

T- 13149

T- 13149

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline
Field No. PH-6712	Office No. T-13149
FINAL Field Edited Map Edition 1 *	
LOCALITY	
State	Washington
General locality	Elliott Bay
Locality	Seattle
19 66 - 1970	
CHIEF OF PARTY	
V. Ralph Sobieralski	
Div. of Photogrammetry, Wash., D.C.	
LIBRARY & ARCHIVES	
DATE	

USCOMM-DC 5087

* Refer to Memo, page 13.

DESCRIPTIVE REPORT - DATA RECORD

T - 13149

PROJECT NO. (II):

PH-6712 Elliott Bay, Washington

FIELD OFFICE (III):

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Rockville, Maryland

OFFICER-IN-CHARGE

V. Ralph Sobieralski

INSTRUCTIONS DATED (II) (III):

No written instructions.

METHOD OF COMPILATION (III):

Graphic

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):

SEPT. 1976

GEOGRAPHIC DATUM (III):

N.A. 1927

VERTICAL DATUM (III):

MEAN SEA LEVEL EXCEPT AS FOLLOWS:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

REFERENCE STATION (II):

Poultry Tank, 1924

LAT.:

LONG.:

47° 37' 11.827"

122° 21' 33.722"

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

y = 1,623,660.72

x = 229,870.24

Washington

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-13149

FIELD INSPECTION BY (II):

DATE:

MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):

Date of photography, office interpretation of the photography
listed in Data Record next page

PROJECTION AND GRIDS RULED BY (IV):

DATE

A. E. Roundtree

3/15/67

PROJECTION AND GRIDS CHECKED BY (IV):

DATE

R. Glaser

3/20/67

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):

DATE

See Photogrammetric Plot Report for T-12519
Chart No. 6442, December 1963, J. Gerlach

STEREOSCOPIC INSTRUMENT COMPILATION (III):

PLANIMETRY

DATE

Inapplicable

CONTOURS

DATE

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. & October 1970

DESCRIPTIVE REPORT - DATA RECORD

T-13149

CAMERA (KIND OR SOURCE) (III):

"S" 6" focal length

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
66-S-3219A thru 3222A	7/26/66	12:58	1:15,000	8.9 above MLW
C. of E, S-7026-48-5 thru S-7026-48-12	9-11-70	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 (II):

RECOVERED:

IDENTIFIED:

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

RECOVERED:

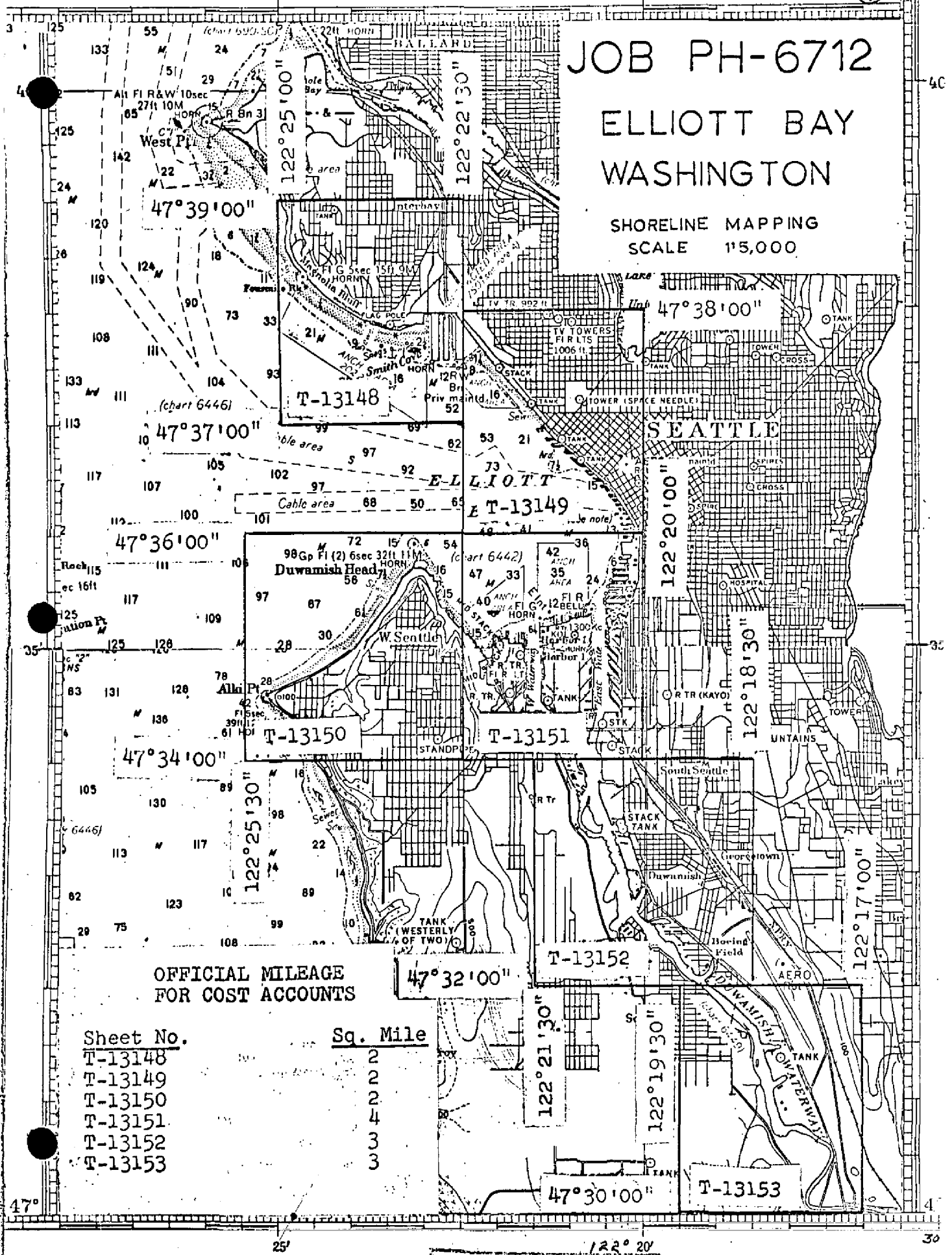
IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

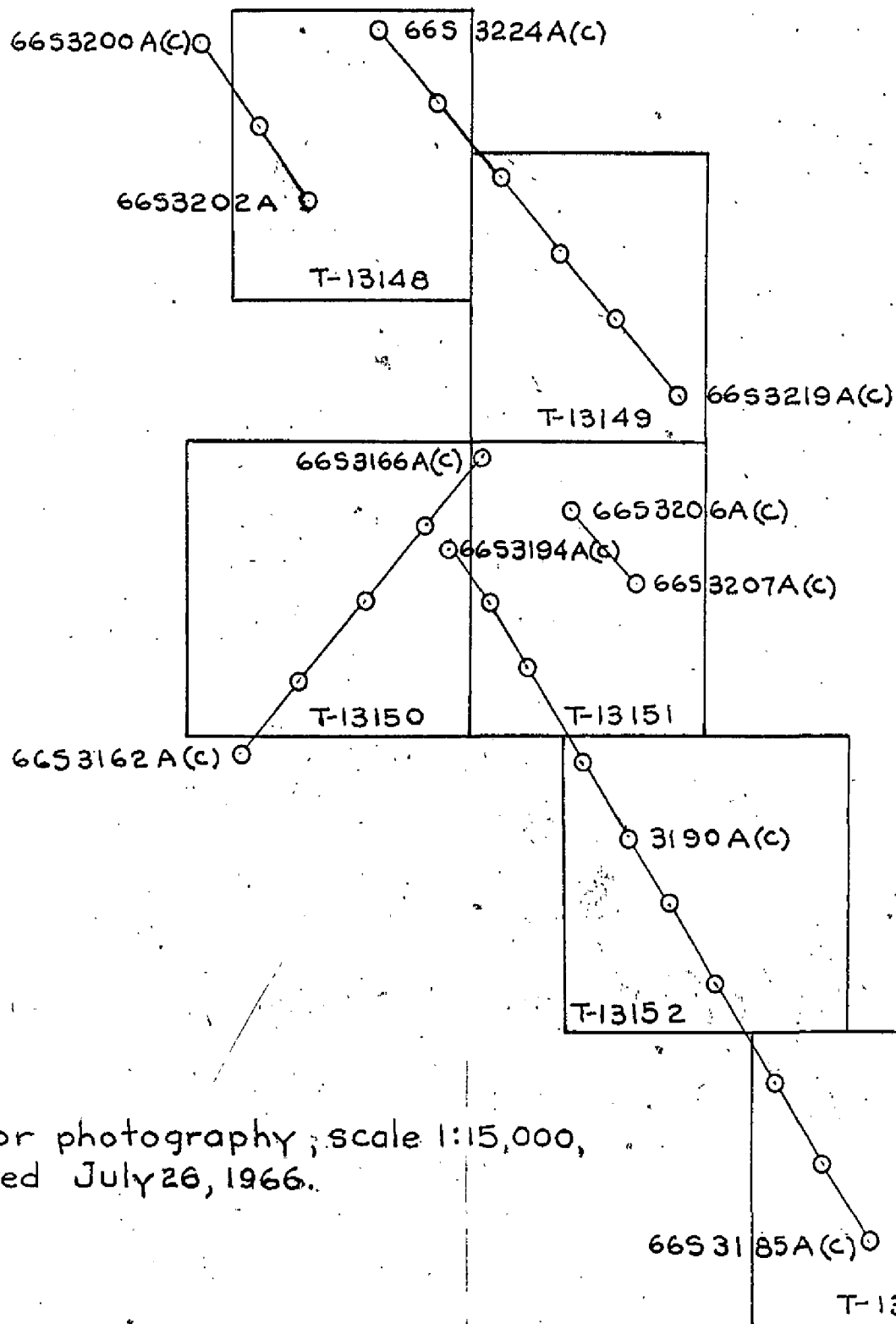
REMARKS:

JOB PH-6712

ELLIOTT BAY
WASHINGTONSHORELINE MAPPING
SCALE 1"=5,000'

5

PH-6712
ELLIOTT BAY, WASH
Photo Coverage



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

T-13149

COMPILATION RECORD	COMPLETION DATE	REMARKS
XXXXXXXXXXXX XXXXXXXXXXXX		
* (See Below)		
Field edit applied	May 1971	Superseded
Field edit application revised	July 1975	

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

Summary (PH-6712)

T-13149 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 13 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-13149

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 cronapaque ratios of color photographs taken in July 1966. After corrections the cronaflex enlargement was paneled on 1:5,000 scale ruled 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

There was no field inspection of the 1966 photography.

No low water or shoal lines were visible on the photographs.

36. Offshore Detail

No comment

37. Landmarks and Aids

Two aids and 12 landmarks 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 west with T-13148 in agreement.

To the south with T-13151 in agreement.

To the north and east with T-12519 (1:10,000) in agreement.

40. Horizontal and Vertical Accuracy

No comment

41. thru 45.

Inapplicable

46. Comparison with Existing Maps

Comparison was made with USGS Quadrangle Seattle North, 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:

J. C. Richter

Approved by:

K. N. Maki,
Chief, Compilation Section

FIELD EDIT REPORT

MAP T-13149

Elliott Bay

Field edit of map T-13149 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 Army Corps of Engineers contact print S 7026-48-11. Unless otherwise indicated, all shoreline features are verified correct as interpreted.

ADEQUACY OF COMPILATION

Compilation of the map is inadequate. Considerable changes have been made in the area covered by the map as noted on the field edit ozalid and referenced photographs, principally the fill area and construction of the Port of Seattle grain terminal. Field Inspection of the map is complete.

RECOMMENDATIONS

It is recommended that the map be revised in accordance with the field edit notes and be recompiled from Army Corps of Engineers photographs where significant changes in shoreline detail have occurred. It is recommended that the revised map be accepted as an advance manuscript.

Respectfully submitted,

Allan F. Divis

Allan F. Divis
LTJG, NOAA

Review Report T-13149
Shoreline Survey

July 1976

62. Comparison with Registered Topographic Surveys

T-12519 1:10,000 1964

Refer to memorandum page 13.

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

Comparison was made with the final reviewed hydrographic survey and they are in agreement.

65. Comparison with Nautical Charts

6442 1:10,000 1964

Refer to memorandum page 13.

66. Adequacy of Results and Future Surveys

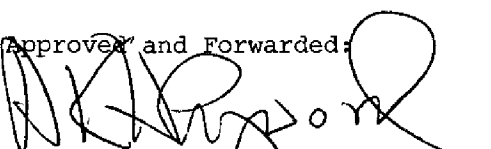
This map meets horizontal accuracy standards but does not meet NOS requirements for use in nautical chart maintenance. Refer to page 13 of this Descriptive Report concerning the inadequacies of this map.

Submitted by:

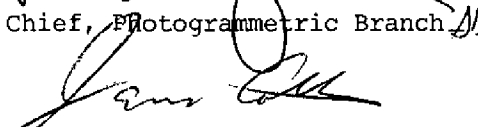


J. B. Phillips

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

(13)

C3421

July 22, 1976

TO: Chief, Coastal Mapping Division
FROM: Quality Control Group *J. B. Blankenship*
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*

SIB

48. Geographic Names List

Elliott Bay
Seattle

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

T-13149

NONFLOATING AID OR LANDMARKS FOR CHARTS

TO BE CHARTED

TO BE CHARTED
NO BE CHARTED

STRIKE OUT TWO

Seattle, Washington July 19 1967

I recommend that the following objects which have ~~(None)~~ 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

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION					METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE *		LONGITUDE *								
				°	'	D.P. METERS	"	°						
Washington	TV	Seattle, TV Station KIRO		47	37	59.468	122	21	19.229	N.A.	X			6449 6442
	TOWER	Tower, 1958 Ht=534 (992)		47	37	1836.6	122	21	101.4	1927	X			6450 6446
	TV	Seattle, TV Station KOMO		47	37	56.373	122	21	09.813	"	X			6449 6442
	TOWER	Tower, 1953 Ht=500 (1005)		47	37	1741.0	122	21	204.9	"	X			6446 6450
	TV	Seattle, TV Station KING		47	37	55.310	122	20	59.323	"	X			6449 6442
	TOWER	Tower, Ht=500 (1006) 1963		47	37	1708.2	122	20	1238.5	"	X			6446 6450
	STACK	Tall, steel stack, Ht=81 (84)		47	37	31.732	122	21	59.591	"	X			6449 6442
	TANK	Poultry Tank 1929		47	37	980.0	122	21	1244.2	"	X			6446 6450
	(elevated)	Ht=104 (107)		47	37	11.827	122	21	33.722	"	X			6449 6442
	TOWER (space)	Seattle Worlds Fair Space Needle, 1962 Ht=607 (737)		47	37	365.3	122	21	704.2	"	X			6446 6450
BUILDING TANK	Seattle Grosvenor House TV		47	37	446.1	122	20	1106.2	"	X				6449 6442
	Antenna 1942 Ht=176 (296)		47	37	05.179	122	20	38.102	"	X				6446 6450
	American Can Co. (Canco)		47	37	159.9	122	20	795.6	"	X				6449 6442
	Tank 1929 Ht=126 (130)		47	36	52.874	122	21	07.327	"	X				6446 6450
	Bell Street Dock Tank 1929		47	36	1633.0	122	21	153.0	"	X				6449 6442
	Ht=111 (119)		47	36	41.336	122	21	52.632	"	X				6446 6450
	FLAGSTAFF	Northern Life Tower, Center		47	36	1276.6	122	20	1099.2	"	X			6449 6442
	center of 3	Flagpole 1929 Ht=320 (488)		47	36	28.241	122	20	03.318	"	X			6446 6450
	PORT SIGN	North end of sign "PORT OF SEATTLE" Ht=23 (95)		47	36	872.2	122	20	69.3	"	X			6449 6442
	N. LIMIT	SEATTLE" Ht=23 (95)		47	36	41.899	122	20	55.255	"	X			6446 6450
PORT SIGN	South end of sign "PORT OF SEATTLE" Ht=23 (95)		47	36	1294.0	122	20	1154.0	"	X			6449 6442	
S. LIMIT	SEATTLE" Ht=23 (95)		47	36	39.826	122	20	51.733	"	X			6446 6450	
					1230.0	122	20	1080.5	"	X			6449 6442	
													6446 6450	

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

T-13149

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT TWO

Seattle, Washington July 19⁶⁷

I recommend that the following objects which have *(have 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

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**

USCOMM-DC 27128

17

U. S. DEPARTMENT OF COMMERCE¹³ COAST AND GEODETIC SURVEY¹²
DESCRIPTIVE REPORT CONTROL RECORD

MAP T. 13149

PROJECT NO. PH-6712

SCALE OF MAP 1:5,000

SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -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)
ALUMINUM BLOWER CO. TANK 1934	pg. 52		231,563.52							14,1161.4	
SEATTLE WORLDS FAIR SPACE NEEDLE 1962	Vol. 11 Pg. 217		1,622,322.42							98,8969.7	
CAN 1934	pg. 51		230,080.25							14,0257.2	
AMERICAN CAN CO. TANK 1929	pg. 54		1,626,456.84							99,1490.0	
BELL STREET DOCK TANK 1929	pg. 54		227,707.56							13,8810.8	
COLMAN'S DOCK TOWER LIGHT 1934	pg. 52		1,624,822.98							99,0494.0	
POULTRY TANK 1929	pg. 113		227,914.46 226,725.78							13,8936.9	
NORTHERN LIFE TOWER (Center Flagpole of 3, 1929)	pg. 91		1,625,430.74							99,0864.5	
KIRO TOWER 1958	pg. 336		226,725.78							13,8212.3	
KOMO TOWER 1953	pg. 336		1,626,414.36							99,1464.1	
KING TOWER 1953	pg. 336		223,503.11							13,6247.8	
SEATTLE GROSVENOR HOUSE TV ANT. 1952	pg. 218		1,628,545.29							99,2763.2	
			229,870.24							14,0129.2	
			1,623,660.72							98,9785.5	
			225,332.90							13,7363.2	
			1,629,766.65							99,3507.7	
			234,676.78							14,3059.2	
			1,624,748.87							99,0448.9	
			234,350.50							14,2860.3	
			1,625,387.46							99,0838.1	
			234,228.65							14,2786.1	
			1,626,103.67							99,1274.7	
			229,121.59							13,9672.8	18
			1,627,457.17							99,2099.8	

1 FT. = 3048006 METER

COMPUTED BY:

DATE

CHECKED BY:

DATE

CONM-DC-5704

TIDE COMPUTATION

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PROJECT NO. Ph- T - 13149

Time and date of exposure 12:56 7/26/66 Reference station Seattle, Washington Mean range 7.6 Diurnal
Date of field inspection Subordinate station Ratio of ranges 11.3

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

	Height feet	Height x Ratio of ranges
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		0
Corrected time at Subordinate station	6	12

	h.	m.	Ht. H. T. or L. T.	feet	Photo. No.
Time H. T. or L. T.	13	24	Ht. H. T. or L. T.	9.0	65-S-3223A
Required time	12	56	Tabular correction	0.1	
Interval		:28	Stage of tide above MLW	8.9	
Time H. T. or L. T.			Ht. H. T. or L. T.		
Required time			Tabular correction		
Interval			Stage of tide above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		
Required time			Tabular correction		
Interval			Stage of tide above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		
Required time			Tabular correction		
Interval			Stage of tide above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		
Required time			Tabular correction		
Interval			Stage of tide above MLW		