Job No.
CM-7414

Map Classification
FINAL

Type of Survey
SHORELINE

LOCALITY

State
ALASKA

General Locality
YAKUTAT BAY

Locality
SCHOONER BEACH TO POINT MANBY

19 77 TO 19 75

REGISTERED IN ARCHIVES

DATE

*U.S. GOVERNMENT PRINTING OFFICE 1980-665-115

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 TP. 00616

MAP EDITION NO. (1)

MAP CLASS Final

JOB PH. CM-7414

PHOTOGRAMMETRIC OFFICE: Rockville, Maryland

OFFICER-IN-CHARGE: J. Collins. 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	
Aerotriangulation	Nov. 19, 1975	Horizontal Control	May 23, 1974
Office	Nov. 3, 1976	Premarking Supplement I	April 29, 1975
		Premarking Supplement II	May 10, 1976

II. DATUMS

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

2. VERTICAL: [XX] MEAN HIGH-WATER [ ] MEAN LOW-WATER [ ] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify)

3. MAP PROJECTION: Oblique Mercator

4. GRID(S): STATE: Alaska; ZONE: 1

5. SCALE: 1:20,000 — STATE; ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic	BY	D. Norman	Oct 1976
	LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat	PLOTTED BY	S. Solbeck	Oct 1976
	CHECKED BY	J. Perrow	Oct 1976
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	J. Taylor	Feb 1977
	CHECKED BY	P. Dempsey	Feb 1977
INSTRUMENT: Wild B-8 Stereoscope	CONTOURS BY	N.A.	
SCALE: 1:20,000	CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	J. Schad	Feb 1977
	CHECKED BY	J. Battley, Jr.	Feb 1977
METHOD: B-8 Worksheet-graphic	CONTOURS BY	N.A.	
	CHECKED BY	N.A.	
SCALE: 1:20,000	HYDRO SUPPORT DATA BY	J. Schad	Feb 1977
	CHECKED BY	J. Battley, Jr.	Feb 1977
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	P. Dempsey	Feb 1977
6. APPLICATION OF FIELD EDIT DATA	BY	J. Minton	Sept 1977
	CHECKED BY	J. Massey	May 1978
7. COMPILATION SECTION REVIEW	BY	J. Massey	May 1978
8. FINAL REVIEW	BY	L. O. Neterer, Jr.	Aug 1986
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY	L. O. Neterer, Jr.	Sept. 1986
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	P. Dempsey	Nov. 1986
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	ELDAUGHERTY	DEC '86

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

TP-00616

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S)
RC-10C (focal length = 88.47 mm)

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

TIME REFERENCE
ZONE: Yukon
MERIDIAN: 135°W
[xx] STANDARD
[ ] DAYLIGHT

TIDE STAGE REFERENCE
[ ] PREDICTED TIDES
[xx] REFERENCE STATION RECORDS
[ ] TIDE CONTROLLED PHOTOGRAPHY

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
75 C(C) 7311 thru 7313	Aug.4, 1975	13:20	1:60,000	6.2 ft. above MLLW
* 75 C(C) 7347 thru 7350	Aug.4, 1975	13:46	1:60,000	5.05 ft. above MLLW

REMARKS

Ratio photographs 75-C(C) 73131-7313 were prepared for hydro support.

2. SOURCE OF MEAN HIGH-WATER LINE:

*The MHWL was compiled on the Wild B-8 stereoplotter using the above listed photography.

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

No MLLWL was compiled.

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
None	TP-00617	None	None

REMARKS

*U.S. GOVERNMENT PRINTING OFFICE:1977-765-092

NOAA FORM 76-36C
(3-72)

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

TP-00616

HISTORY OF FIELD OPERATIONS

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

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R. Melby	Jun 1975
2. HORIZONTAL CONTROL	RECOVERED BY	R. Melby	Jun 1975
	ESTABLISHED BY	R. Melby	Jun 1975
	PRE-MARKED OR IDENTIFIED BY	R. Melby	Jun 1975
3. VERTICAL CONTROL	RECOVERED BY	None	
	ESTABLISHED BY	None	
	PRE-MARKED OR IDENTIFIED BY	None	
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 [XX] NO INVESTIGATION — BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

Premarked

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
75C(C)7311	BEACH 7 ET (USGS), 1959		

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 [XX] NONE

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

7. SUPPLEMENTAL MAPS AND PLANS

None

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

One Form 152, Control Station Identification Card

☆ U.S. GPO: 1977-765-092/1105 Region 6

NOAA FORM 76-36C
(3-72)

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

TP-00616

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		C. Andreason, CDR, NOAA	Jun 1977
2. HORIZONTAL CONTROL	RECOVERED BY	C. Greenawalt	Jun 1977
	ESTABLISHED BY	C. Greenawalt	Jun 1977
	PRE-MARKED OR IDENTIFIED BY	None	
3. VERTICAL CONTROL	RECOVERED BY	None	
	ESTABLISHED BY	None	
	PRE-MARKED OR IDENTIFIED BY	None	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED *(Triangulation Stations)* BY	C. Greenawalt	Jun 1977
	LOCATED *(Field Methods)* BY	C. Greenawalt	Jun 1977
	IDENTIFIED BY	None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION	BY	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	C. Greenawalt	Jun 1977
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS *(Clarification of details)*

75 C(C) 7311 and 75 C(C) 7312

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

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)*

One Field Edit Ozalid, one Field Edit Report

☆ U.S. GPO: 1977-765-092/1105 Region 6

NOAA FORM 76-36D
(3-72)

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

TP-00616

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Shoreline and alongshore detail for hydro support	Feb 1977	Map Class III Horizontal Control adequate		March 1977
Comparison with Chart 16761	Mar 1977	Class III copy sent to Charts for complete revision of S.L. features	Mar 1977	
Field Edit applied Compilation complete.	May 1978	Class I Manuscript	Jun 27,1979	
Final Review	Aug 1986	Final Map	NOV. 1986	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		NOV. 1986 Jun 27, 1979	Form 76-40, Landmarks for Charts, for one LDMK.

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

III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☒ FORM NOS 76-40 SUBMITTED BY FIELD PARTIES.
3. ☒ SOURCE DATA *(except for Geographic Names Report)* AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:

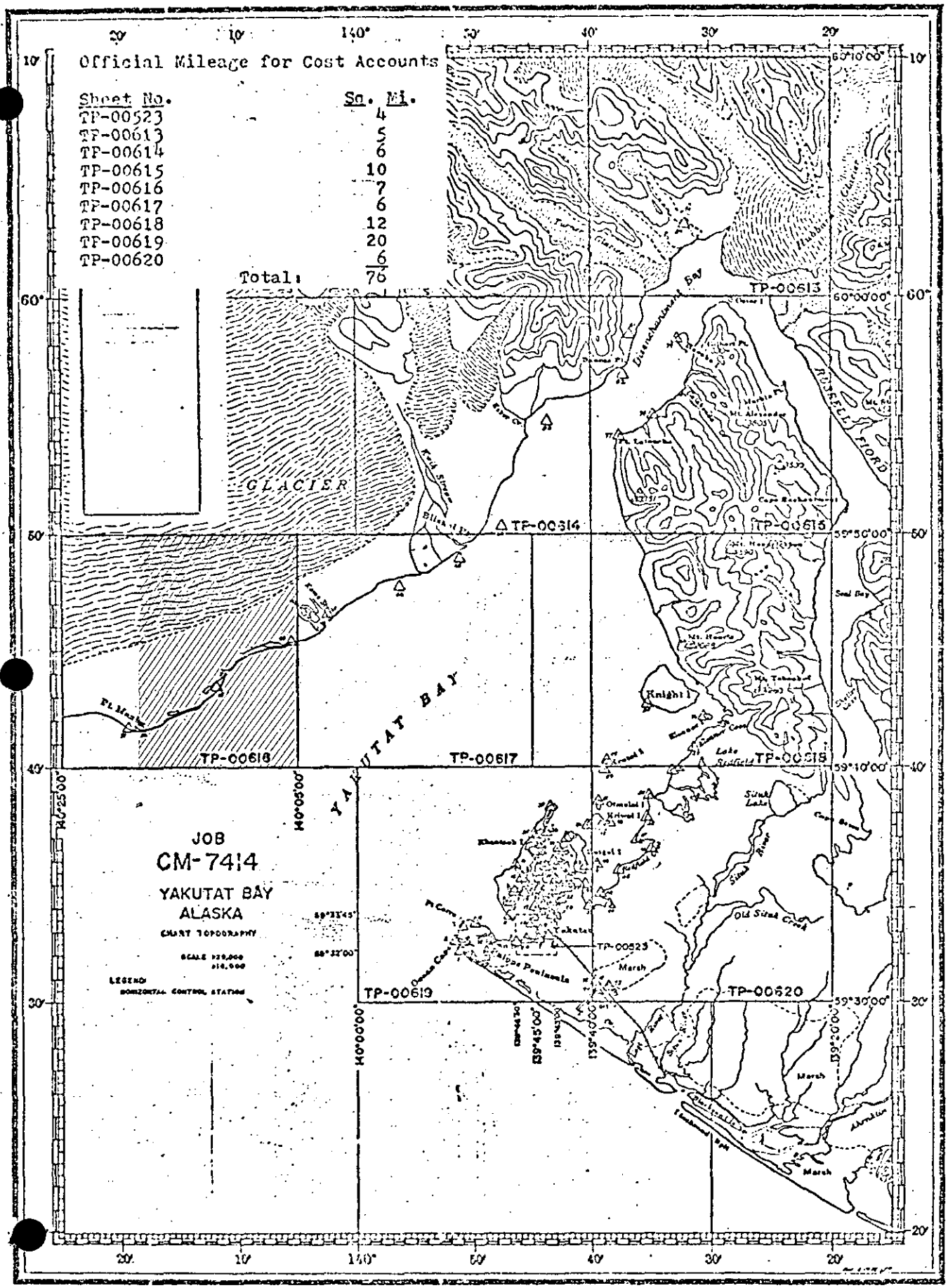
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

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

NOAA FORM 76-36D

☆ U.S. GPO: 1977-765-092/1106 Region 6


Official Mileage for Cost Accounts
Sheet No. Sq. Mi.
TP-00523 4
TP-00613 5
TP-00614 6
TP-00615 10
TP-00616 7
TP-00617 6
TP-00618 12
TP-00619 20
TP-00620 6
Total: 76
GLACIER
YAKUTAT BAY
RUSSELL FIORD
TP-00613
TP-00614
TP-00615
TP-00616
TP-00617
TP-00618
TP-00619
TP-00620
TP-00523
JOB
CM-7414
YAKUTAT BAY
ALASKA
SCALE 1:120,000
SCALE 1:120,000
Rev. 2-17-75

8402

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-00616

This 1:20,000 scale shoreline map is one of nine maps that comprise project CM-7414, Yakutat Bay, Alaska.

This project encompasses Yakutat Bay to Disenchantment Bay, latitude 59° 30' 00" north to latitude 60° 10' 00".

Field work prior to compilation, consisting of the identification of horizontal control by premarking methods to meet aerotriangulation requirements, was accomplished in June 1975.

Photographic coverage was provided in August 1975 using color film with the "C" camera (focal length = 88.47 millimeters) at 1:60,000 scale.

Analytic aerotriangulation was performed at the Washington Science Center in October 1976.

Compilation was performed at the Rockville, Maryland office in February 1977.

Field edit was accomplished during August 1978.

Application of Field Edit was completed in April 1979 at the Pacific Marine Center.

Final Review was performed at the Atlantic Marine Center in August 1986.

This Descriptive Report contains all pertinent information used to compile this final map.

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

FIELD INSPECTION

CM-7414

TP-00616

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
Yakutat Bay, Alaska
CM-7414

October 21, 1976

21. Area Covered

This report pertains to nine sheets in Yakutat Bay, Alaska. The sheets are TP-00613 thru TP-00620 of 1:20,000 scale and TP-00523 of 1:10,000 scale.

22. Method

Three strips were bridged by analytic aerotriangulation methods. The strips were adjusted to ground in the Alaska Zone 1 State Plane Coordinate System. Points were established for determining ratios of 1:60,000 scale offshore photography. Points were also established for setting models of 1:30,000 scale photography on sheet TP-00619. Ratios of 1:30,000 scale infrared, MHW photography were also determined for coverage of sheet TP-00619. Ratios have been ordered. All sheets were plotted on the Coradomat.

23. Adequacy of Control

A discrepancy exists between two horizontal control stations: CENTER RADIO TOWER, 1941 and YAKAIR, 1974. CENTER RADIO TOWER is a terminal station for strip 3 and YAKAIR is a terminal station for strip 2. In the vicinity of these stations the two strips overlap. Tie points indicate a difference of approximately 12 feet in X and 6 feet in Y.

YAKAIR is located at the Yakutat Airport. Three other points at the airport, with known positions were also measured. These points agree with CENTER RADIO TOWER, but not with Yakair. Stations at the airport were tied to datum in 1967 by triangulation and traverse from station CAVE, 1941. The azimuth station was BOLD, 1941 with CENTER RADIO TOWER used as a check. The check was 0.9 seconds.

The Geodesy Division checked the 1974 field data but could find nothing wrong. It was suggested that earthquake movement could be responsible for the discrepancy.

It was decided to complete the project even though the discrepancy has not been resolved. Strip 2 was adjusted on tie points from strip 3. YAKAIR was not used.

24. Supplemental Data

No supplemental data was used.

25. Photography

The photography was adequate.

Submitted by:

Don O. Norman

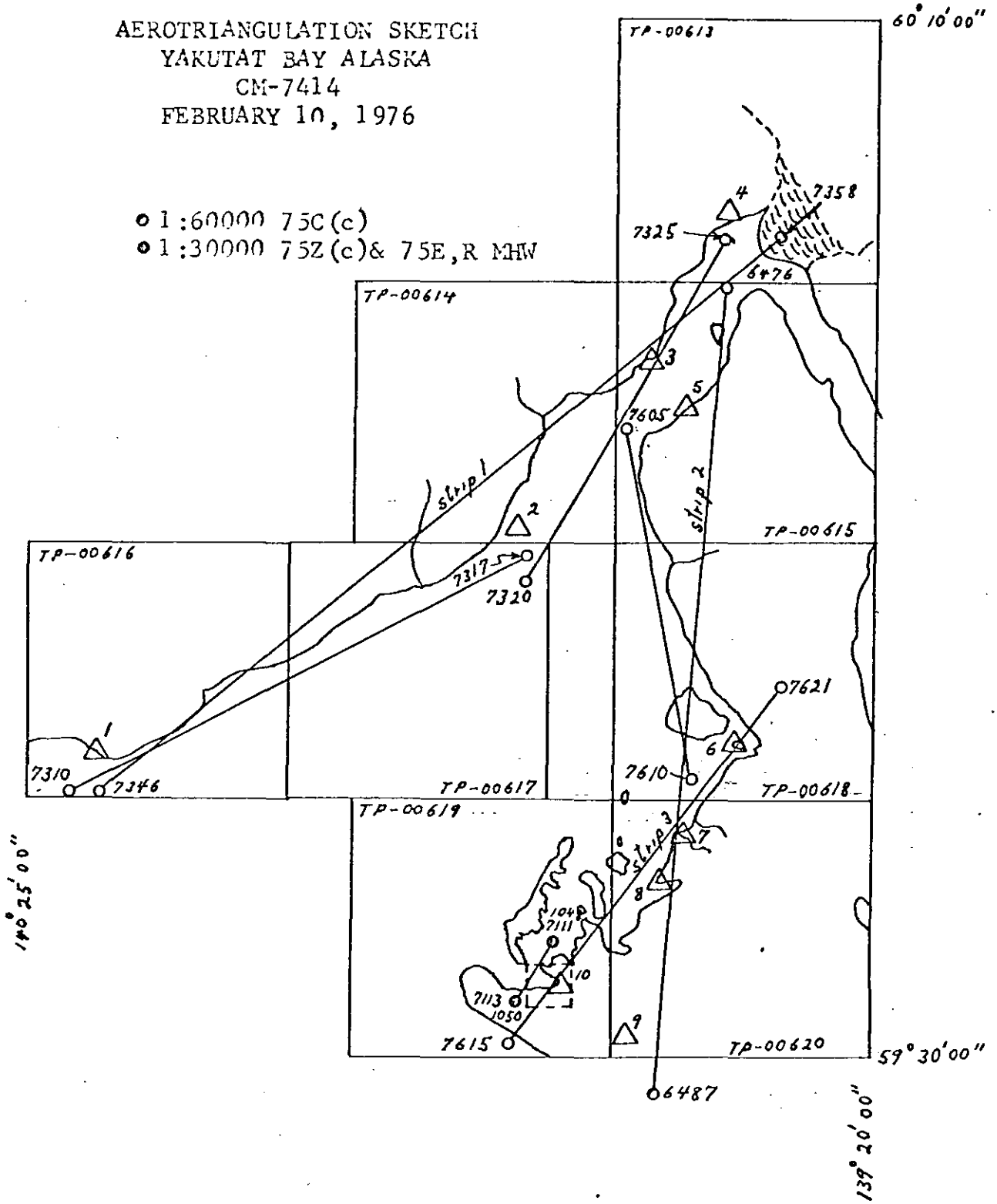
Approved by:

John D. Perrow Jr.

John D. Perrow, Jr.
Chief, Aerotriangulation Section

AEROTRIANGULATION SKETCH
YAKUTAT BAY ALASKA
CM-7414
FEBRUARY 10, 1976

- 1:60000 75C(c)
- 1:30000 75Z(c)& 75E,R MHW



	fit to control (feet)
strip 1	
1 BEACH 7ET (USGS), 1959	(0.3, 0.1)
2 BLIZ, 1974	(1.5, 1.3)
3 BANCAS, 1974	(5.3, 3.8)
5 DOLCE, 1974	(1.1, 2.3)
4 HUB, 1974	(0.2, 1.1)
strip 2	
357801	(0.7, 5.6)
357802	(2.8, 7.6)
5 DOLCE, 1974	(2.1, 4.6)
6 LEAN, 1974	(4.5, 2.1)
7 KRUTOI, 1941	(2.5, 2.9)
8 GRASS, 1941	(2.1, 0.6)
486801	(1.5, 1.8)
strip 3	
10 CENTER RADIO TOWER, 1941	(0.0, 0.0)
8 GRASS, 1941	(0.0, 0.0)
7 KRUTOI, 1941	(1.5, 1.0)
6 LEAN, 1974	(0.0, 0.0)

NOAA FORM 76-41
(6-75)

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

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO. TP-ØØ616 Yakutat Bay, Alaska	JOB NO. CM-7414	GEODETIC DATUM N/A 1927	ORIGINATING ACTIVITY Coastal Mapping

STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE Alaska ZONE 1	GEOGRAPHIC POSITION ϕ LATITUDE λ LONGITUDE	REMARKS
Beach 7 ET (USGS) 1959 (Panel)	59140 P 1	346100	x= 1,457,669.98 y= 2,932,821.56	ϕ 59°41'42.487" λ 14Ø°19'22.657"	1314.8m (542.Øm) 354.6m (584.4m)
Malaspina SW Base, 1892	59140 P1	69	x= 1,482,015.11 y= 2,941,086.21	ϕ 59°43'27.Ø98" λ 14Ø°11'46.277"	838.6m (1Ø18.2m) 723.3m (214.5m)
			x= y=	ϕ λ	
			x= y=	ϕ λ	
			x= y=	ϕ λ	
			x= y=	ϕ λ	
			x= y=	ϕ λ	
			x= y=	ϕ λ	
			x= y=	ϕ λ	
			x= y=	ϕ λ	

COMPUTED BY	DATE	COMPUTATION CHECKED BY	DATE
LISTED BY J. Minton	DATE 5/77	LISTING CHECKED BY J. Massey	DATE 6/77
HAND PLOTTING BY	DATE	HAND PLOTTING CHECKED BY	DATE

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

COMPILATION REPORT
CM-7414
TP-00616
February 1977

31. Delineation

The MHW line, foreshore features, and planimetry were compiled from 1:60,000 scale color photography. This compilation was done on the B-8 stereoplotter.

Photo-hydro support photographs (1:60,000 scale color, ratioed to 1:20,000 scale), were prepared in the usual manner.

Photos 75-C(C) 7346 and 75-C(C) 7347 could not be set in B-8 stereoplotter. This model consists of 85% water. Graphic methods were attempted but the photo control points produced a swinger. As a result, the area from long. 140°19'30" to the west limit was not compiled.

32. Horizontal Control

(See Photogrammetric Plot Report.)

33. Supplemental Data

None.

34. Contours and Drainage

Contours are not applicable. Drainage was delineated from 1:60,000 scale photos on the B-8 stereoplotter.

35. Shoreline and Alongshore Detail

See Item 31 - Delineation. The 1:60,000 scale color bridging photography, taken at approximately half tide, was used to compile shallow and wash areas bordering the MHWL.

36. Offshore Detail

No unusual problems were encountered.

37. Landmark and Aids

None.

38. Control for Future Surveys

None.

CM-7414
TP-00616

39. Junctions

Refer to the Compilation Sources form, NOAA Form 76-36B, item 5.

40. Horizontal and Vertical Accuracy

41. thru 45. Inapplicable

46. Comparison with Existing Maps

Comparison was made with USGS quadrangle:

Yakutat, Alaska - Canada, dated 1959 - 1:250,000 scale

47. Comparison with Existing Charts

Comparison was made with Chart:

16761, 11th Edition, dated August 28, 1976, 1:80,000

Items to be Applied to Nautical Charts Immediately - Entire shoreline compilation.

Items to be Carried Forward - None.

Submitted by:

For: James Schad
Cartographer

Approved and Forwarded:

For: J. P. Battley, Jr.
Chief, Coastal Mapping Section

15

OCT 2 198

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7414 (Yakutat Bay, Alaska)

TP-00616

Gulf of Alaska

Osar Stream

Point Manby

Schooner Bay

Yakutat Bay

Approved:

Charles E. Harrington

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

FIELD EDIT REPORT

TP-00616

OPR-525-DA-77

YAKUTAT BAY, ALASKA

NOAA SHIP DAVIDSON

1977

51 METHODS

Field edit on shoreline manuscript TP-00616 was accomplished in accordance with Project Instructions OPR-525-DA-77, Yakutat Bay, Alaska, dated 23 February 1977; Change No. 1, dated 25 March 1977; Change No. 2, dated 4 May 1977; Change No. 3, dated 13 June 1977; Change No. 4, dated 20 June 1977 and Change to Section 3.4, dated 15 April 1977.

OPORDER procedures for field edit with HYDROPLOT support in conjunction with hydrography were used.

The note on the Discrepancy Print to verify the shallow area along the shoreline was transferred to the Field Print. The Field Print and field photographs (B/W matte ratio photographs 75C7311, 75C7312 and 75C7313) were taken into the field to investigate and identify features. No notes were made on the field photographs. Original data was recorded on the Field Print at the time of investigation. All times are referenced to Greenwich Mean Time.

The field edit investigation was made on 14 September 1977 from a skiff run close inshore near the time of low water. This investigation was supplemented by the hydrographic investigation (90 meter line spacing) at the inshore ends of sounding lines. Rocks were photo identified on color ratio prints 75C7311 and 75C7312. The verified high water line (HWL) was determined based on the hydrography and estimated distances to the HWL resulting from the field investigation. The surf along Pt Manby to just north of the stream entrance on the east side of the point generally breaks 200 meters offshore. From this area to the bend near MALISPINA SOUTHWEST BASE 1892, the surf generally breaks 100 meters offshore and from there northward 50 meters offshore.

Weather on the day the skiff was used to field edit the shoreline was:

Wind	0-3 knots
Sky	cloudy
Water	
Visibility	10 feet except less in the plume of the stream at Pt. Manby

It should be noted that the shoreline determined photogrammetrically for this survey differs significantly from the shoreline as presently charted. (See Change No. 1 to the Project Instructions)

The significant feature of the shoreline from here northward is its migratory nature. The hydrography and field edit run during this season, 1977, generally verifies the compiled shoreline. It is, however, believed that this shoreline does vary. At the tide gage site, Pt. Manby 2, several feet of variation in the elevation of the beach occurred during the season. One particular storm lowered the beach elevation washing out a "dead man" anchoring the tide gage tubing, and destroying plate-level marks that were thought to have been set above the storm high waterline. To the northeast at Schooner Beach, the hydrography from this survey crosses the HWL in two places. It is probable that the shoreline, as originally compiled, was correct for the time of photography, 1975. The problem is considered to be solely attributable to the forces of nature.

A number of streams transport sediment to the western shore of Yakutat Bay from Malispina Glacier, a glacier approximately the size of the state of Rhode Island. Although these streams approach Yakutat Bay perpendicular to the beach, none of them enter directly into the bay. Each of them has developed a longshore bar that causes the stream to flow northeast before entering the bay, which is an indication of the longshore sediment transport.

Conversations with local fishermen, familiar with the western shore of the bay because of gillnetting for salmon inside the streams, indicate that there is considerable change in the shoreline and stream entrances from year to year, particularly after the winter storms. They indicate that changes in elevation of five to ten feet per year are common along the shore.

Thus, it is evident that the shoreline from Pt. Manby to Blizhni Pt. is ambulatory and will change from year to year. (See 54 RECOMMENDATIONS).

Field operations along this shoreline were made very difficult due to the continual heavy surf conditions. The offshore swells from the Gulf of Alaska, whether they are from the southeast or southwest, refract into the wide mouth of Yakutat Bay, and make beach landings from Pt. Manby to Blizhni Pt. very difficult. Pt. Manby is especially difficult because of its exposed location. As noted in the Field Tide Note, OPR-525-DA-77, conditions dictated that the personnel make beach landings by wearing survival suits while paddling ashore through the surf in a rubber raft. It took two months to find a day sufficiently calm to retrieve the tide gage from tide station Pt. Manby 1, the station site selected upon DAVIDSON's arrival at Yakutat. In general, the beach is quite steep with a strong undertow as the water from each swell recedes. As the landing boat is swept out from the beach, it encounters strong littoral currents and is swept parallel to the beach away from the

landing site. These littoral currents cause large amounts of longshore sediment transport. The transportation of typical surveying instruments under these conditions was impossible.

Tide gages for OPR-525-DA-77 were installed at Pt. Manby, Blizhni Pt. Point Latouche, Redfield Cove and Johnstone Passage. Usable staff comparisons were never obtained at Pt. Manby or Blizhni Pt. because of the surf conditions. The Blizhni Pt site was abandoned and the Point Latouche site established because of destruction from icebergs at the Blizhni Pt. site.

Horizontal control was also a problem since only three stations (BLIZ 1974, MALISPINA SW BASE 1892, BEACH 7 1959) were recovered along the shoreline from Blizhni Pt. to Pt. Manby. Eventually a traverse was run from BLIZ 1974 south to MALISPINA SW BASE 1892 for the purpose of obtaining a RAYDIST site on the western shore of the bay. Control is insufficient for taking sextant fixes along the beach. BEACH 7 1959 does not "see" MALISPINA SW BASE 1892.

Standard ink colors were used to process the field edit data.

Color Photographs:

Red - Additions

Field Edit Sheet:

Red - Additions
Green - Deletions
Violet - Verifications

Final Field Sheet:

Red - Revision of compiled items
Black - Verification of compiled items

52 ADEQUACY OF COMPILATION

This map compilation is adequate and complete for charting with this field edit applied. See 54 RECOMMENDATIONS.

54 RECOMMENDATIONS

Because of the ambulatory nature of the shoreline between Pt.Manby and Blizhni Pt., the shoreline should be considered "approximate". A cautionary note should be added to the chart to warn mariners of the potential hazards along the beach. The note should state

that the western shore of Yakutat Bay from Pt. Manby to Blizhni Pt. is subjected to heavy surf conditions and longshore currents which make beach landings hazardous, and cause migration of the shoreline and nearshore sand bars. Boat landings at stream entrances should only be made with local knowledge and near times of high tide.

In the event that a more exact HWL is required than that estimated from this field edit and hydrographic survey, a shore party should be sent instead of a hydrographic vessel from being effective. A shore based party with horizontal control capabilities, helicopter support and a rubber boat and motor (for use in the rivers) would be much more effective.

56 MISCELLANEOUS

The three masted schooner, fast in the sand on Schooner beach, should be added to the chart as it is a good landmark from seaward. It is located at Latitude 59°45'07.610"N, Longitude 140°06'18.528"W. This geodetic position is for station TAT 1941 which lies 4 feet east of the center mast.

Respectfully submitted,

Steven S. Snyder
LTJG, NOAA

Approved and forwarded by,

for Christian Andreasen, CDR, NOAA
Commanding Officer

REVIEW REPORT
SHORELINE

TP-00616

61 - GENERAL STATEMENT

See Summary included with this report.

The mean high water line is required to be labeled "subject to frequent change" because it is made up of sedimentary glacial deposits that are affected both by littorial currents and winter storms which change the shoreline from year to year.

62 - COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Not applicable.

63 - COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with U.S.G.S. quadrangle:
Yakutat, Alaska-Canada, scale 1:25,000, dated 1959.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with the advance copy of H-9687, 1:20,000, dated September 15, 1979.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with N.O.S. Charts:
Chart 16760, 7th edition, 1:300,000 scale, dated March 16, 1985
Chart 16761, 13th edition, 1:80,000 scale, dated August 18, 1984.

66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

TP-00616

Submitted by

Lowell O. Neterer, Jr.
Final Reviewer
August 7, 1986

Approved for forwarding

Billy H. Barnes
Chief, Photogrammetric Section

Approved

Chief, Photogrammetric Section
Rockville

Ronald K. Brewer
Chief, Photogrammetry Branch
Rockville

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

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

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- [X] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [ ] 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)	STATE	LOCALITY	DATE
NOAA Ship DAVIDSON	Alaska	Yakutat Bay	9/14/77

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

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
OPR-525-DA-77		TP-00616	NORTH AMERICAN 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
CENTER MAST OF THREE MASTS	Schooner fast in sand. Only the three masts now uncovered. G.P. is TAT 1941, which is 4 feet east of the center mast.	59 45	07.610	140 06	18.528	V-1-Vis	V-1-Vis.	16761

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	**NAME**	**ORIGINATOR**
OBJECTS INSPECTED FROM SEAWARD	CDR Christian Andreasen, NOAA Commanding Officer NOAA Ship DAVIDSON S331	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED		FIELD ACTIVITY REPRESENTATIVE
		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

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

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.

CHART	DATE	CARTOGRAPHER	REMARKS
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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