

TP-00367

TP-00367

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey *Shoreline*.....
Job No. *PH-7110*..... Map No. *TP-00367*.....
Classification No. Edition No. *1*.....

Final Field Edited Map

LOCALITY

State *Washington*.....
General Locality *Hood Canal*.....
Locality *Anderson Cove*.....

1971 TO 1972

REGISTRY IN ARCHIVES

DATE

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY		SURVEY TP-00367	
DESCRIPTIVE REPORT - DATA RECORD				<input checked="" type="checkbox"/> ORIGINAL		MAP EDITION NO. ()	
				<input type="checkbox"/> RESURVEY		MAP CLASS Final	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division Norfolk, Va.				<input type="checkbox"/> REVISED		JOB PH- 7110	
				OFFICER-IN-CHARGE Jeffrey G. Carlen, CDR			
				TYPE OF SURVEY		JOB PH- _____	
				<input type="checkbox"/> ORIGINAL		MAP CLASS _____	
				<input type="checkbox"/> RESURVEY		SURVEY DATES:	
				<input type="checkbox"/> REVISED		19__ TO 19__	
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
Aerotriangulation July 15, 1971 Compilation December 13, 1971				Field April 30, 1971			
II. DATUMS							
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION Polyconic				4. GRID(S)			
				STATE Washington		ZONE South	
5. SCALE 1:10,000				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY D. Norman						Nov 1971	
METHOD: Analytical LANDMARKS AND AIDS BY							
2. CONTROL AND BRIDGE POINTS PLOTTED BY D. Phillips						Dec 1971	
METHOD: Coradomat CHECKED BY D. Phillips						Dec 1971	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY A. L. Shands						Jan 1972	
COMPILATION CHECKED BY R. White						Jan 1972	
INSTRUMENT: Wild B-8				CONTOURS BY NA			
SCALE: 1:15,000				CHECKED BY NA			
4. MANUSCRIPT DELINEATION PLANIMETRY BY R. J. Pate						Jan 1971	
METHOD: Smooth drafted CHECKED BY B. Wilson						Jan 1972	
SCALE: 1:10,000				CONTOURS BY NA			
HYDRO SUPPORT DATA BY R. J. Pate						Jan 1971	
CHECKED BY B. Wilson						Jan 1972	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY B. Wilson						Jan 1972	
6. APPLICATION OF FIELD EDIT DATA BY R. R. White						May 1974	
CHECKED BY A. L. Shands						May 1974	
7. COMPILATION SECTION REVIEW BY A. L. Shands						May 1974	
8. FINAL REVIEW BY C. Blood						Aug 1988	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY J. Byrd						Sep 1988	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY P. Dempsey						Jan 1989	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY J. P. K. K.						MAR 1989	

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COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E" FL = 152.71mm		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR X (P) PANCHROMATIC (I) INFRARED	ZONE		<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY			Pacific		
			MERIDIAN		
			120th		
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
71 E(C) 4251-4254	5/2/71	13:09	1:20,000	4.8 ft. above MLLW	
*71 E(C) 4038-4041	5/2/71	10:35	1:30,000	7.7 ft. above MLLW	

REMARKS
*Compilation photographs

2. SOURCE OF MEAN HIGH-WATER LINE:
The mean high-water line was delineated from the listed compilation photographs.

3. SOURCE OF MEAN LOW-WATER LINE:
None 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
TP-00365	No Survey	No Survey	TP-00366

REMARKS

TP-00367

HISTORY OF FIELD OPERATIONS

I. FIELD INSPECTION OPERATION FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. B. Melby	Apr 1971
2. HORIZONTAL CONTROL	RECOVERED BY	None
	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 (<i>Triangulation Stations</i>) BY	None
	LOCATED (<i>Field Methods</i>) BY	None
	IDENTIFIED BY	None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE BY <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
None		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*)
None

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HISTORY OF FIELD OPERATIONS

I. FIELD INSPECTION OPERATION FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	G. Poor	Apr/May '72
2. HORIZONTAL CONTROL	RECOVERED BY	None
	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 (<i>Triangulation Stations</i>) BY	None
	LOCATED (<i>Field Methods</i>) BY	None
	IDENTIFIED BY	None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE BY <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
None		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*)
Field Edit Ozalid, Hydro Signals, Overlay SP-4002,
Field Edit Report

I. MANUSCRIPT COPIES			DATE MANUSCRIPT FORWARDED	
COMPILATION STAGES			MARINE CHARTS	HYDRO SUPPORT
DATA COMPILED	DATE	REMARKS		
Compilation complete pending field edit	Jan 1972	Class III Map	2/25/72	2/23/72
Field edit applied	May 1974	Class I Map	8/24/83	
Final Review	Aug 1988	Final		

II. LANDMARKS AND AIDS TO NAVIGATION None

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

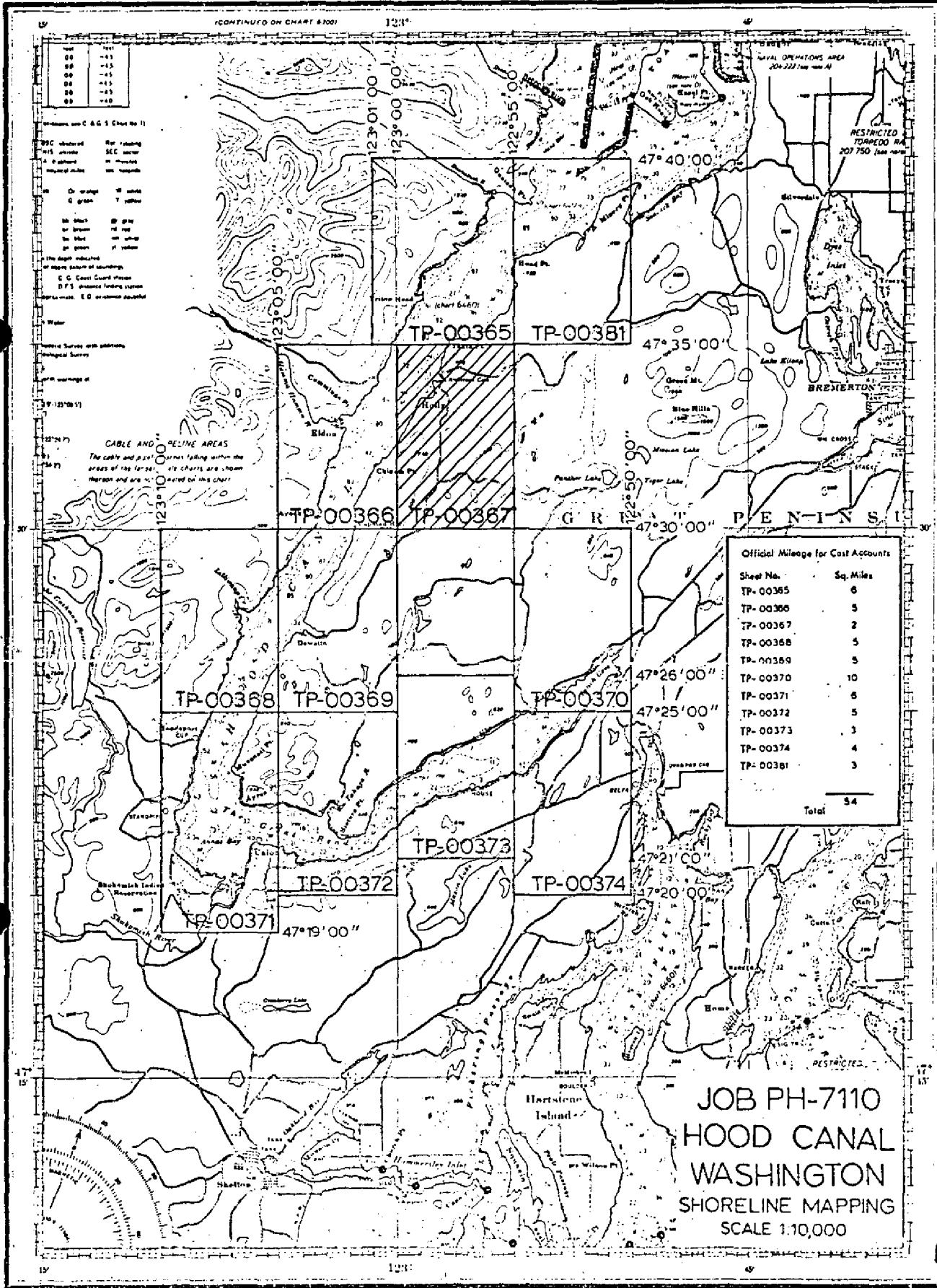
2. REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____
 3. REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. BRIDGING PHOTOGRAPHS; DUPLICATE BRIDGING REPORT; COMPUTER READOUTS.
 2. CONTROL STATION IDENTIFICATION CARDS; FORM NOS ⁷⁶⁻⁴⁰ ~~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



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-00367

This 1:10,000 scale Final shoreline map is one of eleven 1:10,000 scale maps designated as project PH-7110, Hood Canal, Washington.

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 April 1971, consisted of recovery and premarking of horizontal control for aerotriangulation.

This map area was photographed in May 1971 with the RC-8 "E" camera at 1:20,000 and 1:30,000 scale using natural color film.

Aerotriangulation was completed at the Washington office in November 1971.

This map was compiled at the Norfolk office in January 1972.

Field edit was acquired for TP-00367 during the 1972 field season. Field edit was applied at AMC in May 1974.

Final review was accomplished at the Atlantic Marine Center in August 1988. A Chart Maintenance Print was prepared and forwarded to the Marine Charts Branch.

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

TP-00367

Field inspection was limited to the recovery and identification of horizontal control for aerotriangulation.

PHOTOGRAMMETRIC PLOT REPORT
Hood Canal, Washington
Job PH-7110
November 1971

21. Area Covered

This report pertains to Hood Canal in the state of Washington. The sheets covered are TP-00381 and TP-00365 thru TP-00374.

22. Method

Two strips (71-E-4018 thru 4028 and 71-E-4029 thru 4044) of 1:30,000 scale color and one strip (71-E-4197 thru 4204) of 1:20,000 scale color photography were bridged by analytic aerotriangulation methods. Positions were determined for points for computing ratios. The data for ruling projections, grids and plotting points for compilation were furnished to the Coradomat to be plotted on the Washington, South Zone, State Plane Coordinate System.

23. Adequacy of Control

The control was adequate.

24. Supplemental Data

USGS topographic quadrangles were used to obtain vertical control for the strips.

25. Photography

The photography was adequate.

Submitted by:

Don O. Norman

Don O. Norman

Approved and Forwarded:

Henry P. Eichert
Henry P. Eichert, Chief
Aerotriangulation Section

FIT TO CONTROL

- ▲ held in adjustment
 - tie point held in adjustment
 - tie point used as check
- (x, y) in feet

STRIP 1

- ▲ 1 LYNCH 1934, subpoint (-0.0, +0.1)
- ▲ 2 GREEN POINT 2 1934, subpoint (+0.1, -0.2)
- ▲ 3 SMOKE 1934, subpoint (-0.0, +0.2)
- ▲ 4 INDIAN 1934 (-0.0, -0.1)
- 30801 (-1.5, +1.0)
- 30802 (-2.6, -0.6)

STRIP 2

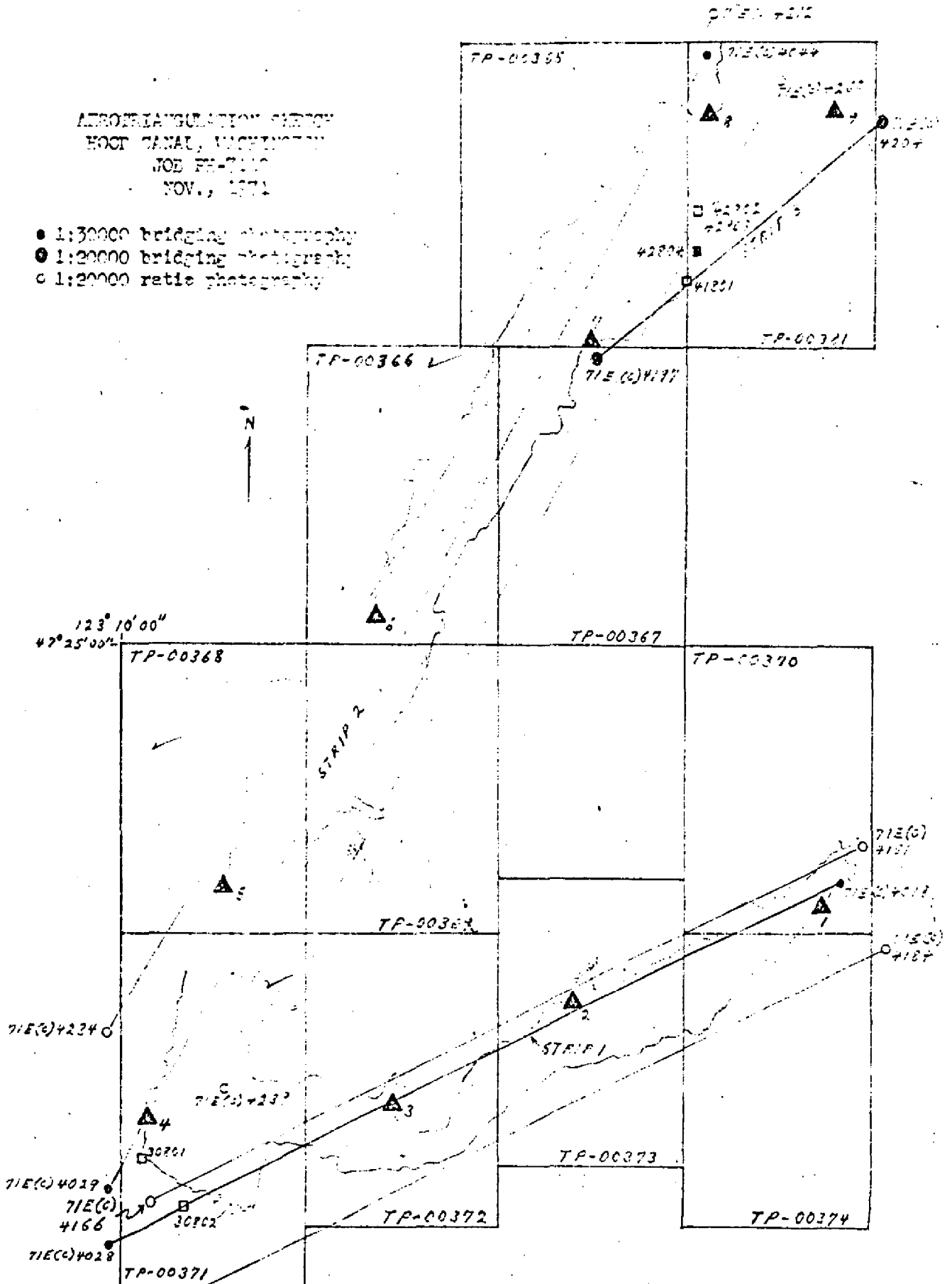
- ▲ 4 INDIAN 1934 (+0.5, -0.2)
- ▲ 5 MILLER 2, 1934, subpoint (-0.9, +0.5)
- ▲ 6 AYOCKS POINT 4, 1959, subpoint (+0.1, +0.0)
- ▲ 7 TEKIU 3, 1971, subpoint (+0.7, -0.8)
- ▲ 8 QUATSAP 2, 1934, subpoint (-0.4, +0.4)

STRIP 3

- ▲ 7 TEKIU 3, 1971, subpoint (0.0, 0.0)
- 42804 (0.0, 0.0)
- ▲ 9 BOULDER 1878, subpoint (0.0, 0.0)
- 41801 (+0.6, +0.6)
- 42802 (+3.0, -1.0)
- 42803 (+1.6, +1.5)

AEROBRIANGULATION STRIP
HOOT CANAL, WASHINGTON
JOB #B-2110
NOV., 1971

- 1:30000 bridging photography
- ⊙ 1:20000 bridging photography
- 1:20000 ratio photography



DESCRIPTIVE REPORT CONTROL RECORD

MAP NO. TP-00367	JOB NO. PH-7110	SOURCE OF INFORMATION (Index)	AEROTRIANGULATION POINT NUMBER	GEODETIC DATUM		COORDINATES IN FEET STATE <u>Washington</u> ZONE <u>South</u>	ORIGINATING ACTIVITY		REMARKS
				NA 1927	Coastal Mapping		Division, Norfolk, Va.	Division, Norfolk, Va.	
STATION NAME							ϕ LATITUDE	λ LONGITUDE	
KLONE 2, 1934		VOL. I Pg. 1632	37				ϕ 47 33	26.307	
MILROY 2, 1934		VOL. I Pg. 1684	34				λ 122 59	02.510	
							ϕ 47 32	41.290	
							λ 122 59	37.443	
							ϕ		
							λ		
							ϕ		
							λ		
							ϕ		
							λ		
							ϕ		
							λ		
							ϕ		
							λ		
							ϕ		
							λ		
							ϕ		
							λ		
COMPUTED BY	A. C. Rauck, Jr.		DATE	12/8/71			COMPUTATION CHECKED BY		G. Blood (comp ✓)
LISTED BY			DATE				LISTING CHECKED BY		
HAND PLOTTING BY			DATE				HAND PLOTTING CHECKED BY		

COMPILATION REPORT

TP-00367

31. DELINEATION:

Delineation was by the Wild B-8 stereoplotter, using 1:30,000 scale, color photographs. The stage of tide was above mean lower low-water at the time of photography, therefore, detail which covers by tidal water is only partially compiled.

The quality of the photography is adequate for shoreline compilation.

32. CONTROL:

Refer to the Photogrammetric Plot Report, dated November 1971.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage was delineated from the compiler's interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

The mean high-water line and alongshore details were delineated from the compiler's interpretation of the photographs.

36. OFFSHORE DETAILS:

Offshore details was delineated from the compiler's interpretation of the photographs. Details which were covered by water at the time of photography, were not compiled.

37. LANDMARKS AND AIDS:

There were no charted nonfloating aids or landmarks and none were noted during stereoscopic instrument compilation.

38. CONTROL FOR FUTURE SURVEY:

None.

TP-00367

39. JUNCTIONS:

A satisfactory junction was made with all adjoining contemporary maps. Refer to the Data Record Form 76-36B, item 5.

40. HORIZONTAL AND VERTICAL ACCURACY:

No Statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with U.S. Geological Survey quadrangle Holly, Washington, scale 1:24,000, dated 1953, photorevised 1968.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with U.S. Coast and Geodetic Survey Chart 6460, scale 1:80,000, 11th edition, dated July 25, 1970.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Charles Blood
for

R. J. Pate
Cartographic Technician
January 19, 1972

Approved and forwarded:

J. Rauck, Jr.

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

APR 1 12 1981

GEOGRAPHIC NAMES

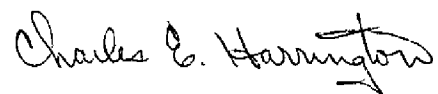
FINAL NAME SHEET

PH-7110 (Hood Canal, Washington)

TP-00367

Anderson Cove
Anderson Creek
Holly
Hood Canal

Approved:



Charles E. Harrington
Chief Geographer
Nautical Charting Division

FIELD EDIT REPORT

Hood Canal, Washington

April-May 1972

Map Manuscripts: TP-00381,TP-00365,
TP-00366,TP-00367,TP-00368,TP-00369,
TP-00371

Project OPR-412-MA-72

Field Edit Report

Hood Canal, Washington

Manuscripts: TP-00381,TP-00365,TP-00366
TP-00367,TP-00368,TP-00369,TP-00371

This report covers the area of Hood Canal bounded on the north by latitude 47° 40' 00" and on the south by latitude 47° 19' 00".

The entire shoreline was inspected by vehicle or small boat. The shoreline and alongshore features were compared with the field edit copies of the manuscript and the field edit color photographs. The field edit copies (discrepancy prints) of the map manuscripts were used as the index for field corrections. Three-point sextant fixes taken to delineate the mean high water line or the positions of other alongshore features are recorded on the appropriate Field Edit Ozalid. Positions of features determined by their relationship to photogrammetrically identified objects are referenced on the appropriate Field Edit Ozalid and recorded on the photograph indicated on the Field Edit Ozalid.

Adequacy of the Compilation

The accuracy of the maps appear adequate for navigation, however the current charts are lacking detail. All discrepancies were investigated and resolved.

New construction is prevalent in the area. All new piers and bulkheads were located by three-point sextant fixes. All pilings, dolphins, and ruins, which did not appear on the discrepancy sheets were also located by three-point fixes.

The mean high water line was established throughout the surveyed area either by three-point fixes or by measuring to the mean high water line from a known point of reference. Shore line areas where streams and rivers enter Hood Canal were extensively delineated. Changes to the shore line were dashed in with purple ink. Marsh areas are designated as such. Rocks and shoals were investigated. In the majority of cases, elevations of rocks and shoals were related to the elevation of the feature above the water at the time it was visited by direct measurement. In those instances where this was not possible, the height of the feature above mean high water (as estimated from vegetation on the face of the feature for example) was measured.

Purple ink was used to indicate corrections on the discrepancy sheets. Red-orange ink was used for the annotations of the field edit photographs. Green ink was used on the discrepancy prints to indicate deletions.

Where small coves made it impossible to carry on field edit work using established signals for sextant cuts, signals were photo located. Triton Cove, DeWatto Bay and Pleasant Harbor were field edited using photo located signals.

There were no fixed aids to navigation in the area surveyed. All features of landmark value were investigated and designated as such on the discrepancy sheets. All significant landmarks have been listed on form 567.

A list of geographic positions used in field edit work is included in this report.

SUBMITTED BY:

Steven R. Birkey

Steven R. Birkey
LTJG, NOAA

APPROVED AND FORWARDED:

George M. Poor

George M. Poor
CDR, NOAA
Commanding

REVIEW REPORT
SHORELINE

TP-00367

61. GENERAL STATEMENT:

See the 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-9319, 1:10,000 scale, dated 1972

H-9320, 1:20,000 scale, dated 1972.

There were no conflicts.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with NOS chart 18476, 1:40,000 scale, dated September 15, 1984. The chart compared well with this manuscript.

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.
James L. Byrd, Jr.
Final Reviewer

Approved for forwarding:

Billy H. Barnes
Billy H. Barnes
Chief, Quality Assurance Group, AMC

Approved:

A. G. Bayson
Chief, Photogrammetric Productions Sec. Chief, Photogrammetry Branch

