

4391

4391

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
State: SW Alaska	
11-5613	
DESCRIPTIVE REPORT.	
Hydrog..... Sheet No.	4391
LOCALITY:	
Alaska Peninsula	
Isanotski Strait	
1924	
CHIEF OF PARTY:	
R. B. Lukens	

DESCRIPTIVE REPORT.

Hydrographic Sheet "5"

ISANOTSKI STRAITS

S.W. ALASKA

Str. PIONEER

R.R. Lukens, Comdg.

1924.

LIMITS This sheet which is on the scale of 1 : 10,000 embraces the southern portion of the narrow pass between the Pacific and Bering Sea known on the charts as Isanotski Straits, but always referred to locally as False Pass.

CONTROL The survey is controlled by a triangulation scheme carried up the pass in 1923, from the old triangulation in Ikatan Bay.

METHODS The hydrography was done from the steam launch # 117, in charge of Mr. A.J. Hoskinson. In the shoal parts, the hand lead was used, while in the deeper areas, a hand sounding machine was used. Hydrography here is very difficult due to the strong current. The officer in charge was inexperienced, as he had never before had charge of a sounding party.

TIDES An automatic tide gauge was maintained at the cannery dock, and all soundings were reduced from this gauge. The tide is very erratic and complicated here, due to the fact that the pass is open to both large seas. The automatic gauge has now been in operation for two summers, and should afford data for interesting studies.

CURRENTS As could be expected, the currents in this pass are very strong. At their strength during the large tides, it is estimated that they attain a velocity of 8 knots off Whirl Point. A vessel must steam 11 knots through the water in order to pass this point when bucking these tides. Off the cannery dock the currents attain a maximum velocity of about 6 knots. Ocean going vessels should enter the pass only at slack water. In former years, this pass was considered unsafe for large vessels, but in recent years some large vessels have been berthed at the cannery dock without incident. In 1924 an oil tanker over 400 feet long, discharged oil at the cannery dock, and departed without accident. Due to the limited size of the dock (200 ft along the face) it is hard to hold large vessel at the dock during the strength of the current. Currents of 4 to 5 knots have been observed running past the face of the dock.

WHIRLS There are usually strong whirls and eddys off and to the southward of Whirl Point. A full powered steamer of medium length can negotiate them without danger.

TIME OF SLACK WATER. Due to the irregularities of the tide here, it is hard to predict the times of slack water. It apparently has no relation to the times of high and low water in the pass itself. It does, in some cases bear considerable relation to the times of high and low water at San Diego. During the current season, the time of slack water off the dock was recorded at all times that the ship was in port. As a result about 125 observations were obtained. The mean of these give a factor of 7 hours and 36 minutes to be added to the times of high and low water at San Diego. This will give the approximate time of slack water in 150th meridian standard time. Local navigators use  $7\frac{1}{2}$  to 8 hours after San Diego and say that it usually hits pretty closely. This confirms our observations. During the flood, the current runs North and during the ebb it runs South.

KABUCH POINT forms the eastern entrance to the pass. It is bold and precipitous. A reef extends off this point which makes it preferable for vessels to favor the western side when entering.

WHIRL POINT is rocky, and has small ledge of rocks extending off it. There is deep water close up to the end of this ledge, and the cannery tenders pass within a few feet of it when bucking the tide northbound. With the ebb tide the current sweeps directly across the channel from Whirl Pt.

STONEWALL is a prominent point with vertical rock cliffs. A reef extends about 200 yards off this point. It bares at half tide. Small vessels sometimes strike this reef when hugging the shore in an attempt to keep out of the current.

FALSE PASS CANNERY and village. This place is a United States postoffice and has a good general store open the year around. It is known officially as the FALSE PASS POSTOFFICE. The main dock is 200 feet in length, with 30 feet alongside, while there is a small oil dock with 13 feet alongside. This oil supply is a private one, and there is none for sale except by prior arrangement.

ISLAND ROCK is a small rocky islet directly across the channel from the dock. It is about 10 feet high and has deep water close up to it on the channel side.

BIRD ROCK is a small rocky islet about 15 feet in height, and is a nesting place for gulls and other birds.

ANCHORAGES A good anchorage may be had just N.E. from Bird Rock in 10 fathoms with sticky bottom. There is an indifferent anchorage in the bight just north of the cannery. The bottom here is gravel and shells, but by getting in close, the strength of the current can be avoided. There is a good anchorage off the Palisade Cliffs at the eastern side of the entrance to the pass. This anchorage is good in northerly weather only

*R. R. Lukens*  
Chief of Party.

STATISTICS SHEET

for

HYDROGRAPHIC SHEET - - - - - FALSE PASS

Date (1924)	Letter	Volume	Positions	Soundings	Stat. Miles	Vessel
July 9	a	1	146	227	12	Launch #117
July 11	b	1	152	244	11	"
July 12	c	2	106	202	4	"
July 14	d	2	97	159	10.5	"
July 16	e	2	108	183	13	"
July 16	e	3	47	95	7	"
July 17	f	3	94	161	13	"
July 19	g	3	73	151	7	"
July 22	h	3	31	51	3	"
July 23	j	4	47	72	10	"
<b>Totals</b>			901	1545	905	

Hydrographic Sheet No. 4391  
U. S. Alaska.

The lines of this survey run across current of from 6 to 8 knots. The lines are very crooked and no doubt soundings are too deep.

✓ No cross lines to check. Numerous both over-developed and underdeveloped areas appear.

Development not considered good.

✓ Additional work appears <sup>needed</sup> to more fully develop this area.

Plotting by Field Party generally accurate in the deep water portion of the sheet but an accountable error was found in the inshore work. Boat sheets of little use in verification as it has no projection.

✓ Position numbers and letters too large and not of a suitable color. Lines connecting positions cut too deep. All positions not numbered.

Signal names, in some instances far removed from

signal. Plotting by Field Party generally accurate but too few soundings entered in the closer developed lines. Records generally good

but no "Boat head by Compass" or change in course recorded. Numerous checks had to be made by reason of this omission.

John D. Torrey.  
Feb. 12/25

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

March 19, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4391

Isanotski Strait, Alaska Peninsula.

Surveyed in 1924.

Instructions dated April 11, 1923 and February 8, 1924.

Chief of Party, R. R. Lukens.

Surveyed by A. J. Hoskinson.

Protracted and soundings plotted by A. J. Hoskinson.

Verified and inked by J. D. Torrey.

1. The records are faulty in that bottom characteristics are omitted on many pages and, when given are often not at the top of the page. Compass bearings and changes in courses of sounding lines are omitted throughout.
2. The plan and character of development conform to the General Instructions.
3. The plan and extent of development satisfy the specific instructions except that no check lines were run.
4. The sounding line crossings are adequate, considering the uneven character of the bottom.
5. The information is sufficient for drawing the usual depth curves.
6. The field party completed the usual field plotting. There were a number of errors in protracting, all positions were not numbered and connecting lines were deeply indented in the paper. Position numbers and letters were much too large and carelessly drawn. Yellow is the most undesirable color to use as it is indistinct on the drawing, but photographs like black ink. Names are too far from the objects to which they apply. In the shoaler areas only part of the soundings were plotted although there was ample space to show all of them. Several anchorages are mentioned in the descriptive report but their locations were not shown on the smooth or boat sheets.
7. The junction with the adjacent work to the northward is adequate.

8. ✓ The plan of the survey is defective in that all sounding lines are normal to the axis of the channel. It has been demonstrated that accurate soundings cannot be obtained when crossing currents of 3 or 4 knots. As the currents in the area of this sheet amount to as much as 8 knots it is practically certain that all soundings except those done at slack water or close inshore are greater than the true depths. An additional objection to lines across strong currents is the impossibility of holding to the desired course. The results of this survey clearly show this fact.
9. ✓ The spacing of the sounding lines average 200 meters with numerous openings of 300 meters. The survey cannot be considered a satisfactory development of an uneven bottom like the area covered by this one.
10. ✓ The character and scope of the surveying and field drafting are fair.
11. Reviewed by E. P. Ellis, March, 1925.

Approved -  
A. B.  
E. P. Ellis.

January 20, 1925.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in

4 volumes of sounding records for False Pass, S. W. Alaska

HYDROGRAPHIC SHEET 4391

Locality: False Pass, S. W. Alaska

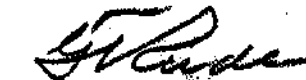
Chief of Party: R. R. Lukens in 1924

Plans of reference is mean lower low water

7.8 ft. on tide staff at False Pass, Unimak Id., Alaska.

For reduction of soundings, condition of records satisfactory  
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks



Chief, Division of Tides and Currents.



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

~~HYDROGRAPHIC~~  
~~TOPOGRAPHIC~~ TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. (F) 4391

State SW. Alaska . . . . .

General locality . . Alaska Peninsula . . . . .

Locality . . Isanotski Straits . . . . .

Chief of party . . . R.R. Lukens . . . . .

Surveyed by . . . A.J. Hoskinson . . . . .

Date of survey . . . . 1924 . . . . .

Scale . . . 1:10,000 . . . . .

Soundings in fathoms at MLLW  
Heights in feet above . . . . .

Tide gauge at False Pass Cannery  
Contour interval . . . . feet.

Positions and soundings plotted by A.J. Hoskinson  
Inked by J. H. Torrey . Lettered by J. H. Torrey . . . . .  
*Verified*

Records accompanying sheet (check those forwarded): Photographs, . . . . .

Descriptive report, 4 vol sdg records, ~~Horizontal angle books~~, ~~Field computations~~, . . . . .

Data from other sources affecting sheet . . . . .

Remarks:

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

*L. O. Colbert* ..... Director.

HYDROGRAPHIC SHEET NO. ....

# SOUNDINGS

Locality:

*0.8 miles SE of False Pass Cannery Rock in*

*Isanetski Strait*

Boat *M.W.B.*

Vol. No. *1* ..... *1* ..... Vols.

From *June 7* ..... 19*41* .., Pos. *1 a*

To *June 7* ..... 19*41* .., Pos. *11 a*

Statute miles of sounding lines .....

Number of soundings *32* .....

Number of positions *11* .....

1941

Name of Vessel:

*Discoverer*

Chief of Party:

*L. O. Graham*

*Lieut. Comdr.* ..... U. S. C. and G. Survey.

# DEVIATION TABLE

(FOR AREA COVERED BY HYDROGRAPHIC SHEET)

VESSEL .....

DATE .....

LATITUDE .....

LONGITUDE .....

VARIATION (CHART NO. .... OR OBSERVED) .....

SHIP'S HEAD	DEVIATION
..... COMPASS	+ EAST
	- WEST
0	0 /
15	
30	
45	
60	
75	
90	
105	
120	
135	
150	
165	
180	
195	
210	
225	
240	
255	
270	
285	
300	
315	
330	
345	
360	

# INDEX

## OBJECTS LOCATED BY HYDROGRAPHIC PARTY

NAME OF OBJECT	PAGE	NUMBER OF CUTS ON PA
<i>DOCK</i>	<i>3</i>	
<i>TAN</i>	<i>4</i>	

# INDEX

## HYDROGRAPHIC INFORMATION

SUBJECT	PAGE	NUMBER OF REFS. ON PAGE
<p><i>outside</i> SE corner of Cannery dock at False Pass</p> <p>outer tangent of prominent point, 0.4 mile north of stone wall.</p>		

Locality

SOUNDINGS

Southwest Alaska

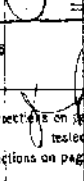
Year 1941

Month June

Day of Month 7

POSITION NUMBER	TIME MER A. M. P. M.	SOUNDINGS		CORRECTIONS			REDUCED SOUNDINGS			
		FATHOMS	FEET	LEAD LINE	SLOPE	RED. FOR TIDE	FIELD		OFFR	
				TURNS			FEET	TENTHS	FEET	TENTHS
				ECHO			FEET FATHOMS	FEET FATHOMS	FEET FATHOMS	
<p>S.S. DALLWOOD Aground on LEDGE 0.8 miles SE of False Pass, CAMEROY PASS</p> <p>In charge C. Price Sextant 722 Sextant 729 Plotting W. A. Johnson Protractor Clock Automatic A. S. portable p.s.</p> <p>W. A. Johnson gauge No. at King Cove, AK.</p>										
1	8:22:50	2	3				15			
	28.00	2	3				15			
	10	2	3				15			
2	29	2	3				15			
	55	2	3				15			
	29:10	2	3				15			
3	29:20	2	3				15			
	35	2	3				15			
	50	2	3				15			
	20:00	2	3				15			
4	30:20	1	2				8			
5	32:25	2	5				17			

Boat used: *False Pass - Nicholas Pt. ...*  
*Park whaleboat ...* ; *Day*

BOTTOM	READING BY COMPASS	ANGLES AND RANGES BEARINGS LOG READINGS ENGINE REVOLUTIONS	REMARKS
<p>LEAD LINE CORRECTIONS</p> <p>Mark of lead line: <i>100</i> fathoms                      Correction to standard: <i>0</i> soundings</p> <p>M <i>100</i> L <i>100</i> M <i>100</i></p>			<p>Following Sigs thru toward                      Stranded S.S. DELLWOOD.</p>
<p>No. 16                      starts                      clock                      Machine corrected on page                      Sheave No. tested                      Corrections on page</p>		<p><i>18</i>                      Vol</p>	<p>Weather: - Clear                      Wind: - calm                      Sea: - Smooth.                      C. Fritz - leadman.                      A.P. ...                      Sigs taken in stern of DELLWOOD.</p>
<p><i>1</i></p>	<p>DOCK                      NEAR                      TAIL</p>	<p>43-41                      NEAR                      WHITE PT. 96-03</p>	<p>Soundings around Stranded                      S.S. DELLWOOD. R. M. SE. P.E.                      * Running along Port or starboard                      side of DELLWOOD.</p>
<p><i>2</i></p>	<p>DOCK                      NEAR                      CLIFF</p>	<p>45-05                      NEAR                      CLIFF 78-34</p>	<p>* inside hips                      * shooting sea alongside ship.</p>
<p><i>3</i></p>	<p>S</p>	<p>46-06                      77-53</p>	<p>@ Bridge of DELLWOOD.</p>
<p><i>4</i></p>	<p>GARD                      DOCK                      NEAR</p>	<p>27-30                      DOCK                      NEAR 47-37</p>	<p>* end of boat @ Bew.                      Heavy Kelp. Shark                      at abrad of Bew.                      Running back to stern.</p>
<p><i>5</i></p>	<p>DOCK                      NEAR                      CLIFF</p>	<p>43-51                      NEAR                      CLIFF 79-00</p>	<p>* taken at stern</p>

Locality

SOUNDINGS

Year 19 41 Month June Day of Month 27

POSITION NUMBER	TIME H. M. S.	SOUNDINGS		CORRECTIONS			REDUCED SOUNDINGS				
		12		LEAD	SLOPE	RED. FOR TIDE	FIELD		OFF.		
		FEET	FATHOMS	TURNS			FEET	FATHOMS	FEET	FATHOMS	
		FEET	FATHOMS	ECHO	FEET	FATHOMS	FEET	FATHOMS	FEET	FATHOMS	
	9.11.30	2	2				14				
	10.40	2	2				14				
	11.10	2	3				15				
	11.00	2	4				16				
10	11.23.30	2	3				15				
	50	2	3				15				
	20.30	2	2				14				
	120	2	1				13				
11	20	2	-				12				
	40	2	-				12				
	50	1	5				11				
	10.30	1	5				11				
	110	1	4				10				
	120	1	3				9				
12	20	1	3				9				
	10	1	1				7				
	100	-	4				7				
13	26.16	-	5				5				
14	27.30	-	5				5				







False Pass, N. of ...  
 Boat used ... a day

BOTTOM	HEADING BY COMPAZ	ANGLES AND RANGES BEARINGS LOG READINGS ENGINE REVOLUTIONS	REMARKS
			Study along side, looking for ... No sign of rock.
			* Taking ...
	③ TAN.	58-12	study taken ...
	TRY	94-46	108 ft from side of ship.
	④ S	55-29	55 ft from ship side.
		97-28	
			@ turn of bow
	⑤ S	51-47	
		99-48	
	⑥ S	51-06	15' from stern of ship.
		99-57	
	⑩ TAN.	103-08	
	ROCK		
	DOCK	42-02	

