11210
11211

11210 11211

Diag. Cht. No. 8002.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-5808 Office No. T-11210 T-11211

LOCALITY

State Alaska

General locality Gulf of Alaska

Locality Lituya Bay

19 58-59

CHIEF OF PARTY
H.J.Seaborg, Chief of Party
L.W.Swanson, Div. of Photo. Wash,D.C.

LIBRARY & ARCHIVES

DATE May 1962

USCOMM-DC 5087

FORM 181
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T - 11210 and T - 11211

Project No. (II): Ph - 5808 Quadrangle Name (IV):

Field Office (II): Chief of Party: H. J. Seaborg

Photogrammetric Office (III): Washington, D. C. Officer-in-Charge: L. W. Swanson

Instructions dated (II) (II) 20 October 1958 *Copy filed in Division of* Photogrammetry (IV)

Method of Compilation (III): Stereo - instrument -(nine-lens and graphic)

Manuscript Scale (III): 1 : 10,000 Stereoscopic Plotting Instrument Scale (III): 1 : 10,000

Scale Factor (III):

Date received in Washington Office (IV): Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): 4/25/62

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): 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):

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.

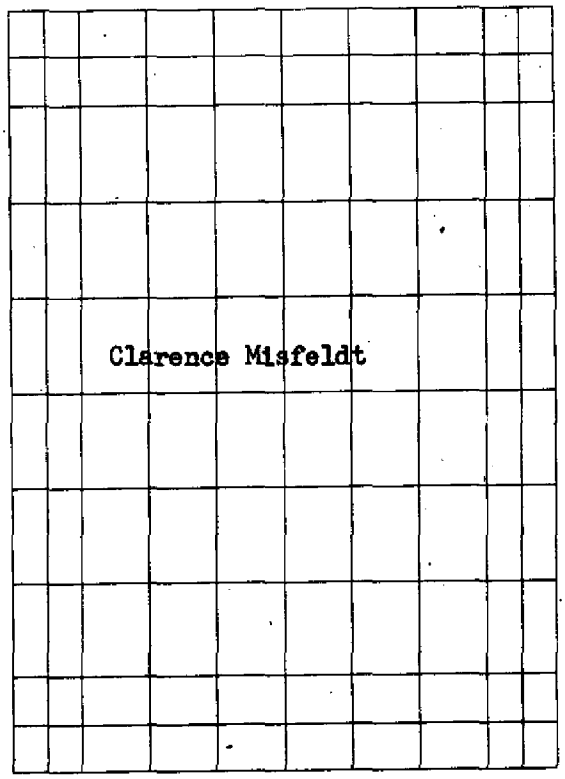
When entering names of personnel on this record give the surname and initials, not initials only.

COMM-DC-57842

FORM 181a
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD



Areas contoured by various personnel
(Show name within area)
(II) (III)

COMM-DC-57842

FORM 181b
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): H. J. Seaborg — Date: July-Aug., 1959

Planetable contouring by (II): — Date:

Completion Surveys by (II): — Date:

Mean High Water Location (III) (State date and method of location):
Field inspection Aug. 1959, on 1958 Nine-lens photographs.

Projection and Grids ruled by (IV): P. T. Dempsey — Date: 10-22-58

Projection and Grids checked by (IV): R. Shoup — Date: "

Control plotted by (III): R. L. Sugden — Date: Dec. 1959

Control checked by (III): H. Lucas — Date: Dec. 1959

Radial Plot or Stereoscopic Control extension by (III): R. L. Sugden — Date: Dec. 1959

Stereoscopic Instrument compilation (III):
Planimetry Clarence Misfeldt — Date: Mar. 1959
Contours " — Date: Mar. 1959

Final shoreline and contours revised in Dec. 1959 by C. Misfeldt

Manuscript delineated by (III): — Date:

Photogrammetric Office Review by (III): L. Levin — Date: Dec. 1959

Elevations on Manuscript checked by (II) (III): L. Levin — Date: Dec. 1959

COMM-DC-57842

FORM 181c
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III):

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
58577 thru 58583	8-29-58	0857 thru 0900	1:10,000	0.5 above MLW
58586 thru 58592	8-29-58	0906 thru 0908	"	"

Tide (III)

Diurnal

Ratio of Ranges	Mean Range	Spring Range
	7.0	9.0

Reference Station: Sitka
Subordinate Station: Lituya Bay
Subordinate Station:

Washington Office Review by (IV): L C Lands Date: Mar 1962

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III):
Shoreline (More than 200 meters to opposite shore) (III):
Shoreline (Less than 200 meters to opposite shore) (III):
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): Recovered: Identified:
Number of BMs searched for (II): Recovered: Identified:
Number of Recoverable Photo Stations established (III):
Number of Temporary Photo Hydro Stations established (III):

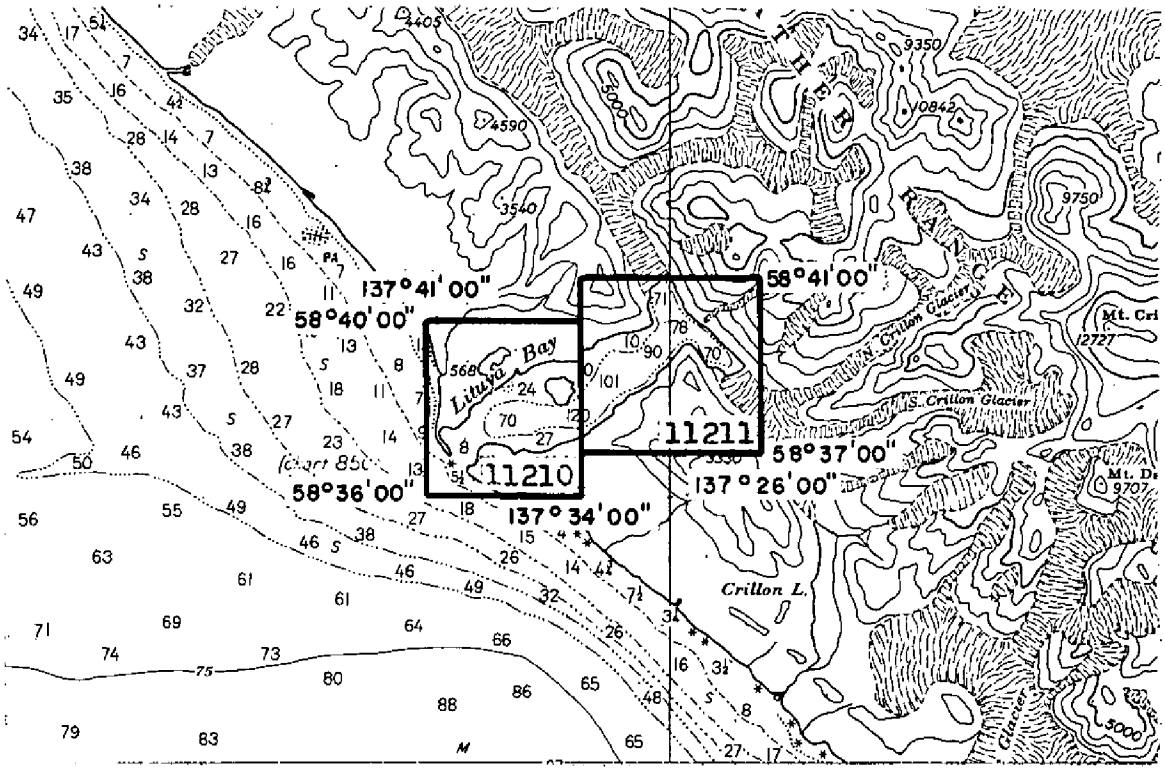
Remarks:

COMM-DC-57842

PROJECT PH-5808

Topographic Mapping Scale 1:10,000

Lituya Bay, Alaska



Official Mileage For Cost Accounts

Sheet Number	Area Sq. Mi.	Lin. Mi. Shoreline
11210	11	22
11211	15	14
TOTALS	26	36

Project PH-5808
PHOTOGRAMMETRIC PLOT REPORT
LITUYA BAY, ALASKA
Scale 1:10,000
December 1959

A preliminary plot of this area was done in December 1958. Office identified control and graphic control positions were used . Field identified control dated July-Aug. 1959, was furnished for control of the final radial plot for this area. Hydrographic control established by the field and indicated on the blackline impressions was adjusted to this datum. The original photographs and templets, with the additional control added, were used in laying this plot.

21. Area Covered

This radial plot includes two manuscripts, T-11210 and T-11211 at 1:10,000 scale covering Lituya Bay from the entrance to its head.

22. Method

The radial plot was laid on vinylite manuscripts on which polyconic projections and the UTM grid were ruled. The grid lines were used in junctioning the manuscripts. The attached sketch shows the layout, the photographs used and the distribution of horizontal control.

Fourteen nine-lens metal-mounted photographs taken in August 1958 were prepared for this plot with pass points about every three inches along the shoreline and about every six inches in the interior. Sufficient pass points common with Geological Survey single-lens photographs taken in June 1948 were picked at the same time.

Vinylite was used in making the templets. A master templet was not used in preparing the templets as the photographs were previously checked and found free of transformer errors.

The 1959 field identified control was added to the originally prepared photographs and templets. Only nine-lens photographs were used for the relaid plot.

A tight plot into all control was laid in the stronger controlled western half obtaining good pass point positions and azimuths. With this as a base the plot was extended eastward into station ICE 1959 (Sub Pt.).

There was extreme tilt evident in photographs 58577, 58578 and 58579. Intersections into positions of high elevated peaks was resolved only after templets were corrected by drawing rays from the elevated points to the nadir point.

Intersection positions formed by three or more rays were circled with red ink and those formed by only two rays were circled in green ink. Those new pass point positions differing by more than 0.3mm with the preliminary plot positions were corrected on the original manuscript.

After completion of the plot of nine-lens photographs templets of the single-lens photographs were adjusted to positions obtained by the nine-lens plot. Little extension was required for this plot, it being primarily a resection problem. Pass points on this single-lens plot were circled with $2\frac{1}{2}$mm blue circles. These were made solid for three or more intersections and dash for two rays.

23. Adequacy of Control

Eleven control stations with CSI cards and accompanying field photoidentification was used for controlling the plot. Positions and field identification was also furnished for four peaks.

The control was adequate overall but best in the western half where there was more and better placed control. Much of the control in the eastern half was on high peaks with poor photograph images falling on tilted photographs. The templets had to be corrected for tilt as explained in paragraph 22 above.

Radials from images to hydro station GIL intersected into triangulation station GILBERT 1959. They are denoted as being the same on the field photograph and therefore afford a check on the plot.

In adjusting the hydrographic control to the final plot, it was found that the hydrographic stations with triangulation station names fell on the plotted positions for their respective stations. These stations therefore afforded an additional check in datum for the plot. One exception to this was station COAL which did not coincide. As there was no field report received with this job, it is not known if this is to be in the same position. The blackline impression position was shown (adjusted to the final plot) as there was no position shown on the field photos.

All control held in the plot within 0.3mm with the following exceptions: SUNMORE 1959 (Sub Pt.) was missed by 0.4mm S. A number of rays were from poor images. DOME HILL 1959 with rays from poor photograph images was missed 0.4mm N.W. Peak A 1959 with positions from tilted photographs was missed 0.8mm to the north. The apparent high point was picked for Peak D (not the field identified position). This peak held in the plot.

24. Supplemental Data

T-42~~46~~44, 1926, 1:20,000

Although no large discrepancies existed between the positions obtained by radial plot and graphic control survey positions, there is a discrepancy in shoreline between the surveys in the vicinity of hydro station CAT. The quality of the intersections of the plot indicate that the planetable survey is in error in this area.

25. Photography

The nine-lens photography was adequate for the plot. The scale between the photographs varied and Nos. 58577 thru 58579 were badly tilted. See sub-heading 22. The single-lens photographs were of poor definition but should be adequate for compilation of shoreline.

26 through 30

Inapplicable.

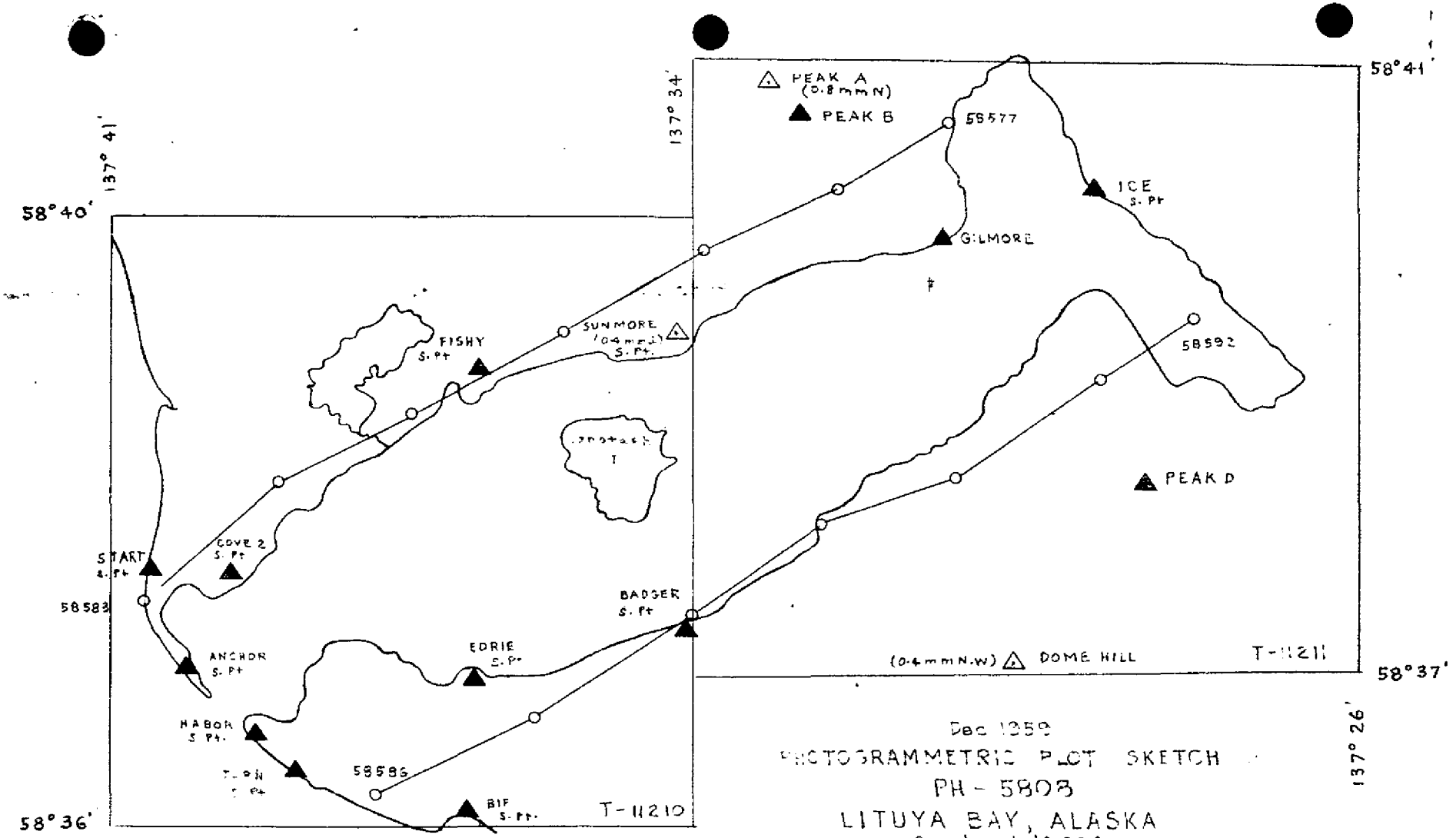
Sketch and form M-2388-12 submitted.

SUBMITTED BY:

Robert L. Sugden
Robert L. Sugden
Cartographer

APPROVED BY:

Peter P. Battley Jr.
J. Battley, Jr.
Cartographer



Dec 1959

PHOTOGRAMMETRIC PLOT SKETCH

PH - 5808

LITUYA BAY, ALASKA

Scale 1:10,000

LEGEND

▲ Field identified triangulation stations held.

△ Field identified triangulation stations not held.

○ U.S.C.&G.S. Nine lens photographs, Aug '59

FORM 164
4-23-54)

U.S. DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORT

COAST AND GEODETIC SURVEY
CONTROL RECORD

MAP T. 11210 PROJECT NO. PH-5-808 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
SUNMORE, 1959	G 12119 Pg 2	NA 1927	58-39-05.578			1856.5	172.6	1683.9		
			137-34-15.975			967.6	257.6	710.0		
Sub Pt. SUNMORE, 1959	Off. Comp.	"	58-39				199.6	1656.9		
			137-34				258.0	709.6		
TURN, 1926	G 12119 Pg 3	"	58-36-17.670			1856.5	546.7	1309.8		
			137-38-37.301			968.9	602.3	366.6		
Sub Pt. TURN, 1926	Off. Comp.	"	58-36				509.0	1347.5		
			137-38				596.8	372.1		
ANCHOR, 1959	G 12119 Pg 1	"	58-37-02.280			1856.5	70.5	1786.0		
			137-40-10.655			968.6	172.0	796.6		
Sub Pt. ANCHOR, 1959	Off. Comp.	"	58-37				94.6	1761.9		
			137-40				136.0	832.6		
COVE 2, 1959	G 12119 Pg 1	"	58-37-31.199			1856.5	965.4	891.1		
			137-39-38.404			968.3	619.8	348.5		
Sub Pt. COVE 2, 1959	Off. Comp.	"	58-37				1042.4	814.1		
			137-39				602.8	365.5		
EDRIE, 1959	G 12119 Pg 2	"	58-37-00.623			1856.5	19.3	1837.2		
			137-36-34.684			968.6	559.9	408.7		
Sub Pt. EDRIE, 1959	Off. Comp.	"	58-36				1824.7	31.8		
			137-36				547.2	421.4		
FISHY, 1959	G 12119 Pg 2	"	58-38-57.590			1856.5	1781.9	74.6		
			137-36-34.025			967.7	548.8	418.9		
Sub Pt. FISHY, 1959	Off. Comp.	"	58-38				1829.2	27.3		
			137-36				570.0	397.7		

1 FT. = .3048006 METER

COMPUTED BY: F. M. Wisiecki DATE 12/8/59 CHECKED BY: R. L. Sugden DATE 12/9/59

COMM-DC-57843

ORM 164
4-23-54)

U.S. DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORT

COAST AND GEODETIC SURVEY
CONTROL RECORD

MAP T- 11210-11211 PROJECT NO. PH-5-808 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
ENTER, 1959	G-12119		58-36-41.390			1856.5	1280.7	575.8		
			137-39-11.419			968.7	184.4	784.3		
BAY, 1959 (1926)	G-12119		58-37-10.963			1856.5	339.2	1517.3		
			137-38-22.906			968.5	369.7	598.8		
SQUARE, 1959	"		58-37-46.659			1856.5	1443.7	412.8		
			137-38-58.327			968.2	941.2	27.0		
LITUYA BAY MID BASE, 1959 (1926)			58-37-20.652			1856.5	639.0	1217.5		
			137-40-25.394			968.4	409.9	558.5		
LITUYA BASE, N.B. 1959, (1926)			58-37-29.901			1856.5	925.2	931.3		
			137-40-25.078			968.4	404.7	563.6		
CENOT, 1959			58-38-06.489			1856.5	200.8	1655.7		
			137-35-07.460			968.1	120.4	847.7		
COAL, 1959			58-38-17.556			1856.5	543.2	1313.3		
			137-31-54.021			968.0	871.5	96.5		
GILBERT, 1959			58-39-49.138			1856.5	1520.4	336.1		
			137-30-55.927			967.3	901.6	65.7		
CRILL, 1959			58-39-20.207			1856.5	625.2	1231.3		
			137-29-35.582			967.5	573.8	393.7		
TRAVE, 1959			58-37-00.438			1856.5	13.6	1842.9		
			137-40-00.362			968.6	5.8	962.8		
LITUYA BAY, S.B. RM No 2, 1926			58-37-01.241			1856.5	38.4	1818.1		
			137-39-58.592			968.6	945.9	22.7		
FRONT ROYAL, 1959			58-37-38.528			1856.5	1192.1	664.4		
			137-39-21.253			968.3	343.0	625.3		

1 FT. = .3048006 METER

COMPUTED BY: R. Sugden DATE 12/30/59 CHECKED BY: H. Lucas DATE 12/30/59

COMM-DC-5784

ORM 164
4-23-54)

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

MAP T- 11210-11211 PROJECT NO. PH-5-808 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
HABOR, 1959	G 12119 Pg 1	NA 1927	58-36-34.928				1080.7	775.8		
			137-39-19.887				321.1	147.7		
Sub Pt. HABOR, 1959	Off. Comp.	"	58-36				1096.0	760.5		
			137-39				286.2	682.6		
BIF, 1926	II 626	"	58-36-04.092				126.6	1729.9		
			137-36-32.676				527.7	441.3		
Sub Pt. BIF, 1926	Off. Comp.	"	58-36				145.2	1711.3		
			137-36				543.3	425.7		
START, 1926	G 12119 Pg 3	"	58-37-32.139				994.4	862.1		
			137-40-32.565				525.6	442.8		
Sub Pt. START, 1926	Off. Comp.	"	58-37				1102.4	754.1		
			137-40				556.0	412.4		
1959 ICE, (1926)	G 12119 Pg 2	"	58-40-09.635				298.1	1558.4		
			137-29-12.873				207.5	759.6		
Sub Pt. ICE, 1926	Off. Comp.	"	58-40				301.1	1555.4		
			137-29				179.4	787.7		
BADGER, 1959	G 12119 Pg 2	"	58-37-17.084				528.6	1327.9		
			137-34-13.460				217.3	751.2		
Sub Pt. BADGER, 1959	Off. Comp.	"	58-37				484.9	1371.6		
			137-34				241.8	726.7		

1 FT. = .3048006 METER

COMPUTED BY: F. M. Wisiecki DATE 12/9/59 CHECKED BY: R. L. Sugden DATE 12/9/59

COMM-DC-57843

FORM 164
4-23-54)

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

MAP T-11210-11211 PROJECT NO. PH-5808 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
REAR RANGE, 1959			58-37-43.478			1856.5	1345.3	511.2		
			137-39-19.967			968.2	322.2	646.0		
BM No.2 1926, 1959			58-36-58.454			1856.5	1808.7	47.8		
			137-37-06.321			968.6	102.0	866.5		
PEAK D, 1959			58-38-10.691	T-11211		1856.5	330.8	1525.7		
			137-28-31.212			968.1	503.6	464.5		
DOME HILL, 1959			58-37-05.571	T-11211		1856.5	172.4	1684.1		
			137-29-58.089			968.6	937.7	30.9		
PEAK A, 1959			58-40-50.031	T-11211		1856.5	1548.1	308.4		
			137-33-00.665			966.8	10.7	956.1		
PEAK B, 1959			58-40-36.431			1856.5	1127.2	729.3		
			137-32-45.817			966.9	738.4	228.5		

1 FT. = .3048006 METER

COMPUTED BY: R. Sugden DATE 12/30/59 CHECKED BY: H. Lucas DATE 12/30/59

COMM-DC-57843

orig

COMPILATION REPORT
T-11210 and T-11211
7 December 1959

31. Delineation

The planimetry and hypsography were compiled with the Reading Stereoplotter, A.

32. Control

Geodetic control by triangulation was confined to shoreline points. These were identified in the office from published descriptions. Supplemental control by the radial-line plot was adversely affected by tilted photographs combined with high elevations of many selected points. The position of detail back of the shoreline was mainly determined by the plotting of the stereo model that had good alignment with shoreline points. Vertical control was confined to the water level at the time of photography. Additional points in the outer areas of photographs were cut into the plot by intersections of two or more rays. The elevations, of as many points as were contained in a well-rectified photograph, were computed using radial distance and parallax measurements. These served as aids in rectification of the adjacent photographs. An adjusted stereo model of the two photographs provided a check and modification of elevations of common points. The procedure was repeated for each successive photograph. Considering the probable accuracy of the 1926 survey and the tree-cover on many points, there is reasonable agreement of position and elevation of most common points.

33. Supplemental Data

Shoreline field inspection, 1959.

34. Contours and Drainage

Stereo instrument contouring of the preliminary maps was done without benefit of vertical control other than the water surface. Subsequent field identified vertical control data was furnished for eighteen triangulation stations. The maps information compared very favorably with the computed field data. Fifteen of the map elevations agreed within less than five feet of the computed elevations and the maximum difference was 13 feet.

35. Shoreline and Alongshore Details

Changes to shoreline and alongshore detail resulting from the new positions obtained by the radial plot laid on the 1959 control (see 1959 Plot Report), and from the 1959 shoreline inspection were made directly on the original manuscripts in red ink. Vertical datum from field inspection was applied to offshore rocks.

The hydrographic control was adjusted to the final datum and is shown on the original manuscript. On some of these photo hydro stations additional radial cuts from office photos resulted in stronger located positions than were obtained in the field. With the exception of COAL all photo-hydro positions are believed to be in their correct position.

36. Offshore Details

Some rocks awash shown on the 1926 survey, especially at the mouth of Lituya Bay, were not visible on the photographs. Confirmation of these can be made at the time of hydrography.

37. Landmarks and Aids

The harbor light was washed out by the seismic tidal wave of July 9, 1958. Landmark TREE (photo hydro TAY) was scaled from final manuscript (plot) & submitted to Hydr. Charts. EE. Chart Letter 134, 1960

38. Control for Future Surveys

Many shoreline or alongshore rocks or boulders are delineated, some may be useful for hydro signals.

39. Junctions

The two manuscripts join each other, but no other contemporary surveys are in the area.

40. Horizontal and Vertical Accuracy

Accuracy decreases as distance from shore increases. See No. 32, Control and No. 34, Contours.

41. Seismic Investigation

The survey was started to record changes produced by the earthquakes and seismic tidal wave of July 9, 1958. A simultaneous survey was made, from 1948 single-lens photography for comparison. The outstanding change was the extensive areas, some of high elevation, denuded by the ice and water of the seismic tidal wave. Little change occurred in the shoreline. The relatively independent compilations, together with probable recurring erosion and deposition, made critical comparison difficult.

46. Comparison with Existing Maps

USGS Alaska Reconnaissance topographic series:
Mr. Fairweather, Alaska 1:250,000, 1951

46. Comparison with Existing Maps Continued

USC&GS topographic survey, No. T-4244 - Lituya Bay 1:20,000, 8/26
USC&GS hydrographic survey, No. H-6582 - Lituya Bay and approaches, 1:20,000, 4/40
USC&GS hydrographic survey, No. H-4608 - Lituya Bay, 1:20,000, 8/26
USC&GS hydrographic survey, No. H-2174a - Entrance to Lituya Bay, 1:10,000, 1874

47. Comparison with Nautical Charts

USC&GS Nautical Chart, No. 8402, Cross Sound to Yakutat Bay, 1:300,000 4/49
USC&GS Nautical Chart, No. 8505, Lituya Bay, 1:20,000 3/27

SUBMITTED:

Contouring: Clarence Misfeldt
Clarence Misfeldt

Adjusted shoreline and alongshore features: Robert L. Sugden
Robert L. Sugden

REVIEW REPORT
of Topographic Manuscripts T-11210 and T-11211
March 1962

62. Comparison with Registered Topographic Surveys

T-4244 1:20,000 1926 This survey agrees as well as could be expected considering the time difference. Only minor differences exist between this survey and T-11210 and T-11211. T-11210 and T-11211 supersede the above survey of common area for Nautical Chart purposes.

63. Comparison with Maps of Other Agencies

U.S.G.S. Reconnaissance topographic series:
Mt. Fairweather, Alaska 1:250,000 1951

Because of the scale difference only a visual comparison can be made. T-11210 and T-11211 are more complete and supersede the above survey for common area.

64. Comparison with Contemporary Hydrographic Surveys

H-8492 1:10,000 and 1:5,000 1959

Shoreline and control of subject survey was furnished for the hydrographic survey in 1959. There are some rocks shown on T-11210 and T-11211 that are not shown on H-8492. However, during verification and review they will be proved or disproved.

65. Comparison with Nautical Charts

Chart 8505 1:20,000 Edition 1942 Revised 7/5/59

66. Adequacy of Results and Future Surveys

These surveys were prepared according to project instructions and are within the required accuracy for Nautical Charting.

Respectfully Submitted:

L. C. Lande

Approved:

Chas. Theurer
Chief, Cartographic Branch

5/9/62
Chief, Photogrammetry Div.

Chief, Nautical Chart Division

6/4/62
Chief, ~~Coastal Surveys Div.~~ Operations

Geographic Names
T-11210 and T-11211

Gulf of Alaska
Lituya Bay
Crillon Inlet
Gilbert Inlet
Anchorage Cove
Portage Creek
Coal Creek
Mudslide Creek
Fall Creek
Steelhead Creek
Fish Lake
Cenotaph Island
Solomon Railroad
The Paps
Harbor Point
La Chaussee Spit
Cormorant Rock
Cascade Glacier
Lituya Glacier
North Crillon Glacier

NAUTICAL CHARTS BRANCH

SURVEY NO. T-11210 & 11211

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5/18/73	8505	TOMMYE ALEXANDER	Before [redacted] Verification and Review
5/18/73	8402	TOMMYE ALEXANDER	Before [redacted] Verification and Review
2/2/79	8505	RTN	~~Before~~ After Verification and Review
			Fully applied topo to Drg. #8
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.