

T-12725

T-12726

T-12725
T-12726

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
(Incomplete)	
Type of Survey	Shoreline
Field No. PH-6413	Office No. T-12725 and T-12726
LOCALITY	
State	Alaska
General locality	Whittier
Locality	Passage Canal
1964-65	
CHIEF OF PARTY	
J.E. Waugh, Chief of Party	
Div. of Photogrammetry, Wash., D.C.	
LIBRARY & ARCHIVES	
DATE	

COMM-DC 61300

DESCRIPTIVE REPORT - DATA RECORD

T- 12725 and T-12726

01

PROJECT NO. (II) :

-214326- 21423(6) PH-6413

FIELD OFFICE (II) :

CHIEF OF PARTY

J. B. Watkins, Jr.

PHOTOGRAMMETRIC OFFICE (III) :

OFFICER-IN-CHARGE

Washington, D.C.

J. E. Waugh

INSTRUCTIONS DATED (II) (III) :

30 June, 1965, Bridging and Compilation Instructions,
Project 21423(6), Whittier, Alaska, Maps T-12725, T-12726,
1:5,000 scale.

METHOD OF COMPILATION (III) :

Stereoplotter, B-8

MANUSCRIPT SCALE (III) :

1:5,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III) :

1:5,000

DATE RECEIVED IN WASHINGTON OFFICE (IV) :

N/A

DATE REPORTED TO NAUTICAL CHART BRANCH (IV) :

APPLIED TO CHART NO.

DATE:

~~OCT~~

1961

DATE REGISTERED (IV) :

OCT

1961

GEOGRAPHIC DATUM (III) :

NA 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 (III) :

NONE

LAT.:

LONG.:

☐ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV) :

STATE

ZONE

Y =

X =

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

02

T-12725 and T-12726

FIELD INSPECTION BY (II): J. B. Watkins, Jr.		DATE: 6-65
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Field Inspection - May and June, 1965		
PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree		DATE 2-3-65
PROJECTION AND GRIDS CHECKED BY (IV): R. Glaser		DATE 2-9-65
CONTROL PLOTTED BY (III): J. Taylor		DATE 7-6-65
CONTROL CHECKED BY (III): J. Richter		DATE 7-6-65
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): J PERROW		DATE 7-5-65
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY M. Webber J. Richter J. Mooney	DATE 7-13-65
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III): J. B. Battley, M. Webber, J. B. Phillips		DATE 7-14-65
SCRIBING BY (III): NONE		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): F WRIGHT		DATE 6-9-81
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD

PH-6413 03

CAMERA (KIND OR SOURCE) (III):

S Camera

Focal Length 152.29 mm

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64S7992 thru 7998	8-29-64	12:10	1:15,000	4.6' above MLLW
64S8008 " 8012	"	12:15	"	"
64S8020 " 8023	"	12:23	"	4.9' above MLLW

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Cordova, Alaska		9.7	12.1
SUBORDINATE STATION: Whittier, Alaska			
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): F WRIGHT

DATE: 6-9-81

PROOF EDIT BY (IV): NONE

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:

IDENTIFIED: 8

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

NONE

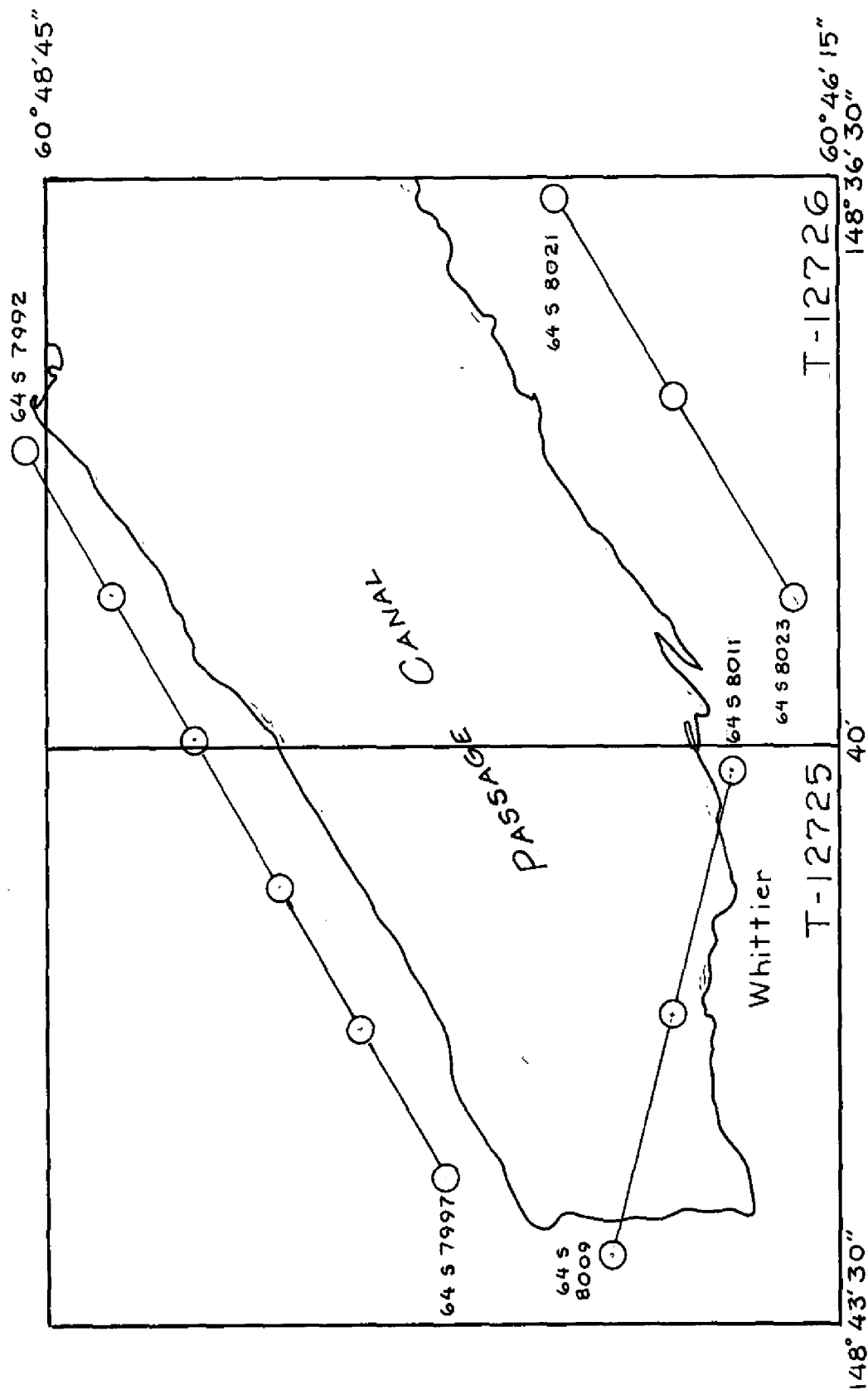
RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): NONE

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): 49

REMARKS:



LAYOUT SKETCH

PH-6413

SHORELINE MAPPING

JULY 1965

○ ... 1:15,000 scale pan
photos

Summary to Accompany Descriptive Report
T-12725 and T-12726

Shoreline maps T-12725 and T-12726 are two of four maps in Job PH-6413, Alaska. Revision Surveys 765 and 766 are the other two maps in the project. Map T-12725 covers the head of Passage Canal, including the Whittier area, and extends eastward to longitude $148^{\circ} 43' 30''$. Map T-12726 extends eastward to $148^{\circ} 36' 30''$. The maps junction at $148^{\circ} 40' 00''$. Their common north-south limits extend in latitude from $60^{\circ} 46' 15''$ north to $60^{\circ} 48' 45''$. This project was initiated for the purpose of providing photogrammetric support for field hydrographic operations and shoreline for hydrographic smooth sheet needs. Photo centers and passpoints were provided by aerotriangulation. Compilation was accomplished on the Wild-B-8 stereoplotter at a map scale of 1:5,000. The field operations preceding compilation consisted of the recovery and photoidentification of horizontal control, field inspection of shoreline and alongshore rocks, and the photoidentification of hydrographic signal stations. The maps are not field edited and the Descriptive Report will be registered as one combined report, T-12725 through T-12726.

Revision Surveys 765 & 766 were turned over to Marine Charts and filed as blueprints.

Project 21423 (6)
Passage Canal
Prince William Sound
Whittier, Alaska

Eight Horizontal Control Stations and one Base, required for Photo-Control were identified.

Forty-nine photo hydro signals were located, marked and inked on the Photo-Hydro Support Photographs, for the control of Hydrographic Surveys, 24 signals on T-12525 and 25 on T-12526. These signals should be shown on the manuscript upon re-compilation.

Note to Hydrographer:

Photo-Hydro signals consisting of rocky points and rock were marked by red paint accompanied by its corresponding designation number. Trees and bushes were marked by a red flag tied or stapled in its limbs. All natural objects such as pier corners and building gables were not marked as they are readily recovered.

Herman L. Gana

Approved:

John B. Watkins Jr.
John B. Watkins Jr.
CDR, USC&GS
Commanding, Ship HODGSON

Passage Canal, Alaska

PH-21423(6)

Photogrammetric Plot Report

21. Area Covered

T-sheets 12725 and 12726 covering the western end of Passage Canal and the town of Whittier.

22. Method

Three strips of photography were bridged. Strips #1 and #3 were bridged on the stereoplanigraph with strip #2 being bridged on the stereocomparator. All strips were adjusted by IBM 1720 methods. Strip #1 was adjusted on four horizontal control stations with one station plus the companion points as checks. Strip #2 was adjusted on three stations with companion points as checks. Strip #3 was adjusted on three stations with only the companion points as checks. All tie points were averaged or adjusted to conform, depending on their conformity to the adjustment pattern.

23. Adequacy of Control

Control was adequate in distribution and complied with project instructions. In strip #1 only Delta 2, 1956 SS B could not be held in the adjustment. The point was identified as a "small dead bush". It is possible that the field man misidentified the wrong bush since several others are visible in the area. Since the other stations and tie points held well in the bridge, as well as the results showing good residuals, the sub station was dropped from the bridge. In strip #2 the position of Tomb 3, 1956 SS B could not be held by five feet in Y. This is believed to be due to poor identification. The bow error in this bridge is larger than expected and could indicate some discrepancy. Since the adjustment was confined to three points no further checks could be made.

24. Supplemental Data

USGS quads were used for rough vertical control during bridging operations.

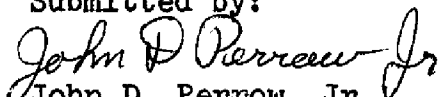
25. Photography

Photography was adequate in relation to coverage, overlap, definition and quality.

Approved by:


Henry P. Eichert

Submitted by:


John D. Perrow, Jr.

DESCRIPTIVE REPORT CONTROL RECORD

12726

ZONE 4

MAP T. 12725, PROJECT NO. 21423(6)

SCALE OF MAP 1:5,000

SCALE FACTOR 0.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LENGTH-OR-XY-COORDINATE LENGTH-OR-XY-COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) FORWARD (BACK)
TANK, 1956	60148 PAGE No. 41	1927	729,531.91 ✓	
SSA (97110)			2,480,358.45 ✓	
SSB (97111)			729,557.58 ✓	
SAW 2, 1948	60148 19102 PAGE No. 37	"	2,480,432.35 ✓	
SSA	19101		729,575.08 ✓	
			2,480,371.98 ✓	
			751,846.48 ✓	
			2,487,608.20 ✓	
			751,829.08 ✓	
			2,487,585.88 ✓	
TOMB 3, 1956	60148 PAGE No. 42	"	743,588.62 ✓	45,3292.3
SSA	21101		2,481,953.29 ✓	151,3001.7
SSB	21102		743,503.28 ✓	
			2,481,905.62 ✓	
			743,509.93 ✓	
			2,481,927.54 ✓	
WHITTIER, Columbia Lumber Co.	60148	"	733,763.53 ✓	
West Stock, 1948 (97113)	PAGE No. 46		2,478,723.74 ✓	
WHITTIER RR STA	60148		737,405.63 ✓	
EAST END, 1948	PAGE No. 46		2,478,270.56 ✓	
OVEN, 1948			748,601.24	45,63482
			2,485,046.52	151,4887.3
COMPUTED BY	DATE	CHECKED BY	DATE	

DESCRIPTIVE REPORT CONTROL RECORD

ZONE 4

MAP T-12725, 12726 PROJECT NO. 21423 (6) SCALE OF MAP 1:5,000 SCALE FACTOR 0.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	EASTING OR COORDINATE LONGITUDE OR LATITUDE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 ft. = 3048006 meter)
			FORWARD	(BACK)
TAG, 1913, 1914	ALAS. 60148 PAGE No 41	1927	750,734.53 ✓	
SSA (90110)			2,496,478.64 ✓	
SSB (90111)			750,732.71 ✓	
DELTA 2, 1956	60148 PAGE No. 9	"	2,496,482.60 ✓	
SSA (92110)	Position of RM (OLD) doubtful		750,735.61 ✓	
SSB 92111			2,496,475.73 ✓	
FALL 1913	60148 PAGE No. 12	"	745,199.37 ✓	45 4274.4
SSA			2,491,214.88 ✓	151, 2647.6
SSB			745,144.61 ✓	
MARGIN, 1956	60148 PAGE No. 19	"	2,491,497.62 ✓	
SSA			745,233.13 ✓	
SSB			2,491,241.90 ✓	
			736,278.35 ✓	
			2,485,686.19 ✓	
			736,211.38 ✓	
			2,485,654.95 ✓	
			736,379.98 ✓	
			2,485,764.49 ✓	
			736,993.23 ✓	
			2,478,536.96 ✓	
			737,094.65 ✓	
			2,478,578.76 ✓	
			736,877.26 ✓	
			2,478,432.92 ✓	
COMPUTED BY	DATE	CHECKED BY	DATE	

Compilation Report
T-12725 and T-12726
July 1965

31. Delineation

Instrument methods were used to compile the two maps, T-12625 and T-12726. Individual models were compiled on the B-8 plotter in pencil and then ink drawn onto the base map manuscripts.

No unusual problems were encountered other than that of elevated points inland from the shoreline, as noted in paragraph No. 49, Notes to the Hydrographer.

32. Control

Refer to the Photogrammetric Report for Passage Canal, Alaska.

33. Supplemental Data

None

34. Contours and Drainage

Not applicable.

35. Shoreline and Alongshore Details

The delineation of mean-high-water line was from field inspection data. No foreshore line of sand, mud or ledge was shown. The photography was taken at approximate half-tide level.

Numerous foreshore rocks awash are shown some of which have vertical datum reference heights obtained from data provided by field inspection.

Refer to paragraph No. 31 for comments on shoreline.

36. Offshore Details

No comment

37. Landmarks and Aids

No special landmarks are shown other than existing triangulation

stations some of which are elevated objects.

Several buoys have been located.

No Forms 567 have been submitted.

38. Control for Future Surveys

No Forms 524 have been submitted for recoverable topographic stations.

Photo-hydro stations, identified by field inspection, were located by photogrammetric methods. They are numbered stations. A list of all these stations by number and description has been included as a part of paragraph No. 49.

39. Junctions

The junctions between the two maps of this survey are in agreement.

40. Horizontal and Vertical Accuracy

Refer to the Photogrammetric Plot Report. Vertical accuracy not applicable.

41. through 45.

Not applicable

46. Comparison with Existing Maps

Two maps, T-9131 and T-9132, scale 1:20,000, 1958, cover the map area of T-12725 and T-12726. The two 1:20,000 scale maps were corrected in 1965 from 1964 photography and assigned revision survey numbers 765 and 766.

The USGS 1:63,360 scale Seward (D-5), Alaska, quadrangle covers the project area.

47. Comparison with Nautical Charts

The map manuscripts have been compared with Chart No. 8521, scale 1:20,000, 3rd Edition, corrected to May 31, 1965.

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Following the application of field edit data the land details, shoreline in particular, will supersede the corresponding detail or features on the nautical charts.

Items to be Applied to Nautical Charts Immediately: None

Items to be Carried Forward: None

Submitted by:

John C. Richter (Ret.)

Approved by:

Frank A. Wright (for)

K. N. Maki
Chief, Compilation Section

6-9-81

48. Geographic Name List

Passage Canal
Whittier

Notes to the Hydrographer
T-12725 and T-12726
Passage Canal, Alaska

49. Hydrographic support consists of prepared cronapaque ratio photographs, 64-S-7992 - 7997, 64-S-8009 - 8011, and 64-S-8021 - 8023 and copies of the map manuscripts T-12725 and T-12726.

The ratio photographs are prepared in the conventional manner. They were originally prepared for drawing preliminary maps by graphic methods and have on them pass points from that operation shown by 6 mm diameter yellow circles. These yellow pass point circles are not to be used unless they are circled by a concentric orange-red 4 mm diameter circle. In using the ratio photographs for photogrammetric location of needed additional signals or other miscellaneous points that may be needed use only the 4 mm diameter orange-red circles all of which have rays drawn through them. The 4 mm circled pass points have all been located on the manuscripts either by photogrammetric bridging methods or B-8 stereoplotter during instrument compilation. Photograph centers on the manuscripts have been resected by holding only the pass points at or near water level. No inland pass points, orange-red circles, are shown on the photographs and none have been plotted on the manuscripts. Due to conditions induced by flight lines following along the shoreline resulting in models of half water area and half elevated terrain accurate positions cannot be obtained for the inland or elevated pass points. The necessary additional control would be required to offset this situation.

A separate listing of the hydrographic signals has been compiled by signal number and description. Hydrographic signals are shown on the map manuscripts by numbered $2\frac{1}{2}$ mm black circles. These signals may, on occasion, be set up as pass points, also.

- * The shoreline at the north neat line of T-12726 at longitude $148^{\circ}37'30''$ has been drawn as indicated by field inspection. Much of the sandy foreshore appears to be above MHW but it is possible that the area changed between the photo date and field inspection date. Several signals (bushes) fall in this foreshore area. Additional field examination of this area is desirable.

K. N. Maki
K. N. Maki

* Field man has stated that the original inspection of shoreline is correct. The signals (bushes) are just above MHW.

K. N. M. 3/23/66

HYDROGRAPHIC SIGNALS

<u>Signal No.</u>	<u>Description</u>
2501	Northeast corner dock
2502	Northeast corner bldg.
2503	Northeast corner dock
2504	Center of northerly of two control houses
2505	Center of the westerly of two elevator shafts
2506	North gab bldg.
2507	Center of west base sawmill stack
2508	Center of rock offshore of two
2509	Center of rock southerly of two
2510	Eastly corner rock
2511	East gab bldg.
2512	Center of top of smoke stack
2513	Center of steel tank
2514	Northeast corner bridge
2515	Center of rock
2516	Center of a flat rock on bluff edge
2517	Center of point of rock ledge
2518	Center of the top large rock
2519	Center small spruce tree
2520	Center of rock
2521	Center of top of a sloping rock
2522	Center of top of rock
2523	Center of dead bush
2524	Center of dead tree stump
2601	Center of rock
2602	Southeast corner pavilion
2603	Northeast corner bridge
2604	Southwest corner rock
2605	Center of small spruce tree
2606	Center of rock offshore of two
2607	Center small spruce tree
2608	Center tall dead tree
2609	Center of leaning tree
2610	Center of tree
2611	Center of leaning tree
2612	Center of small tree
2613	Center of tall tree
2617	Center of bush
2618	Center of tree
2619	Center of lone tree
2620	Inshore end dead tree
2621	Center of base lone leaning spruce
2622	Center of bush

<u>Signal No.</u>	<u>Description</u>
2623	Center of tall spruce tree
2624	Center of small spruce tree
2625	Center of small tree
2626	Center of rock
2627	Center of base of a leaning tree
2628	Center of rock

TIDE COMPUTATION

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

August 29, 1964

12:09 - 645 7992 - 7998

12:15 - 645 8009 - 8012

12:23 - 645 8021 - 8023

PROJECT NO. Ph. T

Time and date of exposure

Reference station

Cordova

Mean range

9.7

Date of field inspection

Subordinate station

Whittier, Passage Canal

Ratio of ranges

Diurnal range 12.1

	Time	
	h.	m.
High tide	16	11
Low tide	10	11
Duration of rise or fall	6 00	

	Height	Height x Ratio of ranges
	feet	
High tide	12.1	$-0.3 = 11.8$
Low tide	2.7	$0.0 = 2.7$
Range of tide		9.1

	Time	
	h.	m.
High tide at Ref. Sta.	16	14
Time difference	-0	03
Corrected time at Subordinate station	16	11

	Time	
	h.	m.
Low tide at Ref. Sta.	10	08
Time difference	+0	03
Corrected time at Subordinate station	10	11

Time H. T. or L. T. Required time Interval	h. m. 10 11 12 09 1 58	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	feet 2.7 1.9 4.6	Feature bares Stage of tide above MLW Feature above MLW	Photo. No.
Time H. T. or L. T. Required time Interval	10 11 12 15 2 04	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	2.7 1.9 4.6	Feature bares Stage of tide above MLW Feature above MLW	
Time H. T. or L. T. Required time Interval	10 11 12 23 2 12	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	2.7 2.2 4.9	Feature bares Stage of tide above MLW Feature above MLW	
Time H. T. or L. T. Required time Interval		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW	
Time H. T. or L. T. Required time Interval		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW	
Time H. T. or L. T. Required time Interval		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW	

COMM - DC - 57848

Computed by

JBP

Checked by

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Shoreline Mapping Chart Compilation
Review Report PH-6413

61. General Statement

Maps T-12725 and T-12726 were final reviewed in this incomplete (Class II) stage by the Photogrammetric Branch (Rockville). These maps are based on aerotriangulation that meets the requirements for National Standards of Map Accuracy and compilation field inspection of the mapping photography. This descriptive report contains all the pertinent information and listings which may be required by users of these maps. All pertinent data used to compile these manuscripts will be filed in the (Federal Record Center) National Archives.

62. Comparison with Registered Topographic Surveys - None

63. Comparison with Maps of Other Agencies

Refer to Compilation Report, paragraph 46, bound with the Descriptive Report.

64. Comparison with Contemporary Hydrographic Surveys - None

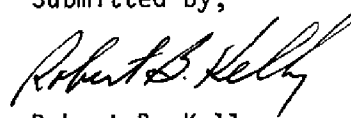
65. Comparison with Nautical Charts

Refer to Compilation Report, paragraph 47, bound with this Descriptive Report.



66. Adequacy of Results and Future Surveys

This map meets National Standards of Map Accuracy and complies with compilation instructions and Bureau requirements

Submitted by,


Robert B. Kelly

Approved and forwarded:


Chief, Photogrammetric Branch

Chief, Photogrammetry Division

PROJECT MATERIAL ON FILE

PH-6413

NATIONAL ARCHIVES

Green Jacket

Aerotriangulation Photographs
Computer Readouts
Photogrammetric Plot Report
Forms C&GS 152 - Control Station Identification Cards
Form 251 - Observation of Horizontal Directions
Project Diagram
Bridging and Compilation Instruction
Field Inspection and Hydro Support Photography

NATIONAL OCEAN SURVEY ARCHIVES

Copies of Final Maps
Descriptive Reports

REPRODUCTION DIVISION

8x Reduction negatives of each Map (Class II)