8297

Diag. Cht. Nos. 8802-3 and 8860-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. PF-2256 *Office No.* H-8297

LOCALITY

State Alaska

General locality North Side Alaska Peninsula

Locality Amak Island

1956

CHIEF OF PARTY

J. Bowie

LIBRARY & ARCHIVES

DATE March 8, 1958

B-1870-1 (1)

8297

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-8297

Field No. PF-2256

State Alaska

General locality North Side Alaska Peninsula

Locality Amak Island

Scale 1:20,000 Date of survey July - August 1956

Instructions dated 20 December 1954, 21 October 1955

Vessel USC&GSS PATHFINDER Launches 1, 2, 3, and 4.

Chief of party John Bowie

Surveyed by F. X. Popper, W. E. Randall, J. O. Boyer

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

Fathograms scaled by Ship Personnel

Fathograms checked by Ship Personnel

Protracted by K. W. Jeffers

Soundings penciled by K. W. Jeffers

Soundings in fathoms ~~feet~~ at ~~MEAN~~ MLLW AND ARE TRUE DEPTHS.

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 777032

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-8297(PF-2256)

NORTH SIDE ALASKA PENINSULA, ALASKA

Scale 1:20,000 Date 1956

USC&GS SHIP PATHFINDER John Bowie, Comdg.

A. PROJECT:

This survey is a part of Project 13750. Original Instructions were dated 20 December 1954 and Supplemental Instructions were dated 21 October 1955, both issued by the Director.

B. SURVEY LIMITS AND DATES:

The area covered by this survey is between latitudes 55° - 18' and 55° - 29' and longitudes 162° - 52' and 163° - 16'. Hydrography was started 6 July and ended 23 August 1956.

Junctions were made with contemporary surveys H-8302 (1956) (scale 1:40,000) to the north and west, H-8301 (1956) (scale 1:20,000) to the east, and H-8300 (1956) (scale 1:20,000) to the south.

C. VESSELS AND EQUIPMENT:

Hydrography was done by PATHFINDER launches Nos. 1, 2, 3 and 4.

Launch No. 1 was equipped with 808 type depth recorder No. 74S and shoran receiver No. 581.

Launch No. 2 was equipped with 808 type depth recorder No. 46 and shoran receiver No. 1313.

Launch No. 3 was equipped 808 type depth recorder No. 61 and shoran receiver No. 518.

Launch No. 4 was equipped with 808 type depth recorder No. 52 and shoran receiver No. 1352.

All fathometers were calibrated for 800 fathoms per second.

The turning radii for the launches are about 20 meters.

D. TIDE AND CURRENT STATIONS:

During this survey a portable automatic tide gage was in operation at latitude 55° - 24!8, longitude 163° - 06!9, off the east shore of Amak

Island. See TIDE NOTE attached.

A Roberts Radio Buoy current station was observed at latitude 55° - 20!6, longitude 163° - 01!2. Velocities up to 1-1/2 knots were recorded.

E. SMOOTH SHEET:

The smooth sheet was made by hand by ship personnel. G. P's. for 3 points on every fifth shoran arc were computed and plotted. Arcs were drawn thru these points using celluloid shoran curves. Intermediate arcs were proportioned between those curves already drawn.

F. CONTROL STATIONS:

(lat. 55°27'20.095" (627.5m) long. 162°34'41.558" (730.4m) G.P. Vol. IV. pp 286

The geographic positions of triangulation stations GLAZENAP, 1952 and MOFFET, 1952 were used to determine the locations of shoran stations NAP and MOF. BADGER, 1952 was used for visual hydrography and also as reference Sta.

G.P. Vol. IV pp 294
lat. 55°14'26.596" (822.5m)
long. 162°59'45.507" (804.1m)

lat. 55°24'13.853" (428.4m)
long. 163°09'08.443" (148.6m) G.P. Vol. IV - pp 295

Many points on Amak Island were located photogrammetrically on Advance Manuscript T-11471. Signals or white-washes were put on these points for visual control of hydrography. See Field Edit Report for T-11471.

G. SHORELINE AND TOPOGRAPHY:

The shoreline for Amak Island was transferred from Advance Manuscript T-11471. It joins the hydrography reasonably well. The beaches are mostly huge boulders or rock bluffs and not subject to changes. The small gravel beach at the south end of the island is stable.

The portions of shoreline for Operl and Newman Islands were transferred from Advance Manuscript T-11474. The shoreline of these low sand islands is constantly shifting. At the time of this survey it was about 50 meters offshore of that drawn on the manuscript. See Review Par. 1.

H. SOUNDINGS:

Soundings were recorded in fathoms by 808 type protable depth recorders. Several comparisons were made with leadline soundings while obtaining bottom specimens. Most comparisons agreed very well.

Every day that weather sould permit bar checks were taken by each launch. Bar checks were obtained by disconnecting the receiver unit in the keel, and lowering another unit suspended on a graduated cable to various known depths. Fathometer errors were computed and fathometer initials were set so that the instrument would read correct for the average sounding depth. Correction curves were drawn to obtain the fathometer corrections that were applied to all soundings. Bar checks for different days agreed very well so each fathometer required but one correction curve for the whole survey. See "Fathometer Corrections Report" for this project (Special Report No. 151)

All soundings were recorded on "A" scale so no phase corrections were necessary.

Corrections for tides were obtained from the portable automatic gage in operation at Amak Island. No time or range differences were applied to this gage's readings.

I. CONTROL OF HYDROGRAPHY:

About 70 per cent of the hydrography was shoran controlled. The location of the shoran towers were determined from GP's for 1952 triangulation stations. Shoran corrections were determined by comparing shoran distances with true distances as determined by visual 3-point fixes. A buoy was anchored E. of Amak I. for several weeks for calibration of launch shoran sets in foggy weather. See Shoran Corrections Report. Separate Report (No. 152)

Visual control was used for the northwestern portion of the survey beyond the limits of shoran control. Positions for hydrographic signals were determined on Advance Manuscript T-11471. These locations proved very good, no "jumps" were noted, except for one point whose identification was questionable. This point was relocated with sextant cuts from ⊙ USE the launch. Three rocks north of Amak Island were located with sextant cuts and later used as hydrographic stations. Control near the northwestern limits was weak because of small angles and difficulty in seeing objects.

J. ADEQUACY OF SURVEY:

This survey is complete and adequate for charting and should supersede all prior data from other sources.

Junctions with contemporary surveys H-8302 to the north and west, H-8300 to the south and H-8301 to the east are good. Depth curves can be adequately drawn at the junctions.

K. CROSSLINES:

About 10 per cent of the hydrography is crosslines. Crossings are good.

L. COMPARISON WITH PRIOR SURVEYS:

No prior surveys of the area are available for comparison.

M. COMPARISON WITH CHART:

The meager hydrographic information appearing on Chart 8860 within the limits of this survey should be deleted. The several soundings that appear probably fail to agree because of poor control. The submerged rock shown one mile southeast of Amak was disproved with closely spaced sounding lines. A small sand ridge does extend from the island and through the rock symbol to a point about 2 miles southeast of Amak, shoalest depth 6 fms. 1-1/2 miles offshore.

Chart 8802 shows the same misinformation as Chart 8860. A submerged peak was found about 2-1/2 miles northeast of Amak near where the chart shows a submerged rock and breakers. The party was in this area several months and breakers were never observed even when high seas were running. This peak was carefully developed and a least depth of 4.7 fathoms was obtained, by hand lead. The rocks between Amak Island and Sealion Rocks are poorly charted. Some are not shown and others do not exist. A submerged peak covered with 5.7 fathoms about 2-1/4 miles west of Amak Island was carefully developed.

N. DANGERS AND SHOALS:

The peaks mentioned above are not dangers to normal shipping as they are not in the lanes used by large ships. Craft with long towlines with a deep sag should avoid these areas.

Small craft hugging the south and east shore of Amak must be cautious as this area is foul close to the beach. Near the south end of the island a small reef extends 1/3 mile offshore to the east.

The area 1 mile north of Amak Island is foul and should be avoided.

All dangers and shoals are evident on the smooth sheet.

O. COAST PILOT INFORMATION:

See Coast Pilot Notes attached.

P. AIDS TO NAVIGATION:

SEALION ROCK LIGHT is the only aid to navigation within the limits [redacted] of this survey. It is a very weak light near the top of Sealion Rock and does not show to the south. The elevation is 92 feet above the water, not 170 feet as shown in the Light List. The new elevation was determined from vertical sextant angles taken by two hydrographic parties at different times.

Q. LANDMARKS FOR CHARTS:

High Point on Amak Island which is shown on all charts is the only recommended landmark within the limits of this survey.

R. GEOGRAPHIC NAMES:

A separate report on Geographic Names has been submitted for this project.

S. SILTED AREAS:

No silted areas were noted.

T. BY-PRODUCT INFORMATION:

Generally the bottom for the whole area is firm black or gray sand.

It is good holding ground but there is no good protection from storms. Vessels can get a little protection from Amak Island. Small craft can lay off the east shore of Amak, north of the reef extending east of the southern end of the island. This affords fair protection from westerly weather.

U. MISCELLANEOUS:

The wreck of an air plane was noticed on the east side of Amak Island at about 1,000 feet.

Respectfully submitted,

John O. Boyer
LCDR, C&GS

Approved and forwarded:

John Bowie
CAPT, C&GS
Comdg. Ship PATHFINDER

Also copy on file in C.P. Soc.

COAST PILOT NOTES

SHIP PATHFINDER

PROJECT CS-13750, JUNE - SEPT. 1956

SHEETS 2256, 2556, 2756, 2856

The following is submitted to supersede the text in the U. S. Coast Pilot - Alaska - Part II - Yakutat Bay to Arctic Ocean - Fifth (1947) Edition from Line 41, Page 510 through Line 10, Page 512.

From Isanotski Strait to Cape Glazenap, about 19 miles, the coast retains the same general direction. It is low with grassy bluffs in places, 50 to 100 feet high.

Cape Glazenap (lat. 55° 15' n., long. 163° 01 W.) is prominent in that it is higher - 175 feet - than any part of the coast in this general locality. This high land marks the southwest entrance to Izembek Lagoon.

Izembek Lagoon covers a large area bordered mostly by low marshes. It is crossed in many directions by sloughs of shallow depths. Most of the lagoon is bare or awash at low tide. The bottom is mud and sand. The channels that exist are difficult to follow except at low tide stages and is not recommended for craft drawing more than 3 or 4 feet.

The entrance channel at Cape Glazenap is narrow and shifting. Breakers make out for about 1 mile off the entrance. In 1956 the channel depth was 1 fathom. It is between breakers and lies close to Cape Glazenap. Fishermen mark the entrance to the channel by a gas drum buoy during the summer.

The wreck of an old schooner is a conspicious landmark.

The channel from Cape Glazenap to Grant Point is narrow and crooked. Local knowledge should be obtained before entering Izembek Lagoon.

Glen and Operl Islands are low, narrow, grass covered islands extending between Cape Glazenap and Moffet Point along the northwest side of Izembek Lagoon.

Lights from the radio towers at Cold Bay are visible for about 20 miles on clear nights.

AMAK ISLAND TO PORT MOLLER

CHART 8802

Amak Island is of volcanic origin, 1791 feet in height and almost round. Its north-south width is 2.4 miles; east-west width 2.0 miles. The beaches are mostly huge boulders and bluffs except at the south, where there is a small flat. A small airstrip was built here during World War II. There is foul ground off the north side of the island; several rocks and reefs and Sealion Rock, 2-1/2 miles to the northwest. The latter is 95 feet high and its southern slope occupied by an extensive rookery of sea lions.

Amak Island is 10 miles N.N.W. of Cape Glasenap. The passage between Amak Island and the islands bordering Izembek Lagoon is clear and is the usual track for small vessels and fishing boats. Depths in the center of the passage are 10 fathoms or better. Currents are about 2 knots. A reef lies off the southeast end of Amak Island. It extends eastward 1/3 mile and bares on low tides. This reef should be given a wide berth.

No anchorages are recommended but in emergencies, small craft can obtain a little protection from westerly weather by anchoring in the lee on the east side.

SEALION ROCK LIGHT, 92 feet above the water, is located near the top of Sealion Rock. It is a weak light and not visible from the south as the top of the small white box structure is several feet lower than the high point of the rock.

MOFFET POINT is a curving sandy hook with sand dunes 40 to 60 feet in height. A channel between Operl Island and Moffet Point leads into the northeastern part of Izembek Lagoon. The channel leads through breakers and during the summer is marked by gas drum buoys by local fishermen. In 1956 the depth over the bar was 2 fathoms. Passage should not be attempted without local knowledge and only then with small boats of 3 or 4 feet draft.

MOFFET LAGOON is shallow and crossed by numerous gulleys. The bottom is sand and mud, and bares over an extensive area at low tide. Moffet Lagoon joins Izembek Lagoon via an opening between Moffet Point and Blaine Point. Joshua Green River empties into Moffet Lagoon.

JOHN BOWIE
CAPTAIN, C&GS
COMDG. SHIP PATHFINDER

TIDE NOTE

HYDROGRAPHIC SURVEY H-8297 (PF-2256)

A portable automatic tide gage was in operation during this survey at latitude 55° - 24!8, longitude 163° - 06!9 on the east side of Amak Island.

Corrections from recorded tides referred to MLLW were applied to all soundings. No. differential for time or range was believed necessary.

STATISTICS

HYDROGRAPHIC SURVEY H-8297 (PF-2256)

VOLUME NUMBER	DAY LETTER	DATE 1956	NUMBER OF POSITIONS	STAT. MI. SOUNDINGS
LAUNCH NO. 1				
1	a (blue)	6 July	9	- -
1	b	7	114	40.8
1	c	9	23	2.3
2	d	10	14	2.3
2	e	11	124	34.3
2	f	12	60	16.1
3	g	13	106	26.3
3	h	14	100	24.4
3, 4	j	23	141	20.9
4	k	24	148	30.6
5	l	25	63	6.8
5	m	29	83	18.0
5	n	23 August	23	4.8
	Launch No. 1 Totals		1008	227.6
LAUNCH NO. 2				
6	a (purple)	6 July	14	- -
6	b	7	130	51.4
6, 7	c	9	122	48.0
7	d	10	136	42.2
7, 8	e	11	29	8.4
8	f	12	80	28.3
8	g	23	59	22.6
8, 9	h	24	115	30.1
9	j	31	55	18.8
9, 10	k	8 August	124	43.9
	Launch No. 2 Totals		864	293.7
LAUNCH NO. 3				
1	a (green)	6 July	38	- -
11	b	7	112	41.4
11	c	8	80	29.6
12	d	9	132	48.5
12, 13	e	10	97	32.9
13	f	11	102	37.7
13, 14	g	13	110	40.0
14	h	23	130	46.0
15	j	24	126	44.1
15, 16	k	31	125	39.3
16	l	2 August	50	10.7
16	m	8	129	43.5
17	n	11	102	27.4
	Launch No. 3 Totals		1333	441.1

STATISTICS (cont.)

VOLUME NUMBER	DAY LETTER	DATE 1956	NUMBER OF POSITIONS	STAT. MI. SOUNDINGS
LAUNCH NO. 4				
18	a (brown)	8 August	165	30.2
18	b	12	115	15.8
	Launch No. 4 Totals		280	46.0
	Totals For All Launches		3485	1008.4

Total Area of Survey = 142.6 Square Statute Miles.

APPROVAL SHEET

HYDROGRAPHIC SURVEY H-8297 (PF-2256)

This survey was done under my close supervision. I consider this survey complete and adequate for charting. No additional work is recommended within the area of this survey.

John Bowie
CAPT, C&GS
Comdg. Ship PATHFINDER

4HC

Form 712
(11-30-55)

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens: 9 April 1957

Plane of reference approved in
18 volumes of sounding records for

HYDROGRAPHIC SHEET 8297

Locality Alaska Peninsula, North Side

Chief of Party: J. Bowie in 1956

Plane of reference is mean lower low water, reading

2.5 ft. on tide staff at Amak Island

16.4 ft. below B.M. 2 (1941)

Height of mean high water above plane of reference is

6.9 feet.

Condition of records satisfactory except as noted below:

William Hoffman
Signature

Chief, Tides Branch

Comm-DC 34330

GEOGRAPHIC NAMES

Survey No. H-8297

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	
Amak Island										1
Bristol Bay										2
Neumann I.										3
Operl Island					4-4-57			a/W		4
Sealion Rock (singular)					11-26-58			L. H		5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
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										23
										24
										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8297

Records accompanying survey:

Boat sheets 3; sounding vols. 18; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 6-Envelopes

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

2-Special reports with Shoran and Fathometer Corrections .....
for Hydro. Surveys H-8297 thru 8304.

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

Number of positions on sheet		3485
Number of positions checked		350
Number of positions revised		~~15~~ 30
Number of soundings revised (refers to depth only)		48
Number of soundings erroneously spaced		7
Number of signals erroneously plotted or transferred		~~0~~ 1 Hydro Eng. USCE
Topographic details	Time	16
Junctions	Time	16
Verification of soundings from graphic record	Time	24

Verification by E. F. Pace ..... Total time 178 Hrs. Date Nov. 6, 1958

Reviewed by Leo O'Brien ..... Time 32 ..... Date 28 Nov. 1958.

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY — REGISTRY NO. 8297

Alaska, North Side Alaska Peninsula
Amak Island — Field No. PF 2256

Surveyed - July-August 1956 — Scale 1:20,000

Project No. 13750

Soundings: — Control:

808 Depth Recorder — Shoran
Sextant fixes on shore signals

Chief of Party - John Bowie
Surveyed by - F. X. Popper, W. E. Randall, J. O. Boyer
Protracted by - K. W. Jeffers
Soundings plotted by - K. W. Jeffers
Verified and inked by - E. F. Pace
Reviewed by - L. S. Straw — Date: 28 Nov. 1958
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with the unreviewed manuscripts T-11471 (1952) and T-11474 (1952) except for the north shoreline of Neumann Island which was determined by the hydrographer of the adjacent survey H-8301 (1956).

The Shoran control stations are beyond the limits of the present survey; their geographic positions are given in the Descriptive Report.

2. Sounding Line Crossings

The crosslines are adequate and the depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves can be adequately delineated.

The bottom is generally smooth except for several abrupt protrusions. In the vicinity of Amak Island the bottom is irregular and is characterized by dangerous, off-lying rocks and reefs. The most prevalent bottom characteristic for the whole area is firm black or gray sand.

4. Junctions with Contemporary Surveys

The junctions with contemporary surveys H-8300 (1956) on the southwest and H-8302 (1956) on the West, North, and East are adequate. The junction with H-8301 (1956) on the East will be considered in the review of that survey.

5. Comparison with Prior Surveys

There are no prior hydrographic surveys in the area by this Bureau.

6. Comparison with Chart 8860 (latest print date 3/24/58)
8802 (latest print date 9/29/58)

A. Hydrography

The hydrography on chart 8860 originates with the present survey prior to verification and review. No important descrepancies in depths are noted, but the elevation of Sealion Rock should be corrected to read 95 feet and the elevation of the bare rock in lat. 55°27.05', long. 163°09.40' corrected to read 11 feet. The charted detail of the reef extending eastward about 1/3 mile offshore near the south end of Amak Island (approximate lat. 55°24.15', long. 163°06.50') should be revised to agree with the present survey.

The hydrography on chart 8802 originates with advance information from the present survey contained in C.L. 747 (1956); unofficial source C.L. 479 (1915); and unidentified sources presumably Russian. Several of the charted sunken rock symbols differ with present information. The present survey is adequate to supersede the charted information.

B. Aids to Navigation

Sealion Rock Light is the only aid to navigation, within the limits of this survey. It is charted on 8802 one half mile too far west.

C. Geographic Names

Sealion Rock is the correct name for the rock in lat. 55°27.9', long. 163°12.1'. The name should be corrected on the charts.

7. Condition of Survey

a. The sounding records and Descriptive Report are complete and comprehensive.
b. The smooth plotting was well done.
c. As originally plotted sounding lines in the vicinity of Sealion Rock determined by small angles on hydrographic signal USE failed to conform to recorded notes regarding distances from the high water line. A replotting of the position of the signal shifted the position about 1.5 mm. and brought all lines into harmony.

8. Compliance with Instructions

The survey adequately complies with the instructions.

9. Additional Field Work

This is an excellent basic survey, no additional work is required.

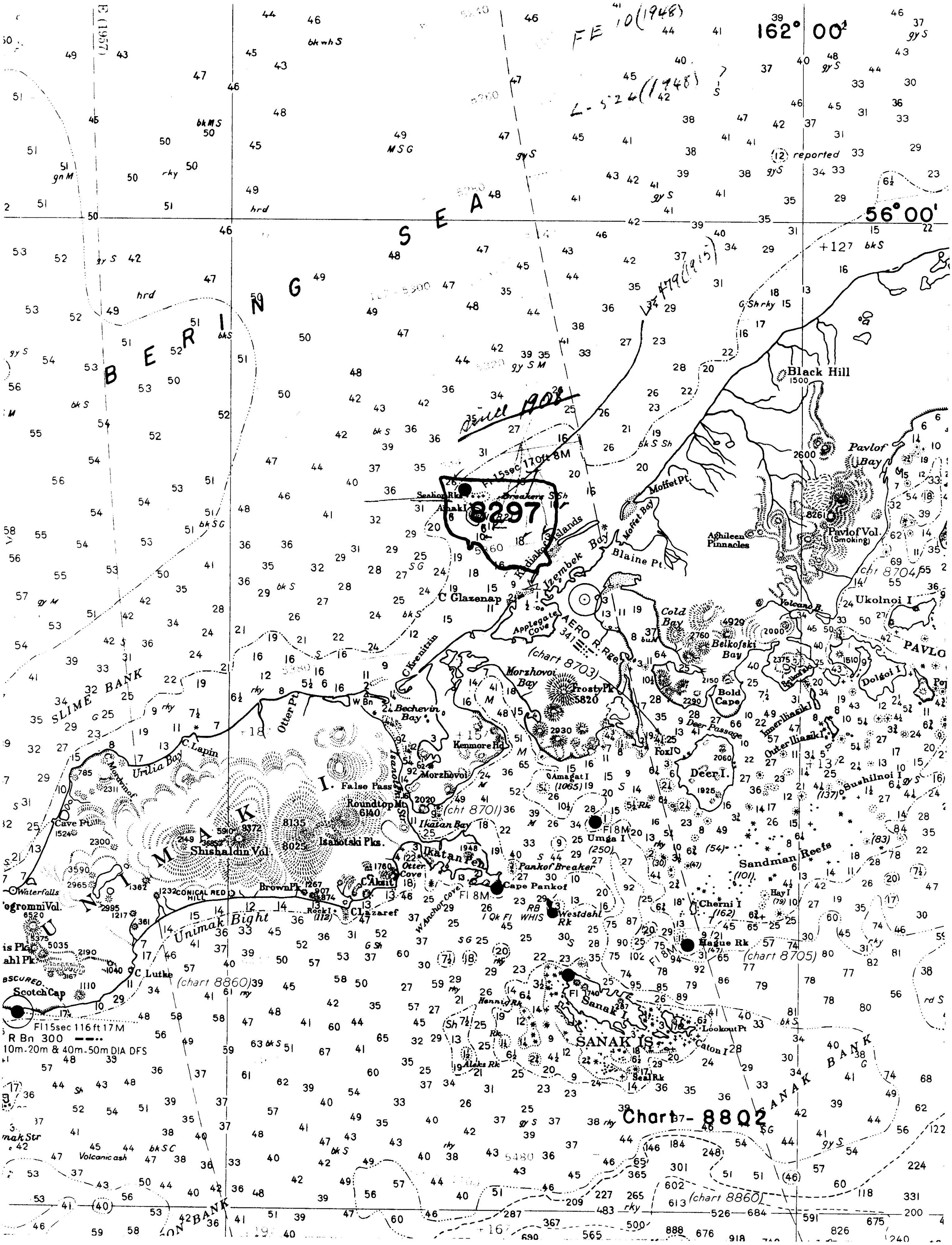
Examined and Approved

Max G. Ricketts
Chief, Nautical Chart Branch

Ernest B. Lewey
Chief, Chart Division

Lorin F. Woodcock
Chief, Hydrographic Branch

Samuel B. Grenell
Chief, Coastal Surveys Division



FE 10 (1948)
L-524 (1948)
162° 00'
56° 00'
BERING SEA
L-479 (1915)
Since 1908
8297
Chart-8802
(chart 8860)
(chart 8701)
(chart 8703)
(chart 8704)
(chart 8705)
UNIMAK I.
Unimak Bight
SLIME BANK
SANAK BANK
SANAK IS.
Sanak I.
Black Hill
Pavlof Bay
Pavlof Vol. (Smoking)
Aghileen Pinnacles
Moffet Pt.
Moffet Bay
Blaine Pt.
Izembek Bay
Kudiakof Islands
Sealion Rks
Amak I.
C Glazenap
Applegate Cove
AERO R. Bn
Cold Bay
Belkofski Bay
Bold Cape
Ukolnoi I
Dolgoi I
Morzhovoi Bay
Frosty Pk 5820
Bechevin Bay
Kenmore Hd.
Morzhovoi
False Pass
Roundtop Mt 6140
Isanotski Pks.
Isanotski Str
Ikatan Bay
Ikatan Pen.
Shishaldin Vol.
Cave Pt.
C. Lapin
Urilia Bay
Otter Pt.
C Krenitzin
Amagat I
Umga I
Pankof Breaker
Cape Pankof
Westdahl Rk
Deer I.
Deer Passage
Inner Iliasik I
Outer Iliasik I
Bushilnoi I
Sandman Reefs
Cherni I
Hay I
Hague Rk
C. Aksit
C. Lazaref
Brown Pk.
Otter Cove
W. Anchor Cove
Pogromni Vol.
Waterfalls
C. Lutke
Scotch Cap
Fl 15sec 116ft 17M
R Bn 300
10m-20m & 40m-50m DIA DFS
Hennig Rk
Aleks Rk
Seal Rk
Caton I
Lookout Pt
Volcanic ash

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8297

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
11/20/57	8860	Sam.	Before ~~After~~ Verification and Review Partially applied.
2/20/59	8860	Helmer	[redacted] After Verification and Review
4-15-59	8802	R.K. De Lauder	~~Before~~ After Verification and Review. Appl before review was typed and signed thru dat 8860
4/13/62	8860	William K. Wall	Fully applied Pres. chr. examination ~~Before~~ After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.