



3539

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DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

State: \_\_\_\_\_

11-5613

DESCRIPTIVE REPORT.

*Map* Sheet No. *3539*

LOCALITY:

\_\_\_\_\_

191

CHIEF OF PARTY:

*J. A. D.*

3539

22.

DEPARTMENT OF COMMERCE

Coast & Geodetic Survey,

E. Lester Jones, Supt;

S. E. Alaska, Revillagegido Channel.

DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET X. 30-39.

Surveyed by Wire Drag Party No. 3 May to July, 1915.

1. REPORT, LIMITS, SCALE, METHODS, PARTY,

I have to report as follows on topographic sheet A, which shows the East side of Revillagegido Channel from Slate Islands southward to Foggy Point, including about 3 miles of shore line up on both sides of the Boca De Quadra, as done by party from Wire Drag Party No 3. Total amount of shore line run was 72.9 statute miles. The scale used was 1: 20,000, and the planetable used exclusively in the work excepting for the location, by sextant, of two rocks awash at low water in the harbor north of Kah Shakes Cove. The party consisted of either one or two men besides the observer except for the work in Very Inlet, where three men were used hydrography being carried on in as well as topography. A small boat with Evinrude Motor was <sup>used</sup> in all the work. The over-board motor proved very useful, as with this, the boat was easily handled by one man. The fact that nearly all landings were made in smooth water, favored the use of the motor. The party was in charge of Leroy P. Raynor, Aid, C. G. Survey.

2. CONTROL, TRAVERSES, CONTOURS, HEIGHTS.

The triangulation controlling the projection on this sheet is referred to the Approximate S. E. Alaska Datum. Where possible, traverses run were checked between stations located by triangulation. The longest traverse run was from  $\Delta$  Shak to  $\Delta$  Inlet, a traverse distance of 7 miles, with an error of 48 meters. The traverse from  $\Delta$  Foggy to  $\Delta$  Inlet, distance by traverse 3.2 miles had an error of 10 meters. The traverses up the Boca De Quadra from  $\Delta$  Point on the north side and from  $\Delta$  Kah on the south were unchecked. Topography north of  $\Delta$  Point was taken from stations located by planetable triangulation. An unchecked traverse was run from  $\Delta$  Inlet to get the topography in Very Inlet. As particular care was taken in orientation and reading distances between traverse stations, it is the opinion of the observer that no large errors are to be found in this traverse. After the work had been completed it was found that  $\Delta$  Inlet had been incorrectly plotted by 26 meters in longitude and 5 meters in latitude. Shift was made in the meridians and parallels to correct the chart for these errors. Except in a very few cases elevations to mountains and hill-tops were taken to the tops of trees, which average about 100 feet in height. The greatest discrepancy between single determinations of the same peak was 25 feet. Very few contours were drawn due to the impossibility of getting sufficient accuracy, on account of tree growth, without travelling inland. The contour interval is 100 feet.

3. GENERAL REMARKS, MOUNTAINS, GENERAL CHARACTER OF SHORE LINE, VEGETATION, ANIMAL LIFE.

Except for the Boca De Quadra, where the mountains rise steeply from the water's edge the land immediately back of the shore is low, from 200 to 400 feet high and usually swampy and damp. The highest peak located was 2590 feet. The general character of shore line varies from sand beaches to steep rocky cliffs. The tree growth is very thick in all parts surveyed, and consists chiefly of Alfalfa, spruce, cedar, and hemlock. Grass grows thickly in all open spots near the water. Flowers of various kinds are abundant. Deer and black bear are easily found near the shore, while mink and porcupine were often seen. Of game birds ashore, the oystercatcher and small snipe were the only ones seen by the survey party. Salmon run in great abundance in season, and trout are found in many of the streams.

4. DETAILED DESCRIPTION OF SHORE, PROMINENT POINTS

Foggy Point, at the southern end of the sheet is a low rocky, tree-covered point, the end of which is nearly an island, being connected with the mainland by a low narrow neck. About a mile to the N. E. is a small bay with a sand beach at its head, where there is an anchorage for small vessels. The shore line between Foggy Point and this bay is bold. A half mile to the eastward of this bay is a larger bay suitable for an anchorage. Care should be exercised when entering since there are rocks awash at low water on both sides of the entrance. The north shore should be favored at high water. When inside there are no dangers. Beyond this bay to Very Inlet, about 2 miles, the shore is bold and foul out to 150 meters from shore. Very Inlet is a long arm of the sea extending back 4 miles from the entrance, where there is a bay  $3/4$  miles in diameter connecting through a narrow gut with a long narrower bay to the southeast. On the north side of the larger bay is a large tide flat through which runs a stream draining much of the land to the north as evidenced by the ~~very~~ considerable amount of water discharged at its mouth. On the south side is a small bight with a rock awash at low water on the east entrance, which is a good anchorage for small boats. A swift current runs through the narrow pass connecting this bay with the bay to the south, excepting at slack water. At the last of the ebb it is so shallow that the water runs white. At the head of the narrow bay is a large meadow covered about 2 feet at high tide through which runs a stream of considerable size, coming down from the mountains to the east. The shore line here is for the most part rocky with hills rising steeply from the water.  $1\frac{1}{2}$  miles from the entrance to Very Inlet a narrow arm  $1\frac{1}{2}$  miles long opens up into a large bay in which are numerous small islands. At the narrowest part of this arm a very strong current runs at all times except an hour or so before and after slack tide. There are rapids here with a falling tide from a half ebb to low water. The "Rival" drawing about 8 feet went through here easily at high slack. The northeastern part of the bay is full of islands around which the water is shallow. A stream of considerable size empties into the bay from the east. There are two <sup>coves</sup> bays at the southeastern part of the bay at the heads of which are tide flats bare at low water but for <sup>and</sup> streams of water running through them. These <sup>bays</sup> bays with the one just east of the large island at the entrance form anchorages for small boats. A little west of north and 270 meters from the small

island on which Quiz is located is the end of a sunken ledge which should be noted. A sounding of 2 fathoms was gotten here at about mean tide level. The land on all sides of this bay slopes gradually up to hills varying from 200 to 300 feet high, excepting on to the southeast where there are mountains about 2500 ft. in height. The sides and tops of the mountains are tree-covered. About a mile to the southwest of the entrance to Very Inlet is a rock barely covered at mean high water, which is at the southern end of a reef or group of sunken rocks and rocks awash at low water extending towards the De Long Islands. Lying to the west of Very Inlet are the De Long Islands, a large group consisting of islands of various sizes, nearly all of which are wooded. Between them and the main shore, the water is very foul with many rocks showing above high tide and rocks awash at low water. From the entrance to Very Inlet the shore line is very irregular, and has a general northwesterly direction as far as Kirk Point. The shore is very foul all along here with numerous rocks awash at high and low water, out to several hundred meters. Kirk Point is a low point about a half mile long and averaging 300 meters in width, extending Northwest and southeast, and lies about 3 miles northwest of Very Inlet. It is connected to the mainland by a low neck 200 meters wide 440 meters north west of Kirk Point is House Island, a small rock having an elevation of 13 feet. 880 meters due south of House Island, is a reef about 300 meters long extending out to 500 meters from the shore line of Kirk Point. At extreme low water the rocks bare from 1 to 3 feet. The reef is ordinarily marked by kelp. At 800 meters and 1200 meters north of Kirk Point and 200 meters off shore, are rocks about 80 meters in diameter and 15 feet high. Beyond Kirk Point to Kah Shakes Cove the shore is irregular and foul. The land back of the shore is generally low. Kah Shakes Cove, a small bay about 1 1/2 miles south of the entrance to the Boca De Quadra, is a good anchorage for small boats. Care must be exercised in entering on account of the rocks in the entrance as shown on the chart. At the time the survey was made there was a row of piles on the western side of the cove, off the large island forming part of the western side of the bay, 20 meters to the east of the most northern pile is a rock covered about 2 feet at ordinary low water. Near the head of the bay piles have been driven by boats tending the fish traps located near here. On the east side of the entrance are several Indian houses, now deserted. N. 36° - 30' E. (true) of the easterly point of the most northerly island at the west side of the entrance to Kah Shakes Cove and 220 meters distant, is a rock baring about 2 feet at extreme low water. The location is ordinarily marked by kelp. 1/2 mile north of Kah Shakes Cove is another long cove and anchorage. Kah Shakes Point at the southern entrance to the Boca De Quadra, is at the end of a low broad peninsula separating the Quadra from the long bay to the south. For 1 1/2 miles into the Quadra beyond Kah Shakes Point the country back of the shore is low. Beyond this, however, to the end of the sheet, the land rises steeply to a range, from 1700 to 1900 feet high, running parallel to the shore. The north shore of the Quadra is of similar character as the south, and also has a range of mountains running parallel to the coast. Slate Islands, at the end of the work to the north are a group of 4 low wooded islands. The three northern <sup>islands</sup> are nearly connected at low water. White Reef, most of which is covered at high water, is a large reef 2 miles outside the entrance to the Boca De Quadra. Several white shell beaches, which showing up, except at the highest water have probably given the name to the Reef. Snail Rock, on which a Snail is located, is a lone rock 200 meters long and 20 meters wide, with an elevation of 20 feet lying well



# PLANETABLE POSITIONS

Top Sheet # 3539

Station	Elev. approx. feet	Latitude		D. M.	Longitude		D. P.	Remarks
Mon #	20	55	02	1235 620	130	59	511 555	w. w. stone pile E. side ent; Kah Shakes Cove.
Post	33	55	02	1061 794	130	59	361 705	Northern of two post on beach by Indian village
Apt	8	55	02	991 864	130	59	86 980	w. w.
Bet	8	55	02	1035 820	130	58	976 90	w. w.
Cat	8	55	02	899 955	130	58	911 155	w. w.
Dot		55	02	605 1250	130	58	849 217	w. w.
Alf		55	02	225 1630	130	58	776 290	w. w.
Fed		55	02	432 1423	130	59	11 1055	w. w.
Gab		55	02	638 1217	130	59	203 863	w. w.
Ham		55	02	770 1085	130	59	533 533	Pole with cloth on point near tide staff
Snail *	28	55	01	1676.2	131	03	161.4	
White *	8	55	04	43.8 1811.7	131	02	252.0 812.4	Cairn on White Reef
Kah *		55	04	06.2 1849.4	130	59	376.7 688.0	
Shak *	10	55	02	1334.5 521.0	131	00	784.9 280.8	
Hed *		55	03	882.3 973.2	130	59	956.3 1097.0	

Note: \* after station name denotes location by triangulation.  
# " " " " recoverable P. T. station

Station	Elev feet. appr.	Latitude		D.M. Adjust- ed		Longitude		D. P. Adjust- ed		Remarks
Point *	15	55	05	116.9 1738.6		130	59	730.7 333.7		
Slate *	20	55	05	578.0		131	03	258.6		
Isle *		55	07	1637.3		131	04	936.7		
Foggy *	25	54	55	705.1		130	58	704.6		
Inlet *	19	54	57	501.5 1353.5		130	57	328.9 738.8		
Branch *	21	54	58	388.6 1466.6		131	00	611.1 456.5		
Black Rock *	27	55	01	688.5 1166.9		131	03	628.4 437.7		
Art	20	54	57	1162 693	1158 697	130	57	508 560	534 534	w.w. ent; Very Inlet
Ben	12	54	57	1403 452	1399 456	130	57	405 663	431 637	w. w.
Dan	10	54	57	18012 43	1808 47	130	57	224 844	250 818	Quartz rk. set on pt. small isd
Ed	10	54	58	147 1708	143 1712	130	57	121 947	147 921	Quartz rk. set on pt.
Pit	12	54	58	360 1495	356 1499	130	56	977 91	1003 65	Sm. quartz rk. face
Gap	14	54	58	490 1365	486 1369	130	56	826 242	852 216	w. cloth on proj'ng limb on point.
Her	12	54	58	603 1252	599 2256	130	56	603 456	629 438	w. cloth on dead tree.
Imp	12	54	58	701 1154	697 1158	130	56	493 675	519 649	w. cloth On limb
Sum		54	58	929 926	925 930	130	56	108 960	134 934	rk. awash H.W. near N. shore

Note: \* after station name denotes location by triangulation.

Station	Elev feet appr.	Latitude	D. M.	Adjust- ed	Longitude	D. P.	Adjust- ed	Remarks		
Jot	11	54	58	706 1149	702 1153	130	56	258 808	284 782	w. cloth On dead tree
Kid	10	54	58	941 914	937 918	130	56	386 682	412 656	w. cloth on point
Lad	14	54	58	862 993	858 997	130	55	977 91	1003 65	w. cloth on limbs on pt.
Mut	11	54	58	625 1230	621 1234	130	55	765 303	791 277	w. cloth On pt sm island
New #	17	54	58	985 870	981 874	130	55	556 512	582 486	Quartz set h.p of sm. island
Oat #	16	54	58	1250 605	1246 609	130	55	750 318	776 292	H. P. of middle of 3 sm. is'ds
Pit #	12	54	58	1393 462	1389 466	130	55	820 248	846 222	Quartz pile S. end of northern of 3 sm. is'ds
Qui	12	54	58	1151 704	1147 708	130	55	984 84	1010 58	log on shore
If	11	54	58	11524 331	1520 335	130	55	673 395	699 369	w. w. stone pile.
Hat	11	54	58	1720 135	1716 139	130	55	490 578	516 552	ww stone pile
Sot	11	54	58	1465 390	1461 394	130	55	356 712	330 738	Quartz out- crop N. W. pt. sm. isd
Rip #	11	54	58	1373 482	1369 486	130	55	220 848	194 874	Pale on sm White N. W. is'ds
Quartz	12	54	58	1570 285	1566 289	130	54	915 153	941 127	Quartz rk. in narrow gap.
Ant	10	54	58	1760 95	1756 99	130	54	757 311	783 285	stone pile sm. pt.
Bu Bum	10	54	59	17 1838	13 1842	130	54	634 434	660 408	stone pile sm. pt.
Hot	10	54	59	344 1511	340 1515	130	54	472 596	498 570	stick on noth shore
Cut	10	54	59	354 1501	350 1505	130	54	271 797	297 771	log ashore

Note: # after station name signifies recoverable PT station.



Station	Elev feet appr.	Latitude	D. M.	Adjust- ed	Longitude	D.P.	Adjust- ed	Remarks		
Eat	11	54	59	572 1283	568 1287	130	53	960 108	986 82	w. w. on point
Fuss	10	54	59	572 1283	568 1287	130	53	721 347	747 321	w.w. pt. w. side ent sm. bay.
Got	12	54	59	378 1473	382 1477	130	53	628 440	654 414	log w. side sm. bay
Ham	12	54	59	164 1691	160 1695	130	53	541 527	567 501	cloth stone head bay.
It	11	54	59	576 1279	572 1283	130	53	458 610	484 584	w.w. east side ent, sm. bay.
Jam	12	54	59	766 1089	762 1093	130	53	274 794	300 768	cloth, over hanging limbs
Kit	8	54	59	791 1064	787 1068	130	53	162 906	188 880	w.w. on pt
Zest	10	54	59	953 902	949 906	130	52	1028 40	1054 14	w. w.
Was	10	54	59	1245 610	1241 614	130	52	1034 34	1060 08	w. w.
Vat	14	54	59	1669 186	1665 190	130	53	138 930	164 904	w. w.
Tin	20	55	00	31 1824	27 1828	130	53	350 718	376 692	tree head sm bay.
Tub	10	54	59	1413 442	1409 446	130	53	553 515	579 489	w.w. on sm. outlying rk
Sin	12	54	59	1668 187	1664 191	130	53	881 187	907 161	w.w. on pt peninsula.
Flag	9	54	59	1219 636	1215 640	130	53 54	1056 12	16 1052	pole on pt.
Tree	17	54	59	736 1119	732 1123	130	54	218 850	244 824	tree, w.w. stone below
Lum	10	54	59	476 1379	472 1383	130	53	65 1003	91 977	w. w.
Elf		54	58	510 1345	506 1349	130	52	23 1045	49 1019	w.w.

Station	Elev. feet appr.	Latitude	D. M.	Adjust- ed	Longitude	D. P.	Adjusted	Remarks		
May	14	54	59	322 1533	318 1537	130 1	52 53	1057 11	17 1051	
Nip	10	54	59	111 1744	107 1748	130	53	00 1068	26 1042	w.w. west side pt at narrow
Put	11	54	58	1654 201	1650 205	130	52 53	1052 1046	18 1058	w. w.
Ray	11	54	58	1489 366	1485 370	130	53	00 1068	26 1042	w.w. pt. E. side sm. bay
* Sip #	9	54	58	1575 280	1571 284	130	53	118 950	144 924	w.w. rk. head bay
Tot	11	54	58	1425 430	1421 434	130	53	128 940	154 914	w. w.
ULR	10	54	58	1188 667	1184 671	130	53	100 968	126 942	w. w.
Vex	11	54	58	1010 845	1006 849	130	52	1038 30	1064 04	w.w. pt
Wap	11	54	58	757 1098	753 1102	130	52	870 198	896 172	w.w.pt
Yet	12	54	58	573 1282	569 1286	130	52	604 464	630 438	w.w. pt
* Fed #	8	54	58	290 1565	286 1569	130	52	114 954	140 928	w.w. pt head bay
Din		54	58	715 1140	711 1144	130	52	182 886	208 860	w. w.
Cop	12	54	58	855 1000	851 1004	130	52	467 601	493 575	w. w.
But	10	54	58	1089 766	1085 770	130	52	630 438	652 412	w.w. st. pile
And	14	54	58	1333 522	1329 526	130	52	789 279	815 253	x below evergreen on high vert. cliff
Qua	10	54	58	1579 276	1575 280	130	52	888 180	914 154	w. w.
Obo	10	54	58	1848 2015	1836 2018	130	52	971 97	997 71	w.w. x

Note: # after station name denotes recoverable P. T. position

Station	Elev feet appr	Longitude		D.M.	Adjust- ed	Longitude		D. P.	Adjust- ed	Remarks
Ape	13	54	58	385 1470	381 1474	130	55	925 143	951 117	cloth on tree
Sap	13	54	58	296 1559	292 1563	130	55	883 885	909 859	sm. pole
Dar	12	54	57	1842 13	1838 17	130	55	607 461	633 435	cloth on rk narrows
Ent	10	54	57	1684 171	1680 175	130	55	534 534	560 508	cloth
Fin	12	54	57	1541 314	1537 318	130	55	413 655	439 629	cloth
Gun	7	54	57	1454 401	1450 405	130	55	361 707	387 681	n. end isd in channel
Had	6	54	57	1504 3511	1500 355	130	55	255 813	281 787	
Jar	13	54	57	1306 549	1302 553	130	55	91 976	117 950	dead tree
Ill	12	54	57	1316 639	1312 643	130	55	755 912	788 886	
Log	14	54	57	1102 753	1098 757	130	55	169 899	195 873	stick on sm isd past narrows.
Mat	10	54	57	915 940	911 944	130	54	1023 45	1049 19	cloth w. side lg isd near entrance
Oct	10	54	57	461 1394	457 1398	130	54	857 211	883 185	cloth on projecting tree
Not	10	54	57	767 1088	763 1092	130	54	999 69	1025 43	sm stone pile, lg island
Open	11	54	57	414 1441	410 1445	130	54	943 125	969 99	pt. w. side channel
Pat	11	54	57	314 1541	310 1545	130	54	736 332	762 306	st. pile S. end lg isd
Quig #	14	54	56	1748 107	1744 111	130	54	522 546	548 520	highest pt bare isd in channel.

Note: # after station name denotes recoverable P. T station

Station	Elev feet appr	Latitude		D. M. Adjusted		Longitude		D. P. Adjusted		Remarks
Heart	8	54	56	717 1138	713 1142	130	54	311 757	337 731	w w rock in narrow bay
Ten	11	54	56	366 1489	362 1493	130	54	266 802	292 776	ww near h head of bay
Und	11	54	56	520 1335	516 1339	130	54	193 875	219 849	w w s. side narrow bay
Vase	14	54	56	762 1093	758 1097	130	54	11 1057	37 1031	w w on pt.
Vamp	14	54	56	751 1104	7477 1108	130	53	1023 45	1049 19	w w
Wax	9	54	56	606 1249	602 1243	130	53	888 180	914 154	w w middle w. side lg. bay.
Yes	10	54	56	273 1582	269 1586	130	53	578 490	604 464	w w st. near head w side bay
Zeal	10	54	56	747 1108	743 1112	130	53	434 634	460 608	w w pt E side bay
Ask	10	54	56	784 1071	780 1075	130	53	332 736	358 710	w w
Bid	10	54	56	1058 797	1054 801	130	53	149 919	175 893	w w
Deb	13	54	56	1648 207	1644 211	130	53	674 394	700 368	w w & pole outlying rk near isd
Isle	10	54	56	1478 377	1474 381	130	53	988 80	1014 54	w w s pt sm isd
Ear	10	54	56	1594 261	1590 265	130	54	96 972	122 946	w w n. w. pt sm isd
Fib	10	54	57	37 1818	33 1822	130	54	160 899	195 873	ww n pt sm island
Fan	11	54	57	240 1615	236 1619	130	54	1053 15	11 1055	w w n side island
Dob	15	54	57	308 1547	304 1551	130	53	827 241	853 215	green spot e side isd
Sir	11	54	57	479 1376	475 1380	130	53	515 553	541 527	green top rk

Station	Elev feet appr	Latitude		D. M. Adjust- ed		Longitude		D. P. Adjust- ed		Remarks
Hep	13	54	57	222 1633	218 1637	130	53	587 481	613 455	w w on h p rock
Let	12	54	57	505 1350	501 1354	130	53	957 111	983 85	pole on point
Gab	12	54	57	370 1485	366 1489	130	54	357 711	383 685	w cloth outlying rock
Get	12	54	57	400 1455	396 1459	130	m 54	391 677	417 651	w cloth outlying rock
His	10	54	57	583 1272	579 1276	130	54	435 633	461 607	w cloth
In	11	54	57	972 1083	968 1087	130	54	381 707	387 681	w cloth
Jan	14	54	57	1190 665	1186 669	130	54	307 761	333 735	w cloth lone bare rk in bay
Harp	12	54	57	989 866	985 870	130	54	616 452	642 426	pole on lg. rk.
Roy	10	54	59	1014 841	1010 845	130	54	36 1032	62 1006	w w
Ran	12	55	02	1638 217	1634 221	130	59	692 374	718 348	w w pt s. side bay
Boca	10	55	05	621 1234		130	57	501 562		w w sloping rk n side Boca Quadra
Quadra	12	55	05	1066 789		130	56	336 727		Quartz
Bq4 #	15	54	58	1545 260	1591 264	130	55	185 93	111 957	Hand sum Stake
House #		55	00	260 1495		131	01	975		H.P House
Out #		54	56	1284 571	1280 575	130	58	456 612	48 482 586	Isd rk awash Foggy Bay
Outer tang N shore between Boca and Quadra		55	05	848 1007		130	56	744 320		used by W. D. P. #3 May 25 '15

Note: signals in Very Inlet required adjustment due to incorrect plotting  
of station Inlet before beginning work  
# after station name denotes recoverable P.T. station

U. S. COAST AND GEODETIC SURVEY  
Register No. 3539.

3539

STATE. S. E. Alaska

GENERAL LOCALITY. Revillagigedo Channel

LOCALITY. Slate Island to Foggy Point

Surveyed by. Leroy P. Raynor, Aid

Chief of Party. John A. Daniels, Assistant.

Date. May to July, 1915.

Scale. 1:20,000

Inked by Field Party

Lettered by Field Party

Heights in feet above mean sea level

Contour interval 100 feet