

TP-00728
ORIGINAL

TP-00728

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-7311	Map No. TP-00728...
Classification No. Final	Edition No. 1
Field Edited Map	
LOCALITY	
State Washington	
General Locality Tacoma Harbor	
Locality Point Defiance	
.....	
<hr/> 1973 TO 1974 <hr/>	
REGISTRY IN ARCHIVES	
DATE	

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

RCS 18413 - 9-30-B1 RL

RCS 18445-B SC 9-30-81 RL

RCS 18448 9-30-81-RL

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY

- ☒ ORIGINAL
☐ RESURVEY
☐ REVISED

SURVEY TP. 00728

MAP EDITION NO. (1) 2:

MAP CLASS Final

JOB ~~PER~~ CM-7311

PHOTOGRAMMETRIC OFFICE

Coastal Mapping Division
Atlantic Marine Center, Norfolk, VA

OFFICER-IN-CHARGE

Jeffrey G. Carlen, Cdr., NOAA

LAST PRECEDING MAP EDITION

TYPE OF SURVEY

- ☐ ORIGINAL
☐ RESURVEY
☐ REVISED

JOB PH. _____

MAP CLASS _____

SURVEY DATES:

19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE

Aerotriangulation Aug 30, 1973
Compilation Jan 22, 1974

2. FIELD

May 17, 1973

II. DATUMS

1. HORIZONTAL:

☒ 1927 NORTH AMERICAN

OTHER (Specify)

2. VERTICAL:

- ☒ MEAN HIGH-WATER
☐ MEAN LOW-WATER
☒ MEAN LOWER LOW-WATER
☐ MEAN SEA LEVEL

OTHER (Specify)

3. MAP PROJECTION

Polyconic

4. GRID(S)

STATE

Washington

ZONE

South

5. SCALE

1:5,000

STATE

ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic	BY LANDMARKS AND AIDS BY	I. O. Raborn	1/74
2. CONTROL AND BRIDGE POINTS METHOD: Calcomp	PLOTTED BY CHECKED BY	R. Robertson	1/74
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY CHECKED BY	R. R. White	2/74
INSTRUMENT: Wild B-8	CONTOURS BY	L. O. Neterer	2/74
SCALE: 1:7,500	CHECKED BY	NA	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY CHECKED BY	F. R. Gustafson	3/74
METHOD: Smooth Draft	CONTOURS BY CHECKED BY	R. R. White	3/74
SCALE: 1:5,000	HYDRO SUPPORT DATA BY CHECKED BY	F. R. Gustafson	3/74
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	R. R. White	3/74
6. APPLICATION OF FIELD EDIT DATA	BY CHECKED BY	J. R. Minton	3/75
7. COMPILATION SECTION REVIEW	BY	A. L. Shands	5/75
8. FINAL REVIEW	BY	A. L. Shands	5/75
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY	A. L. Shands	Jan 1978
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	J. B. Phillips	Mar 1978
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	R.T. Cator	MAY 1978

TP-00728
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		<input type="checkbox"/> (C) COLOR <input type="checkbox"/> (P) PANCHROMATIC <input type="checkbox"/> (I) INFRARED		ZONE Pacific	<input checked="" type="checkbox"/> STANDARD
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				MERIDIAN 120th	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
73E(C) 9122 and 9123	6/22/73	10:33	1:15,000	7.1 ft. above MLLW	
73E(C) 9097 and 9098	6/22/73	09:55	1:15,000	7.7 ft. above MLLW	

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

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

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER 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
No Survey	TP-00730	No Survey	No Survey

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00728
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. B. Melby	6/73
2. HORIZONTAL CONTROL RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	R. B. Melby	6/73
	None	
	R. B. Melby	6/73
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	NA	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
73E(C)9122	ENTRANCE 2, 1958		

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)

1 Form 152
 1 Form 943A
 1 Form 29A
 2 Form 26's
 1 Form 6135 (Tellurometer Observations)

TP-00728
HISTORY OF FIELD OPERATIONSI. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	M. Fleming	3/74 - 4/74
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 (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)

1 Field Edit Ozalid
Field Edit Report

TP-00728
HISTORY OF FIELD OPERATIONSI. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	M. Fleming	12/74-1/75
2. HORIZONTAL CONTROL	RECOVERED BY D. Eilers	12/74
	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 D. Eilers	12/74
	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)

1 Form 76-40

Original Field Edit Ozalid with Field Edit Report Addendum

TP-00728
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.	3/74	Class III Manuscript Superseded	3/74	3/74
Field edit applied. Compilation complete.	3/75	Class I Manuscript	5/31/74	
Final Review	Jan. 1978	Final	Feb. 1978	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		6/16/77	Aid

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: June 16, 19773. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

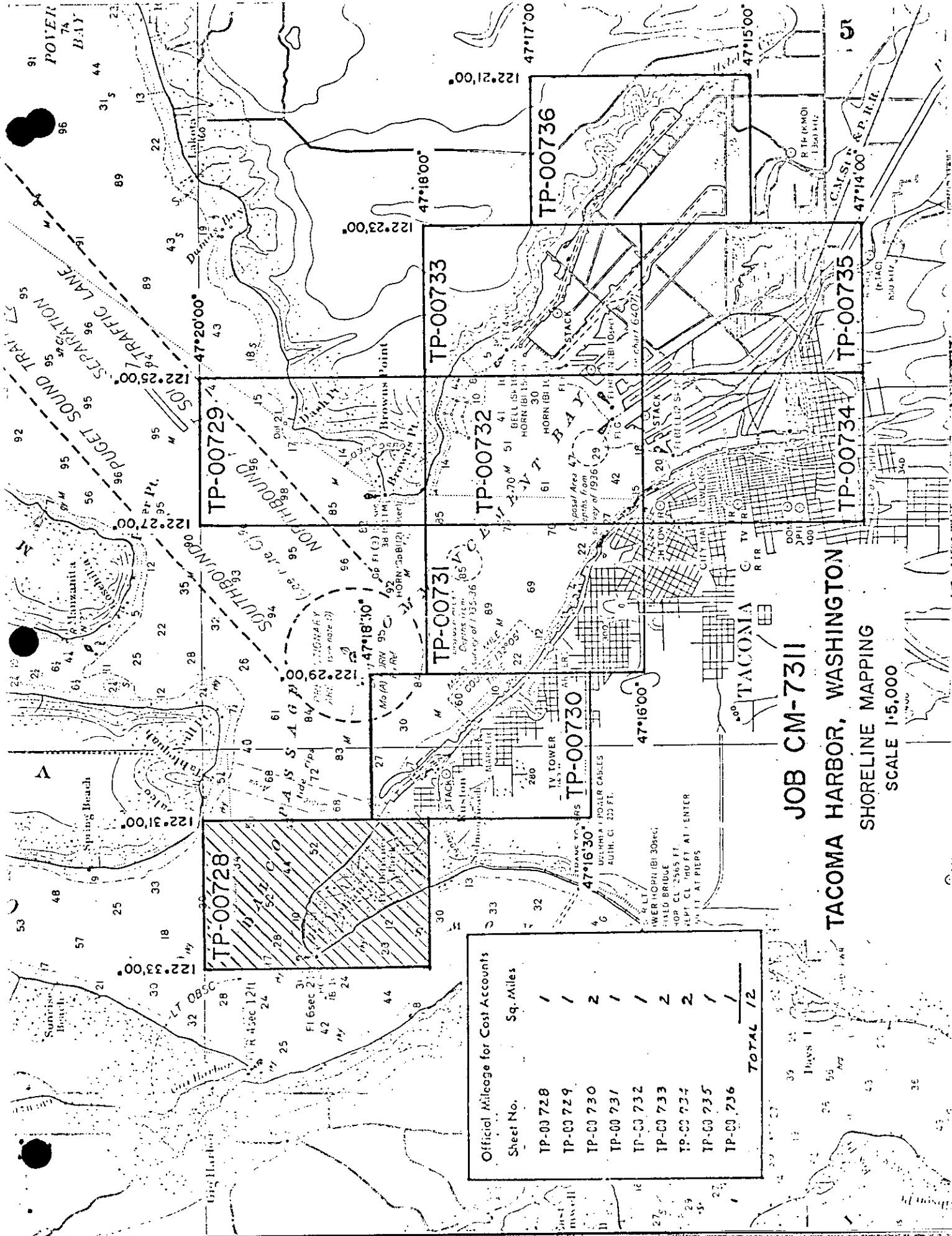
III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☒ FORM NOS ⁷⁶⁻⁴⁰ ~~562~~ 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	



JOB CM-7311
TACOMA HARBOR, WASHINGTON
SHORELINE MAPPING
SCALE 1:5,000

Official Mileage for Cost Accounts		
Sheet No.	Sq. Miles	
TP-00728	1	
TP-00729	1	
TP-00730	2	
TP-00731	1	
TP-00732	1	
TP-00733	2	
TP-00734	2	
TP-00735	1	
TP-00736	1	
TOTAL		12

Days 1
 39
 55
 43
 36

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORTS TP-00728 thru TP-00736

The maps covered in this summary comprise all of Project CM-7311. They are all standard shoreline maps covering Commencement Bay and including the Hylebos, Blair, Sitcum, Milwaukee, Puyallup, St. Paul, Middle and City Waterways. The purpose of the project is to provide up-to-date shoreline and alongshore delineation in support of contemporary hydrographic surveys and for nautical chart construction. All maps are 1: 5,000 scale.

Photography of the area was flown at 1:15,000 scale in June, 1973. Both onshore and offshore flights were flown. Ratios of the offshore flights were processed by the compilation office for photo-hydro support.

Field work prior to compilation was limited to the recovery and identification of horizontal control used in bridging. There was no clarification of details.

Bridging was done at the Washington Science Center in January, 1974, using the onshore flights. Analytic triangulation methods were used. Points common to the offshore flights were established to determine ratio scales.

The maps were compiled at the Atlantic Marine Center during February and March, 1974, by Wild B-8 instrument method.

Many buildings currently charted are not shown on the maps. In most cases, buildings are shown on the chart as they appear on the photographs. However, in a few instances buildings shown on the chart are not visible on the photographs. Where this is so, that fact is stated in the review report of the affected map.

Field edit was partially done in April, 1974 and completed in December, 1974. It was applied to the maps at the Atlantic Marine Center in May, 1975.

Final review was performed at the Atlantic Marine Center in January, 1978. The original base maps and all pertinent data was forwarded to the Washington Science Center for final registration.

FIELD INSPECTION

TP-00728

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

Tacoma Harbor

Washington

Job CM-7311

January 1974

21. Area Covered

The area covered by this report pertains to the shoreline of Commencement Bay, Tacoma, Washington. This area is covered by nine 1:5,000 scale sheets, TP-00728 thru TP-00736.

22. Method

Three strips of 1:15,000 scale color photography were bridged by analytic aerotriangulation methods. Strip No. 1 was measured on the David W. Mann Company mono comparator Model 422 and strips 2 and 3 were measured on the Wild stereo comparator. Sketch number 1 shows the flight lines of the photography and the placement of the control used in the adjustment. The three strips were controlled by field identified control paneled in 1973. Old control, which was office identified, was floated for checks. Ties were made between all bridging strips. Common points were located between the bridging photography and the offshore flights to determine the ratio scale. One cronapaque and one matte each were ordered of the offshore flights. Sketch number 2 shows the flight lines of the offshore photography. Data for ruling projections were furnished to the Coradomat to be plotted on the Washington South Plane Coordinate System.

23. Adequacy of Control

The control was adequate.

24. Supplemental Data

USGS quadrangles were used to provide vertical control for the adjustment.

25. Photography

The photography was adequate.

Respectfully submitted,

Ivey O. Raborn
Ivey O. Raborn

Approved and Forwarded:

John D. Perrow, Jr.
John D. Perrow, Jr.

Chief, Aerotriangulation Section

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	CM-7311	GEODETTIC DATUM		NA	1927	ORIGINATING ACTIVITY		REMARKS
			TP-00728	Division, AMC, Norfolk, Virginia					
STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET		GEOGRAPHIC POSITION		FORWARD	BACK	
			STATE	ZONE	ϕ LATITUDE	λ LONGITUDE			
BOR, 1924	G.P. Vol 1 P. 71		X=		ϕ	47 18 57.757	1783.7	(69.2)	
			Y=		λ	122 32 47.097	989.1	(271.0)	
POINT DEFIANCE LIGHT, 1973	Field Comp. Field Edit Form 76-40		X=		ϕ	47 19 01.04	32.1	(1810.8)	
			Y=		λ	122 32 48.71	1023.0	(237.1)	
			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				
			X=		ϕ				
			Y=		λ				
			X=		ϕ				
			Y=		λ				
			X=		ϕ				
			Y=		λ				
COMPUTED BY	A. C. Rauck, Jr.	DATE	COMPUTATION CHECKED BY		F. R. Gustafson		DATE		
LISTED BY		1/30/74	LISTING CHECKED BY				2/01/74		
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY				DATE		

COMPILATION REPORT

TP-00728

31. DELINEATION:

Delineation was by the Wild B-8 stereoplotter, using 1:15,000 scale color photography. The photograph coverage was adequate.

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 and the mean high water line were delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

36. OFFSHORE DETAILS:

There were no offshore details compiled.

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 Quadrangle: GIG HARBOR, WASHINGTON, scale 1:24,000, dated 1959, photorevised 1968.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with the following USC&GS Chart: No. 6407, scale 1:15,000, 12th edition, January 27, 1973.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Albert C. Rauck, Jr. FOR
F. R. Gustafson
Cartographic Aid
March 1, 1974

Approved for forwarding:

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

NOAA FORM 75-74 (7-75)		U.S. DEPARTMENT OF COMMERCE NOAA NATIONAL OCEAN SURVEY	
PHOTOGRAMMETRIC OFFICE REVIEW			
TP - 00728			
1. PROJECTION AND GRIDS RRW	2. TITLE RRW	3. MANUSCRIPT NUMBERS RRW	4. MANUSCRIPT SIZE RRW
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RRW	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NA		7. PHOTO HYDRO STATIONS NA
8. BENCH MARKS RRW	9. PLOTTING OF SEXTANT FIXES ALS	10. PHOTOGRAMMETRIC PLOT REPORT RRW	11. DETAIL POINTS RRW
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE RRW	13. LOW-WATER LINE RRW	14. ROCKS, SHOALS, ETC. RRW	15. BRIDGES RRW
16. AIDS TO NAVIGATION RRW	17. LANDMARKS ALS	18. OTHER ALONGSHORE PHYSICAL FEATURES RRW	19. OTHER ALONGSHORE CULTURAL FEATURES RRW
PHYSICAL FEATURES			
20. WATER FEATURES RRW	21. NATURAL GROUND COVER NA		22. PLANETABLE CONTOURS NA
23. STEREOSCOPIC INSTRUMENT CONTOURS NA	24. CONTOURS IN GENERAL NA	25. SPOT ELEVATIONS NA	26. OTHER PHYSICAL FEATURES RRW
CULTURAL FEATURES			
27. ROADS RRW	28. BUILDINGS RRW	29. RAILROADS RRW	30. OTHER CULTURAL FEATURES RRW
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES RRW	34. JUNCTIONS RRW		35. LEGIBILITY OF THE MANUSCRIPT RRW
36. DISCREPANCY OVERLAY RRW	37. DESCRIPTIVE REPORT RRW	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS RRW
40. REVIEWER <i>Richard R. White</i> Richard R. White 2/74		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> 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 <i>J. R. Minton</i> J. R. Minton 3/17/75		SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.	
Reviewer A. L. Shands 5/75			
43. REMARKS <i>A. L. Shands</i> See Forms 76-36C, Items 8			

January 11, 1978

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7311 (Tacoma Harbor, Washington)

TP-00728

Dalco Passage

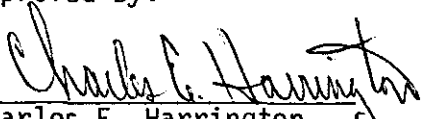
Point Defiance

Salmon Beach (locality)

Tacoma

The Narrows

Approved by:


Charles E. Harrington
Staff Geographer - C51x2

FIELD EDIT REPORT

COMMENCEMENT BAY

TACOMA, WASHINGTON

OPR-412

MARCH - APRIL 1974

INTRODUCTION

Field edit reports are attached for the following maps: TP-00728, TP-00729, TP-00730, TP-00731, TP-00732, TP-00733, TP-00734, TP-00735, and TP-00736. Copies of the Field Edit Ozalids and extra ozalids were compared in the field with actual shore features. The field edit was done before signals were built in many areas, so positions of many items were estimated relative to nearby features. In many instances these positions fell on one or more natural ranges. Some sextant fixes were possible and were recorded for future reference. Height data for all features were noted as referenced to MLLW or MHW or simply by time and date. Unless followed by a "Z" for GMT, all times are in Zone +7 (105° meridian).

All notes have been made in violet ink on the Field Edit Ozalids with the exception of TP-00733 for which another sheet was used and labeled "Smooth Ozalid." All deletions are noted or underlined with green ink.

During our work in the survey area, a great deal of new construction was observed. Shoreline construction sites were noted - as fully as possible - on the ozalids. It is suggested that any questions about new piers, etc. under construction be directed to the Property Manager, Port of Tacoma (address below).

Hugh Wild
Property Manager
Port of Tacoma
P.O. Box 1837
Tacoma, WA 98401

Compilation of the maps agreed well with actual shore features; any discrepancies are noted on the ozalids. Field edit of these manuscripts is not complete, especially for the inland. It is felt that all shore features of importance to the mariner have been adequately covered and noted.

Submitted by,

R. W. Mercer

R.W. Mercer
ENS, NOAA

Approved by,

Michael H. Fleming

M.H. Fleming
CDR, NOAA
Commanding Officer
NOAA SHIP DAVIDSON

FIELD EDIT REPORT

MAP TP-00728

TACOMA, WASHINGTON

MARCH - APRIL 1974

Field edit map TP-00728 was done by Ens. R.W. Mercer, Ens. Joseph J. Kapler and Ens. John L. Oswald during March and April of 1974. Inspection was done from skiffs and on foot where necessary.

METHOD

A copy of the field edit Ozalid was examined in the field and mapped features verified or unmapped items noted appropriately. Mean high waterline verification was done by visual comparison of the Ozalid and the shoreline in the field. Verification by sextant fixes was not possible due to lack of control during the field edit. Height data of rocks is noted directly on the Ozalid; all times noted are GMT +7 zone time.

ADEQUACY OF COMPILATION

Compilation of this map is good. Hydrographic location of details compares well with photogrammetric location.

RECOMMENDATIONS

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

Respectfully submitted,

Roger W. Mercer
Roger W Mercer
ENS, NOAA

ADDENDA FIELD EDIT REPORT

Commencement Bay, Washington
Dec 1974 - Jan 1975
OPR-412
Project CM-7311

This report is a follow-up and completion of the original field edit accomplished in this area in March and April of 1974. Certain deficiencies were noted in the original field edit; and this report is being submitted to correct, clarify, or alleviate any errors or misconceptions that may have been conveyed in the original report.

Although this report was not intended to be a complete re-field edit of the area, certain items from the previous report were checked to verify positions and resolve suspect features. It is suspected the original field editors did not use the photographs to their full advantage as the majority of items in question could be located by photogrammetric methods.

The majority of the landmarks were verified by computing the inverse for intersection stations and occupying marked triangulation stations and observing theodolite cuts.

The field edit copies of the manuscripts were used for the field corrections (in blue and dated) and the photographs were cross-referenced to the field edit copies.

Adequacy: The extent and accuracy of this field edit with amended items of the original field edit and completed forms 76-40 now appears complete.

Pertinent information for each individual discrepancy sheet is listed under that specific sheet.

TP-00728

Re-field edited 12/11/74. Agreed with the original field edit except the bluff in question is considered of landmark value. It is of significant height, and distinct boundaries are clear as plotted.

For verification of Pt. Defiance Light see attached NOAA Form 76-40.

TP-00729

Re-field edited 12/11/74. Original field edit complete. Brown Point Lighthouse recovered. See attached form 76-40.

TP-00730

Re-field edited on 12/12/74, 12/13/74, and 1/10/75. All landmarks were recovered. Lighted aids to navigation were located by photogrammetric methods on photograph 73E9100. The triangulation station TARGET, 1952, in question was reported destroyed in 1965 by H.J.S. (page 41 of book 392) and no attempt was made to recover it.

The position of the Commencement Bay Measured Nautical Mile northwest range front marker was determined by an angle distance from reference mark of the triangulation station TARGET. The position of the northwest range rear marker was determined by an angle and distance from the reference mark of triangulation station BLUFF, 1935. Both positions are less than third order. See the enclosed computations and form 76-40.

TP-00731

Re-field edited on 12/12/74. The positions of the Commencement Bay Measured Nautical Mile southeast markers, both front and rear, were determined by an angle and distance from RUSTON, RM NO2. Both positions are less than third order. See the enclosed computations and form 76-40.

TP-00732

Re-field edited on 12/10/74. Nonfloating aids to navigation were triangulation stations that were recovered. The new stack considered of landmark value was located photogrammetrically.

The Grain Export Facility under construction in April, 1974, is nearing completion. The pier faces are complete with work on the tower continuing. Port authorities expect to have the facility in operation in June, 1975. The plans for this facility were obtained and are enclosed.

TP-00733

This sheet was re-field edited on 12/10/74, 1/6/75, and 1/10/75. Two charted tanks are gone and should be deleted from the charts. See enclosed form 76-40.

Three landmarks (triangulation stations) were recovered and recovery notes submitted. The twin chimneys were located photogrammetrically on photograph 73E9091. The charted stack mentioned in the April, 1974, field edit as being of no landmark value is considered of landmark value in this report. Although poorly visible from Commencement Bay, it is quite distinguishable in the Hylebos Waterway. See photograph 73E9091.

Two large dome-shaped storage elevators depicted on the charts, but not compiled on the ozalid, should be left on the charts, as they are salient features and visible from offshore in Commencement Bay. See photograph

73E9113. Two navigation lights were recovered, and the fog signals were located photogrammetrically on photograph 73E9114.

TP-00734

The three items not previously investigated were field edited 12/12/74 and noted on the ozalid. One nonfloating aid to navigation was recovered. One tank, as noted on form 76-40, should be deleted from the chart, as it no longer exists.

Fourteen landmarks were located. Twelve were triangulation and were recovered. Two were located photogrammetrically on photograph 73E9104.

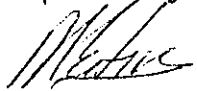
TP-00736

ramp A.L.S.

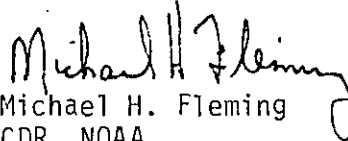
Re-field edited 12/12/74. The new boat^A was located on photograph 73E9090 by planetable methods. It is a private boat ramp and not maintained by the port authorities. The two stacks considered of landmark value by this field edit were located photogrammetrically on photograph 73E9089 and 73E9088.

There is new construction of a barge-loading facility in the Blair Waterway turning basin. The plans for this facility were obtained from the Port authorities and are enclosed.

Respectfully submitted,


D.S. Eilers
LTJG, NOAA

Approved by,


Michael H. Fleming
CDR, NOAA
Commanding Officer

[illegible]

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	D. S. Eilers, Lt. (jg), NOAA
POSITIONS DETERMINED AND/OR VERIFIED	D. S. Eilers, Lt. (jg), NOAA
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	J. R. Minton, Cartographic Technician
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 (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
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	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.
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

REVIEW REPORT

TP-00728

SHORELINE

January 5, 1978

61. GENERAL STATEMENT:

See Summary, page 6 of this descriptive report.

A net marking a swimming area was delineated on the map at lat. $47^{\circ} 18.8'$, long. $66^{\circ} 31.6'$ during final review. This net had previously been shown on the Class III map but was deleted following field edit application. The field editor stated that it was in use only during the summer months.

A road adjacent to the north shoreline was removed from the map when an examination of the photographs did not reveal any evidence of its existence.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Not applicable.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

No comparison was made. Hydrographic Survey H-9410 which covers the area was not available during final review.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 18453, 1:15,000 scale, 14th edition dated May 29, 1976. There are no significant differences.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Submitted by,

A. L. Shands

A. L. Shands
Final Reviewer

Approved for forwarding:

Albert C. Rauch Jr. FOR

Jeffrey G. Carlen, CDR
Chief, Coastal Mapping Division, AMC

Approved:

John D. Perrean Jr.

Chief, Photogrammetric Branch

James C. Allen

Chief, Coastal Mapping Division

