

# 11570

CR 10/11/11

Diag. Cht. No. 8502-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. 6140 Office No. T-11570

### LOCALITY

State Alaska

General locality Cook Inlet

Locality Anchorage

194 55

CHIEF OF PARTY

LIBRARY & ARCHIVES

DATE 1945

# 11570

# DATA RECORD

T - 11570

Project No. (II): 6140

Quadrangle Name (IV):

Field Office (II):

Chief of Party: H. C. Applequist  
Comdr. USC&GS

Photogrammetric Office (III): Washington, D. C.

Officer-in-Charge: L. W. Swanson  
Comdr. USC&GS

Instructions dated (II) (III): 17 August 1955

Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): Kelsh Plotter (B)

Manuscript Scale (III): 1:10000

Stereoscopic Plotting Instrument Scale (III): 1:3000

Scale Factor (III):

Date received in Washington Office (IV):

OCT 28 1955

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 21 Oct 1957

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III):

Vertical Datum (III): MHW

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): Anchor, 1947

Lat.: 61° 13' 08.850"

Long.: 149° 54' 07.877"

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.

# DATA RECORD

Field Inspection by (II): **Kenneth A. MacDonald** Date: **May 1955**  
**Ens, USC&GS**

Planetable contouring by (II): **None** Date:

Completion Surveys by (II): **None** Date:

Mean High Water Location (III) (State date and method of location): **Field Inspection**  
**May 1955**

Projection and Grids ruled by (IV): **A. Riley** Date: **8-26-55**

Projection and Grids checked by (IV): **A. Riley** Date: **8-26-55**

Control plotted by (III): **W. D. Harris** Date: **9-12-55**

Control checked by (III): **C. E. Cook** Date: **10-3-55**

Radial Plot or Stereoscopic **W. D. Harris** Date: **9-16-55**  
Control extension by (III):

Planimetry **C. E. Cook** Date: **10-10-55**

Stereoscopic Instrument compilation (III): ~~Control~~ Date:

Manuscript delineated by (III): **J. MacDonald** Date: **10-18-55**

Photogrammetric Office Review by (III): **C. E. Cook** Date: **10-21-55**

Elevations on Manuscript **None** Date:  
checked by (II) (III):

Camera (kind or source) (III): W-1

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
54-W-2784-2789	27 July 1954	1327-1329	1: 30,000	*14.6 ✓
54-W-2795-2799	27 July 1954	1342-1344	1: 30,000	*16.3 ✓

\* Tides are from predictions; observations for that period are not available

Tide (III)

Reference Station: Anchorage, Alaska  
Subordinate Station:  
Subordinate Station:

Diurnal		
Ratio of Ranges	Mean Range	Range
--	26.7	29.6

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 8  
Shoreline (More than 200 meters to opposite shore) (III): 8  
Shoreline (Less than 200 meters to opposite shore) (III): -  
Control Leveling - Miles (II): -  
Number of Triangulation Stations searched for (II):  
Number of BMs searched for (II):  
Number of Recoverable Photo Stations established (III):  
Number of Temporary Photo Hydro Stations established (III):

Recovered:  
Recovered:

Identified: 19  
Identified:

Remarks:

MAP T-11570 PROJECT NO. Ph-140 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\psi$ -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)	
Woronozof, 3 1947 elev. 148 ft.	Alaska 23 P. 18 V-387	N.A. 1927	61-12-15.576	482.1	(1375.1)				
S.S. Woronozof, 3 (R.M.2)	P. 18	"	150-00-47.908 61-12 and 150-00 and	715.5	(180.6)				
Anchorage Radio Station KFD Tower 1954, elev. 256 ft. (top)	#13352 V-826	"	61-11-38.865 149-57-05.598	476.6	(1380.6)				
Anchorage Radio Station KBYR tower 1954, elev. 262 ft. (top)	#13350 V-826	"	61-11-33.354 149-54-01.522	739.0	(157.1)				
Anchorage Radio Station KENI Tower, 105 ft. (top) elev. 351 ft. (top)	#13351 V-827	"	61-12-25.193 149-55-20.324	22.7	(873.7)				
Anchorage, Providence Hospital, gold painted cross (Gross), 1941	P. 16 V-386	"	61-12-52.875 149-54-08.194	779.8	(1077.4)				
Anchor, 1947 elev. 87 ft.	P. 19 V-387	"	61-13-08.850 149-54-07.877	303.5	(592.5)				
Anchor, 1947 Sub Point		"	Not computed (plotted by $\chi$ and distance according to M-2226-12 card). 16.8 m on left $\chi$ of 79° 00' from Radio Station KENI	1636.7	(220.5)				
Anchorage, Federal Building, P. 16 Chimney (Black), V-386 1941	P. 16 V-386	"	61-13-09.896 149-53-30.953	122.3	(773.2)				
Anchorage, TV Station KPIA, Tower, 1954, (top) elev. 229 ft.	#13353 V-827	"	61-13-11.439 149-53-25.851	273.9	(1583.3)				
Anchorage, TV Station KPIA, Tower, 1954, (Base) elev. 261 ft. (top)	#13354 V-826	"	61-13-09.991 149-52-31.124	117.6	(778.1)				
Anchorage, City Water tank, Apex (steel), 1941	P. 16 V-386	"	61-13-17.880 149-52-07.133	306.3	(1550.9)				

1 FT. = 3048006 METER

COMPUTED BY: W. D. Harris

DATE 10 September 1955

CHECKED BY: C. E. Cook

DATE 3 October 1955

M-2388-12



MAP T. 11570 PROJECT NO. Ph-140 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\nu$ -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)	
House, 1941	Alaska 23, P. 16 V-384	N.A. 1927	61-13-42.795	1324.7	( 532.5)				
Anchorage, General Fish Company, highest warehouse, west gable	P. 16 V-385	"	149-53-11.131	166.1	( 729.2)				
(Can), 1941	P. 16 V-385	"	61-13-40.144	1242.6	( 614.6)				
Anchorage, Red railroad water tank, apex (Red)	P. 16 V-385	"	149-53-39.449	588.7	( 306.7)				
(Rail), 1941	P. 16 V-385	"	61-13-46.026	1424.7	( 432.5)				
Anchorage, Alaska railroad, elevated tank, 1947, elev. 213 ft.	P. 19 V-367	"	149-52-35.721	533.0	( 362.3)				
Anchorage, Ocean dock warehouse, North ventilator, (Rail), 1941	P. 16 V-386	"	61-13-46.483	1438.8	( 418.4)				
Loop (R.M. 4) 1944	P. 16 V-386	"	149-52-35.333	527.2	( 368.2)				
S.S.	P. 16 V-386	"	61-14-15.432	477.7	( 1379.5)				
Anchorage, municipal airport (aero Beacon) P. 16 1941	P. 16 V-386	"	149-53-16.653	248.4	( 646.7)				
Merrill Field Control Tower, 1944, R 1954	P. 16 V-827	"	61-15- and 149-50 and	425.5	( 1431.7)	(outside sheet limits)			
RMC Anchorage Radio ANC, 1954 elev. 262 ft. (top)	P. 16 V-827	"	61-13-02.999	658.1	( 236.5)	(outside sheet limits - plotted because			
VOR Anchorage radio ANC, 1954	P. 16 V-828	"	149-50-52.015	92.8	( 1764.4)	name agreed with control station Ident.			
Anchorage, 1200 L St. Apt. Bldg., base of flagpole, 1954, elev. 246 (Base)	P. 16 V-828	"	61-13-03.025	776.5	( 119.2)	(outside sheet limits and			
Anchorage, Inter- national airport control tower, 1954 elev. 190 ft. (top)	P. 16 V-828	"	149-50-52.787	93.6	( 1763.6)	not plotted)			
	P. 16 V-828	"	61-11-50.024	778.0	( 117.7)				
	P. 16 V-828	"	149-51-38.543	1548.4	( 308.8)				
	P. 16 V-828	"	61-11-43.98	575.7	( 320.6)				
	P. 16 V-828	"	149-58-22.16	1361.4	( 495.8)				
	P. 16 V-828	"	61-12-38.55	331.0	( 565.3)				
	P. 16 V-828	"	149-54-00.45	1193.3	( 663.9)				
	P. 16 V-828	"	61-10-26.35	6.7	( 889.1)				
	P. 16 V-828	"	149-58-45.40	815.6	( 1041.6)	(outside sheet limits)			
	P. 16 V-828	"		678.6	( 218.2)				

1 FT. = 3048006 METER

COMPUTED BY: W. D. Harris

DATE: 10 Sept. 1955

CHECKED BY: C. E. Cook

DATE: 3 October 1955

M-2388-12

Ph - 140

Anchorage, Alaska

Photo Points, UTM Coordinates Zone 6

Station	N	E
Rug, 1955	6,788,494.81 ✓ M.	339,270.32 ✓ M.
Lo9, 1955	6,788,430.07 ✓	339,684.08 ✓
Rod, 1955	6,788,365.24 ✓	340,500.54 ✓
Sew, 1955	6,788,716.66 ✓	341,700.08 ✓
How, 1955	6,789,057.16 ✓	342,434.98 ✓

These are all no-check positions



## FIELD INSPECTION REPORT

### 2. AERIAL FIELD INSPECTION.

The area inspected was the shoreline along the Anchorage, Alaska waterfront from Latitude  $61^{\circ} 15'$  South to Pt. Woronzof at Longitude  $150^{\circ} 01'$ .

The interior detail is clearly shown on the photographs and it was felt that complete field inspection was not required.

Quality of photographs was excellent and coverage was adequate except that some of the beach area was out on the wing of the photos.

### 3. HORIZONTAL CONTROL.

The following is a list of Supplemental Control Stations established by the field party.

SOURCE	NAME	LATITUDE		METERS	LONGITUDE		METERS
		°	'		°	'	
× BO-A-55	ROK, 1955	61	14	1685	149	52	584
- BO-A-55	(C-9, 1948, (USE)	61	14	1086	149	52	716
- BO-A-55	(C-8, 1948, (USE)	61	14	824	149	52	820
- BO-A-55	(C-7, 1948, (USE)	61	14	496	149	53	67
× BO-A-55	ABE, 1955	61	14	19	149	53	323
× BO-A-55	HAT, 1955	61	13	830	149	53	391
- BO-A-55	CAT, 1955	61	13	149	149	54	296
- BO-A-55	HOG, 1955	61	12	1488	149	54	725
- BO-A-55	RAT, 1955	61	12	981	149	55	319

The above stations were located by graphic control methods by the field party.

-HOW, 1955  
-SEW, 1955  
-ROD, 1955  
-LOG, 1955  
-RUG, 1955

The above stations were located by three point fix and data for computation of positions is included with this report.

No triangulation was identified in the group containing "DELTA, 1909, L 1918"; "TAN"; and "BLUFF, 1941" for the following reasons. "DELTA, 1909" was reported lost in 1918, "TAN" was a temporary station used for hydrography in 1941 and was not recoverable, "BLUFF, 1941" was searched for by the field party and reported definitely lost. As a substitute for this group "ANCHORAGE RADIO STATION KENI, TOWER, 1954" was identified.

Identification of "WAREHOUSE (ABANDONED) GABLE, 1910, L 41", which was required by the project instructions was not accomplished due to the fact the station was reported lost in 1941 as was shown on the photo index, "LOOP, 1944" was identified as a substitute for this station.



4. VERTICAL CONTROL.

Inapplicable.

5. CONTOURS AND DRAINAGE.

The streams have been noted on the field photo in the area inspected.

6. WOODLAND COVER.

Inapplicable.

7. SHORELINE AND ALONG SHORE FEATURES.

Adequate notes have been made on the field plates for the delineation of these features. The low water line is delineated on the hydrographic sheet.

8. OFF SHORE FEATURES.

There are no off shore features worthy of note.

9. LANDMARKS AND AIDS.

All landmarks for charts have been listed on form 567. There are no fixed aids to navigation within the area of this survey.

10. BOUNDARIES MONUMENTS AND LINES.

Inapplicable.

11. OTHER CONTROL.

Following is a list of recoverable topographic stations not listed on form 567.

- FAR, 1955
- PAL, 1955
- OAK, 1955
- FLAG, 1955
- ABE, 1955

12. OTHER INTERIOR FEATURES.

Interior details are readily discernable on the photographs, and therefore were not inspected by the field party.

13. GEOGRAPHIC NAMES.

The names that appear on the various charts are the accepted names.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA.

Data for computation of stations located with a theodolite.

Landmark for charts Form 567.

Description for recoverable topographic station will be submitted with the topographic survey.

Recovery notes for triangulation will be submitted direct to Washington Office.

Control station identification cards are submitted for all control identified on the field photo.

Respectfully submitted:

*Kenneth A. Mac Donald*  
Kenneth A. Mac Donald  
Ensign, USC&GS

APPROVED:

*H.C. Applequist*  
H.C. Applequist  
Commander, USC&GS  
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT

21. AREA COVERED:

T-11570

22. METHOD:

Stereo model templates were used by the Research Branch to test this method of bridging. In attempting to detail the models, the adjusted bridge points could not be held with satisfactory accuracy. The models were then bridged on the stereoplanigraph with only slight change in the results. Most of the control was on the shore side of the strip which did not permit accurate adjustment of the inshore side of the bridge.

Inasmuch as most of the control in the area was along the shore in the area required to be detailed, this control was favored over bridge points and detailing was completed.

23 thru 25. Not applicable.

Approved:

Respectfully submitted:



C. Theurer  
Supv. Photogrammetric Engineer



Charles E. Cook  
Cartographer

COMPILATION REPORT  
T-11570

31. DELINEATION:

The Kelsh plotter was used for detailing. Field inspection was very limited. Most of the buildings, roads, drainage, bluffs and vegetation were office interpreted.

32. CONTROL:

See Bridging Report. Triangulation Station Anchorage, Municipal Airport (Aero Beacon), 1941 could not be held in either method of bridging.

33. SUPPLEMENTAL DATA:

USGS Anchorage (A-8) Alaska, 1953 1/63360  
USC&GS Chart #8557 corrected to 1952 1/40,000

34. CONTOURS AND DRAINAGE: Not applicable.

35. SHORELINE AND ALONGSHORE DETAILS: Not applicable.

36. OFFSHORE DETAILS: Not applicable.

37. LANDMARKS AND AIDS:

See copy of Form 567 in this report.

38. CONTROL FOR FUTURE SURVEYS:

ROK, 1955	ABE, 1955	RAT, 1955	LOG, 1955
C-7, 1948 (USE)	HAT, 1955	HOW, 1955	RUG, 1955
C-8, 1948 (USE)	CAT, 1955	SEW, 1955	
C-9, 1948 (USE)	HCG, 1955	ROD, 1955	

Positions were obtained in the field for all of these stations and they were identified on the photographs. These positions were checked during compilation and Forms 524 were prepared using the pricking cards for the sketches.

*No check position*  
The plotted position for station SEW, 1955 is 11 mm west of the field position. Since the pricking card and photograph identification agree, no reason could be found for this discrepancy.

39. JUNCTIONS: Not applicable.

40. HORIZONTAL AND VERTICAL ACCURACY: Not applicable.



46. COMPARISON WITH EXISTING MAPS:

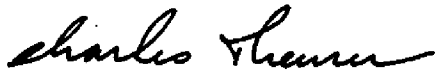
USGS Anchorage (A8) Alaska, 1953 1/63360

47. COMPARISON WITH NAUTICAL CHARTS:

USC&GS 8557, 1/40,000 1947, corrected to 1952.

Approved:

Respectfully submitted:



C. Theurer  
Supv. Photogrammetric Engineer

Charles E. Cook  
Cartographer

Review Report T-11570  
Shoreline Survey  
December 5, 1956

62. Comparison with Registered Topographic Surveys.

T-3038	1:10,000	1909
T-6826	1:10,000	1941

Shoreline and planimetry are mapped in greater detail on T-11570. For nautical charting purposes it supersedes the above manuscripts.

63. Comparison with Maps of Other Agencies.

USGS Tyonek (A-1) Alaska quad	1:63,360	1952
USGS Anchorage (A-8) Alaska quad	1:63,360	1953

64. Comparison with Contemporary Hydrographic Surveys.

H-8203	1:10,000	1955
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65. Comparison with Nautical Charts.

Chart No. 8557	1:40,000	1955
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"Little Campbell Creek" on chart should be changed to "Fish Creek".

66. The map manuscript conforms with the National Standards of Map Accuracy \*  
and project instructions.

Reviewed by:

H. Rau  
H. Rau

APPROVED

L. C. Lande  
Chief, Review Section  
Division of Photogrammetry

W. R. Little  
Chief, Nautical Chart Branch  
Division of Charts

J. D. Dull  
Chief, Division of Photogrammetry

W. D. Dull  
Chief, Division of Coastal Surveys

## NONFLOATING AIDS OR LANDMARKS FOR CHARTS

~~TO BE DELETED~~ STRIKE OUT ONE  
TO BE DELETED

**Anchorage, Alaska** May 1955

I recommend that the following objects which have ~~been~~ ~~been~~ been inspected from seaward to determine their value as landmarks be ~~classified as~~ ~~deleted from~~ the charts indicated.

The positions given have been checked after listing by A. L. Powell /s/ H. C. Applequist  
H. C. Applequist

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. 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.

TO BE CHARTED  
~~TO BE DELETED~~

**STRIKE OUT ONE**

## NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Anchorage, Alaska

May 1955

I recommend that the following objects which have ~~(been examined)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(detached forms)~~ the charts indicated.

The positions given have been checked after listing by A. L. Powell

/s/ H. C. Applegate  
H. C. Applegate

[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. 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.



## PHOTOGRAMMETRIC OFFICE REVIEW

T-11570

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

## CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒  
9. Plotting of sextant fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

## PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours ☒ 23. Stereoscopic instrument contours ☒ 24. Contours in general ☒ 25. Spot elevations ☒ 26. Other physical features ☒

## CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

## BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

## MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒40. C. R. Cook  
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

## FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:

M-2623-12

T-11,570.

Geographic Names.

Alaska R.R.

Anchorage

Anchorage City Cemetery

Bluff Road

Chester Creek

East Chester

Firawaad Lane

Fish Creek

Gambell Street

Hood Creek

Knik Arm

L Street

Merrill Airport

North Fork Chester Creek

Ocean Dock

O'Connell Lake

Point Woronzof

Post Road

Seward Highway

Ship Creek

Spenard

Spenard Road

Sunflower Village

Turnagain Heights

Names approved 11-28-56

L. Heck