[redacted]

6861

Diag. Cht. No. 1255

Form 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic / *Hydrographic* } *Sheet No.* A 41

State ALASKA

LOCALITY

ALEUTIAN ISLANDS

CHAGULAK & AMUKTA ISLANDS

1941

CHIEF OF PARTY

F.B.T. Siems

U. S. GOVERNMENT PRINTING OFFICE 102221

Applied for Chart 6661 - Feby 1942 - Jan
" " 8502 Feb 20, 1942 U.S.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, $300

OFFICIAL BUSINESS
RETURN AFTER FIVE DAYS

PHOTOGRAPHS

Photographs loaned to U.S.N., see letter dated Aug. 27, 1942 in D.R.

Form 537a
Ed. Nov. 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. A 41

REGISTER NO. T6861 Confidential

State ~~ALASKA~~ Aleutian Islands

General locality ~~Aleutian Islands~~ Amukta Pass

Locality Chagulak I. & N.E. side Amukta Island

Scale 1:20,000 Date of survey June 3 to July 5, 1941

Vessel Explorer

Chief of party F.B.T. Siems

Surveyed by E.B. Brown

Inked by E.B. Brown

Heights in feet above MHW to ground ~~to tops of trees~~

~~Contour~~, ~~Approximate contour~~, Form line interval 100 feet

Instructions dated Feb. 3, 1941

Remarks:

GPO

25-MER

CONFIDENTIAL

August 27, 1942

To: Lieutenant Colonel R. M. Cutts, U.S.M.C.
Section F-11, Office of Naval Intelligence
Navy Department
Washington, D. C.

From: The Director
U. S. Coast and Geodetic Survey

Subject: Confidential survey sheets and photographs

Complying with your verbal request, the following photostat copies of topographic survey sheets of Chagulak, Amukta and Seguam Island are transmitted herewith:

T-6861 (Part)	—	Chagulak Island		
T-6862		Amukta Island		
T-6861 (Part)	—	Amukta shoreline bordering Chagulak Pass		
T-6866	"	—	Seguam Island, Moundhill Cape to Finch Cape	
T-6868	"	—	"	" Finch Cape to ⌿ Brown
T-6868	"	—	"	" ⌿ Brown to Saddleridge Point
T-6867	"	—	"	" Saddleridge Point to ⊙ Zed
T-6867	"	—	"	" ⊙Zed to ⌿Burn
T-6869	"	—	"	" ⌿Burn to Ora
T-6869	"	—	"	" ⊙Ora to Lava Point
T-6866	"	—	"	" Lava Point to Moundhill Cape

It is requested that the receipt for the above data be accomplished on the attached carbon copy of this letter.

Request is acknowledged of one photostat copy of each of the topographic sheets listed in this letter. Date_____ _____.

Director

DESCRIPTIVE REPORT

To Accompany

Topographic Sheet A-41 T-6861

Instructions: Dated February 3, 1941.

Limits: Chagulak Island and Northeast side of Amukta Island.

Description of Coast:

Chagulak Island is a small, uninhabited island with a central sharp peak ~~2750~~ 3750 feet high. Where the slope is not too steep, there is a growth of tall grass. In general there is a steep rocky bluff near the shore line--the island is almost inaccessible. The shore is either large boulders, vertical cliffs or outcropping rock. The northeast side is rugged with sharp ridges and deep draws. There is a thumblike protrusion 1120 feet elevation about 200 meters inside the high water line that shows well from a northwest or southeast direction (at Lat. 52°35' Long. 171°07.9'). The northeast point above the rocky cliff is grass covered and gentle sloping. About 850 meters east of this point is a small 8-foot rock or islet; seas break over this rock in moderate weather. About 1070 meters south of this rock is a prominent 150-foot pinnacle (Signal "Gull") or islet that lies about 600 meters offshore. The east side of the island is steep and rugged. The southeast point of the island is outcropping rock on which it is possible to make a landing in smooth weather at slack water. After landing on the low rocks it is necessary to scale a near-vertical 25-foot cliff then a steep grassy slope--above these the slope is gentle for about 1/3 mile. This is the only place that this party was able to gain access to the island. About 1/2 mile ~~east~~ West of this point there is a prominent smooth slide. About 1/2 mile west of the slide are several prominent draws. There are many offlying rocks along the southern shore. The southwestern point of the island is fairly flat and grass covered. There is a small rise on the southern side of this point, 346-foot elevation (Signal "Max). Near the northwest side of the point there is a rise near the end of the shoulder 352-foot elevation (Signal "Should"). There is a small island on which signal "Tang" is located, that gives enough shelter so that a landing may be made on the beach in moderate weather. There is a low 5-foot reef about 170 meters off the southwest point of the island. On the western side there is a rounded thumblike protrusion (Signal "Thumb"), about 500 meters from the high water line, 1495 foot elevation. It may be seen best from the southwestward while there is snow on the island. It is on a ridge which forms the southern boundary of a deep valley.

At Lat. 52°34.3' Long. 171°09.8' there is a 225-foot pinnacle rock tangent to the shore line. A beach landing may be made on the southern side of this pinnacle. About 400 meters north of the pinnacle is an almost impassible 20-foot dike that extends about 20 meters outside the high water line. There are many rocks awash and sunken rocks off the point 250 meters north of the dike.* There are two prominent rocks off the northwest point of the island. The inshore rock is 55-foot elevation, the offshore rock (Triangulation Station "Nord") is 44-foot elevation. The northern shore is very rugged with precipitous rocky bluffs. There is a pinnacle 1905-foot elevation near the south side of a large shoulder about 570 meters south of the high water line (Signal "Pea"). In general there is a growth of kelp near the shores being thickest off the western shore.

* No feature shown on sheet.

The northwest (east) shore of Amukta Island is in general lava bluffs or large boulder beach. There are many offlying rocks along this shore. A good landing place is in the small bight on the south side of Signal "Big". There is a good small boat anchorage and landing in the small cove southwest of Signal "Near".

At Lat. 52°30.2' Long. 171°13.6' is a ~~1680~~ 1486-foot cinder cone that is prominent especially while the snow is still on the island.

Landmarks:

The most prominent landmarks are: Peak (Triangulation Station "Chagulak Peak"); Pinnacle (Signal "Gull"); Cinder Cone.

Character of Control:

The sheet was controlled by triangulation and by signals "Gon" and "Nac", which were located by theadolite cuts.

Survey Methods:

The signals were cut in from the triangulation stations and from well-located topographic stations and by traverse. A traverse originated at signal "Gon" and closed on station "Nord" with a negligible closing error. A traverse was run between stations "Nord" and "Nac" with a 20 meter closing error. This error was adjusted in proportion to the distance from the origin in a northeasterly direction. No unusual survey methods were used.

Form Lines Verified:

There were very few cases where it was possible to get form line cuts from the beach. Form lines were drawn from sextant cuts taken from either a launch or the ship while cruising near the island.

Approved and Forwarded:

F. B. T. Siems,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.

Respectfully submitted,

E. B. Brown,
Jr. H. & G. Engr.,
U.S.C. & G.S.S. EXPLORER.

Magnetics:--

Magnetic meridians were drawn on the sheet with declinitoire No. 254, correction minus 9 minutes--calibrated by H. A. Paton April 21, 1941.

Signals Outside High Water Line:--

Sub: A small 8 foot rock. φ 52°35', λ 171°06'

Gull: A 150 foot pinnacle.

Nac: A hydrographic disk on south side of 90 foot pinnacle.

Tang: A triangulation disk on south side of 160 foot pinnacle.

Brace: A white wash on rise on S.W. side of rock islet.

Nord: Top of an off lying rock islet.

Near: Top of rise at off shore end of rock islet. φ 52°32', λ 171°15'

Off: Top of 20 foot pinnacle.

Seal: Pointed off lying rock 8 feet high.

In: Highest and inshore edge of top of rock.

Ink: White wash on eastern end of rock.

Attached here with are computations of positions of signals that were located by theodolite cuts.

Statistics: Statute miles of shore line = 17.0

Square statute miles of topography = 3.4

Topo only

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

		°	′	″
α	2 to 3	136	29	15
2d ∠	&	+ 57	49	28
α	2 to 1	194	18	43
Δα			01	14
		180	00	00.0
α′	1 to 2	14	20	57
		34	52	18

		°	′	″
α	3 to 2	316	27	18
3d ∠	&	− 87	18	14
α	3 to 1	229	09	04
Δα			03	11
		180	00	00.0
α′	1 to 3	49	12	15

First Angle of Triangle

	°	′	″			°	′	″
φ	52	30	08.335	2 Dreq	λ	171	12	10.894
Δφ		03	41.653		Δλ		01	32.795
φ′	52	33	49.988	1 Gon. (ww)	λ′	171	10	38.099

	°	′	″			°	′	″
φ	52	31	43.269	3 Muka	λ	171	14	38.708
Δφ		02	06.719		Δλ		04	00.611
φ′	52	33	49.988	1 Gon (ww)	λ′	171	10	38.097

	Logarithms
s	3.849 490
Cos α	9.986 308
B	8.509 895
h	2.345 698
s²	7.698 99
Sin² α	8.786 10
C	1.518 29
	8.003 38
h²	4 6913
D	2.377 8
	7.0691

Values in seconds	
(309.4)	
1545.2	
1st term	− 221.″6645
2d term	+0.0101
3d term	+0.0012
−Δφ	221.6532

	°	′	″	−.001
½(φ+φ′)	52	31	59.1	

	Logarithms	Values in seconds
s	3.849 490	(412.6)
Sin α	9.393 050	717.6
A′	8.508 798	
Sec φ′	0.216 185	
Δλ	1.967 526	92.″7953
Sin ½(φ+φ′)	9.899 659	
−Δα	1.867 185	73.6

	Logarithms
s	3.777 557
Cos α	9.815 622
B	8.509 893
h	2.103 075
s²	7.555 12
Sin² α	9.757 55
C	1.518 70
	8.831 37
h²	4.206 1
D	2.377 8
	6.5839

Values in seconds	
1st term	126.″7870
2d term	+ 0.0678
3d term	+0.000 4
−Δφ	126.7188

	°	′	″	+.001
½(φ+φ′)	52	32	46.6	

	Logarithms	Values in seconds
s	3.777 557	
Sin α	9.878 773	
A′	8.508 798	
Sec φ′	0.216 185	
Δλ	2.381 318	240.″6113
Sin ½(φ+φ′)	9.899 735	
−Δα	2.281 051	191.0

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comp ck.

Topo only

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
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POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 to 3		200	02	35
2d ∠	&		+ 16	33	27
α	2 to 1		216	36	02
Δα				03	10
			180	00	00.0
α′	1 to 2		36	39	12
			61	51	23

			°	′	″
α	3 to 2		380	04	14
3d ∠	&		− 101	35	10
α	3 to 1		278	29	04
Δα				1	31
			180	00	00.0
α′	1 to 3		98	30	35

First Angle of Triangle

	°	′	″			°	′	″
φ	52	30	08.335	2 Drag	λ	171	12	10.893
Δφ		03	16.200		Δλ		03	59.149
φ′	52	33	24.535	1 Nac	λ′	171	08	11.744

	°	′	″			°	′	″
φ	52	33	35.043	3 Tang	λ	171	10	07.152
Δφ			10.509		Δλ		01	55.406
φ′	52	33	24.534	1 Nac	λ′	171	08	11.746

	Logarithms	Values in seconds
s	3.878 340	(1096.2) 758.4
Cos α	9.904 614	
B	8.509 895	
h	2.292849	1st term − 196.″2678
s²	7.756 68	679
Sin²α	9.550 83	
C	1.518 29	
	8.825 80	2d term + 0.0670
h²	4.5857	
D	2.377 8	
	6.9635	3d term +0.0009
		−Δφ 196.1999

	°	′	″	+.001
½(φ+φ′)	52	31	46.5	

	Logarithms	Values in seconds
s	3.878 340	(917.8) 223.4
Sin α	9.775 416	
A′	8.508 798	
Sec φ′	0.216 115	
Δλ	2.378 669	−239.″1493
Sin ½(φ+φ′)	9.899 638	
−Δα	2.278 307	−189.8

	Logarithms	Values in seconds
s	3.342 093	
Cos α	9.168 912	
B	8.509 890	
h	2.020895	1st term + 10.″4929
s²	6.684 19	
Sin²α	9.990 44	
C	1.519 19	
	8.19382	2d term + 0.0156
h²	4.0417	
D	2.377 7	
	6.4194	3d term + 0.0003
		−Δφ 10.5088

	°	′	″	−.001
½(φ+φ′)	52	32	29.7	

	Logarithms	Values in seconds
s	3.342 093	
Sin α	9.995 221	
A′	8.508 798	
Sec φ′	0.216 115	
Δλ	2.062 227	115.″4056
Sin ½(φ+φ′)	9.899 805	
−Δα	1.962 032	91.630

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Comp Rwk

Final

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
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POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″				°	′	″
α	2	to 3	136	29	15	α	3	to 2	316	27	18
2d ∠		&	+65	58	58	3d ∠		&	−84	48	36
α	2	to 1	202	28	13	α	3	to 1	231	38	42
Δα			+	2	13	Δα				+4	10
			180	00	00.0				180	00	00.0
α′	1	to 2	22	36	26	α′	1	to 3	57	42	52
		First Angle of Triangle	29	12	26						

	°	′	″			°	′	″		°	′	″			°	′	″
φ	52	30	08.335	2 Drag	λ	171	12	10.894	φ	52	31	43.269	3 Muka	λ	171	14	38.708
Δφ		+4	06.911		Δλ	−	2	47.627	Δφ		+2	31.975		Δλ		−5	15.442
φ′	52	34	15.246	1 Thum	λ′	171	09	23.267	φ′	52	34	15.244	1 Thum	λ′	171	09	23.266

	Logarithms	Values in seconds						Logarithms	Values in seconds			
		-.001		° ′ ″ -.001					+.001		° ′ ″	
s	3.916 996	(1383.1) 471.5	½(φ+φ′)	52 32 11.7		s	3.879 452			½(φ+φ′)	52 32 59	
Cos α	9.965 709 n			Logarithms	Values in seconds	Cos α	9.792 764 n				Logarithms	Values in seconds
B	8.509 895		s	3.916 996	(641.8)	B	8.509 893			s	3.879 452	
h	2.392 600	1st term −2469.45	Sin α	9.582 295	438.2	h	2.182 109	1st term −1520.93		Sin α	9.894 416 n	
s²	7.83 399		A′	8.508 798		s²	7.758 90			A′	8.508 798	
Sin² α	9.164 59		Sec φ′	0.216 254		Sin² α	9.788 83			Sec φ′	0.216 254	
C	1.51829		Δλ	2.224 343	−167.627	C	1.518 70			Δλ	2.498 920	−315.442
	8.51687	2d term +0.033	Sin ½(φ+φ′)	9.899 679			9.066 43	2d term +0.117		Sin ½(φ+φ′)	9.899 757	
h²	4.785		−Δα	2.124 022	133.0	h²	4.36			−Δα	2.398 673	250.4
D	2.378					D	2.4					
	7.163	3d term +0.001					6.76	3d term +0.001				
		−Δφ −246.911						−Δφ 151.975				

HAP ✓

DEPARTMENT OF COMMERCE
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POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2	to 3	235	56	51.
2d ∠		&	+101	58	15
α	2	to 1	337	35	16
Δα				+	50.
			180	00	00.0
α′	1	to 2	157	55	56
			53	42	27

			°	′	″
α	3	to 2	56	00	26
3d ∠		&	−24	19	18
α	3	to 1	31	41	08
Δα				− 2	45
			180	00	00.0
α′	1	to 3	211	38	23

First Angle of Triangle

	°	′	″		λ	°	′	″
φ	52	31	43.285	2 Muka	λ	171	14	38.677
Δφ		−1	34.585		Δλ		−1	02.877
φ′	52	30	08.700	1 Cinder Hill	λ′	171	13	35.802

	°	′	″		λ	°	′	″
φ	52	33	35.048	3 Tang	λ	171	10	07.137
Δφ		−3	26.348		Δλ		3	28.664
φ′	52	30	08.700	1 Cinder Hill	λ′	171	13	35.801 (+1)

	Logarithms	Values in seconds
s	3.498 996	(1585.70) 268.92
Cos α	9.966 915	
B	8.509 893	
h	1.975 804	1st term + 94.581
s^2	6.997 99	
$\sin^2\alpha$	9.150 20	
C	1.518 70	
	7.666 89	2d term + .004
h^2	.395	
D	2.38	
	6.73	3d term +
		−Δφ +94.585

	°	′	″
½(φ+φ′)	52	30	55.992

	Logarithms	Values in seconds
s	3.498 996	(456.6) 675.3
Sin α	9.575 104	
A′	8.508 799	
Sec φ′	0.215 577	
Δλ	1.798 476	−62.875
$\sin\frac{1}{2}(\phi+\phi')$	9.899 557	
−Δα	1.698 033	−49.89

	Logarithms	Values in seconds
s	3.874 699	
Cos α	9.929 901	
B	8.509 890	
h	2.314 490	1st term +206.296
s^2	7.749 40	
$\sin^2\alpha$	9.440 74	
C	1.519 19	
	8.709 33	2d term + .051
h^2	463	
D	2.38	
	7.01	3d term + .001
		−Δφ 206.348

	°	′	″
½(φ+φ′)	52	31	52.874

	Logarithms	Values in seconds
s	3.874 699	
Sin α	9.720 372	
A′	8.508 799	
Sec φ′	0.215 577	
Δλ	2.319 447	+208.664
$\sin\frac{1}{2}(\phi+\phi')$	9.899 649	
−Δα	2.219 196	165.652

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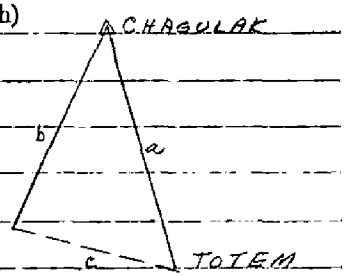
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 665
Ed. Dec. 1929

TRIANGLE COMPUTATION USING TWO SIDES AND INCLUDED ANGLE

$\left[\frac{a}{b} = \tan\,(45° + \phi)\right.$ (Call longer side a): $\tan\,\frac{1}{2}\,(A_p - B_p) = \tan\,\phi\,\tan\,\frac{1}{2}\,(A_p + B_p)$: $\left. c = \frac{a \sin C_p}{\sin A_p}\right]$*

C_s	° ' "	Log a	3.949 819	Log m	
Sph. excess / 3		Log b	3.944 220	Log sin C_s	
C_p	31 15 55.4	Log tan $(45+\phi)$	0.005 599	Log a	
$\frac{1}{2}\,C_p$	15 37 57.7	$(45°+\phi)$	45 22 09.6	Log b	
$90° - \frac{1}{2}C_p = \frac{1}{2}(A_p + B_p)$	74 22 02.3	ϕ	0 22 09.6	Log sph. ex.	
$\frac{1}{2}\,(A_p - B_p)$	1 19 10.8	Log tan ϕ	7.809 3019	Sph. excess	
Sum $= A_p$	75 41 13.1	Log tan $\frac{1}{2}(A_p + B_p)$	10.553 1209		
Diff $= B_p$	73 02 51.5	Log tan $\frac{1}{2}(A_p - B_p)$	8.362 4228		
C_p	31 15 55.4				
	180 00 00.0				

(Sketch)



Log a	3.949 819
Log sin C_p	9.715 170
Colog sin A_p	0.013 694
Log c	3.678 683

CHECK COMPUTATION

No.	STATION	SPHERICAL ANGLE	SPHERICAL EXCESS	PLANE ANGLE AND DISTANCE	LOGARITHM
	2-3				3.678 683
	1 CHAGULAK	31 15 55.4			0.284 830
	2 TOTEM	73 02 51.5			9.980 706
	3 MUKA	75 41 13.1			9.986 306
	1-3				3.944 219 +1
	1-2				3 949 819 ✓
		180 00 00.0			
	2-3				3.678 683
	1 DRAG	155 34 32.6			
	2 TOTEM	20 31 51.5			
	3 MUKA	3 53 37.1			
	1-3				
	1-2				
		180 00 01 2			

*The subscripts s and p on this form refer to spherical and plane angles respectively.

U. S. GOVERNMENT PRINTING OFFICE 11—11142

Final

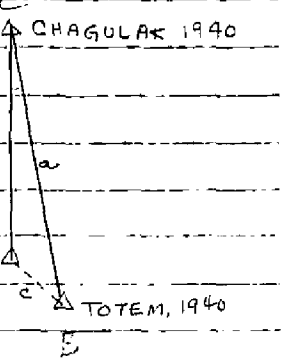
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 665
Ed. Dec. 1929

TRIANGLE COMPUTATION USING TWO SIDES AND INCLUDED ANGLE

$\left[\frac{a}{b} = \tan(45° + \phi)\right.$ (Call longer side a): $\tan \frac{1}{2}(A_p - B_p) = \tan \phi \tan \frac{1}{2}(A_p + B_p)$: $\left. c = \frac{a \sin C_p}{\sin A_p}\right]^*$

C_s	° ' "	Log a	3.949 819	Log m	
Sph. excess / 3		Log b	3.927 106	Log sin C_s	
C_p	4 13 03.3	Log tan $(45+\phi)$	0.022 713	Log a	
$\frac{1}{2} C_p$	2 06 31.65	$(45°+\phi)$	46 29 51.2	Log b	
$90° - \frac{1}{2} C_p = \frac{1}{2}(A_p + B_p)$	87 53 28.35	ϕ	1 29 51.2	Log sph. ex.	
$\frac{1}{2}(A_p - B_p)$	35 22 28.30	Log tan ϕ	8.417 3592	Sph. excess	
Sum $= A_p$	123 15 56.7	Log tan $\frac{1}{2}(A_p + B_p)$	1.433 8957		
Diff $= B_p$	52 31 00.0	Log tan $\frac{1}{2}(A_p - B_p)$	9.851 2549		
C_p	4 13 03.3				
	180 00 00.1				
Log a	3.949 819				
Log sin C_p	8.866 549				
Colog sin A_p	0.077 723				
Log c	2.894 091				

(Sketch)



CHECK COMPUTATION

No.	STATION	SPHERICAL ANGLE	SPHERICAL EXCESS	PLANE ANGLE AND DISTANCE	LOGARITHM
	2-3				2.894 091
	1 CHAGULAK	4 13 03.3			1.133 451
	2 TOTEM	52 31 00.0			9.899 564
	3 DRAG	123 15 56.7			9.922 277
	1-3				3.927 106 ✓
	1-2				3.949 819 ✓
		000			
	2-3				
	1				
	2				
	3				
	1-3				
	1-2				

*The subscripts s and p on this form refer to spherical and plane angles respectively.

U. S. GOVERNMENT PRINTING OFFICE 11—11142

Topo only

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 25
Ed. Jan., 1929

COMPUTATION OF TRIANGLES

11—9121

State: _____

NO.	STATION	OBSERVED ANGLE	CORR'N	SPHER'L ANGLE	SPHER'L EXCESS	PLANE ANGLE AND DISTANCE	LOGARITHM
	2-3						3.832 635
	1 Nac	(61 51 18)	+05			23	0.054 645
	2 Drag	16 33 35	-08			27	9.454 813
	3 Tang	101 35 07	+03			10	9.991 059
	1-3						3.342 093 (4)
	1-2						3.878 340 (0)
	2-3						3.790 620
	1 Nac	(31 42 03)	-16			47	0.279 493
	2 Muka	10 46 39	+14			53	9.271 984
	3 Tang	137 31 18	+2			20	9.829 499
	1-3						3.342 097
	1-2						3.899 612 (1)
	2-3						3.607 173
	1 Nac	(30 09 11)	+24			35	2.298 939
	2 Drag	80 06 55	-9			46	9.993 501
	3 Muka	69 43 54	-15			39	9.972 228
	1-3						3.899 613
	1-2						3.878 340
							comp Quick
	2-3						3.607 173
	1 Thum	(29 12 26)					0.311 607 ✓
	2 Drag	65 58 58 ✓					9.960 672
	3 Muka	84 48 36 ✓					9.998 216
	1-3	179 59 60					3.879 452 ✓
	1-2						3.916 996 ✓

Do not write in this margin

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U. S. COAST AND GEODETIC SURVEY
Form 25
Ed. Jan., 1929

COMPUTATION OF TRIANGLES

11—9121

State: _____

NO.	STATION	OBSERVED ANGLE	CORR'N	SPHE'L ANGLE	SPHE'L EXCESS	PLANE ANGLE AND DISTANCE	LOGARITHM
	2-3						3.790 620
	1 Cinder Hill	(53 42 27)"					0.093 662
	2 Muka	101 58 15"					9.990 451
	3 Tang	24 19 18"					9.614 748
	1-3						3.874 733'
	1-2						3.499 030'
	2-3						
	1						
	2						
	3						
	1-3						
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U. S. COAST AND GEODETIC SURVEY
Form 25
Ed. Jan., 1929

COMPUTATION OF TRIANGLES

State: ALASKA

11—9121

NO.	STATION	OBSERVED ANGLE	CORR'N	SPHER'L ANGLE	SPHER'L EXCESS	PLANE ANGLE AND DISTANCE	LOGARITHM
	2-3						3.678 683
	1 Gon (ww)	(38 04 53)					0.209 870
	2 Totem	50 43 16					9.888 782
	3 Muka	91 11 51					9.999 905
	1-3						3.777 335
	1-2						3.888 458
	2-3						3.607 17 8
C	1 Gon	(34 52 18)					0.242 801
	2 Drag	57 49 28					9.927 586
	3 Muka	87 18 14					9.999 519
	1-3						3.777 560 (225)
	1-2						3.849 493
	2-3						2.894 091 ✓
	1 Gon	(3 12 35 6) ✓					1.251 882 ✓
	2 Totem	30 11 25 ✓					9.701 458 ✓
	3 Drag	146 36 5 00 54 ✓					9.740 742 ✓
	1-3	179 [illegible] 120					3.847 431
	1-2						3.886 715
	2-3						✓
	1						
	2						
	3						
	1-3						
	1-2						

Do not write in this margin

	Remarks	Decisions
1		525710 U.S.G.B
2		" "
3	OK to ink pending U.S.G.B. decision.	"
4		
5	A card is being submitted to U.S.G.B. for the 150' rock just east of Chagulak I (signal GULL). En Baker it is either High Rock (as on charts 8902, 9102) or Chugiginak Rock (el. 123 feet).	"
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M 234

GEOGRAPHIC NAMES

Survey No. T6861

Confidential

Name on Survey	On Chart No. A,	On previous survey No. B,	On U. S. quadrangle Maps C,	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Amukta Island										1
Chagulak Island										2
Chagulak Pass										3
										4
										5
										6
			L Item on 3/2014							7
										8
										9
										10
										11
										12
										13
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										26
										27

M 234

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

~~No.~~

No. T T6861

received February 17, 1942
registered February 20, 1942
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
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88			
90			

RETURN TO

82	R. W. Knox

RWK

CONFIDENTIAL

DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF TOPOGRAPHIC SURVEY — REGISTER NO. 6861
Field No. A

Aleutian Islands, Chagulak Island
and N. E. Side Amukta Island
Surveyed June 3 - July 5, 1941; Scale 1:20,000
Instructions dated February 3, 1938 (SURVEYOR)
and April 3, 1941 (EXPLORER)

Plane Table Survey — Aluminum Mounted

Chief of Party - F. B. T. Siems
Surveyed by - E. B. Brown
Inked by - E. B. Brown
Reviewed by - Harold W. Murray
Inspected by - H. R. Edmonston, September 7, 1942

1. Junctions with Contemporary Surveys

The junction of shoreline details with T-6682 (1941) on the northwest and southeast sides of Amukta Island is satisfactory. Form lines for this island are shown on T-6682.

2. Comparison with Prior Surveys

No prior surveys have been made in this area.

3. Comparison with Chart 8802 (New Print date 1-29-42)
9102 (" " " 7- 2-42)

a. Topography

(1) Chart 8802

Topography on this chart originates with miscellaneous information prior to the year 1893 (1st ed., chart 8800). The island as charted is 1 mile northwest of the present survey location and the maximum present elevation is 3,750 feet instead of the charted 4,300-ft. value. The sunken rock charted on the northwest side of the island was disposed of in the review of H-6695 (1941). The present survey supersedes the above charted information.

(2) Chart 9102

The present survey was applied to this chart prior to review. No comment is necessary except that the shoreline has been generalized and several close-lying islets have been omitted.

b. Magnetic Meridian

The two declinatoire observations on Chagulak Island agree closely with the charted value. The observations on Amukta Island have been considered in detail in the review of T-6862 (1941), par. 3b.

4. Compliance with Instructions for the Project

Satisfactory.

5. Condition of Survey

A commendable addition to the Descriptive Report is a list of all signals outside the high water line accompanied by a description of the objects on which they are located.

6. Additional Field Work Recommended

None.

7. Superseded Surveys

None.

Examined and approved:

Robert W. King
Chief, Surveys Section

F. S. Borden
Chief, Division of Charts

L. P. Rayner
Chief, Section of Hydrography

G. Rude
Chief, Division of Coastal Surveys