T-12725
T-12726

T-12725
T-12726

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey (Incomplete) 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

FORM C&GS-181a
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

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):	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):
1:5,000	1:5,000
DATE RECEIVED IN WASHINGTON OFFICE (IV):	**DATE REPORTED TO NAUTICAL CHART BRANCH (IV):**
N/A	

APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):
	~~OCT~~ ~~1981~~	OCT 1981

GEOGRAPHIC DATUM (III):	VERTICAL DATUM (III):
NA 1927	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.

FORM C&GS-181b
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T-12725 and T-12726

02

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:

USCOMM-DC 16276B-P61

5

FORM C&GS-181c
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

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:

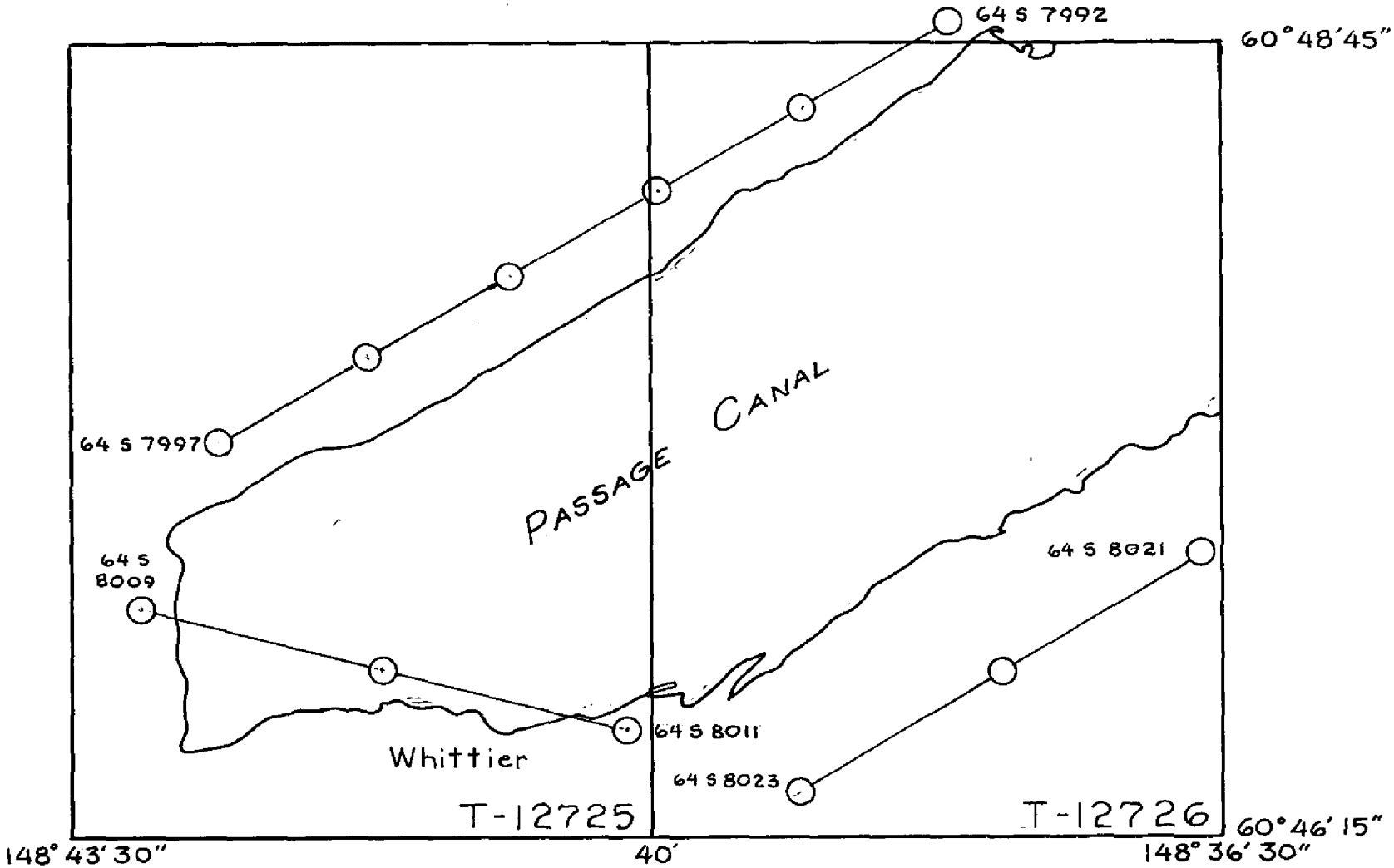
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): RECOVERED: IDENTIFIED: 8

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

O ... 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° 43' 30". Map T-12726 extends eastward to 148° 36' 30". The maps junction at 148° 40' 00". Their common north-south limits extend in latitude from 60° 46' 15" north to 60° 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 descrepancy. 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

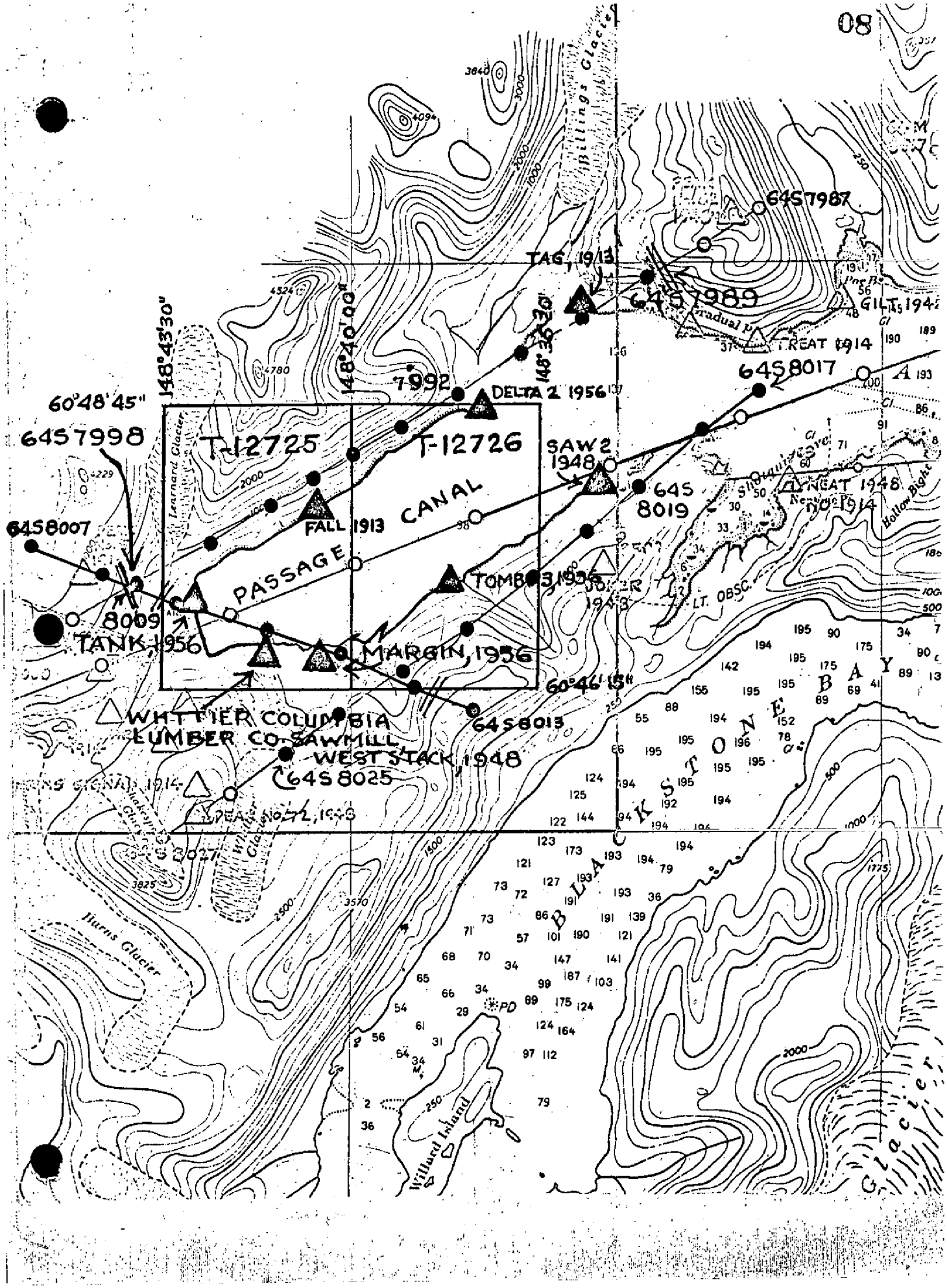
Photography was adequate in relation to coverage, overlap, definition and quality.

Approved by:

Henry P. Eichert

Submitted by:

John D. Perrow, Jr.



Billings Glacier
64S7987
TAG, 1913
64S7989
GILT, 1942
REAT 1914
64S8017
148°43'30"
148°40'00"
148°36'30"
7992
DELTA 2 1956
60°48'45"
64S7998
T-12725
T-12726
SAW 2 1948
64S 8019
NEAT 1948
NO. 1914
Hollow Bight
Learnard Glacier
FALL 1913
PASSAGE CANAL
64S8007
TOMB 3, 1956
JOKER 1948
LT. OBSC.
8009
TANK, 1956
MARGIN, 1956
60°46'15"
64S8013
WHITTIER COLUMBIA LUMBER CO. SAWMILL
WEST STACK, 1948
64S8025
PEAK NO. 72, 1948
64S8027
Burns Glacier
Willard Island
BLACKSTONE BAY
Glacier

FORM C&GS-164
(3-64)
USCOMM-DC
6659-P64

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- #+ 12725, 12726 PROJECT NO: 21423 (6) SCALE OF MAP 1:5,000 ZONE 4 SCALE FACTOR 0.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	~~LATITUDE OR Y~~ COORDINATE X ~~LONGITUDE OR X~~ COORDINATE Y	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 2,480,358.45	
SS A (97110)			729,557.58 2480,432.35	
SS B (97111)			729 575.08 2480.371,98	
SAW 2, 1948	60148 19100 PAGE No. 37	"	751,846.48 2487.608.20	
SSA	19101		751829.08 2487,585.88	
TOMB 3, 1956	60148 PAGE No. 42	"	743 588.62 2,481,953.29	45, 3292.5 151, 3001.7
SSA	21101		743,503.28 2,481,905.62	
SSB	21102		743,509.93 2,481,927.54	
WHITTIER, Columbia Lumber Co. West Stack, 1948 (97113)	60148 PAGE No. 46	"	733,763.53 2,478,723.74	
WHITTIER RR STA EAST END, 1948	60148 PAGE No. 46		737,405.63 2,478,270.56	
OVEN, 1948			748 601.24 2485 046.52	45, 6 3482 151, 4887.3

COMPUTED BY DATE CHECKED BY DATE

FORM C&GS-164
(3-64)
USCOMM-DC
6659-P64

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT CONTROL RECORD

MAP T-12725, 12726 PROJECT NO. 21423 (6) SCALE OF MAP ZONE 4 1:5,000 SCALE FACTOR 0.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	~~LATITUDE OR X~~ COORDINATE / ~~LONGITUDE OR Y~~ COORDINATE X Y	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 X	
			2,496 478.64 X	
SSA (90110)			750,732.71 ✓	
			2,496,482.60 ✓	
SSB (90111)			750,735.61 ✓	
			2,496,475.73 ✓	
✓ RM (old) DELTA 2, 1956	60148 PAGE No. 9	"	745,199.37 ✓	45 4274.4 ?
			2491,214.88 ✓	151, 2647.6 ?
SSA (92110)	Position of RM (OLD) doubtful		745,144.61 ✓	
			2491,497.62 ✓	
SSB 92111			745 233.13 ✓	
			2491,241.90 ✓	
FALL 1913	60148 PAGE No. 12	"	736 278.35	
			2485,686.19 ✓	
SSA			736,211.38 ✓	
			2485,654.95 ✓	
SSB			736,379.98 ✓	
			2,485,764.49 ✓	
MARGIN, 1956	60148 PAGE No. 19	"	736,993.23 X	
			2,478,536.96 X	
SSA	24101		737, 094.65 ✓	
			2478,578.76 ✓	
SSB	24102		736,877.26 ✓	
			2478,432.92 ✓	

COMPUTED BY DATE CHECKED BY DATE

10

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.

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 2½ 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°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

Signal No.	Description
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

Signal No.	Description
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

FORM [redacted] (4-27[redacted])

August 29, 1964

TIDE CO[redacted]UTATION

U.S. DEPARTMENT[redacted] COMMERCE
COAST AND GEO[redacted]IC SURVEY

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
Diurnal range 12.1

Date of field inspection

Subordinate station Whittier, Passage Canal

Ratio of ranges

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

	Height feet	Height x Ratio of ranges
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

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

COMM-DC-57848

Computed by JBP

Checked by

8

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

Robert B. Kelly

Approved and forwarded:

George M. Baker

Chief, Photogrammetric Branch

Walter Shimano

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)