8150

Diag. Chr. No. 8201-3.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. LJ-1254 *Office No.* H-8150

LOCALITY

State Southeast Alaska

General locality Sumner Strait

Locality Northwest Coast of Prince of Wales Island

1954

CHIEF OF PARTY

Curtis Le Fever

LIBRARY & ARCHIVES

DATE May 6, 1959

COMM-DC 61300

8150

Form 537
(Ed. June 1946)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

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

REGISTER No. H-8150

Field No. LJ-1254

State SOUTHEAST ALASKA

General locality SUMNER STRAIT

Locality NORTH WEST COAST OF PRINCE OF WALES ISLAND

Scale 1:10,000 Date of survey 20 JULY to 29 SEPTEMBER 1954

Instructions dated 3 June 1953, 28 December 1953 and 23 December 1954

Vessel LESTER JONES

Chief of party Curtis Le Fever

Surveyed by Curtis Le Fever, Charles A. Schoene & Howard A. Garcia

Soundings taken by ~~fathometer~~, graphic recorder, hand lead, wire

Fathograms scaled by Carl E. Strom and Vernon L. Broughton

Fathograms checked by Charles A. Schoene and Carl E. Strom

Protracted by Leo W. Eason II

Soundings penciled by Harvey C. Parsons

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW and are based on a velocity of sound of 800 fms/sec.

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 777032

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8150 (FIELD NO. LJ-1254)

SUMNER STRAIT - ALASKA

SCALE 1:10,000 JULY, AUG. & SEPT. 1954

SHIP LESTER JONES

CURTIS LE FEVER (Ship Hydrographer)
CHARLES A. SCHOENE (Launch Hydrographer)

A. PROJECT:-

Authority for this project is contained in Supplemental Instructions, Project CS-347 to Commanding Officer, Ship PATTON dated 3 June 1953. Supplemental Instructions to Commanding Officer, Ship LESTER JONES dated 28 December 1953 and 23 December 1954.

B. SURVEY LIMITS AND DATES:-

This survey comprises hydrography in the vicinity of the Northwest shore of Prince of Wales Island and extending halfway across Sumner Strait from longitude 133° 35' to 133° 44' and from latitude 56° 20' to 56° 13'. It includes the inshore area in the southern half of Port Protection, all of Labouchere Bay, Hole in the Wall and the alongshore area from Protection Head south to the Barrier Islands. It also includes the large shoal area adjacent to Calder Rocks.

Hydrography was begun on July 20 and completed on 29 September 1954.

There are no contemporary surveys within or adjoining the project area. This sheet joins sheet H-8149 (1954) on the north. & H-8151 (1954-55) on the south

No satisfactory junction with previous survey H-1754 (1886) on the western limits is possible.

C. VESSELS AND EQUIPMENT:-

Sounding on this sheet was done by the Ship LESTER JONES and Launch 92 (a standard diesel powered motor launch) operating from the ship. Launch 92 has a turning radius of about 20 meters, and the ship about 100 meters. The launch was used to survey all the inshore areas and offshore reefs, and the ship was employed for deep water offshore hydrography. Various skiffs attached to the ship were used in signal building and locating rocks.

Three 808 fathometers, Nos. 75, 102-S and 107-S were used for all echo sounding on this survey. Handlead and wire soundings were taken while obtaining bottom samples and on shoals.

Sounding machine No. H-144 was used by the ship for wire soundings.

D. TIDE AND CURRENT STATIONS:-

A portable tide gage was maintained throughout the survey at Point Baker, off sheet. The portable tide gage in Port Protection remained in place until the survey of that bay was completed. It was then moved to the entrance to Hole in the Wall and remained there in operation until the survey was completed.

Desc. Report H-8150

The Port Protection gage was used for the reduction of soundings in that bay except at times when it refused to operate. On those days Point Baker gage was used with a range ratio correction as furnished in Director's letter No. 36-25-9821J being applied.

The Hole in the Wall gage was used for all other areas on this sheet except on days when it was inoperative. On those days the gage at Point Baker was used with a range ratio correction furnished in the Director's letter No. 36-25-9821J, being applied.

No time corrections were applied.

No current stations were observed on this project.

E. SMOOTH SHEET:-

The smooth sheet projection was made in the Washington Office by ruling machine. Shoreline and signals ~~are to be~~ were transferred by the processing office. This work is not yet begun as of the date of this report.

F. CONTROL STATIONS:-

Triangulation control was obtained from surveys by L.O.Colbert in 1915 and by this party in 1954. Positions for all recoverable topographic stations which were located by theodolite cuts are computed. All triangulation and recoverable topographic stations are pricked on the photographs and shore line details are tied to them by field inspection.

The majority of non-recoverable hydro stations are located by photogrammetric methods on manuscript T-9621, T-9622 and T-9623 from 1954 field data. The positions of many of these are strengthened by theodolite cuts.

Other non-recoverable topographic stations are located by computed geographic positions, graphically from theodolite cuts and sextant angles. All theodolite directions observed on control signals are recorded in the list of directions. All sextant cuts are indexed in volumes 1 and 25 of this sheet.

Hydrographic stations were located by conventional methods. Data is indexed in sounding volume 1.

G. SHORELINE AND TOPOGRAPHY:-

Shoreline and topographic details are from advanced photogrammetric compilations of manuscripts T-9621, T-9622 and T-9623 from 1954 field inspection data.

Isolated revisions to the shoreline based on the hydrographer's interpretations were made during the hydrography, while running close inshore. The changes are sketched in, in black india ink, distinguishable from the rest of the shoreline which is delineated in yellow ink.

Rock symbols transferred to the boat sheet from bromoil prints were investigated and their positions verified. See verifier's notes concerning the transferring of contemporary topography to the smooth sheet. DJK

H. SOUNDINGS:-

All soundings on sounding lines were measured with echo sounding equipment listed in side heading C. Vessels and Equipment. See the report on fathometer corrections attached at the end of this report.

Hand lead and wire soundings were obtained at detached positions on shoals and at the times bottom samples were taken.

A fifth phase was installed on 808 depth recorder No. 75, which recorded depths from 155 to 196 fathoms. This phase was used in those depths on this sheet.

I. CONTROL OF HYDROGRAPHY:-

All hydrography was controlled by visual sextant fixes taken on shore stations.

J. ADEQUACY OF SURVEY:-

The survey is considered complete and adequate for charting and complies with project instructions and the hydrographic manual.

K. CROSSLINES:-

Crosslines were run to conform with general instructions. All crossings are good, there being no differences greater than 2 or 3 fathoms.

L. COMPARISON WITH PREVIOUS SURVEYS:-

There are no recent surveys within the project area. Most critical soundings are shown on existing charts and will be discussed under M. Comparison with Charts, however there is shown on Survey No. 1755 in Port Protection a sounding of 4.3 fathoms in latitude 56° 18.6' longitude 133° 36.45 which is not charted. This sounding could not be verified, 7 fathoms being the least depth that could be found in the vicinity. about 125 m to the Northeast of this position is a 2¾ fm. sounding representing the least depth in an area of 4.3 fms. Sq. not carred forward to H-8150.

M. COMPARISON WITH CHARTS:-

On chart 8174 print date 46/11/25 in Port Protection the sounding of 1/4 fathom in latitude 56° 19' longitude 133° 37.25' is verified by a detached rock ledge located in latitude 56° 19.07' longitude 133° 37.42'. This ledge bares at the lower stages of tide and is marked by a heavy kelp growth.

The kelp marked shoal in latitude 56° 18.9', longitude 133° 36.5' is verified by a rock awash with a large shoal surrounding area found in latitude 56° 19.0', longitude 133° 36.68'. This shoal is marked by heavy kelp beds. The sounding of 1-3/4 fathoms in latitude 56° 18.65', longitude 133° 36.2 is verified by a least depth of 2 fathoms in the same latitude and longitude of 133° 36.36'. This shoal is kelp marked. The sounding of 4½ fathoms in latitude 56° 18.7', longitude 133° 36.87' could not be verified. However the 3½ fathom sounding 0.1 mile southwest is found to be on the edge of a shoal extending from shore and very near depths of 4 and 5 fathoms. It should be rejected however and the depths from this survey used. *from H-1755 (1886)

No effort is made to compare the few reconnaissance soundings shown on chart 8174 in Labouchere Bay, with the present survey. The shoreline, offlying islets and rocks and soundings of this survey should be accepted and those of previous surveys not used.

The shoal in latitude 56° 18.4', longitude 133° 40.1' with a least charted depth of 2 fathoms is verified. The least depth found being one 1½ fm. fathom. The charted shoal soundings should be rejected however and this survey accepted for the area. This shoal is marked by a heavy kelp growth.

The shoal in latitude 56° 17.8', longitude 133° 40.5' with a least charted depth of 7 fathoms is verified by a least depth of 6½ fathoms.

The sounding of 13 fathoms in latitude 56° 17.4, longitude 133° 41.2' is verified by an extensive shoal area being found with a least depth of ~~12½~~ fathoms.

The large shoal area in the vicinity of Calder Rocks and shown on Chart No. 8172 is verified. ~~Five~~ Four rocks awash are located in the approximate position of the charted rock awash near the southern end of the reef.

0-2 fms

An uncharted rock awash is found on the reef farther north in latitude 56° 15.28, longitude 133° 42.94'.

The shoal area north of the Barrier Islands in latitude 56° 13.6', longitude 133° 39.8' is verified. An extensive shoal area with least depths of 2½ fathoms is found in the vicinity of the charted 2 fathoms sounding. A shoal with least depth of 4 fathoms was found in latitude 56° 13.5', longitude 133° 40'. These shoals are marked by heavy kelp beds.

N. DANGERS AND SHOALS:-

No additional dangers to surface navigation were found near the ship channels. There are many differences however in Labouchere Bay and south along the coast of Prince of Wales Island, in the entrance to Hole in the Wall and in the depths north and east of the Barrier Islands. In these areas there had been only reconnaissance surveys and only small vessels with local knowledge navigated them.

The additional shoals, rocks and changes found in other features were not reported.

In all cases this survey should supersed others.

O. COAST PILOT INFORMATION:-

During the 1954 field season an anchorage in latitude 56° 13.2', longitude 133° 39.6' , 13 fathoms of water, mud bottom; in the bay on the north side of the northerly and most westerly of the Barrier Islands was used several times. This is fair shelter from all except northerly weather. It can be approached on a south course. Pass east of the charted shoal of 2 fathoms, keeping it a safe distance on the starboard hand. Continue on south into a desired depth up to 10 fathoms. Small vessels desiring to anchor in less water can then change to a southwesterly course and continue in toward the head of the bay to a depths as little as 3 fathoms for anchorage, mud and sand bottom.

Hole in the Wall is a small cove on the eastern side of Sumner Strait 2.5 miles northward of Barrier Islands, the entrance of which is through a very narrow passage 0.5 miles long, between high bluffs and opens into a basin 400 yards in diameter. There are two rocks inside the narrow entrance and close to the north vertical shore. They bare at low tide. The depths in the basin are from 4 to 7 fathoms. Small craft enter through the narrow channel but only at half tide or above. It is used some for anchorage but is subject to strong thermal winds drawing through the narrow entrance. The bottom is mud and sand.

Labouchere Bay about 4 miles southward of Point Baker is about 0.8 mile wide at the entrance and 1.5 miles long. It is studded with islets and rocks, the entrance being partially closed by Labouchere Island and the larger unnamed bare islet lying 0.3 miles to the southeast. A submerged reef extends southward 0.3 miles from the unnamed islet to a point directly west of the wooded highwater island which adjoins the southern shore of the bay.

There is a sheltered anchorage for small vessels just inside the bay on its southern side. It is directly east of the highwater island mentioned above and south of the southerly of the two wooded islands lying just inside the bay near the southern shore. The anchorage is 0.15 miles wide with steep-to shores, depths from 3 to 21 fathoms, mud and sand bottom. Three detached rocks which cover at half tide lie near the head of the anchorage. Small fishing craft anchor southeast of the rocks and near the sand beach in 2 to

5 fathoms. Small fishing vessels may enter Labouchere Bay on a northerly course passing east of the kelp marked submerged reef at the entrance and avoiding the large kelp beds on their right.

The recommended entrance to Labouchere Bay is from the northwest on an approximate course of 140°. Keep Labouchere Id. about 0.2 miles on the starboard hand and the unnamed Islet about 0.1 miles off on the same side. When near the south tangent of the unnamed bare rock islet on the right, change to a south course, then round the end of the wooded island on the left, avoiding heavy kelp beds. All vessels then regardless of which entrance used pass mid-channel between the two wooded islands on approximate course of 060°. When the northeast tangent of the island on the right is abeam change course to the right and round that tangent, avoiding kelp beds lying off the island come to a mid-channel course approximately 240° into the anchorage to the desired depth.

P. AIDS TO NAVIGATION:-

A report of Non-floating Aids to Navigation, Form 567, was prepared on 2 November 1954 for the project. There are no non-floating aids on this sheet.

One floating aid CALDER ROCK LIGHTED WHISTLE BUOY 4 is located:
Latitude 56° 15.7' Longitude 133° 43.16'
Depths of water: 22 fathoms
Position No. 143u date 19 August 1954

Q. LANDMARKS FOR CHARTS:-

See report of Non-Floating Aids or Landmarks for Charts forwarded 2 November 1954. (Chart letter 1017, 1954)

The following are landmarks which have been reported in the past and are charted. They were not included on Form 567. Protection Head, Latitude 56° 18.6, Longitude 133° 39.7', a bald white bluff 150 feet high 1 mile northward of Labouchere Island. It has a black circular cave in its center near the water and can beseen for miles. It is a prominent landmark.*

A vertical white bluff 80 feet in height with crack in its center, latitude 56° 15.3', longitude 133° 38.0', 0.6 mile southeast of the entrance to Hole in the Wall is a prominent landmark visible from well off shore. (on cht 8172)

* not charted on cht 8174. (Reef symbol only shown here.)

R. GEOGRAPHIC NAMES:-

See special report on geographic names for this project.

S. SILTED AREAS:-

There are no silted areas on this sheet.

Z. APPLICABLE DATA:-

See following tabulation.

Respectfully submitted,

Curtis Le Fever

Curtis Le Fever,
Commander, C&GS

Approved and Forwarded:

Curtis Le Fever

Curtis Le Fever, CDR., C&GS
Comdg., Ship LESTER JONES

STATISTICS FOR
HYDROGRAPHIC SURVEY H-8150(1954)
SHIP LESTER JONES
PROJECT CS-347

DATE	VOLS.	DAY LETTER	NO. H.L. OR WIRE SOUNDINGS	NO. POSITIONS	STAT. MILES SOUNDING LINES
LAUNCH 92					
7/20/54	1	a	- -	77	3.5
7/21/54	1	b	- -	233	18.7
7/22/54	2	c	2	137	8.6
7/23/54	2	d	- -	145	10.7
7/27/54	2&3	e	- -	157	9.9
7/28/54	3	f	20	78	4.6
7/30/54	3&4	g	1	192	22.8
8/2/54	4&5	h	1	214	26.1
8/3/54	5	j	- -	186	16.2
8/4/54	5&6	k	10	210	21.3
8/5/54	6&7	l	16	205	22.4
8/6/54	7&8	m	- -	252	25.0
8/7/54	8	n	1	85	8.5
8/9/54	8&9	p	- -	219	19.6
8/12/54	9&10	q	- -	229	28.8
8/13/54	10	r	1	234	15.6
8/17/54	10&11	s	18	188	6.0
8/18/54	11&12	t	- -	221	13.1
8/19/54	12&13	u	- -	260	29.2
8/24/54	13	v	- -	212	25.2
8/25/54	13&14	w	- -	239	29.5
8/26/54	14	x	- -	222	13.1
8/27/54	14&15	y	2	141	8.2
8/31/54	15	z	16	156	6.9
9/1/54	15&16	ab	9	166	7.5
9/2/54	16	ac	4	182	27.0
9/3/54	16&17	ad	8	150	18.8
9/8/54	17&18	ae	8	160	13.1
9/9/54	18	af	9	202	18.4
9/10/54	18&19	ag	- -	239	21.0
9/14/54	19&20	ah	5	192	12.4
9/15/54	20	aj	12	213	16.8
9/16/54	20&21	ak	12	189	19.1
9/17/54	21&22	al	5	182	12.4
9/22/54	22	am	- -	116	11.8
9/23/54	22&23	an	3	143	14.7
9/27/54	23	ap	2	195	20.6
9/28/54	23	aq	8	96	9.4
9/29/54	24	ar	14	33	1.4
TOTAL FOR LAUNCH 92			187	6951	617.9

STATISTICS FOR
HYDROGRAPHIC SURVEY H-8150 (1954)
SHIP LESTER JONES
PROJECT CS-347

DATE	VOLS.	DAY LTR.	NO. H.L. OR WIRE SOUNDINGS	NO. POSITIONS	STAT. MILES SOUNDING LINES
			SKIFF		
6/18/54	25	a	8	16	- -
6/21/54	25	b	-	3	- -
7/2/54	25	c	-	1	- -
7/20/54	25	d	-	14	- -
7/27/54	25	e	33	22	- -
8/19/54	25	f	-	16	- -
	TOTAL FOR SKIFF		41	72	- -
			SHIP LESTER JONES		
8/10/54	26&27	A	- -	215	56.3
8/11/54	27	B	- -	241	61.6
8/14/54	28	C	- -	102	26.7
8/16/54	28&29	D	- -	240	59.8
8/21/54	29	E	- -	87	19.7
8/23/54	29&30	F	- -	196	56.7
8/30/54	30	G	- -	92	19.8
9/4/54	30&31	H	- -	80	15.0
9/7/54	31&32	J	- -	212	50.8
9/11/54	32	K	- -	78	16.3
9/13/54	32	L	- -	91	16.7
10/2/54	32&33	M	- -	86	19.8
10/4/54	33	N	19	19	- -
10/5/54	33	P	11	11	- -
10/8/54	33	Q	Phase Comparisons		
	TOTAL FOR SHIP		30	1750	419.2
TOTAL FOR SHEET					
	33		258	8773	1037.1

FATHOMETER CORRECTIONS
SHEETS H-8149, H-8150, H-8151, LJ-1154
LJ-1254, LJ-1354 (1954)

PHASE CORRECTIONS

DATE	A-B	B-C	A-C	C-D	A-D	D-E	A-E
FATHOMETER NO. 75							
6/19	0.0	+0.2		+0.1		+3.1	
7/17	-0.1	+0.4		+0.2		+2.9	
10/8	+0.1	+0.3		+0.4		+3.5	
Mean	0.0	+0.3	+0.3	+0.2	+0.5	+3.2	+3.7
Corrs.	0.0		+0.2		+0.4		+3.6
FATHOMETER NO. 102-S							
7/6	-2.6	-2.5		+0.8R			
7/17	-2.6	-2.5		-0.5			
10/8	-2.5	-2.7		-1.4R			
Mean	-2.6	-2.6	-5.2	-0.5	-5.7		
FATHOMETER NO. 107-S							
10/8	-1.1	+0.1	-1.0	+2.2	+1.2		

DRAFT CORRECTIONS

SHIP DATE	DRAFT FEET	DATE	DRAFT FEET
6/15	7.8	8/10	7.9
6/22	7.8	8/11	8.0
6/29	8.1	8/14	7.6
7/7	8.0	8/16	7.8
7/8	8.0	8/21	7.8
7/9	8.1	9/4	8.0
7/17	8.0	9/4	8.1
7/22	7.9	9/7	8.1
7/23	7.9	9/11	8.1
7/24	7.9	10/2	8.0
7/26	7.8	10/4	8.0
7/28	8.0	10/5	8.0
7/29	8.0	Mean	8.0 ft.
8/3	8.0		1.33 fm.
8/4	8.0		
10/4	8.0		
10/5	8.0		

DRAFT CORRECTIONS

DRAFT FMS.	INITIAL FMS.	DIFF.
1.33	1.0	+0.33

CORRECTION	
0-11	+0.3
11+	+0.2

SHEAVE CORRECTIONS

Sheave No. H-407

Depth	Correction
0-10	0.0
10-11	+0.1
11-30	+0.0
30-70	+0.2
70-110	+0.4
110+	+0.6

PROCESSING OFFICE NOTES - H-~~8151~~ 8150

SMOOTH SHEET

The smooth sheet projection was made in the Washington Office by the ruling machine. The shoreline and signals were transfered and plotted by the Seattle Hydrographic Processing Unit, using standard of transfer, plotting and checking.

SHORELINE AND TOPOGRAPHY

The computed theodolite locations of signals FED,GAB,GOB and HEX were used instead of those on the manuscript. These locations along with hydro locations of high water rocks, showed that the shoreline between signals FED and MAW was misplaced. A shift of the manuscript shoreline to those computed positions cleared all sounding lines. Signal ICE was shifted to agree with this move, shoreline affected by the shifting of these signals was left in pencil by the Processing office to be subsequently verified, adjusted and inked by the verifier. DJK.

Except for the above mentioned change the shoreline and topographic signals weretransfered from blueline tracings of T-9622 and T-9623 with some changes of shoreline transfered from the Boat Sheet.

All changes in shoreline have been left in pencil for verification in the Washington Office. shoreline adjusted and inked. DJK.

CONTROL OF HYDROGRAPHY

All of the hydro sounding lines were plotted by L. W. Eason who apparently made some attempt to follow the instructions in C&GS General Circular 53 - 2, with inovations of his own. He made no attempt to space the positions for odd intervals of time, changes of course or speed changes of the launch; nor were the "spaced" positions indicated in the sounding volumes.

In penciling the soundings at least 20% of the positions were replotted and about 10% changed. The numerous erasures and replotting have roughened the paper surface of this sheet and made legibility difficult. -

ADEQUACY OF SURVEY

This survey is considered complete and adequate for charting.

The junctions with H-8149 and H-8151 have been compared and are found to be satisfactory, except for a small area in the SW. corner of this sheet at the junction with H-8151. Junctions adjusted to agree

The above mentioned discrepancy is in soundings on the "E" scale, on both sheets, and appears to be in the phase correction. The soundings on H-8151 are 2 to 3 fathoms deeper than on H-8150 in depths of 155 to 165 fathoms.

The usual charted depth curves can be adequately drawn at the junctions.

CROSSLINES

Except for the above mentioned discrepancy, the crossings are all in agreement.

COMPARISON WITH CHART

Comparison has been made with Charts 8172 3rd Ed. Revised 9/1/58 and 8174 7th Ed. Oct. 31/55 which were made from the boat sheet of this and other contemporary surveys.

Chart 8174 shows a chain of rocks awash at Lat. 56°18!3, Long. 133°35!75. These rocks could not be verified on the fathograms of the area. A change of fix moved them 0.1 mile N and W. This agrees with the location of a shoal extending from the West shore, Change of location concurred in-1.M.Z.

A mooring buoy shown on 8174 at Lat. 56°18!3, Long. 133° 36!1 could not be found in the sounding records nor is it shown on the boat sheet.

See sections of Charts 8172 and 8174, attached to this report, for comparison between charted soundings and features and the smooth sheet. No attempt was made to compare all of the charted soundings, only those that were shoaler than the surrounding soundings.

Respectfully submitted

William M. Martin

WILLIAM M MARTIN
Supervisory Cartographer

Approved and forwarded

G. C. Mast

G. C. MAST
Captain C&GS
Seattle District Officer

GEOGRAPHIC NAMES PENCILED ON H-8150

BARRIER ISLANDS

CALDER ROCKS

HOLE IN THE WALL

LABOUCHERE BAY

LABOUCHERE ISLAND

PORT PROTECTION

PRINCE OF WALES ISLAND

PROTECTION HEAD

SUMNER STRAIT

✓

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

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″				°	′	″
α	2 WOLF	to 3 SHIP	179	22	44.6	α	3 SHIP	to 2 WOLF	359	22	40.4
2d ∠		&	+ 18	42	51.8	3d ∠		&	− 24	47	58.7
α	2 WOLF	to 1 GOB	198	05	36.4	α	3 SHIP	to 1 GOB	334	34	41.7
Δα						Δα					
			180	00	00.0				180	00	00.0
α′	1	to 2				α′	1	to 3			

First Angle of Triangle

	°	′	″			°	′	″		°	′	″		°	′	″
φ	56	13	20.973	2 WOLF	λ	133	40	11.187	φ	56	17	38.268	3 SHIP	λ	133	40	16.202
Δφ	+	2	28.993		Δλ	−	1	27.273	Δφ	−	01	48.303		Δλ	−	1	32.488
φ′	56	15	49.966	1 GOB	λ′		38	43.914	φ′	56	15	49.965	1 GOB	λ′		38	43.714

	Logarithms	Values in seconds
s	3.685 590	1855.7
− Cos α	9.977 976	1545.4
B	8.509 623	310.3
h	2.173 189	1st term 149.001
s^2	7.3712	
$\sin^2\alpha$	8.9823	
C	1.5775	
	7.9310	2d term + 0.008
h^2		
D		
		3d term +
		−Δφ 148.993

°	′	″	.714
½(φ+φ′)			

	Logarithms	Values in seconds
s	3.685 590	
− Sin α	9.492 156	752.5
A′	8.508 708	
Sec φ′	0.255 418	1.8 3
Δλ	1.946 872	87.274
$\sin\frac{1}{2}(\phi+\phi')$		
−Δα		

	Logarithms	Values in seconds
s	3.569 217	
+ Cos α	9.955 771	
B	8.509 617	
h	2.034 605	1st term 108.294
s^2	7.1384	
$\sin^2\alpha$	9.2658	
C	1.5787	
	7.9829	2d term + 0.009
h^2		
D		
		3d term +108.303
		−Δφ

°	′	″
½(φ+φ′)		

	Logarithms	Values in seconds
s	3.569 217	
− Sin α	9.232 741	
A′	8.508 708	
Sec φ′	0.255 418	
Δλ	1.966 084	92.488
$\sin\frac{1}{2}(\phi+\phi')$		
−Δα		

11—9362 U. S. GOVERNMENT PRINTING OFFICE: 1929

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

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 WOLF	to 3 SHIP 2	179	22	44.6
2d ∠		&	+ 16	12	39
α	2	to 1	195	35	23.6
Δα					
			180	00	00.0
α′	1	to 2			

			°	′	″
α	3 SHIP 2	to 2 WOLF	359	22	40.4
3d ∠		&	− 26	39	54.7
α	3	to 1	332	42	45.7
Δα					
			180	00	00.0
α′	1	to 3			

First Angle of Triangle

	°	′	″			°	′	″
φ	56	13	20.973	2 WOLF	λ	133	40	11.187
Δφ	+	2	43.501		Δλ		1	21.962
φ′	56	16	04.474	1 FED	λ′	133	38	49.225

	°	′	″			°	′	″
φ	56	17	38.268	3 SHIP	λ	133	40	16.202
Δφ	−	1	33.837		Δλ	−	1	26.977
φ′	56	16	04.437	1 FED	λ′	133	38	49.225

	Logarithms	Values in seconds
s	3.720 0953	137.2
Cos α	9.983 7208	
B	8.509 6226	
h²	7.213 5387	1st term −163.470
s²	7.440 39	
Sin² α	8.858 69	
C	1.577 53	
t	7.876 38	2d term +.007
h³		
D		3d term +
		−Δφ −163.500

	°	′	″	Logarithms	Values in seconds
½(φ+φ′)					
s				3.720 0953	
Sin α				9.429 3512	847.3
A′				8.508 7076	
Sec φ′				0.255 4640	
Δλ				1.913 6141	81.962
Sin ½(φ+φ′)					
−Δα					

	Logarithms	Values in seconds
s	3.513 9413	
Cos α	9.948 7647	
B	8.509 6174	
h²	1.972 3234	1st term +93.826
s²	7.027 88	
Sin² α	9.322 58	
C	1.57 870	
t	7.92 916	2d term + .008
h³		
D		3d term +
		−Δφ 93.837

	°	′	″	Logarithms	Values in seconds
½(φ+φ′)					
s				3.513 9413	
Sin α				9.661 2952	
A′				8.508 7076	
Sec φ′				0.255 4640	
Δλ				1.939 4042	86.977
Sin ½(φ+φ′)					
−Δα					

11—9362 U. S. GOVERNMENT PRINTING OFFICE: 1929

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

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 WOLF	to 3 CABOT	200	31	51.5
2d ∠		&	+ 2	33	32.9
α	2 WOLF	to 1 HEX	203	05	24.4
Δα					
			180	00	00.0
α′	1	to 2			

			°	′	″
α	3 CABOT	to 2 WOLF	360 20	33	10.1
3d ∠		&	− 59	57	31.2
α	3 CABOT	to 1 HEX	320	35	38.9
Δα					
			180	00	00.0
α′	1	to 3			

FIRST ANGLE OF TRIANGLE

	°	′	″			°	′	″
φ	56	13	20.973	2 WOLF	λ	133	40	11.187
Δφ	+	2	14.750		Δλ	—	1	43.223
φ′	56	15	35.723	1 HEX	λ′	133	38	27.964

	°	′	″			°	′	″
φ	56	15	41.561	3 CABOT	λ	133	38	36.583
Δφ	—	00	05.838		Δλ	—	00	08.618
φ′	56	15	35.723	1 HEX	λ′	133	38	27.965

	Logarithms		Values in seconds
s	3.656 210		(750.9) 1104.9
Cos α ‾	9.963 735		
B	8.509 623		
h²	2.129 568	1st term	− 134.762″
s²	7.31242		
Sin²α	9.18697		
C	1.57752		
	8.07691	2d term	+ .012
h²			
D			
		3d term	+
		−Δφ	134.750

½(φ+φ′)	Logarithms		Values in seconds
s	3.656 210	5	
Sin α ‾	9.593 484	6	481.4
A′	8.508 708	—	
Sec φ′	0.255 374	8	
Δλ ²	2.013 776		103.223″
Sin ½(φ+φ′)			
−Δα			

	Logarithms		Values in seconds
s	2.368 693		
Cos α +	9.887 993		
B	8.509 600		
h²	0.766 306	1st term	+ 5.838″
s²	4.73738		
Sin²α	9.60528		
C	1.57819		
	5.92087	2d term	+ —
h²			
D			
		3d term	+
		−Δφ	

½(φ+φ′)	Logarithms		Values in seconds
s	2.368 693	1	
Sin α ‾	9.802 643	5	
A′	8.508 708	—	
Sec φ′	0.255 374	8	
Δλ ²	0.935 418		8.618″
Sin ½(φ+φ′)			
−Δα			

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

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

		°	′	″
α	2 WOLF to 3 SHIP₂	179	22	44.6
2d ∠	&	+ 17	38	49.0
α	2 WOLF to 1 GAG	197	01	33.6
Δα				
		180	00	00.0
α′	1 to 2			

		°	′	″
α	3 SHIP₂ to 2 WOLF	359	22	40.4
3d ∠	&	− 25	51	50.7
α	3 SHIP to 1 GAG	333	30	49.7
Δα				
		180	00	00.0
α′	1 to 3			

First Angle of Triangle

	°	′	″			°	′	″
φ	56	13	20.973	2 WOLF	λ	133	40	11.187
Δφ	+	2	35.883		Δλ	−	1	25.780
φ′	56	15	56.856	1 GAG	λ′	133	38	45.407

	°	′	″			°	′	″
φ	56	17	38.268	3 SHIP₂	λ	133	40	16.202
Δφ	−	1	41.473		Δλ	−	1	30.795
φ′	56	15	56.855	1 GAG	λ′	133	38	45.407

	Logarithms
s	3.702 762
Cos α	9.980 537
B	8.509 623
h ₂	2.192 822
s²	7.405 38
Sin² α	8.933 2
C	1.577 5
	7.916 59/3
h²	
D	

Values in seconds	
	(96.4)
	1759.4
1st term	− 155.891
2d term	+ .008
3d term	+
−Δφ	155.883

½(φ+φ′)	°	′	″

	Logarithms	Values in seconds
s	3.702 762	(251.1)
Sin α	9.466 579	781.6
A′	8.508 708	
Sec φ′	0.255 440	
Δλ	1.933 389	85.780
Sin ½(φ+φ′)		
−Δα		

	Logarithms
s	3.544 696
Cos α	9.951 843
B	8.509 617
h ₂	2.006 256
s²	7.089 14
Sin² α	9.298 6
C	1.578 7
	7.966 54
h²	
D	

Values in seconds	
1st term	+ 101.404
2d term	+ .009
3d term	+
−Δφ	101.413

½(φ+φ′)	°	′	″

	Logarithms	Values in seconds
s	3.544 696	
Sin α	9.649 317	
A′	8.508 708	
Sec φ′	0.255 440	
Δλ	1.958 061	90.795
Sin ½(φ+φ′)		
−Δα		

11—9362 U. S. GOVERNMENT PRINTING OFFICE: 2930

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

11—9121
U. S. GOVERNMENT PRINTING OFFICE: 1930

COMPUTATION OF TRIANGLES

State: _____

	NO.	STATION	OBSERVED ANGLE	CORR'N	SPHER'L ANGLE	SPHER'L EXCESS	PLANE ANGLE AND DISTANCE	LOGARITHM
		2-3						3.900 838
		1 GOB	(136-29-09.5)					0.162 076
		2 WOLF	18-42-51.8					9.506 303
		3 SHIP$_2$	24-47-58.7					9.622 676
		1-3						3.569 217
		1-2						3.685 590
		2-3						3.900 838
		1 GAG	(136-38-44.5)					0.173 352
		2 WOLF	17-39-25.8					9.481 902
		3 SHIP$_2$	25-41-50.7					9.637 108
		1-3						3.546 092
		1-2						3.701 298
		2-3 GAG	(136-29-20.3)					3.900 838
		1 WOLF	17-38-49.0					0.162 099
		2 SHIP$_2$	25-51-50.7					9.481 659
		3						9.639 725
		1-3						3.544 596
		1-2						3.702 662
		2-3						3.900 8380
		1 FED	(137-07-26.3)					0.167 2265
		2 WOLF	16-12-39.0					9.445 8729
		3 SHIP$_2$	26-39-54.7					9.652 0298
		1-3						3.513 9374
		1-2						3.720 0943

Do not write in this margin

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

11—9121

U. S. GOVERNMENT PRINTING OFFICE: 1929

COMPUTATION OF TRIANGLES

State: _____

NO.	STATION	OBSERVED ANGLE	CORR'N	SPHER'L ANGLE	SPHER'L EXCESS	PLANE ANGLE AND DISTANCE	LOGARITHM
	2-3						3.666 860
	1 HEX	(117-28-55.9)					0.0095 001
	2 WOLF	02-33-32.9					8.649 832
	3 CABOT	59-57-31.2					9.937 349
	1-3						2.3688 693
	1-2						3.6029 210
	2-3						
	1						
	2						
	3						
	1-3						
	1-2						
	2-3						
	1						
	2						
	3						
	1-3						
	1-2						
	2-3						
	1						
	2						
	3						
	1-3						
	1-2						

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FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8150

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	
Southeast Alaska										1
Sumner Strait										2
Calder Rocks										3
Barrier Islands										4
Hole in the Wall										5
Labouchere Bay										6
Labouchere Island									BGN	7
Protection Head										8
Port Protection			(tide station)							9
Prince of Wales Island										10
				Names approved 5-18-59 L. Heck						11
Tide station off sheet:										12
Point Baker (Not on H 8150)						(see chart 8174 for best placement of names)				13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8150

Records accompanying survey:

Boat sheets 1; sounding vols. 33; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 9-Envelopes

special reports, etc. 1-Smooth sheet & 1-Descriptive report

.....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet		8773
Number of positions checked		880
Number of positions revised		22
Number of soundings revised (refers to depth only)		67
Number of soundings erroneously spaced		22
Number of signals erroneously plotted or transferred		0
Topographic details	Time	20 hrs
Junctions	Time	15 hrs
Verification of soundings from graphic record	Time	394 sdgs. Recommend

Verification by DAVID J. KENNON Total time 10.6 hrs Date 5-8-61

Reviewed by [signature] Time 1:24 Date 6-26-61

M-2232-1

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coast and Geodetic Survey~~ July 21, 1959

Division of Charts: R. H. Carstens

Plane of reference approved in
33 volumes of sounding records for

HYDROGRAPHIC SHEET 8150

Locality Sumner Strait, Alaska

Chief of Party: C. LeFever in 1954
Plane of reference is mean lower low water, reading
6.0 ft. on tide staff at Point Baker
12.9 ft. below B. M.1 (1954)

10.1 ft. on tide staff at Hole in the Wall
15.5 ft. below B.M. 2 (1954)

Height of mean high water above plane of reference is:

Point Baker	11.9 ft.
Hole in the Wall	11.2 ft.

Condition of records satisfactory except as noted below:

William Shafer
Tides Branch
Chief, ~~Division of Tides and Currents~~.

U. S. GOVERNMENT PRINTING OFFICE 877033

OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8150 FIELD NO. LJ-1254

S. E. Alaska, Sumner Strait, N. W. Coast Prince of Wales Island

SURVEYED: July - Sept. 1954 SCALE: 1:10,000

PROJECT NO. CS-347

SOUNDINGS: 808 Depth Recorder
Hand lead & wire

CONTROL: Sextant fixes on shore signals

Chief of Party ---------- C. LeFever
Surveyed by ---------- C. LeFever; C. A. Schoene: H. A. Garcia
Protracted by ---------- L. W. Eason, II
Soundings plotted by ---------- H. C. Parsons
Verified and inked by ---------- D. J. Kennon
Reviewed by ---------- I. M. Zeskind DATE: 6-26-61
Inspected by ---------- R. H. Carstens

1. Description of the Area

This is a survey of Sumner Strait, the lower part of Protection Harbor, Labouchere Bay and Hole in the Wall, all of which are located on the west side of Prince of Wales Island, Alaska. The bottom is very irregular. Inshore, the bottom lies adjacent to mountainous land areas. Here in depths less than 50 fms. submarine features such as ledges, reefs, pinnacles, deeps and ridges are found. In the offshore area, knolls and ridges rising from depths greater than 100 fms. are found. On Calder Rocks pinnacles uncover or rise to about 1 fm. depths.

2. Control and Shoreline

The source of the control is given in the Descriptive Report.

The shoreline originates with unreviewed photogrammetric surveys T-9621 and T-9622 of 1953-54 and T-9623(1953-54-55).

3. Hydrography

Depths at crossings are in good agreement. The usual depth curves were adequately delineated, except close inshore where the foul character of the bottom generally prevented development to the low-water line. The least depths on shoals and the bottom configuration were adequately developed.

4. Condition of Survey

a. The Descriptive Report is complete and comprehensive.

b. The sounding records are complete, except that notes were not always made in the sounding records when features such as reefs, ledges, rocks, etc. were in the proximity of sounding lines.

c. Bottom characteristics were not recorded on many pinnacles and shoals having least depths determined by the handlead.

d. The smooth plotting was accurately done.

5. Junctions

Except for minor differences of 1-3 fms. in depths of as much as 160 fms. at the southwest portion of the present survey, an adequate junction was effected with H-8151 (1954-55) on the south. These differences are attributed to weak control on the present survey. The junction with H-8149 (1954) on the north will be considered in the review of that survey.

6. Comparison with Prior Surveys

A. H-1749 (1886), 1:80,000 H-1754 (1886), 1:80,000
H-1753 (1886), 1:80,000 H-1754a (1913), 1:20,000

The small scale reconnaissance surveys cover the area of the present survey. A scant basis for comparison is afforded by the few scattered soundings on the early surveys.

A number of bottom characteristics have been carried forward from the prior to the present survey. Withethe addition of these bottom characteristics, the present survey is adequate to supersede the prior surveys within the common area.

B. H-1755 (1886), 1:10,000

This reconnaissance survey covers Port Protection north of approximate Lat. 56°18.3'. A comparison between the prior and present surveys reveals differences in depths of as much as 10 fms. These differences in depths are attributed to the different methods of surveying. Soundings were obtained by leadline on H-1755, whereas those on the present survey were obtained by depth recorder.

An 11-fm. sounding on H-1755 (1886) which falls in depths of 20-23 fms. on the present survey in the vicinity of Lat. 56°18.98', Long. 133°37.10' should be disregarded. The 11-fm. is considered to be 10 fms. too shoal.

Several bottom characteristics have been carried forward from the prior to the present survey. With the addition of these bottom characteristics, the present survey is adequate to supersede the prior survey within the common area.

C. Wire Drag Surveys

H-3791WD (1915-16), 1:20,000
H-3811 WD (1915-16),1:20,000

There are no conflicts between the present survey soundings and the effective wire-drag depths, except in Port Protection approximately south of Lat. 56°19.0'. Here the effective wire-drag depths are in conflict with the present survey depths at the southeastern limits of the area covered by H-3811WD. These discrepancies are attributed to error in the position of the shoreline and signals transferred in Port Protection from H-1755 (1886) and H-1755a (1916) to H-3811WD (1915-16). For this reason, an accurate comparison between the effective wire-drag depths on H-3811WD and the soundings on the present survey could not be made in the above mentioned area.

Attention is also directed to the following discrepancies between the soundings plotted on H-3811WD and those on the present survey:

1. The 1-ft. sounding plotted on H-3811WD in Port Protection in Lat. 56°19.0', Long. 133°37.20', is considered discredited by hydrography on the present survey where depths of 23-25 fms. are found. The sounding should be disregarded.

2. The 19½ ft. sounding on H-3811WD in Lat. 56°18.44', Long. 133°40.12', (NA 1927 position) was transferred to the present survey about 30 meters to the eastward in order to conform with the feature which was developed on H-8150. The sounding in its transferred position is adequate for charting purposes.

Three soundings have been carried forward from H-3811WD to the present survey.

7. Comparison with Chart 8172 (Latest print date 11-14-60)
Chart 8174 (Latest print date 10-31-55)

A. Hydrography

The charted hydrography originates with the boat sheet (Bp. 51994) of the present survey and one sounding from wire drag survey H-3791WD (1915-16). A comparison between the charted and present survey soundings reveals only minor differences of 0.2 to 2 fms. The following discrepancies in hydrographic information between the chart and present survey were noted:

1. The area charted as uncovering at MLLW in Lat. 56° 17.55', Long. 133°37.72', originates with zero soundings on the boat sheet (Bp. 51994) of the present survey. During verification of the present survey the soundings were revised to show a least depth of 1.4 fms. here. The feature should be deleted from the chart.

2. The 2 areas charted as uncovering at MLLW in the vicinity of Lat. 56°14.15', Long. 133°37.9', originates with zero soundings on the boat sheet (Bp. 51994) of the present survey. These soundings were revised to 1 fm. during verification of the survey. The features should be deleted from the chart.

3. The area charted as uncovering at MLLW in Lat. 56° 13.77', Long. 133°38.28', originates with a zero sounding on the boat sheet (Bp. 51994) of the present survey. This sounding was revised to 1.4 fms. during verification of the survey. The feature should be deleted from the chart.

4. The area charted as uncovering at MLLW in the Hole in the Wall in the vicinity of Lat. 56°15.77', Long. 133° 38.25', originates with zero soundings on the boat sheet (Bp. 51994) of the present survey. These soundings were revised to show a least depth 1.3 fm. during verification of the present survey. The feature should be deleted from the chart.

5. The reef charted in Lat. 56°17.51', Long. 133°40.02' from the boat sheet (Bp. 51994) of the present survey should be deleted from the chart. Several overlapping soundings on the boat sheet were erroneously interpreted as a reef symbol by the chart compiler.

6. The area charted as uncovering at MLLW in Lat. 56° 17.38', Long. 133°40.05', originates with zero soundings on the boat sheet (Bp. 51994) of the present survey. These soundings were revised to 0.9 fms. during verification of the survey. The feature should be deleted from the chart.

7. The 2 areas which uncover at MLLW in the vicinity of Lat. 56°17.0', Long. 133°39.48', charted from the boat sheet (Bp. 51994) of the present survey were revised to 0.9 fms. and 1.6 fms. during verification and review of the survey. The low-water symbols should be deleted from the chart.

8. The 1-fm. sounding charted in Lat. 56°13.55', Long. 133°38.96', originates with a 4 fm. sounding on the boat sheet (Bp. 51994) of the present survey. The 1-fm. sounding should be deleted from the chart.

9. Two rocks awash were charted in the vicinity of Lat. 56°14.32', Long. 133°37.67', from the boat sheet (Bp. 51994) of the present survey. The northern one which originates with a zero sounding on the boat sheet was revised to 1 fm. during verification of the present survey and, therefore, should be deleted from the chart.

10. The rock awash charted in Lat. 56°14.22', Long. 133° 38.20', originates with 2 rocks awash shown on photogrammetric survey T-9623 (1953-4-5). These rocks are considered to be discredited by the hydrography on the present survey. The rock awash should be deleted from the chart.

11. The rock awash charted in Lat. 56°17.30', Long. 133° 39.94', from the boat sheet (Bp. 51994) of the present survey should be deleted from the chart. The feature is shown out of position on the boat sheet, and actually plots about 40 meters northward where it coincides with the rock awash transferred to the present survey from photogrammetric survey T-9622 (1953-54).

12. The rock awash charted in Lat. 56°17.53', Long. 133° 35.66', originates with the boat sheet (Bp. 51994) of the present survey to which it was transferred from preliminary photogrammetric survey T-9623 (1953-4-5). The feature which is not shown on the smooth sheet of the present survey or on the advance manuscript of photogrammetric survey T-9623, should be deleted from the chart.

 revised report

13. The location and number of rocks awash charted in the vicinity of Lat. 56°18.3', Long. 133°35.7', from the boat sheet (Bp. 51994) of the present survey were revised during verification of the smooth sheet. These charted features should be revised to agree with the smooth sheet.

14. The log boom charted as a hand correction in Lat. 56°18.9', Long. 133°37.5', from chart letter 940 (1958) was added to the chart subsequent to the present survey.

15. The islet charted in Lat. 56°17.34', Long. 133° 39.95', from photogrammetric survey T-9622 (1953-54), was found by the field party to be a rock awash within a reef. The rock awash uncovers 5 ft. at MLLW. The charted symbolization of this feature should be revised to agree with the present survey.

16. The rock awash charted in Lat. 56°17.60', Long. 133° 38.40', originates with a reef symbol shown on preliminary photogrammetric survey T-9622 (1953-54). The field party found the charted feature to be a rock which bares 4 ft. at MHW. The charted rock awash symbol should be revised to a bare rock symbol.

17. The rock awash charted in Lat. 56°17.06', Long. 133° 39.52', from the boat sheet (Bp. 51994) of the present survey to which it was transferred from the preliminary photogrammetric survey T-9622 (1953-54). The present survey failed to reveal the existence of this feature. Also, it is not shown on the advance manuscript of the above-mentioned photogrammetric survey. The rock awash is considered not to exist and, therefore, should be deleted from the chart.

18. A natural channel whose least depth is 2.3 fms. is located on the present survey between the 2 islands which lie in the vicinity of Lat. 56°18.35', Long. 133°35.83'. This channel has not been charted.

19. The 30-fm. sounding charted in Lat. 56°12.97', Long. 133°42.82', from H-1749 (1886), falls in present depths of 158 fms. The sounding originates with a poorly controlled dead reckoning line of soundings which was run during inclement weather, and is believed to actually fall about 1 mile south southeastward where comparable depths are found on the present survey. The sounding should be deleted from the chart.

Revised Report

20. The 2 rocks awash charted in the vicinity of Lat. 56°18.52', Long. 133°35.95', originates with the boat sheet (Bp. 51994) of the present survey to which they were transferred from preliminary photogrammetric survey T-9622 (1953-54). These features which fall in present depths of 10 fms. are not shown on the present survey or on the advance manuscript of photogrammetric survey T-9622. The 2 rocks awash are not considered to exist and should be deleted from the chart.

The following charted features originating with the boat sheet (Bp. 51994) of the present survey were revised during the verification of the smooth sheet:

Charted Feature	Location		Smooth Sheet Revision	Chart Revisions Required
	Latitude	Longitude		
Rock awash	56°18.05'	133°38.58'	0.6fm. RK	Delete rock awash - show 0.6 RK
Rock awash (6)	56°17.62'	133°37.63'	(13 ft.)	Delete (6)- show (13)
Rock awash	56°19.08'	133°37.41'	0.4 fm.	Delete rock awash

The present survey is adequate to supersede the charted hydrography within the common area.

B. Aids to Navigation

The present survey position of the only aid to navigation (Whistle buoy R"4") falling within the limits of the present survey is in substantial agreement with the charted aid and adequately marks the feature intended.

The mooring buoy charted in Lat. 56°18.37', Long. 133°36.15' is not shown on the present survey. The buoy was charted subsequent to the present survey.

8. Compliance with Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is an excellent basic survey and no additional field work is recommended.

Examined and Approved:

Chief, 10/24/61
Nautical Chart Division

Assistant Director,
Office of Cartography

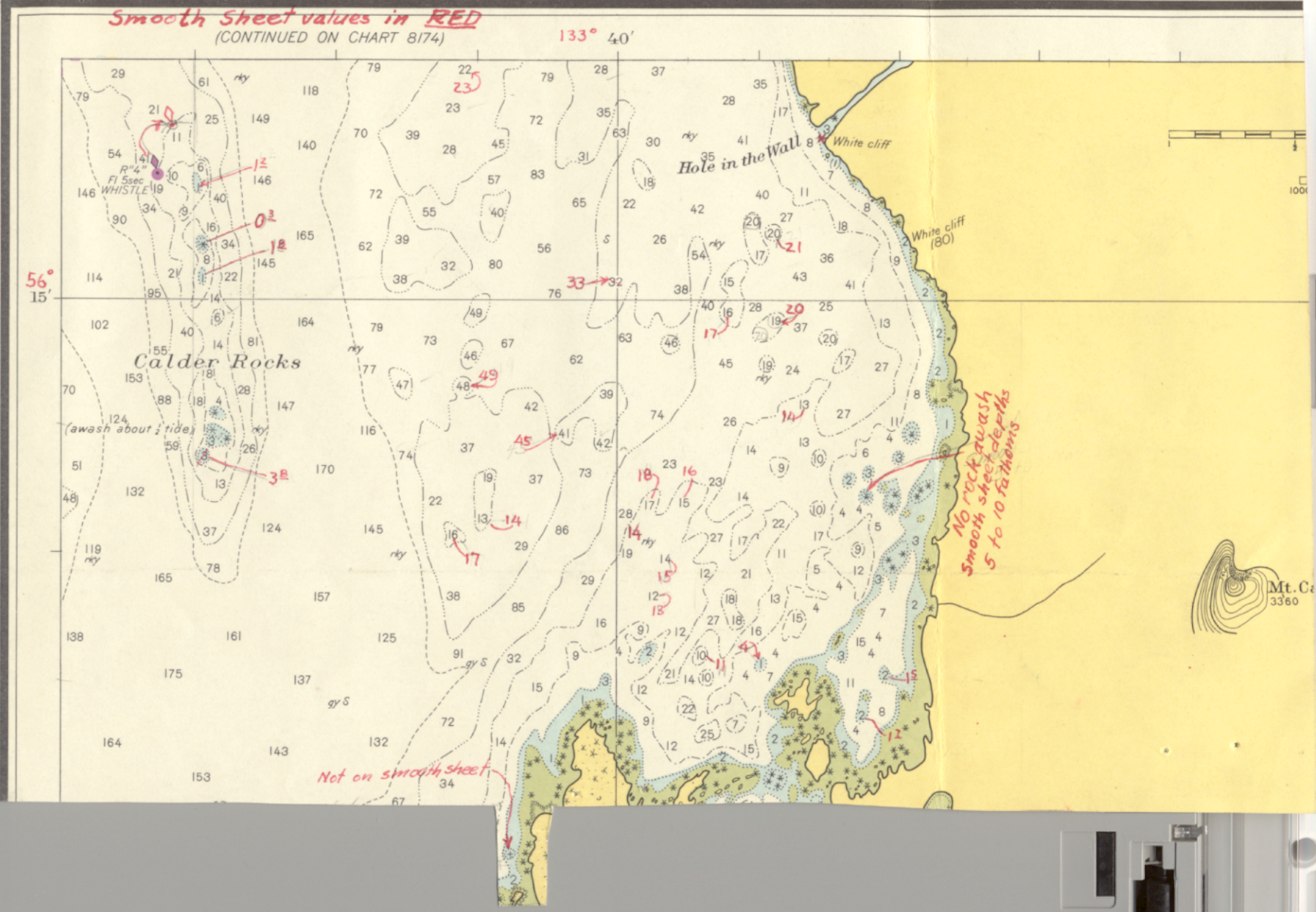
Projects Officer, 11/3/61
Operations Division

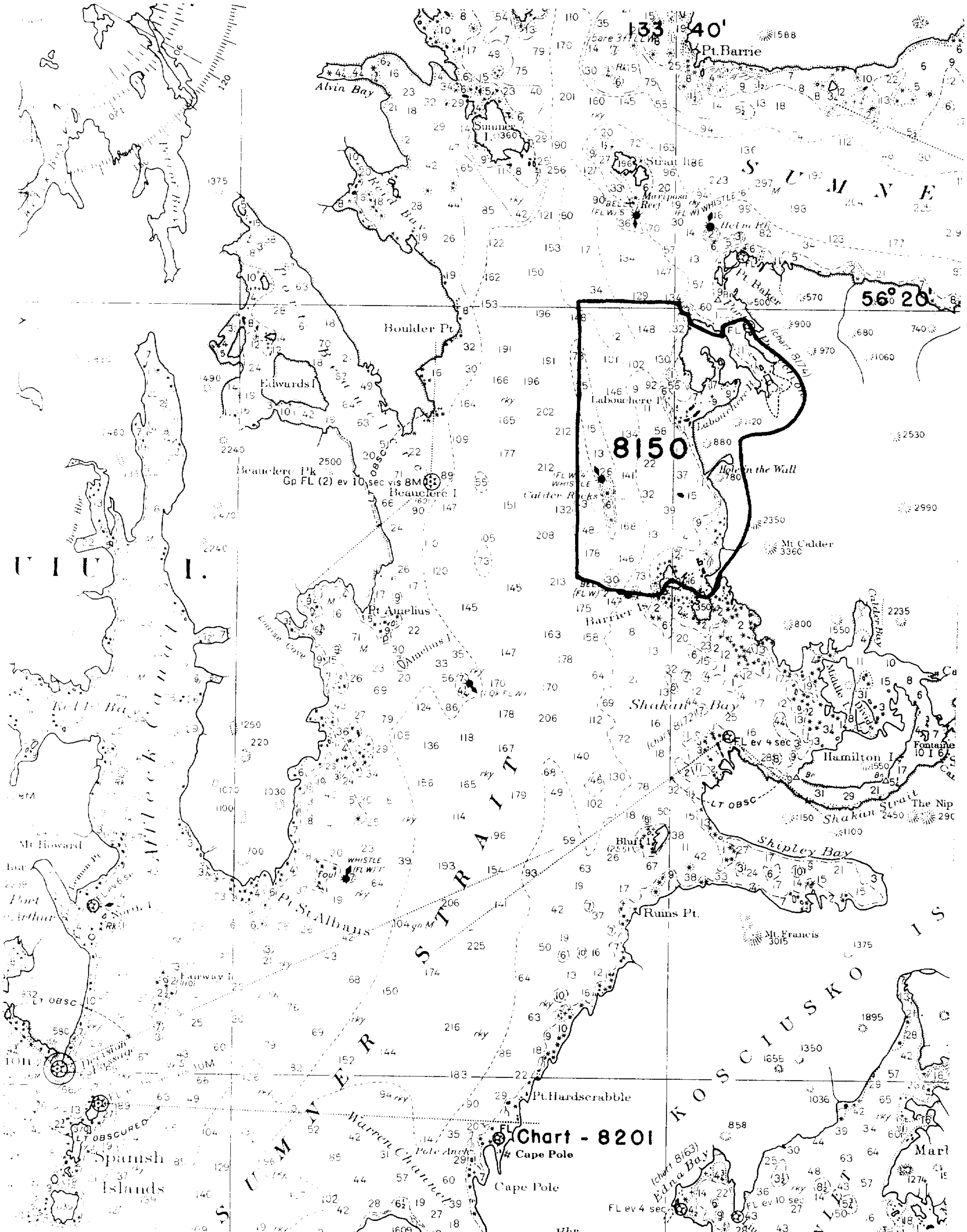
Assistant Director,
Office of Oceanography

8172

Section of Chart 8172 3rd Ed. Revised 9/1/58

Smooth Sheet values in RED





133° 40'
56° 20'
Pt. Barrie
Alvin Bay
Sumner I.
Boulder Pt
Edwards I
Beauclerc Pk
Gp FL (2) ev 10 sec vis 8M
Beauclerc I
Labouchere Pt
8150
Hole in the Wall
Calder Rocks
Mt Calder
Barrier Is
Pt Amelius
Shakan Bay
FL ev 4 sec
Hamilton I
LT OBSC
Shakan Strait
The Nip
Shipley Bay
Ruins Pt.
Mt. Francis
Pt St Albans
Mt Howard
Fairway I
LT OBSCURED
Spanish Islands
Pt.Hardscrabble
Chart - 8201
Cape Pole
Warren Channel
Edna Bay
FL ev 10 sec
SUMNER STRAIT
KOSCIUSKO IS

NAUTICAL CHARTS BRANCH

SURVEY NO. 8150

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5/13/59	8201	M. Rogers	Examined Before ~~After~~ Verification and Review No Corrections
5/19/59	8174	M. Rogers	Examined Before ~~After~~ Verification and Review Partially appld.
5/19/59	8172	M. Rogers	Examined Before ~~After~~ Verification and Review Partially appld.
14 Mar 61	8002	[illegible]	Before ~~After~~ Verification and Review Partially appld thru 8201 dwg #14
Oct 3/61	8174	J.H.E. Hyde	~~Before~~ After Verification and Review - before inspection - critical corrns only —
6/19/64	8174	G.R. Johnson	~~Before~~ After Verification and Review Fully Applied - in area overlapping cht. 8172, only
6/23/64	8172	G.R. Johnson	~~Before~~ After Verification and Review Fully Applied. Applied in part thru chart 8174, dwg #7
8/18/64	8174	G.R. Johnson	~~Before~~ After Verification and Review Fully Applied
4/7/66	8201	[illegible]	~~Before~~ After Verification and Review Fully Applied thru Ch. 8174 dwg# 7 and Ch. 8172 dwg# 7
4/26/79	new chart 17386	O. Stenbel	~~Before~~ After Verification and Review Fully applied
8/27/80	17387	Kam	Re Applied thru New Chart 17386

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.