

8842

Diag. Cht. No. 8554-2.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. PF-20-3-65 Office No. H-8842

LOCALITY

State Alaska

General locality Kamishak Bay

Locality Off Douglas River

1965-66

CHIEF OF PARTY

L.F. Woodcock, G.L. Short & J.O. Phillips

LIBRARY & ARCHIVES

DATE 1-31-72

USCOMM-DC 37022-P66

8842

HYDROGRAPHIC TITLE SHEET

H-8842

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

FIELD NO.

PF 20-3-65

State Alaska

General locality Kamishak Bay
~~Cook Inlet~~

Locality Off Douglas River
~~Kamishak Bay~~

Scale 1:20,000 Date of survey Jul-Sep 65, Jul-Aug 66, ~~28 Jul 67~~

Instructions dated 29 Jan 1963 to 21 Apr 1967 Project No. OPR 429

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

Chief of party CAPT L.F. Woodcock, CDR G.L. Short, CAPT J.O. Phillips
W.S. Simmons, G.E. Rorvig, L.M. Casanova, D.L. Sweetland, F.T. Smith, W.L. Bradley,

Surveyed by S.M. Erickson, R.T. Leroy, L.T. Lynch, F.S. Ito, R.V. O'Connell, P.M. Shidrick, J.M. Wintermyre
and A.C. Weymann

Soundings taken by echo sounder, ~~XXXXXX~~ Raytheon DE 723 Echo Sounder

Graphic record scaled by Ship's Personnel

Graphic record checked by Ship's Personnel

Positions verified by XXXXXX R.D. Lynn

Produced by verified Automated plot by PMC

Soundings ~~XXXXX~~ by R.D. Lynn

Soundings in fathoms ~~XXXX~~ at ~~XXX~~ MLLW

REMARKS: A preliminary descriptive report of work done on this sheet
in 1965 has been submitted previously. However, this report
is complete, with some of the material repeating the infor-
mation given in the preliminary report.

Applied to stds 7-23-72
CRB

PL Scanned **AUG 1 1997**

A. PROJECT

Original instructions dated January 29, 1963 (Ship BOWIE)
Supplemental instructions dated May 18, 1964 (Ship PATHFINDER)
Revised instructions dated April 2, 1965 (Ship PATHFINDER)
Amended instructions dated May 28, 1965 (Ship PATHFINDER)
Amended instructions dated September 9, 1965 (Ship PATHFINDER)
Revised instructions dated March 17, 1966 (Ship PATHFINDER)
Supplemental instructions dated April 27, 1966 (Ship PATHFINDER)
Revised instructions dated April 21, 1967 (Ship PATHFINDER)
Supplemental instructions dated May 10, 1967 (Ship PATHFINDER)
Supplemental instructions dated May 12, 1967 (Ship PATHFINDER)
Supplemental instructions dated May 31, 1967 (Ship PATHFINDER)
Supplemental instructions dated June 6, 1967 (Ship PATHFINDER)

B. AREA SURVEYED

The area surveyed in this sheet extends north from the southern shore of Kamishak Bay at Spotted Glacier to latitude $59^{\circ} 13.0'$. The coastline ^{consists} ~~consists of~~ ^{border} ~~to~~ tidal flats ^{on} the southwest of the survey, and of sandy beaches to the south at the edge of the glacial plane.

The survey was begun in July, 1965 and terminated for the season in September, 1965. Work continued from July to August during the 1966 season and the field work was completed on July 28, 1967 after a one day investigation of the mouth of the Douglas River.

The sheet limits are as follows:

North: Latitude $59^{\circ} 13.0'$
South: The general coastline extending northwestward
from Spotted Glacier
East: Longitude $153^{\circ} 28.0'$
West: Longitude $153^{\circ} 47.0'$

This survey junctions with the contemporary surveys PF 20-2-65 (H-8841)¹⁹⁶⁵ and PF 40-2-65(H-8843)¹⁹⁶⁵⁻⁶. It also junctions with prior survey FE No. 3(1946-1947, 1:200,000, reconnaissance).

C. SOUNDING VESSELS

The PATHFINDER, motor launches #1, #2, #3, and #4, were used as sounding vessels for this survey. The colors used to identify the work are as follows: PATHFINDER - blue (capital letters); ML #1 - blue; ML #2 - violet; ML #3 - green; ML #4 - brown.

D. SOUNDING EQUIPMENT

Raytheon DE 723 echo sounders were used by ship and launches for all soundings. The quality of the fathograms obtained with these units was satisfactory. The serial numbers of the echo sounders are listed below.

On July 28, 1967 an investigation was made in the mouth of $\phi 159^{\circ}05'$ the Douglas River west of Crow Island. A sounding pole was used for this investigation. $\lambda 153^{\circ}45'$
Not smooth plotted - all minus sdgs

<u>VESSEL</u>	<u>SERIAL NO.</u>
PATHFINDER	551
ML #1	940, 935, 145
ML #2	557, 940
ML #3	140, 145, 552
ML #4	552, 145, 551

The echo sounder corrections (draft and velocity) were obtained by lead line comparisons for the PATHFINDER and bar checks were taken twice daily for all launches.

E. SMOOTH SHEET

The smooth sheet is to be plotted at the Pacific Marine Center with the Gerber Digital Plotter.

F. CONTROL

Shoran was used for horizontal control for approximately 90% of the hydrography. The remainder was controlled with three point visual fixes.

In 1965 Shoran stations were established on second-order traverse stations "CROW, 1964" and "SOUTH AUGUSTINE 2, 1964, RM #3". One additional station was established in 1966 on the triangulation station "SHAW NO. 4 1946-1966". For details reference is made to the 1965 SHORAN REPORT and the 1966 SHORAN REPORT.

Control stations for visual hydrography were established by signal building on existing traverse marks and on photogrammetric locations. Photo-hydro signals are plotted on Incomplete Manuscript T-12341 and T-12342(1;20,000, April 1967).

G. SHORELINE

Sources of shoreline details are the manuscripts mentioned above. These are black line manuscripts and the Dryrite ink method of transferring shoreline was used.

The low-water line was properly defined by the inshore hydrography. Major details of the shoreline were also verified in the same manner.

H. CROSSLINES

Crosslines run in the area exceeded the minimum 8% required. Based on predicted tides, crossings were consistent with the regular system of sounding lines.

I. JUNCTIONS

Junctions were established with the following prior surveys: FE-3 (1946-1947, 1:200,000 reconnaissance survey), and with the contemporary surveys PF 20-2-65 and PF 40-2-65.

H-8841(1965) *H-8841(1965)* *H-8843(1963-68)*
PF 20-2-65: The southeastern limit of PF 20-3-65 junctions very well with this survey. Depth curves *H-8842(1966-67)* are continuous over both surveys. No discrepancies of more than one fathom were noted

H-8843(1963-68) *H-8842(1966-67)*
PF 40-2-65: The eastern limit of PF 20-3-65 also junctions well with this survey. No major discrepancies were found between soundings. It should be noted that junctions were compared between boat sheets, and that the only correction applied to soundings was the tide reduced from predicted tides.

(1946-47)
FE-3: Although most of the soundings between these surveys agree reasonably well, there are a few discrepancies. Considering the type of control used in survey FE No. 3, *(1946-47)* the fact that it is only a reconnaissance survey, and the possible earthquake action in this area probably account for discrepancies in the soundings.

J. COMPARISON WITH PRIOR SURVEYS

H-8842(1966-67)
As stated above, most of the soundings in PF 20-3-65 compare closely, within one fathom, to those of FE No. 3 (1946-1947) except for a few instances. The probable reason for these discrepancies are stated in part I. The final and complete comparison is being reserved until after smooth plotting.

K. COMPARISON WITH THE CHART

The area surveyed was compared with C&GS chart 8554, Cook Inlet - Southern Part, 1:200,000, 9th ed., May 10/65. It should be noted that part of this survey covers an area that has never been surveyed before, and that the soundings in the remainder of the area, which are rather scarce, were obtained from reconnaissance surveys. Therefore, the data from PF 20-3-65 should supersede all other data.

H-8842(1966-67)

The following items should be noted:

<u>LOCATION</u>	<u>AVERAGE SOUNDING IN AREA</u>	<u>SHOAL SOUNDING</u>
Lat. 59° 06' 21.1"N Long. 153° 32' 41.6"W	18 fms	9. ⁵ ₇ fms
Lat. 59° 06' 44.0"N Long. 153° 39' 18.1"W	6 fms	0. ⁹ ₈ fms
Lat. 59° 12' 07.8"N Long. 153° 32' 14.2"W	25 fms	2.9 3. ₀ fms

The latter danger to navigation was reported by wire to CCGD on August 9, 1965.

L. ADEQUACY

The survey is considered complete and adequate to supersede all prior surveys.

M. AIDS TO NAVIGATION

No aids to navigation are within the survey limits.

N. STATISTICS

<u>Vessel</u>	<u>Positions</u>	<u>Sounding Lines</u>	<u>Bottom Samples</u>
PATHFINDER	426	127.9 nm	40
ML #1	1601	439.8	-
ML #2	1737	518.9	-
ML #3	944	201.0	26
ML #4	1629	461.1	-
*Skiff	8	2.0	-
Totals	6345	1750.7	66

N. STATISTICS (CONT.)

Area of Hydrography : 81.8 square miles
Tide Stations : 1965-6 Bubbler Tide Gage on Shaw I.
 1967 Bubbler Tide Gage on Nordyke I.
Current Stations : None
Magnetic Stations : None
Oceanographic Stations: 1965: 59° 10.1' N, 153° 31.5' W
 1966: 59° 03.4' N, 153° 09.0' W
 1967: None
Shoran Stations : "CROW, 1964"; "SOUTH AUGUSTINE 2,
 1964"; "SHAW NO. 4 1946-1966".

*See Supplement

O. MISCELLANEOUS

A special investigation in the area of the mouth of the Douglas River was performed to determine if the river required hydrography. The result was that hydrography was not required since a line of soundings crossing the mouth showed the bottom to be above MLLW. Complete notes on the investigation may be found in the Supplement, in the back of this report.

sds all minus and not plotted

P. RECOMMENDATIONS

Deferred to smooth plotter.

Q. REFERENCES TO REPORTS

Shoran Report, 1965, USC&GSS PATHFINDER
Shoran Report, 1966, USC&GSS PATHFINDER
Fathometer Report, 1965, USC&GSS PATHFINDER
Fathometer Report, 1966, USC&GSS PATHFINDER
Seasons Report, 1965, USC&GSS PATHFINDER
Seasons Report, 1966, USC&GSS PATHFINDER
Seasons Report, 1967, USC&GSS PATHFINDER

Respectfully submitted

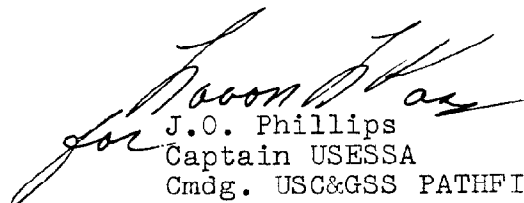
Hugh B. Milburn
Hugh B. Milburn
Ensign USESSA

APPROVAL SHEET

REGISTRY NO. H-8842 (PF 20-3-65)

The field work on this sheet was inspected where conditions permitted. The records have been examined and approved.

The survey is considered complete and adequate for charting purposes and no additional field work is recommended.


J.O. Phillips
Captain USESSA
Cmdg. USC&GSS PATHFINDER

TIDE NOTE

In 1965 and 1966 a pressure recording (bubbler) tide gage was installed in a small cove on the southeast side of Shaw Island at Lat. $59^{\circ} 00.1' N$, Long. $153^{\circ} 22.8' W$. A fixed staff with a vitrified scale was also installed at this location. This installation provided all tidal data for reduction of soundings on PF 20-3-65 except for one day in 1967, when predicted tides were used (see supplement).

The height of MLLW above the tide staff zero was 6.83 feet in 1965, and 5.86 feet in 1966. No hourly heights were required from Washington, D.C. The time meridian used was $150^{\circ} W$.

PF 20-3-65
VELOCITY CORRECTIONS

22 June to 4 July 1965

<u>Correction</u>	<u>To</u>
+0.0 fms	14.0 fms
0.1	39.0
0.2	89.0

5 July to 31 July 1965

<u>Correction</u>	<u>To</u>
+0.0 fms	6.0 fms
0.1	21.0
0.2	51.5
0.4	82.0

1 August to 26 August 1965

<u>Correction</u>	<u>To</u>
+0.0 fms	6.0 fms
0.1	16.0
0.2	26.0
0.3	38.0
0.4	65.0
0.6	82.0

21 September to 1 October 1965

<u>Correction</u>	<u>To</u>
+0.0 fms	6.0 fms
0.1	14.0
0.2	22.0
0.3	30.0
0.4	49.0

16 July to 18 August 1966

<u>Correction</u>	<u>To</u>
+0.0 fms	5.4 fms
0.1	13.5
0.2	22.1
0.3	32.0
0.4	41.9
0.5	51.8

PF 20-3-65
ECHO CORRECTORS

Vessel	Date	Day	Corrector	
			0-31 fms	31- fms
PATHFINDER	8/23/65	235	-0.1	0.0
	8/24/65	236	0.1	0.0
ML #1	8/4/65	216	+0.3	+0.2
	8/5/65	217	0.3	0.2
	9/28/65	271	0.3	0.2
	7/16/66	197	+0.3	+0.2
	7/18/66	199	0.3	0.2
	7/19/66	200	0.2	0.2
	7/20/66	201	0.3	0.2
	7/21/66	202	0.3	0.2
	7/27/66	208	0.2	0.2
	7/29/66	210	0.4	0.4
	7/30/66	211	0.3	0.2
	7/31/66	212	0.4	0.4
	8/1/66	213	0.4	0.4
	8/2/66	214	0.3	0.2
	8/3/66	215	0.3	0.2
	8/9/66	221	0.4	0.4
	8/10/66	222	0.4	0.4
	8/11/66	223	0.4	0.4
	8/12/66	224	0.4	0.4
	8/16/66	228	0.3	0.2
8/17/66	229	0.3	0.2	
ML #2	7/13/65	194	+0.4	+0.4
	7/21/65	202	0.2	0.2
	8/4/65	216	0.3	0.2
	8/5/65	217	0.2	0.2
	8/8/65	220	0.3	0.2
	8/26/65	a	0.2	0.2
	7/17/66	198	+0.3	+0.2
	7/18/66	199	0.4	0.4
	7/19/66	200	0.3	0.2
	7/20/66	201	0.4	0.4
	7/21/66	202	0.3	0.2
	7/26/66	207	0.2	0.2
	7/28/66	209	0.3	0.2
	7/29/66	210	0.4	0.4
	7/30/66	211	0.4	0.4

PF 20-3-65
ECHO CORRECTORS (CONT.)

Vessel	Date	Day	Corrector		
			0-31 fms	31- fms	
ML #2 cont.	8/2/66	214	+0.3	+0.2	
	8/3/66	215	0.3	0.2	
	8/9/66	221	0.4	0.4	
	8/10/66	222	0.3	0.2	
	8/11/66	223	0.4	0.4	
	8/12/66	224	0.4	0.4	
	8/16/66	228	0.3	0.2	
	8/17/66	229	0.3	0.2	
ML #3	7/13/65	194	+0.3	+0.2	
	7/21/65	202	0.3	0.2	
	8/4/65	216	0.3	0.2	
	8/5/65	217	0.3	0.2	
	8/8/65	220	0.3	0.2	
	9/24/65	267	0.3	0.2	
	7/16/66	a	+0.3	+0.2	
	7/17/66	b	0.3	0.2	
	7/19/66	c	0.4	0.4	
	7/20/66	d	0.3	0.2	
	7/21/66	e	0.3	0.2	
	7/26/66	f	0.3	0.2	
	8/1/66	g	0.3	0.2	
	8/2/66	h	0.3	0.2	
	ML #4	8/4/65	a	+0.3	+0.2
		8/5/65	b	0.3	0.2
7/16/66		197	+0.3	+0.2	
7/17/66		198	0.3	0.2	
7/18/66		c	0.3	0.2	
7/19/66		200	0.3	0.2	
7/20/66		201	0.3	0.2	
7/21/66		202	0.3	0.2	
7/26/66		207	0.4	0.4	
7/28/66		209	0.5	0.4	
7/29/66		210	0.4	0.4	
7/30/66		211	0.4	0.4	
7/31/66		212	0.4	0.4	
8/1/66		213	0.4	0.4	
8/2/66		214	0.3	0.2	
8/3/66		215	0.3	0.2	
8/9/66		221	0.2	0.2	
8/10/66		222	0.3	0.2	
8/11/66		223	0.4	0.4	
8/12/66		224	0.3	0.2	
8/16/66	228	0.3	0.2		
8/17/66	229	0.4	0.4		

PF 20-3-65
SEASONAL SHORAN CORRECTORS
1965

	<u>CROW</u>	<u>S. AUGUSTINE</u>
PATHFINDER	0.000	0.000
	+0.020	+0.010
	4.850	2.700
	+0.015	+0.005
	17.400	9.500
	+0.010	0.000
	30.000	15.850
	+0.005	-0.005
		22.750
		-0.010
		29.400
		-0.015
ML #1	0.000	0.000
	+0.035	+0.020
	3.000	5.420
	+0.030	+0.015
	6.000	12.750
	+0.025	+0.010
	9.350	19.850
	+0.020	+0.005
	12.400	
	+0.015	
	15.700	
	+0.010	
	18.850	
	+0.005	
	22.100	
	0.000	
ML #2	0.000	0.000
	+0.015	+0.015
	3.250	1.650
	+0.010	+0.010
	6.250	4.400
	+0.005	+0.005
	9.400	7.100
	0.000	0.000
	12.400	9.750
	-0.005	-0.005

1965(cont)

	<u>CROW</u>	<u>S. AUGUSTINE</u>
ML #2(cont)	15.600 -0.005	12.650 -0.005
	18.700 -0.010	15.380 -0.010
	21.750 -0.015	18.100 -0.015
	24.700 -0.020	20.750 -0.020
		23.600 -0.025
ML #3	0.000 +0.020	0.000 +0.020
	2.750 +0.015	1.150 +0.015
	6.000 +0.010	4.650 +0.010
	9.300 +0.005	7.900 +0.005
	12.600 +0.000	11.400 0.000
	15.700 -0.005	14.500 -0.005
	19.000 -0.010	18.000 -0.010
	22.250 -0.015	21.250 -0.015
		24.600 -0.020

PF 20-3-65
SHORAN CORRECTORS
1966

Note: The Shoran corrector for any given range may be computed by use of the formula $M = K(x) + C$, where (M) is the actual distance, (x) is the Shoran distance, and (K) and (C) are the constants used for various circumstances. These values, used in 1966 for EDP plotting, are given below.

POSITIONS	S. AUGUSTINE		SHAW		CROW	
	K	C	K	C	K	C
<u>ML #1</u>						
351- 437	.999349	-.002690	.998313	+.191771		
438- 724	.998280	+.019640	.998708	+.067584		
725- 915	.998731	+.020952	.997642	+.056174		
916- 948	.998731	+.020952			.996859	+.051256
949-1128			.993729	+.093452	.994839	+.061934
1129-1602			.994390	+.078365	.996859	+.051256
<u>ML #2</u>						
2414-2594	.995933	+.046914	.996037	+.112331		
2595-2870a	.999189	+.023447	.998378	+.075596		
2870b-2912	.999189	+.023447			.997886	+.067960
2913-3098			.999474	+.062814	.997886	+.067960
3099-3639			.994715	+.087774	.996386	+.071626
<u>ML #4</u>						
6000-6125	.997500	+.032500	.998057	+.061642		
6126-6312	.998104	+.030881	.998973	+.041801		
6313-6598	.998711	+.017324	.998465	+.042615		
6599-6646	.998711	+.007388			.997807	+.056974
6647-6835			.997228	+.061799	.997807	+.056974
6836-7351			.996853	+.052593	.996721	+.061478
<u>PATHFINDER</u>						
8288-8290	1.000275	-.007503	.998400	+.058360		
8291-8334			.999750	+.038750	.999700	+.045100

LIST OF SIGNALS

<u>NAME</u>	<u>TYPE</u>	<u>SOURCE</u>
BABY	Tri-Traverse	BABY, 1964
BEAVER	Tri-Traverse	BEAVER, 1964
BOO	Hydrographic	-
BOR	Hydrographic	-
BUD	Photo-Hydro	T-12342
CAR	Hydrographic	-
COK	Photo-Hydro	T-12341
CROW	Tri-Traverse	CROW, 1964
DAN	Hydrographic	-
GOO	Photo-Hydro	T-12342
HAG	Hydrographic	-
KAY	Photo-Hydro	T-12342
KER	Photo-Hydro	T-12342
LEROY	Tri-Traverse	LEROY, 1966
LEY	Photo-Hydro	T-12342
LUV	Photo-Hydro	T-12342
NAD	Photo-Hydro	T-12342
NILE	Tri-Traverse	NILE, 1966
PIT	Photo-Hydro	T-12342
POP	Photo-Hydro	T-12342
QIK	Hydrographic	-
RAY	Photo-Hydro	T-12342
ROG	Photo-Hydro	T-12342
ROR	Photo-Hydro	T-12342
SAN → SEA	HYDROGRAPHIC	-
SHU	Photo-Hydro	T-12341
STN	Photo-Hydro	T-12342
SIP	Photo-Hydro	T-12341
TAG	Hydrographic	-
TOP	Photo-Hydro	T-12341
WAL	Photo-Hydro	T-12342
WIG	Photo-Hydro	T-12342
YEL	Photo-Hydro	T-12341
ZAP	Photo-Hydro	T-12342

Supplement

PF-20-3-65

OPR-429

KAMISHAK BAY, ALASKA

Inspection of Low Water Line at Mouth of Douglas River. ✓

PURPOSE: To determine if launch hydrography was necessary up the Douglas River.

LOCATION: Mouth of the Douglas River, between the mainland, an un-named island, and Crow Island, located at the southwestern end of Kamishak Bay, Lower Cook Inlet, Alaska.

DATE OF SURVEY: Friday, 28 July 1967

DESCRIPTION: The four lines of soundings which are indicated on the accompanying sketch were run from a skiff using a hand pole for sounding. The time was noted to the nearest five minutes and the depth to the nearest tenth of a fathom. The position was approximated using a range for alignment. The horizontal positions are estimated to be accurate to thirty feet.

TIDES: Predicted tides based on Seldovia, Alaska were used to reduce the depths to MLLW survey datum.

RESULTS: All soundings were found to be negative, indicating that there is no navigible entrance to the Douglas River, and that further hydrography up the Douglas River is unnecessary. *Sdps not plotted on S.S.*

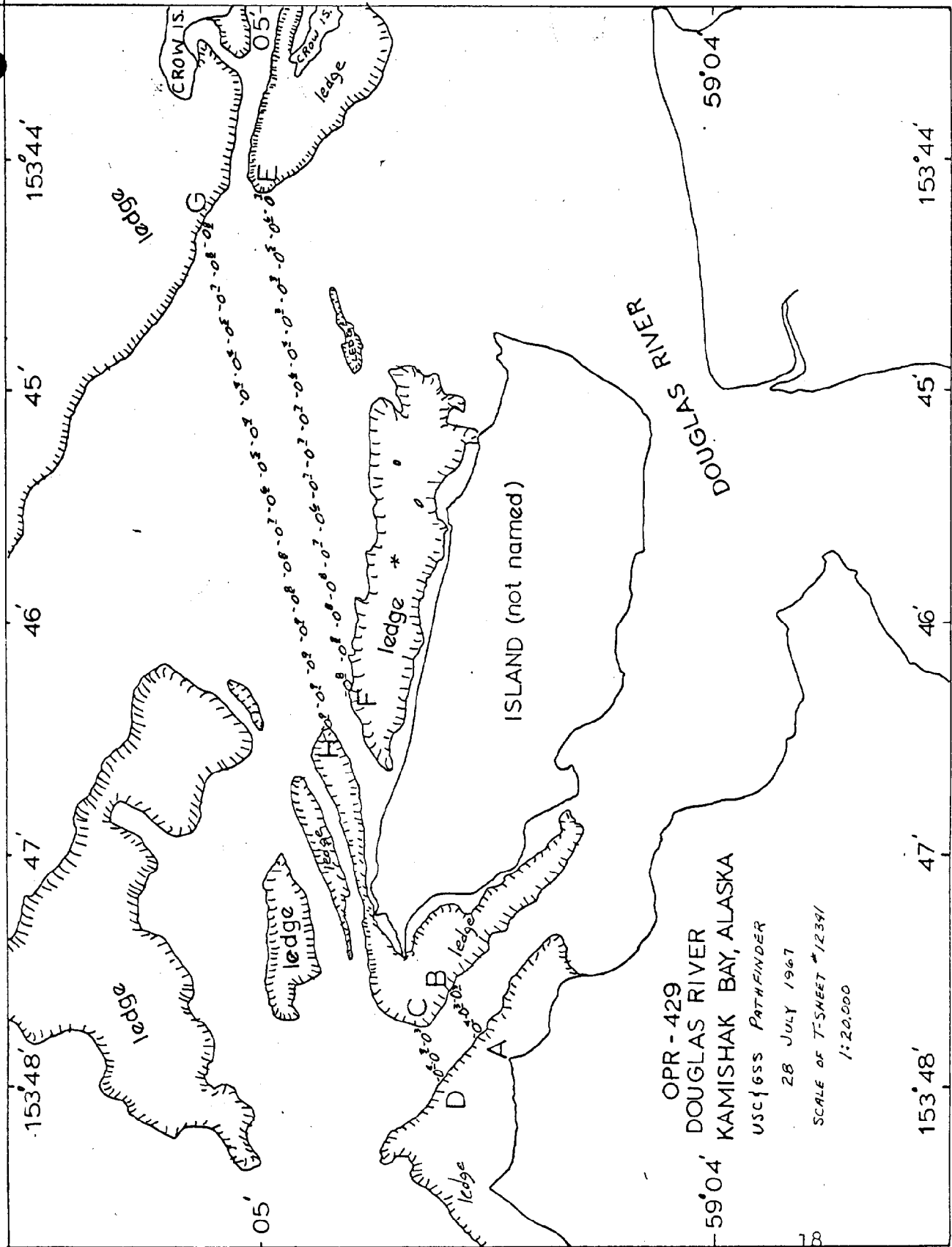
William W. Spychalla

William W. Spychalla
Lt. (j.g.) USESSA

OPR-429

DOUGLAS RIVER, KAMISHAK BAY, ALASKA

<u>Line</u>	<u>Time</u>	<u>Sounding Method</u>	<u>Depths Encountered</u>	
A-B	1100 to 1120	Hand pole from a skiff and also by wading in parts too shallow for skiff.	Ave. depth	1.5 ft.
			Max. depth	2.5 ft.
C-D	1130 to 1150	Hand pole from a skiff	Ave. depth	2.0 ft.
			Max. depth	3.0 ft.
E-F	1330 to 1345	Hand pole from a skiff	Ave. depth	2.5 ft.
			Max. depth	4.0 ft.
G-H	1350 to 1410	Hand pole from a skiff	Ave. depth	3.0 ft.
			Max. depth	4.5 ft.



OPR - 429
 DOUGLAS RIVER
 KAMISHAK BAY, ALASKA
 USCGC PATFINDER
 28 JULY 1967
 SCALE OF T-SHEET #12341
 1:20,000

GEOGRAPHIC NAMES

Survey No. H-8842

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
Cook Inlet											1
Kamishak Bay											2
Da Douglas River											3
											4
											5
											6
											7
											8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

PREPARED BY

Frank W. Pickett
CARTOGRAPHIC TECHNICIAN

APPROVED BY

A. Joseph Whaight
CHIEF GEOGRAPHER

TIDE NOTE FOR HYDROGRAPHIC SHEET

7/25/67

~~Navy Hydrographic Office~~ Pacific Marine Center

Plane of reference approved ~~in~~ for
~~hydrographic survey~~

HYDROGRAPHIC SHEET 8842

Locality: Shaw Island, Kamishak Bay, Alaska

Chief of Party: G. L. Short, 1966

Plane of reference is mean lower low water

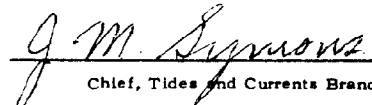
Tide Station Used (Form C&GS-681):

Shaw Island

Height of Mean High Water above Plane of Reference is as follows:

13.3 feet

Remarks


Chief, Tides and Currents Branch

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. H-8842

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET & PNO		1	BOAT SHEETS		4	
DESCRIPTIVE REPORT		1	OVERLAYS		4 3	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES			1			
CAHIERS	3 2		1			5
VOLUMES	36					
BOXES			2			
T-SHEET PRINTS (List)						
SPECIAL REPORTS (List)						

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				6303
POSITIONS CHECKED		6303	15	
POSITIONS REVISED		227	0	
DEPTH SOUNDINGS REVISED		1894	10	
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		291	8	
JUNCTIONS		6	16	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		229		
SPECIAL ADJUSTMENTS		111		
ALL OTHER WORK		306	81	
TOTALS		943	105	
PRE-VERIFICATION BY	BEGINNING DATE		ENDING DATE	
VERIFICATION BY	BEGINNING DATE		ENDING DATE	
REVIEW BY	BEGINNING DATE		ENDING DATE	
	3-16-73		7-4-73	

R.D. Lynn

Fanne S. Powers

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8842

FIELD NO. PF-20-3-65

Alaska, Kamishak Bay, Off Douglas River

SURVEYED: July - September 1965; July - August 1966

SCALE: 1:20,000

PROJECT NO.: OPR-429

SOUNDINGS: Raytheon DE-723 Depth
Recorders, Sounding Pole

CONTROL: Shoran and Sextant
fixes on shore signals

Chief of Party	L. F. Woodcock
.....	G. L. Short
.....	J. O. Phillips
Surveyed by	W. S. Simmons
.....	G. E. Rorvig
.....	L. M. Casanova
.....	D. L. Sweetland
.....	F. T. Smith
.....	W. L. Bradley
.....	S. M. Erickson
.....	R. T. Leroy
.....	L. T. Lynch
.....	F. S. Ito
.....	R. V. O'Connell
.....	P. M. Shidrick
.....	J. M. Wintermyre
.....	A. C. Weymann
Protracted by	Gerber Digital Plotter ¹
Soundings plotted by	Gerber Digital Plotter
Verified and inked by	R. D. Lynn
Reviewed by	F. B. Powers
.....	Date: April 4, 1973
Inspected by	R. H. Carstens

1. Description of the Area

This survey covers a portion of Kamishak Bay off Douglas River.

Most of the foreshore area is sandy except for the northern extreme which is foul and ledge areas. The bottom is irregular with numerous sand ridges and rocky shoals.

The predominate bottom characteristics are sand, mud, and shells.

2. Shoreline and Control

The source of the control is adequately described in Part F of the Descriptive Report.

The shoreline is from advance photogrammetric manuscripts T-12341 and T-12342 based on 1962 photography. The hydrography provided considerable change in the delineation of the reefs in the west portion of the survey.

3. Hydrography

A. Depths at crossings are in good agreement.

B. The usual depth curves are adequately delineated. Several brown curves have been added to emphasize important bottom features.

C. The development of the bottom configuration and the investigation of least depths are considered adequate.

4. Condition of the Survey

The sounding records, smooth plotting, and Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual, supplemented by the Instruction Manual - Automated Hydrographic Surveys.

Considerable re-sounding of fathograms was done during verification. In addition a stylus arm correction was applied to a major portion of the soundings. It is considered that many of the changes were relatively minor and not significant to the survey of the area.

5. Junctions

Adequate junctions were effected with H-8841 (1965) on the southeast and with H-8843 (1965-68) on the north and northeast. The junction with unverified survey H-8962 (1967-8) on the west will be discussed in the review of that survey.

6. Comparison with Prior Surveys

F.E. No. 3 1947 (1:200,000)

The sparcity of soundings and the small scale of this reconnaissance survey preclude an adequate comparison with the present survey.

A comparison of prior and present depths reveals variable differences resulting from the approximate positions of soundings on the Field Examination.

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

7. Comparison with Chart 8554, 12th Ed., May 13, 1972

A. Hydrography

The charted hydrography originates with the previously discussed prior survey which requires no further consideration, supplemented by the partial application of depths from the boat sheet and verified smooth sheet of the present survey. Many of the soundings charted from the boat sheet are about one-fathom shoaler than final smooth sheet values.

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

B. Aids to Navigation

There are no aids to navigation located within the limits of this survey.


8. Compliance with Instructions

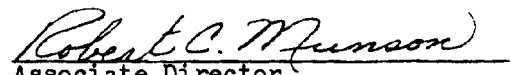
This survey adequately complies with the project instructions.

9. Additional Field Work

This survey is considered to be a good basic survey and no additional field work is recommended.

Examined and Approved:


Chief
Marine Chart Division


Associate Director
Office of Marine Surveys and Maps

H-8842 (1965-66)

Items for Future Presurvey Reviews

The bottom is considered adequately developed on the present survey. Prior soundings were unreliable in position and provide no adequate basis for comparison.

Position Index		Bottom Change	Use Index	Resurvey Cycle
Lat.	Long.	Index		
590	1533	2	0	50 yrs.
590	1534	3	0	50 yrs.
590	1535	3	0	50 yrs.
591	1534	3	0	50 yrs.
591	1535	3	0	50 yrs.

Any future survey in this area should obtain the least depths on the following shoals:

1. 2 fm. lat. $59^{\circ}04.04'$, long. $153^{\circ}38.6'$
2. 1.1 fm. lat. $59^{\circ}07.0'$, long. $153^{\circ}39.9'$
3. 2 fm. lat. $59^{\circ}04.15'$, long. $153^{\circ}38.21'$

Reg. No. 17-8842

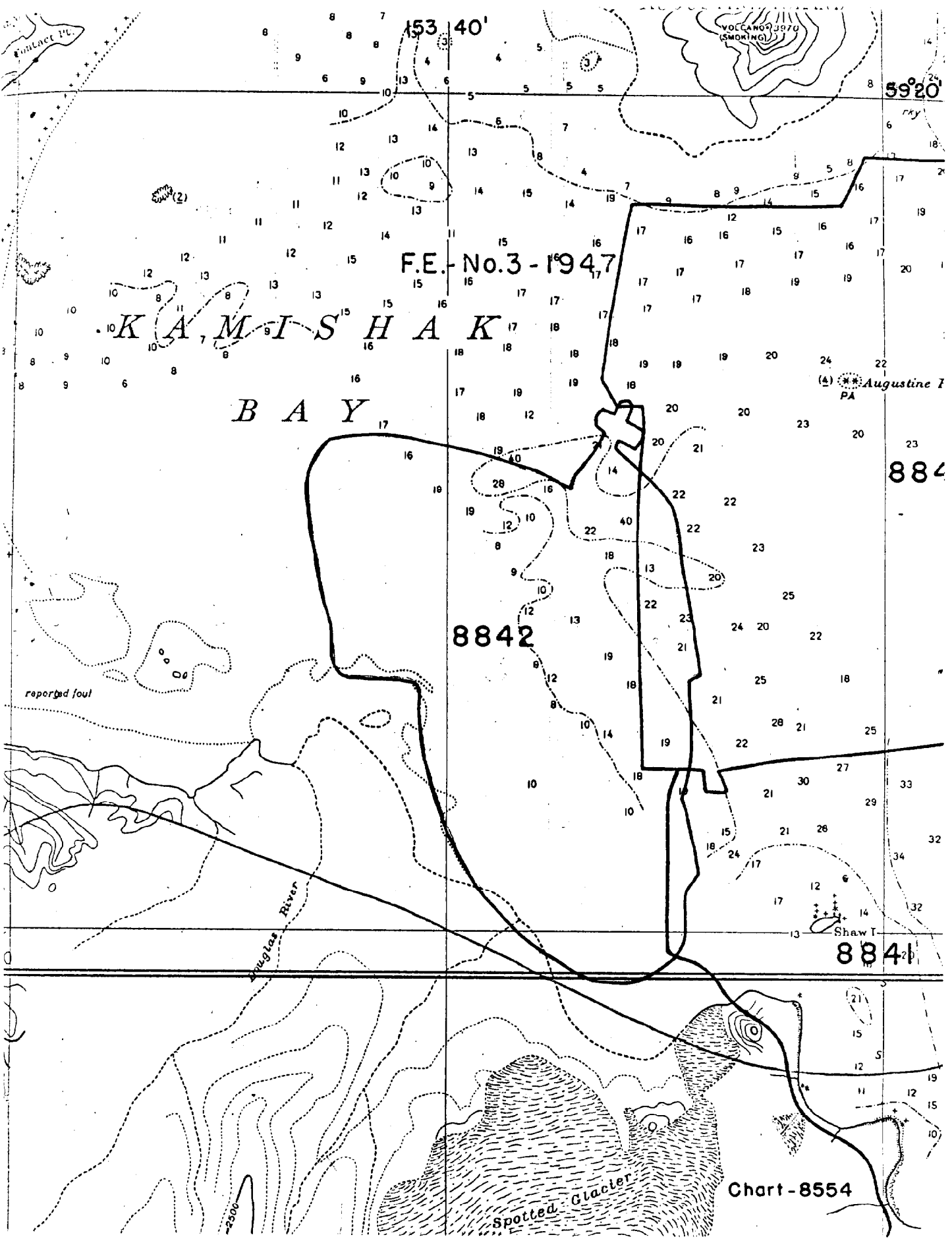
The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey, the following shall be completed:

CARDS CORRECTED

DATE _____ TIME REQ'D _____ INITIALS _____

REMARKS:



F.E. No. 3 - 1947

KAMISHAK

BAY

8842

884

884

Chart-8554