

T- 13150

T-13150

Form 584	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline
Field No. PH-6712	Office No. T-13150
FINAL	Field Edited map Edition 1*
LOCALITY	
State	Washington
General locality	Elliott Bay
Locality	Alki Point
1966 - 1970	
CHIEF OF PARTY	
V. Ralph Sobieralski	
Div. of Photogrammetry, Wash., D.C.	
LIBRARY & ARCHIVES	
DATE	

USCOMM-DC 5087

* Refer to Memo, page 12.

DESCRIPTIVE REPORT - DATA RECORD

T - 13150

PROJECT NO. (II): PH-6712, Elliott Bay, Washington		
FIELD OFFICE (III): Rockville, Maryland		CHIEF OF PARTY V. Ralph Sobieralski
PHOTOGRAMMETRIC OFFICE (III): Rockville, Maryland		OFFICER-IN-CHARGE V. Ralph Sobieralski
INSTRUCTIONS DATED (II) (III): <i>No written instructions.</i>		
METHOD OF COMPILATION (III): <i>Graphic</i>		
MANUSCRIPT SCALE (III): 1:5,000	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): ---	
DATE RECEIVED IN WASHINGTON OFFICE (IV):	DATE REPORTED TO NAUTICAL CHART BRANCH (IV):	
APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV): <i>SEPT 1976</i>
GEOGRAPHIC DATUM (III): N. A. 1927		VERTICAL DATUM (III): MEAN SEA LEVEL EXCEPT AS FOLLOWS: <i>Elevations shown as (25) refer to mean high water</i> <i>Elevations shown as (5) refer to sounding datum</i> <i>i.e., mean low water or mean lower low water</i>
REFERENCE STATION (III): Duwamish 2 (Alki NE Base 2) 1924		
LAT.: 47° 35' 41.892"	LONG.: 122° 23' 13.392"	☒ ADJUSTED ☐ UNADJUSTED
PLANE COORDINATES (IV): y = 220,896.20 x = 1,616,649.92		STATE Washington
		ZONE North
ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE. WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.		

DESCRIPTIVE REPORT - DATA RECORD

T-13150

FIELD INSPECTION BY (II):		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): <i>Photography taken:</i> July 26, 1966 } Office Interpretation of photography CoE Sept. 11, 1970 }		
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. E. Roundtree		March 15, 1967
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
R. Glaser		March 20, 1967
CONTROL PLOTTED BY (III):		DATE
J. C. Richter		April 1967
CONTROL CHECKED BY (III):		DATE
H. Lucas		April 1967
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): See Photogrammetric Plot Report for T-12519 (Chart 6442) December 1963, J. C. Gerlach		DATE
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	CONTOURS	DATE
Inapplicable		
MANUSCRIPT DELINEATED BY (III):		DATE
J. C. Richter		May 1967
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE

REMARKS:

Field edit by Allan F. Davis in Sept. & Oct. 1970

DESCRIPTIVE REPORT - DATA RECORD

T-13150

CAMERA (KIND OR SOURCE) (III):

"S" 6" focal length

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
66-S-3162A-3165A	7/26/66	12:21	1:15,000	8.6 above MLW
66-S-3194A	7/26/66	12:36	1:15,000	8.8 above MLW
S 7026-48-9 thru S 7026-48-11 (CoFE.)	9-19-70	(unknown)	1:12,000	(unknown)

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Seattle, Washington		7.6	Diurnal 11.3
SUBORDINATE STATION:			
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

J. B. Phillips

DATE:

July 1976

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (III):

RECOVERED:

IDENTIFIED:

NUMBER OF BM(S) SEARCHED FOR (III):

RECOVERED:

IDENTIFIED:

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

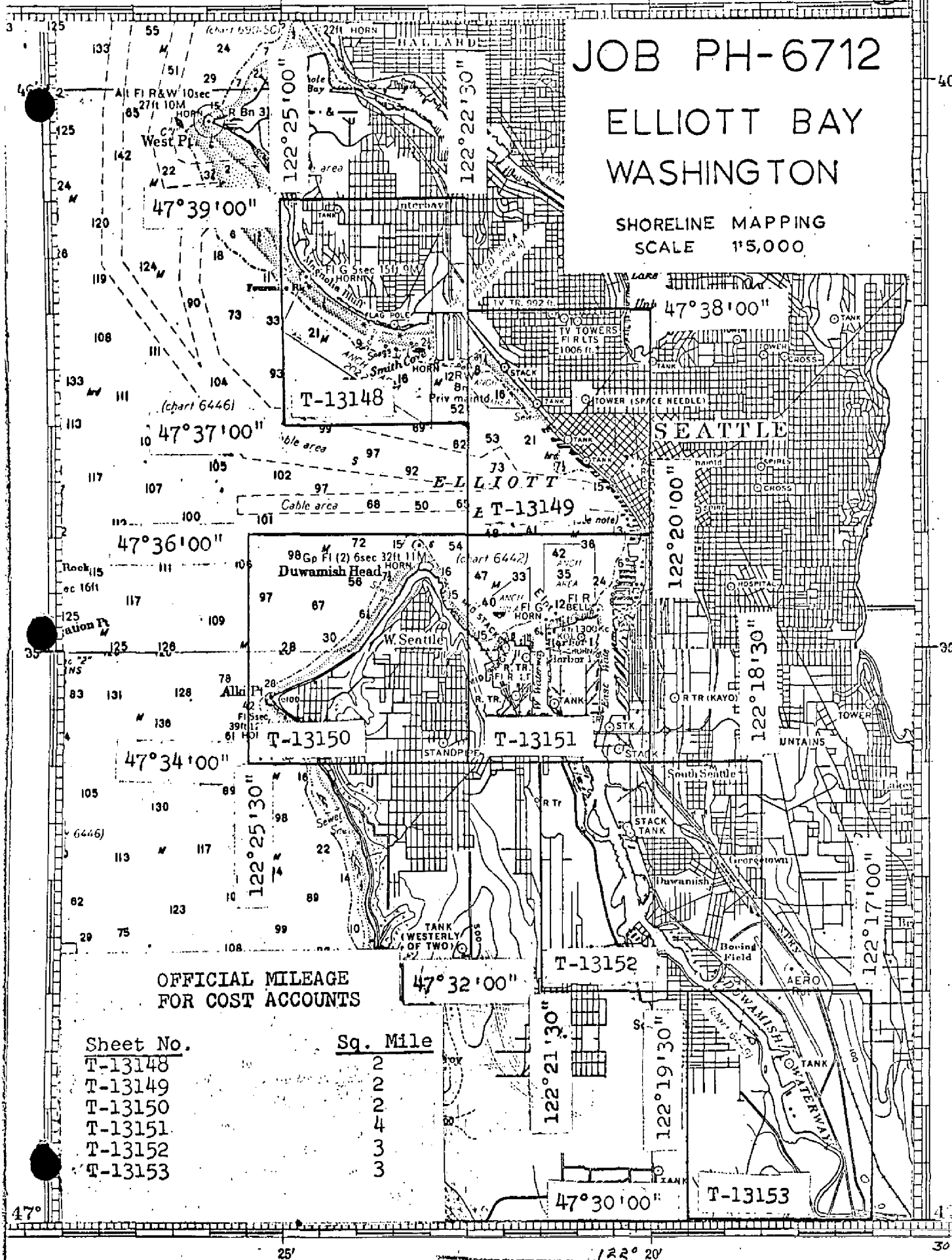
REMARKS:

JOB PH-6712

ELLIOTT BAY

WASHINGTON

SHORELINE MAPPING
SCALE 1"=5,000



OFFICIAL MILEAGE
FOR COST ACCOUNTS

Sheet No.

Sq. Mile

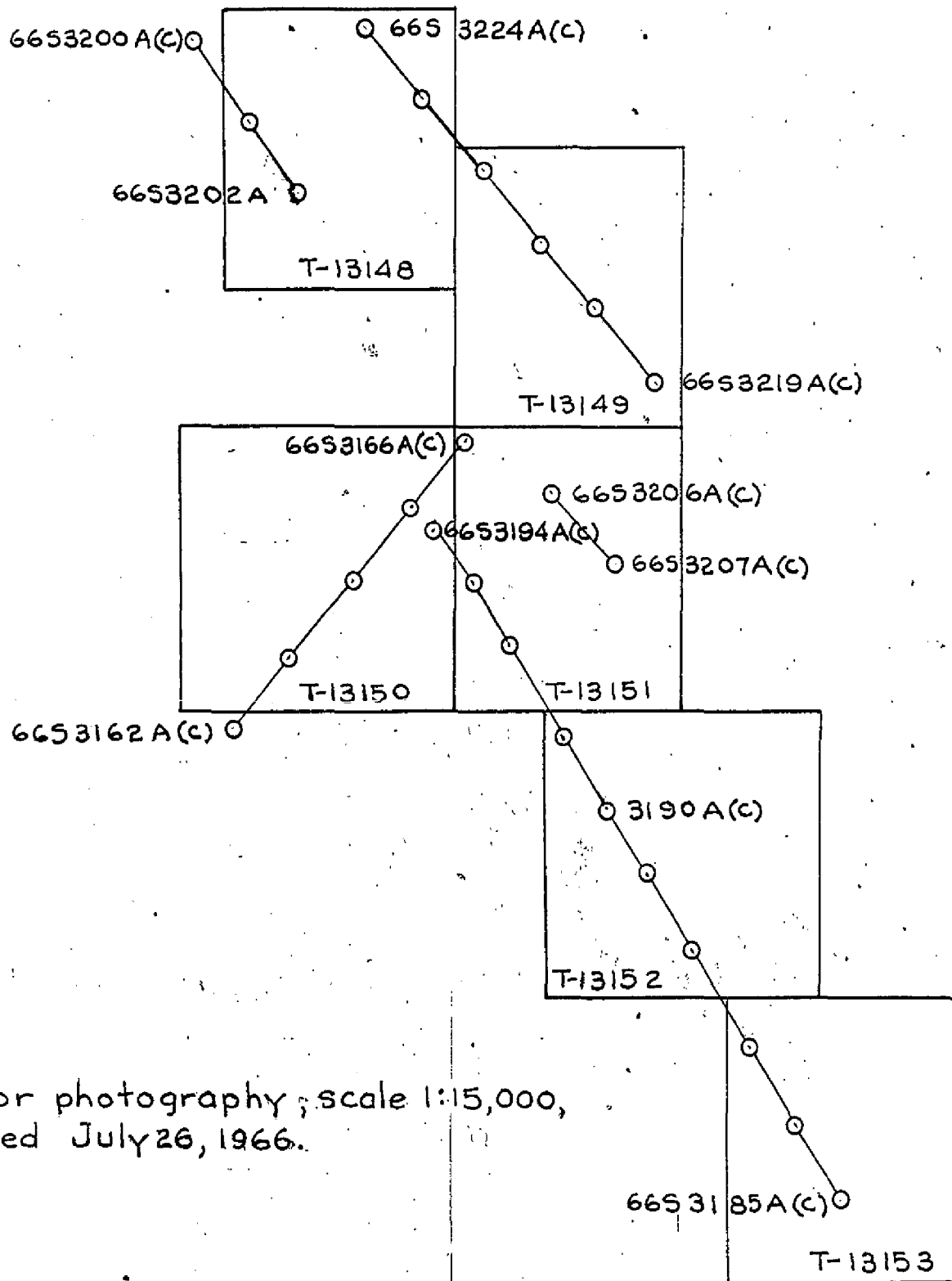
T-13148
T-13149
T-13150
T-13151
T-13152
T-13153

2
2
2
4
3
3

T-13153

PH-6712
ELLIOTT BAY, WASH
Photo Coverage

5



Color photography, scale 1:15,000,
dated July 26, 1966.

T-13150

COMPILATION RECORD	COMPLETION DATE	REMARKS
XXXXXXXXXXXXXX XXXXXXXXXXXXXX		
* (See below)		
Field edit. applied	May 1971	

* Field inspection and field edit completed in 1964 for T-12519 (chart 6442) 1:10,000 scale. Cronaflex copies enlarged 2X were paneled on this manuscript and details revised with 1966 "S" photography in June 1967.

Summary (PH-6712)

T-13150 is one of six 1:5,000 scale shoreline manuscripts prepared for photo-hydro support. These manuscripts originated with PH-21411 (T-12519) compiled in April 1964 and field edited in September 1964.

PH-21411 was compiled at 1:10,000 scale and served as the base for Nautical Chart 6442. Photographic enlargements on film were made of the chart manuscript and these were applied to base sheets ruled for the new 1:5,000 scale shoreline mapping project. In July 1966, 1:5,000 scale photography was flown over the area for photo revision and for preparation of ratio prints for photo-hydro support. The photography was ratioed and prepared for hydrography in May 1967.

Field edit and hydrographic operations were delayed until September and October 1970. The Corps of Engineers supplied 1:12,000 scale panchromatic photography taken in September 1970 for field edit use. The field editor visually verified the adequacy of the 1970 photography for use in revising map details. Edit information, including the 1970 photography, was applied in 1971. In 1975 the hydrographic survey reviewer requested the photogrammetric map for use in his review. Upon examination of the map the reviewer found errors in the application of field edit. The errors resulted, primarily, from the poor quality of the photographic prints used in 1971. Better quality prints were obtained and applied in 1975.

Refer to page 12 of this Descriptive Report concerning the disposition of inadequacies in PH-6712 maps.

Final review was accomplished at the Rockville Office in July 1976.

Several changes were made to the shoreline and foreshore features during review. No attempt was made to update the buildings or other cultural features.

A stable base positive copy of the map and a Descriptive Report will be registered in the NOS Archives.

COMPILATION REPORT
T-13150

This manuscript was compiled from a 2X enlargement of T-12519 (chart 6442) which was compiled in April 1964 and field edited in September 1964.

The enlargement on cronaflex was brought up to date graphically with 1:5,000 scale black and white ratios (cronapaque) of color photographs taken in July 1966. After correction, the cronaflex enlargement was paneled on 1:5,000 scale manuscripts and photographs were prepared for hydro support.

Refer to Descriptive Report for chart compilation of T-12519 (chart 6442) of June 1963-September 1964.

31. Delineation

Graphic methods were used.

32. Control

There is an abundance of triangulation stations in the area of this manuscript.

33. Supplemental Data

None

34. Contours and Drainage

No comment.

35. Shoreline and Alongshore Detail

No comment.

36. Offshore Detail

No comment.

37. Landmarks and Aids

Two aids and 1 landmark were abstracted from Form 567 of T-12519 (chart 6442) and listed on Form 567 for this manuscript.

38. Control for Future Surveys

None

39. Junctions

To the east with T-13151 in agreement. To the south with T-12519 (scale 1:10,000) in agreement. To the north and west no contemporary survey.

40. Horizontal and Vertical Accuracy

No comment.

41. thru 45.

Inapplicable

46. Comparison with Existing Maps

Comparison was made with USGS quadrangle Shilshole Bay, 1949, and Duwamish Head, 1949, scale 1:24,000.

47. Comparison with Nautical Charts

A comparison was made with nautical chart No. 6442, scale 1:10,000, 2nd edition, August 8, 1966, corrected to Jan. 14, 1967.

Items to be applied to nautical charts immediately:

None

Items to be carried forward:

None

Submitted by:

Approved by:

J. C. Richter

K. N. Maki, Chief
Compilation Section

FIELD EDIT REPORT

MAP T-13150

Alki Point

Field edit of map T-13150 was accomplished during September and October 1970 from a skiff in conjunction with photogrammetric signal location and from a launch during hydrography.

METHOD

Field photographs and a paper ozalid copy of the manuscripts were employed in the field in place of Field Edit Ozalids which were not provided. The mean high water line and shoreline detail were verified by visual comparison of the shore area to field photographs and ozalid manuscripts. Army Corps of Engineers 1:12,000 scale photographs of 19 September 1970 were also used during field edit. Notes have been made in violet ink on the field edit ozalid and cross-referenced where necessary to matte ratio prints. Unless otherwise indicated, all shoreline features are verified correct as interpreted.

ADEQUACY OF COMPILATION

Compilation of the map is good. Field Inspection of the map is complete.

RECOMMENDATIONS

It is recommended that the map be revised in accordance with the field edit notes and the revised map be accepted as an advance manuscript.

Respectfully submitted,

Allan F. Divis

Allan F. Divis
LTJG, NOAA

Review Report T-13150
Shoreline Survey

July 1976

62. Comparison with Registered Topographic Surveys

T-12519 1:10,000 1964

Refer to memorandum page 12 .

63. Comparison with Maps of Other Agencies

Refer to the Compilation Report, item 46.

64. Comparison with Contemporary Hydrographic Surveys

H-9167 1:5,000 1970

During review shoreline revisions were made on the photogrammetric manuscript. This area is indicated in pencil on the hydrographic smooth sheet. Other features are in agreement with the hydro survey.

65. Comparison with Nautical Charts

6442 1:10,000 1964

Refer to memorandum page 12 .

66. Adequacy of Results and Future Surveys

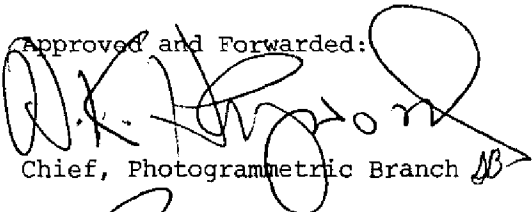
This map meets horizontal accuracy standards but does not meet NOS requirements for use in nautical chart maintenance. Refer to page 12 of this Descriptive Report concerning the inadequacies of this map.

Submitted by:

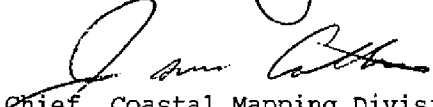


J. B. Phillips

Approved and Forwarded:



Chief, Photogrammetric Branch



Chief, Coastal Mapping Division



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Rockville, Md. 20852

12

C3421

July 22, 1976

TO: Chief, Coastal Mapping Division

FROM: Quality Control Group *J. E. Lankford*

SUBJECT: Recommendation for New Mapping, Elliott Bay, Washington

1. Purpose

The memo outlines the need for a 2nd Edition of Map T-12519 (PH-21411), date 1964.

2. Background

Map T-12519, scale 1:10,000, was used in hydro operations in 1970. Six 1:5,000 scale maps (PH-6712), 2X enlargements of portions of the 1:10,000 scale map, were processed and revised with 1966 photography. Hydrography and field edit were accomplished in 1970.

3. Map Adequacy

For reasons outlined under Section 4, the six 1:5,000 scale maps do not meet NOS requirements for use in nautical chart maintenance. The inadequacies do not affect the basic hydrographic (sounding) information on the contemporary hydrographic surveys.

4. Map Deficiencies

Field edit of the 1:5,000 scale maps was inadequate. The field edit reports state that after revision of the maps with 1970 Corps of Engineers photography in areas indicated (by the editor) they will meet requirements. Many changes in shoreline and alongshore features, apparent on the photographs, were not noted by the editor. The photographs were generally poor for interpreting details and little clarification was done by the editor. Although the hydrographer corrected some photogrammetric survey details on the boat sheet, many changes, apparent on the 1970 photographs, were accepted as compiled from the 1966 photographs.



5. Disposition of 1:5,000 Scale Maps

The six 1:5,000 scale maps were reviewed in July 1976. Changes required in hydrographic survey details were called to the attention of the hydro survey reviewer by notes on the reviewed smooth sheet or by memo, as applicable.

6. Recommended Procedures

New bridging and basic compilation is recommended for the 2nd map edition.

*NOTE: The last complete investigation of landmarks
and aids was done in 1963*

513

48. Geographic Names List

Alki Point
Duwamish Head
Elliott Bay
Puget Sound
West Seattle

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

1967

October 10, 1963

Fred Natella, Capt. C&GS

Chief of Party.

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

USCOMM-DC 27128

TO BE CHARTED
~~TO BE CHARTED~~
~~TO BE CHARTED~~

STRIKE OUT TWO

Seattle, Washington July 19⁶⁷

I recommend that the following objects which have ~~(been)~~*not* been inspected from seaward to determine their value as landmarks be charted on ~~(deleted)~~*from* the charts indicated.

The positions given have been checked after listing by Robert B. Melby

October 11, 1963

Fred Natella, Capt. C&GS

Chief of Party:

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

*** TABULATE SECONDS AND METERS**

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T. 13150

PROJECT NO. 6712

SCALE OF MAP 1:5,000

SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
DUWAMISH HEAD LIGHT 1962	Vol. 2 217		222,283.62 1,616,789.54						13,5504.4 98,5596.8	
DUWAMISH 2 (ALKI NE BASE 2) 1924	pg. 5		220,896.20 1,616,649.92						13,4658.6 98,5511.7	
DUWAM 2 1949	pg. 108		220,284.56 1,617,329.51						13,4285.7 98,5926.0	
DAVIS 1917	pg. 49		218,074.43 1,618,327.77						13,2938.4 98,6534.6	
PINE 1909	pg. 185		216,974.84 1,619,160.72						13,2268.1 98,7042.3	
ILLINOIS 1963	Vol. 11 pg. 385		217,741.89 1,614,077.52						13,2735.7 98,3943.6	
ALKI PT. LT. 1934			214,305.57 1,608,552.94						13,0640.9 98,0575.8	
SCHOOL 1933	pg. 46		214,290.72 1,617,438.03						13,0631.9 98,5992.2	
SEATTLE CITY MON 41st Ave. SW & W HANFORD STREET 1956	pg. 333		213,883.97 1,617,415.98						13,0383.9 98,5978.7	
42nd Ave. SW & W HANFORD STREET	pg. 333		213,891.33 1,617,156.08						13,0388.4 98,5820.3	
WEST SEATTLE MUNICIPAL STAND- PIPE 1929	pg. 56		211,808.80 1,618,032.69						12,9118.9 98,6354.7	
ANDOVER 1933	pg. 46		211,093.43 1,613,727.02						12,8682.8 98,3729.9	7

1 FT. = 3048006 METER

J. Richter

DATE April 1967

CHECKED BY H. Lucas

DATE April 1967

CONRAD-DC-57843

TIDE COMPUTATION

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PROJECT NO. PH-6712 T - 13150

Time and date of exposure

Reference station

Seattle, Washington

Mean range

7.6

Date of field inspection

Subordinate station

Diurnal
Ratio of ranges 11.3

	Time	
	h.	m.
High tide	13	24
Low tide	6	12
Duration of rise or fall	7:12	

	Height	Height x Ratio of ranges
	feet	
High tide	9.0	
Low tide	0.2	
Range of tide	8.8	

	Time	
	h.	m.
High tide at Ref. Sta.	13	24
Time difference	0	
Corrected time at Subordinate station	13:24	

	Time	
	h.	m.
Low tide at Ref. Sta.	6	12
Time difference	:00	
Corrected time at Subordinate station	6:12	

	h.	m.	Ht. H. T. or L. T.	Tabular correction	Stage of tide above MLW	feet	Photo. No.
Time H. T. or L. T.	13	24				9.0	
Required time	12	21				0.4	
Interval		1:03				8.6	66-S-3164A
Time H. T. or L. T.	13	24				9.0	
Required time	12	36				0.2	
Interval		:48				8.8	66-S-3194A
Time H. T. or L. T.							
Required time							
Interval							
Time H. T. or L. T.							
Required time							
Interval							
Time H. T. or L. T.							
Required time							
Interval							