9082

Diag. Cht. No. 8201-3.

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. DA-10-4-69 Office No. H-9082

LOCALITY

State Alaska

General locality Keku Strait

Locality Port Camden

1969

CHIEF OF PARTY

R. E. Moses

LIBRARY & ARCHIVES

DATE 1-14-72

USCOMM-DC 37022-P66

9082

FORM C&GS-537 (5-66)

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

HYDROGRAPHIC TITLE SHEET

REGISTER NO.

H-9082

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.

DA-10-4-69

State Alaska

General locality ~~Southeast Alaska~~ Keku Strait

Locality Port Camden *

Scale 1:10,000 Date of survey 20 August to 12 Sept 1969

Instructions dated 10 March 1969 Project No. OPR 448

Vessel Launch I(DA-1), RAINIER-4, 17' Whaler, USC&GSS DAVIDSON

Chief of party CDR Ray E. Moses

Surveyed by G.H. Endrud, B.W. Fisher, G.F. Tornberg

Soundings taken by echo sounder, ~~hand lead, pole~~ Raytheon DE-723: #214,#553,#1276,#926,#1286

Graphic record scaled by Ship's personnel

Graphic record checked by Ship's personnel

~~Positions~~ verified by ~~X~~ A.E. Eichelberger Automated plot by PMC

~~Soundings~~ VERIFIED by A.E. Eichelberger

Soundings in fathoms ~~X~~ at ~~X~~ MLLW

REMARKS:

Applied to Stds 1-27-72

USCOMM-DC 37009-P66

A. PROJECT

This survey was accomplished according to Project Instructions: OPR-448, KEKU STRAIT, SOUTHEAST ALASKA, dated 10 March 1969.

B. AREA SURVEYED

This survey covered the northern two-thirds of Port Camden between the latitudes 56°48'36"N and 56°42'30"N. Work was accomplished between 20 August and 12 September 1969. The survey junctions with ~~[illegible]~~ survey DA-10-5-68(H-9041) (1968) and contemporary survey DA-10-5-69(H-9083) (1969).

C. SOUNDING VESSEL

The following vessels were used to obtain soundings on this survey:

Launch I(DA-1)	Green
RAINIER-4 (launch)	Red
17' Whaler	Blue

Launch RA-4 was on loan from the Ship RAINIER for the season. A summary of each vessel's work by position numbers is attached. Bottom samples were taken by Ship DAVIDSON and RA-4, and are shown in blue.

D. SOUNDING EQUIPMENT

Raytheon DE-723 fathometers were used:

Launch I	#1276
RA-4	#214
Whaler	#553
DAVIDSON	#926, #1286

Echo sounder corrections were determined from bar checks taken daily by the launches and sounding machine comparisons performed by the ship. Launch and whaler fathometers were initialed at zero, requiring draft corrections for their soundings. Draft corrections are included with velocity corrections in the Modified Velocity Correction tape. The ship's fathometer was initialed at two(2) fathoms. Differences between actual and assumed initial values are compensated for with initial corrections(TC/TI tape). All soundings are in fathoms.

Abstracts of Modified Velocity Corrections and Initial Corrections are attached.

E. SMOOTH SHEET

The smooth sheet will be constructed and plotted by the Processing Division, Pacific Marine Center, Seattle, Washington.

F. CONTROL

Visual three-point fixes were used for control in this survey. There were three types of visual signals used: triangulation signals, hydrographic signals, and topographic signals. Triangulation signals were hand plotted on the boat sheet from calculated field geographic positions; Hydrographic signals were located by intersection angles from triangulation stations using a transit. Topographic signals were located either by stadia traverse or subtense. An abstract of signals is included in the appendix. Topographic traverse data and calculations will be forwarded to the Processing Division, Pacific Marine Center with this report.

The geographic positions which will be submitted to the Processing Division for the smooth sheet control stations will be based upon the adjusted triangulation geographic positions.

G. SHORELINE

Manuscripts and photographs were not available at the time of this survey. The shoreline has not been drawn on the boat sheet.

H. CROSSLINES

The percentage of crosslines run was 5.7%(21.3 miles). Agreement at crossings is good.

I. JUNCTIONS

This survey junctions with ~~prior~~ contemporary survey DA-10-5-68(H-9041) (1968) and contemporary survey DA-10-5-69(H-9083) (1969). There is good agreement at the junctions.

J. COMPARISON WITH PRIOR SURVEYS

Comparison was made with prior survey H-2150(1892, 1:40,000). Comparison of soundings is relatively good considering the line spacing and small scale of the prior survey. In the area of 56°46.55'N, 133°52.8'W this survey shows the shoreline bench extending farther out than the prior survey. The prior survey shows a "29" sounding inside the twenty fathom curve of this survey. The 29-fm. sounding was found to be misplotted. The correct position of this sounding is in agreement with present hydrography.

Several significant shoal areas were found on this survey which are not shown on the prior survey:

(1) 56°46.0'N, 133°52.75'W
Development was run over this shoal; The least depth found was 8.6 fathoms. The prior survey did not show this shoal.

(2) 56°45.75'N, 133°53.0'W
This is a finger-like shoal running out about 800 meters from shore. Some development was run. There is a 14.8-fathom sounding at the end of this shoal. There is no indication of this shoal on the prior survey.

(3) 56°44.7'N, 133°53.7'W
This is an important shoal area in that it is not shown on the prior survey and it is near the center of the channel. Development was run showing a least depth of 8.4-fathoms.

(4) 56°43.5'N, 133°53.5'W
Development was run over this shoal revealing a least depth of 3.4-fathoms. The prior survey does not show any indication of this shoal. This area is sometimes used for an anchorage area.

(5) 56°43.6'N, 133°55.3'W
Development was run over this shoal revealing a least depth of 4.9-fathoms. The prior survey shows a least sounding of 8.5-fathoms in this area.

K. COMPARISON WITH THE CHART

The only chart of this area is chart C&GS #8201, 14th Edition, 30 December 1968. See above item J. for comparison because this chart is a 1:200,000+ scale chart which is based upon prior survey H-2150.

L. ADEQUACY OF SURVEY

This survey only lacks shoreline to be classified as a complete survey. After the manuscripts are compiled, however, a field edit should be made and the shoreline transferred to the boat sheet. Sounding lines define the zero-fathom curve except where the beach is steep.

M. AIDS TO NAVIGATION

There are no naviga tional aids on this survey.

N. STATISTICS

	No. Positions	Nautical Miles Sounding Lines	Bottom Samples
Launch I	490	66.5	0
RAINIER 4	2254	267.4	1
17' Whaler	787	42.1	0
DAVIDSON	32	0	32
Field Edit	66	0	0
Total	*3629*	*376.0*	*33*

The total area surveyed is 12.0 square nautical miles. There are twenty (20) volumes with this survey. Signal cuts are in Volume XX; Some signal cuts are included with contemporary survey DA-10-5-69(H-9083). Bottom samples arecincluded in Volume IX. There are three development overlays with this survey.

One tide gage was installed and maintained on Pup Island for reduction of soundings on the smooth plot. Soundings on the boat sheet are reduced to MLLW with predicted tides based on Port Camden, Alaska. Time meridian 105°W was used for this entire survey. For further information refer to the attached tide note.

O. LOGGING

The HUL(BCD Code)/Friden Flexowriter logging system wassused with this survey. A "dual indicator" format is used which combines both the sounding tape and position tapecinto one "position and sounding tape." An example and explanation of this format are included in the appendix.

P. RECOMMENDATIONS

The shoreline should be field edited and then transferred onto the boat sheet after the new manuscripts are compiled.

Q. REFERENCES TO REPORTS

Corrections to Echo Soundings OPR 448

Landmarks Report OPR 448

Respectfully Submitted

Bruce W. Fisher

Bruce W. Fisher
LTJG USESSA

ATTACHMENTS:

Tide Notes
Geographic Name List
Modified Velocity Corrections
Initial Corrections
Boat Sheet Layout
Form #1 - Parameters for Digital Computing
Copies of Development Overlays
List of Stations on DA-10-4-69
List of Triangulation
List of Obstructions
Position-Sounding Tape
Abstract of Positions
Approval Sheet

ABSTRACT OF POSITIONS

Day#	RA-4	Whaler	DA-1	Bottom Samples Detached Positions
232	1-74 (1)			
233	235-249 (2)			
	75-234 (1)			
234	250-478 (2)			
	479-528 (3)			
235		530-657 (4)		
236		658-746 (4)		
		747-876 (5)		
237	877-1069(3)			
	1070-1126(6)			
239	1127-1318(6)			
240		1319-1449(7)		6501-6517(9)
				6001-6025(8)
246			1450-1670(10)	
247			1671-1926(11)	
			1927-1939(12)	
248	1940-2190(13)			
	2191-2218(14)			
249	2219-2344(14)			
250	2345-2436(14)	3001-3155(7)		
	2437-2653(15)			
251	2654-2893(17)	3158-3310(16)		
252	2894-2999(18)			
	4000-4136(18)			8001-8029(9)
253				6026-6059(8)
254	4137-4222(19)			8030(9)
255				8031-8033(9)

TIDE NOTE

One tide station was installed and maintained on Pup Island. The tide height data were corrected for differences in time and height. off survey sheet

Tide Station	Pup Island Lat. 56°49.4'N, Long. 133°53.2'W
Plane of Reference	MLLW(2.2 ft on the staff)
Time Meridian	105°West

Tide gage is a portable bubbler gage installed on the north shore of Pup Island.

Soundings on the boat sheet are reduced to MLLW with predicted tides based on Port Camden, Alaska.

LIST OF STATIONS ON DA-10-4-69

Name Used in Hydrographic Survey	Origin of Station
401	See #350 DA-10-5-68(H-9041)
402	Vol XX, p. 11,13,14,16,18
403	SAND, 1968
404	Vol XX, p. 11,15,16,17,18
405	Vol XX, p. 4,11,13,16,17,18
406	TIN, 1964
407	Vol XX, p. 11,16,18
408	Vol XX, p. 18
409	Vol XX, p. 20,21,21
410	Topographic station*
411	Topographic station*
412	PASS, 1968
413	Vol XX, p. 17 (See DA-10-5-69)
414	Vol XX, p. 21 (See DA-10-5-69)
431	Topographic*
432	Topographic*
440	Vol XX, P. 14,15,19,20
441	Vol XX, p. 20,21
442	CRANE 1968
444	Topographic*
445	Topographic*
446	Topographic*
450	LUCK, 1927
451	Topographic*
452	Topographic*
453	KADAK 1964 RM #1
454	Vol XX, p.13,15
455	Vol XX, p.13,14,16
456	Vol XX, p.14,19
457	Vol XX, p.13 PITT, 1964
458	Vol XX, p.20,21
459	Vol XX, p.20,21
460	DOVE, 1969
461	See Sheet DA-10-5-69
462	See Sheet DA-10-5-69
480	Topographic*
481	Topographic*
482	Topographic*
483	Topographic*
484	Topographic*
485	Topographic*
486	Topographic*
487	Topographic*
488	Topographic*
489	Topographic*

490	Topographic*
491	Topographic*
492	Topographic*
493	Topographic*
494	Topographic*
495	Topographic*
496	Topographic*
497	Topographic*
498	Vol XX, p.15,16,20
499	Vol XX, p.17,18,20,21

* Note: Topographic data to be forwarded to Processing Division, Pacific Marine Center under separate cover.

LIST OF TRIANGULATION*

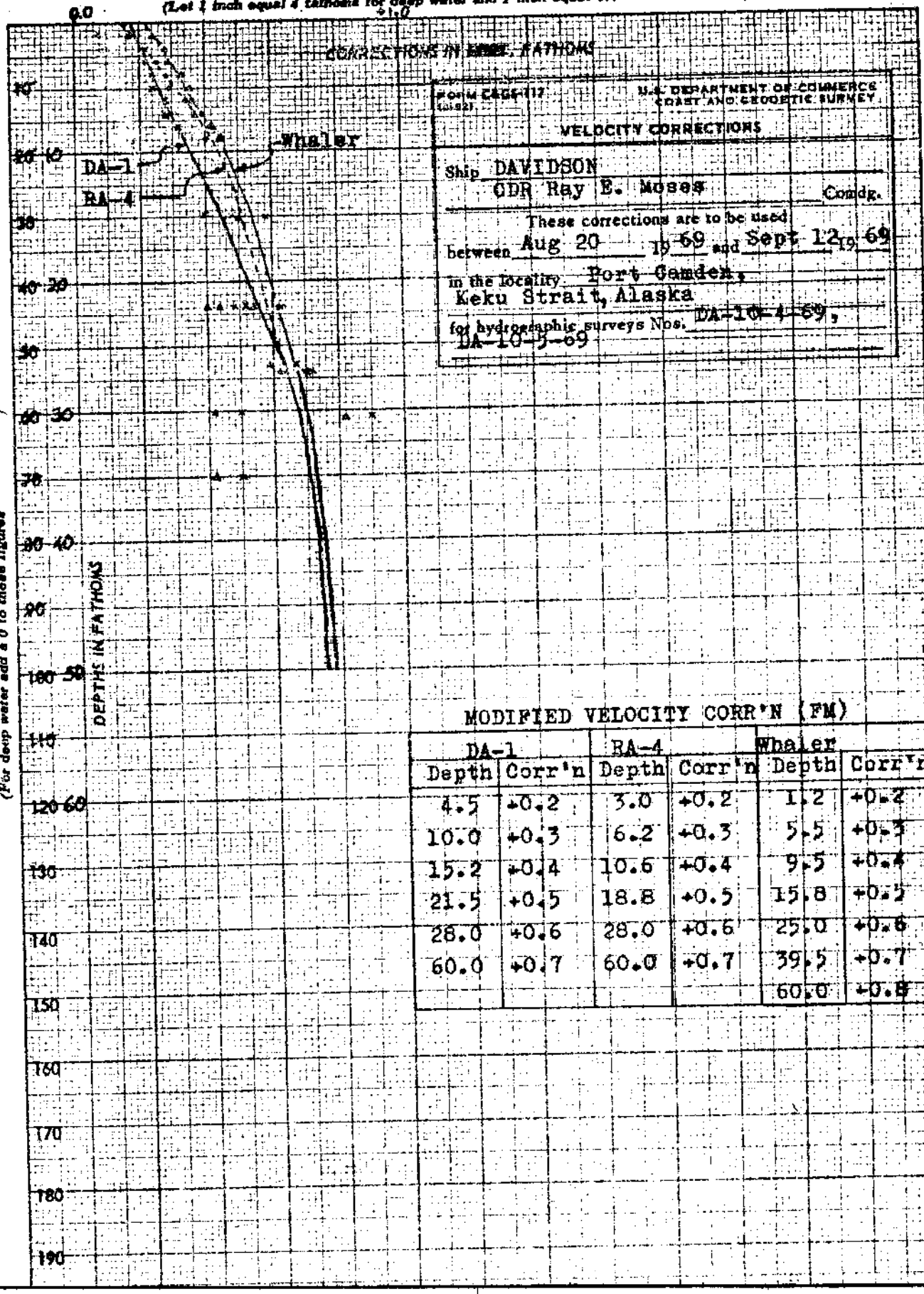
*LUCK, 1927	56°49'1719.3 meters	133°58'250.0meters
*KADAK 1964 RM #1	56049'1719.3 meters	133°56'467.3meters
*PITT, 1964	56°45'1145.4 meters	133°54'391.5 meters
*SAND, 1968	56047' 902.0 meters	133°53'407.3 meters
*TIN, 1964	56°45'1316.5 meters	133°52'265.2 meters
*DOVE, 1969	56°43'1008.7 meters	133°55'861.2 meters
*CRANE, 1968	56°43' 460.9 meters	133°56'360.8 meters
*PASS, 1968	56°43' 613.4 meters	133°54'411.5 meters

* These positions are based upon field computations of triangulation done by Ship DAVIDSON, 1969.

SIGNAL PLOTTER CARDS

H-NO.		LATITUDE	LONGITUDE	X	Y	X
09082	401	69 56491933	133533077	02915	14755	401
09082	402	69 56481613	133532935	02888	12702	402
09082	403	69 56472916	133532397	02792	11177	403
09082	404	69 56470478	133521078	01487	10385	404
09082	405	69 56461694	133520477	01378	08831	405
09082	406	69 56454258	133521560	01571	07715	406
09082	407	69 56445506	133520853	01443	06172	407
09082	408	69 56434979	133521929	01634	04052	408
09082	409	69 56425881	133525714	02309	02397	409
09082	410	69 56423417	133540382	03499	01597	410
09082	411	69 56424720	133541558	03709	02020	411
09082	412	69 56431985	133542417	03863	03080	412
09082	413	69 56423585	133550159	04531	01651	413
09082	414	69 56415273	133553637	05152	00251	414
09082	431	69 56442900	133520135	01315	05326	431
09082	432	69 56443824	133521153	01497	05626	432
09082	440	69 56460346	133553038	05045	08393	440
09082	441	69 56444403	133553836	05188	05814	441
09082	442	69 56431490	133562117	05952	02920	442
09082	444	69 56482366	133562870	06084	12947	444
09082	445	69 56481367	133572911	07160	12822	445
09082	446	69 56481875	133574608	07462	12787	446
09082	450	69 56495557	133581474	07971	15931	450
09082	451	69 56484232	133575711	07658	13552	451
09082	452	69 56482043	133571921	06984	12842	452
09082	453	69 56482311	133562752	06063	12929	453
09082	454	69 56473459	133561343	05812	11353	454
09082	455	69 56464584	133553745	05171	09770	455
09082	456	69 56453194	133545632	04437	07370	456
09082	457	69 56453705	133542301	03843	07536	457
09082	458	69 56442719	133560982	05749	05267	458
09082	459	69 56440055	133561541	05849	04402	459
09082	460	69 56433262	133555063	05407	03495	460
09082	461	69 56425900	133565814	06613	02403	461
09082	462	69 56422813	133573415	07256	01400	462
09082	480	69 56423585	133544914	04309	01651	480
09082	481	69 56423420	133545619	04435	01598	481
09082	482	69 56423298	133543380	04035	01558	482
09082	483	69 56423637	133543680	04028	01668	483
09082	484	69 56422263	133534473	03158	01222	484
09082	485	69 56422412	133540217	03470	01270	485
09082	486	69 56424445	133532969	02890	01931	486
09082	487	69 56424212	133542175	03819	01855	487
09082	488	69 56424387	133543139	03992	01912	488
09082	489	69 56424381	133543592	04073	01910	489
09082	490	69 56430436	133540964	03604	02577	490
09082	491	69 56444649	133520588	01396	05894	491
09082	492	69 56445134	133515066	01124	06051	492
09082	493	69 56445328	133513789	00897	06114	493
09082	494	69 56444400	133514636	01048	05813	494
09082	495	69 56442981	133515383	01180	05352	495
09082	496	69 56442066	133515647	01227	05055	496
09082	497	69 56442088	133521112	01489	05062	497
09082	498	69 56435871	133544493	04234	04342	498
09082	499	69 56434875	133550159	04531	04019	499

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)



FORM C&GS-117 (1-62) U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY

VELOCITY CORRECTIONS

Ship DAVIDSON
CDR Ray E. Moses Comdg.

These corrections are to be used between Aug 20 1969 and Sept 12 1969

in the locality Port Camden, Keku Strait, Alaska

for hydrographic surveys Nos. DA-10-4-69, DA-10-5-69

MODIFIED VELOCITY CORR'N (FM)

DA-1		RA-4		Whaler	
Depth	Corr'n	Depth	Corr'n	Depth	Corr'n
4.5	+0.2	3.0	+0.2	1.2	+0.2
10.0	+0.3	6.2	+0.3	5.5	+0.3
15.2	+0.4	10.6	+0.4	9.5	+0.4
21.5	+0.5	18.8	+0.5	15.8	+0.5
28.0	+0.6	28.0	+0.6	25.0	+0.6
60.0	+0.7	60.0	+0.7	39.5	+0.7
				60.0	+0.8

MODIFIED VELOCITY CORRECTIONS

OPR-448

There are three(3) tables of velocity corrections: Table #1 corrections are to be applied to Launch I soundings; Table #2 corrections are to be applied to Launch RA-4 soundings; Table #3 corrections are to be applied to the 17' Whaler soundings. Refer also to the Report on Corrections to Echo Soundings: OPR-448 which will be forwarded with this report.

Table I
Launch I

Depth*	Corr'n
4.5	+0.2
10.0	0.3
15.2	0.4
21.5	0.5
28.0	0.6
60.0	0.7

Table 2
RA-4

Depth*	Corr'n
3.0	+0.2
6.2	0.3
10.6	0.4
18.8	0.5
28.0	0.6
60.0	0.7

Table 3
17' Whaler

Depth*	Corr'n
1.2	+0.2
5.5	0.3
9.5	0.4
15.8	0.5
25.0	0.6
39.5	0.7
60.0	0.8

* Depth refers to the deepest depth to which the correction is applied.

TRA CORRECTION/TABLE INDICATOR TAPE

Initial Corrections

Table 1 DA-1			Table 2 RA-4			Table 3 17' Whaler		
Day	Time	Corr'n	Day	Time	Corr'n	Day	Time	Corr'n
246	0800	0.0	232	1200	+0.7	235	0800	0.0
247	0800	-0.1		124712	1.0		1358	-0.1
	1404	0.0		124718	0.1	236	0800	0.0
				1255	0.0	240	0800	-0.1
				132915	0.2		1312	0.0
				133430	0.6	250	0800	0.0
				133648	0.0	251	0800	0.0
				133730	0.1			
				1437	0.0			
				143830	0.3			
				144015	0.0			
				145830	0.7			
				150345	0.0			
				150715	0.5			
				150830	0.0			
				152415	0.6			
				1526	0.1			
			233	0800	0.0			
			234	0832	0.0			
				0907	-0.1			
				0942	0.0			
				1503	-0.1			
				1534	0.0			
				1559	-0.1			
				1602	-0.2			
				1607	-0.3			
				1613	-0.3			
			237	0800	0.0			
			239	0800	0.0			
			248	0800	0.0			
			249	0800	0.0			
			250	0800	0.0			
				1128	+0.1			
				1155	0.0			
			251	0800	-0.1			
				1320	0.0			
				1334	+ 0.1			
				1427	0.0			
				1522	-0.1			
			252	0800	0.0			
			254	0800	-0.2			

Table #1 uses Velocity #1
Table #2 uses Velocity #2
Table #3 uses Velocity #3

LIST OF OBSTRUCTIONS
DA-10-4-69

Feature	Position	Vol.	Page	Geographic Position	
Reef	4177	XIX (19)	13	56°44.4'	133°52.6'
Rock	4190 A	XIX (19)	18	56°44.3'	133°52.1'
Rock	2986	XVIII (18)	27	56°43.4'	133°52.7'
Rock	3183	XVII (16)	9	56°43.8'	133°55.3'
Rock	3229	XVII (16)	19	56°44.4'	133°55.6'
Rock	3306	XVII (16)	35	56°42.9'	133°53.3'
Rock	3307	XVII (16)	35	56°42.9'	133°53.4'
Rock	3308	XVII (16)	35	56°42.9'	133°53.5'
Rock	3309	XVII (16)	35	56°42.9'	133°53.5'
Rock	3310	XVII (16)	36	56°43.0'	133°53.5'
Reef	676	IV (4)	43	56°42.9'	133°55.0'

All other obstructions are listed in Volumes VIII & IX.
All obstructions are noted on the boat sheet.

APPROVAL SHEET

OPR 448

DA-10-4-69

KEKU STRAIT
Southeast Alaska

The field work on this survey was accomplished under my supervision.

Frequent inspections were made of the boat sheet and other records.

Ray E. Moses

Ray E. Moses
CDR USESSA
Commanding Officer
USC&GSS DAVIDSON

FRONT COPY

72.

31129

FORM # 1 FIG. 15

PARAMETERS FOR DIGITAL COMPUTING
POLYCONIC PROJECTION

(1) PROJECT NO. OPR 448
(2) H NO. 31129 (9082)
(3) FIELD NO. SHEET M
(4) REQUESTED BY LCDR K. WILLIAM VEEFER
(5) SHIP OR OFFICE DAULDSON
(6) DATE REQUIRED 5 MAY 1968 TO 4 OCT 1968
(7) VISUAL [X]
(8) ELECTRONIC [ ] (FILL OUT FORM #3)

(10) XKN (SP 5) DISTANCE FROM CMER TO EAST EDGE (NYX = 1) OR WEST EDGE (NYX = 0). 454415 METERS

(11) YKN (SP 241) DISTANCE FROM EQUATOR TO SOUTH EDGE OF SHEET. 6285829.5 METERS

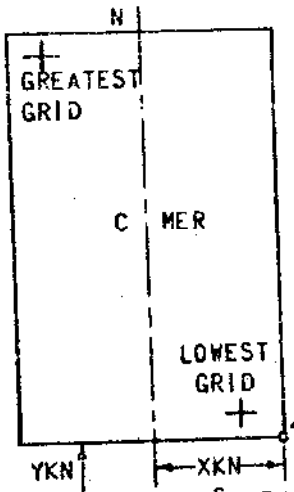
(12) CENTRAL MERIDIAN 133 ° 55 ' 15 " W

(13) SURVEY SCALE 1: 10,000

(14) SIZE OF SHEET (CHECK ONE) 36X54 [X] 42X60 [ ] OTHER [ ]

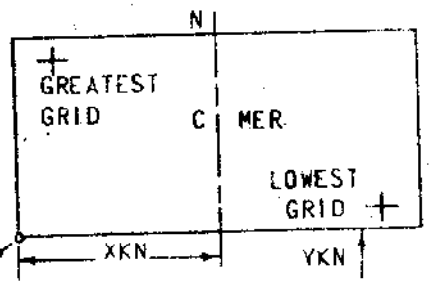
(15) NYX, ORIENTATION OF SHEET (CHECK ONE)

NYX = 1 [X]



FROM EQUATOR TO SOUTH EDGE OF SHEET

NYX = 0 [ ]



FROM EQUATOR TO SOUTH EDGE OF SHEET

(9) PLOTTER ORIGIN (CORNER OF SHEET)

LATITUDE 56 ° 41 ' 45 " N
LONGITUDE 133 ° 50 ' 48 " W

GRID LIMITS

(16) GREATEST LATITUDE 56 ° 49 ' 00 "
(17) LOWEST LATITUDE 56 ° 42 ' 00 "
(18) DIFFERENCE ° 7 ' 00 "

(PROJECTION LINE INTERVAL, PAGE 4 HYDRO MANUAL)

(19) 0 ' 30 "
(20) 14 YSN

(21) GREATEST LONGITUDE 133 ° 59 ' 30 "
(22) LOWEST LONGITUDE 133 ° 51 ' 00 "
(23) DIFFERENCE ° 8 ' 30 "

(24) 0 ' 30 "
(25) 17 XSN

LIST G.P. OF ALL STATIONS TO BE PLOTTED ON THIS PROJECTION ON THE BACK OF THIS FORM. (DEG., MIN., METERS)

Visual - hydro E

Triang. (Deg., Min, Sec)

(9082) 31129

H

Field No. OPR 448-"M"

Date 4/24/69

~~HYDRO II AND III PARAMETER CARDS~~

31129

PARAMETER CARD II

			1	2	3	4	5	6	7	8	9	10
Semi major axis of the earth	6,378,206.4	RDA	6	3	7	8	2	0	6	4	0	7
			11	12	13	14	15	16	17	18	19	20
X Constant- Distance from central meridian to origin of plotter SP 5	meters	XKN	4	5	4	4	0	7	0	0	6	4
			21	22	23	24	25	26	27	28	29	30
Y Constant - Distance from equator to origin of plotter SP 2/1	meters	YKN	6	2	8	5	8	2	9	8	0	7
			31	32	33	34	35	36	37	38	39	40
Central Meridian of Projection ✓	133 55 1500	CMR	4	8	2	1	1	5	0	6	0	6
			41	42	43	44	45	46	47	48	49	50
Plotter Scale/Survey Scale ✓	*10498.6876 1: 10000	SCA	1	0	4	9	8	6	8	8	0	1
												51
North/south axis of sheet - to correspond to (Y axis - 0) (X axis - 1) of plotter		NYX										1
												52
Feet/Fathom indicator	0 - feet 1 - fathom	FOF										1
								53	54	55	56	57
H Identification No.		JN						3	1	1	2	9
											58	59
		YR									6	9

FOF - 1

PARAMETER CARD III

		1	2	3	4	5	6	7	8	9	10
Lowest Lat. Intersection ✓	56 42 0000	YST	2	0	4	1	2	0	0	0	0	6
		11	12	13	14	15	16	17	18	19	20
Lowest Long. Intersection ✓	133 51 0000	XST	4	8	1	8	6	0	0	0	0	6
		21	22	23	24	25	26	27	28	29	30
Difference between Grid ✓	3000	DXY	3	0	0	0	0	0	0	0	0	2
										31	32
Interval (Long)		XSN								1	7
										33	34
Interval (Lat)		YSN								1	4

Computed DR VMM

Punched

Checked

Date

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-9082

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Cam Island										1
Keku Strait										2
Kuiu Island										3
Point Camden										4
Port Camden										5
CRANE CREEK GZM 3/15/79										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
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										21
										22
										23
										24
										25
										26
										27

PREPARED BY

Frank W. Kokott

CARTOGRAPHIC TECHNICIAN

APPROVED BY

CHIEF GEOGRAPHER

FORM C&GS-712
(10-67)

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

January 27, 1970

~~Nautical Charts Division~~: Pacific Marine Center

Plane of reference approved ~~in~~ for Tide tape printout

HYDROGRAPHIC SHEET 9082

Locality: Keku Strait, S.E. Alaska

~~Chief of Party~~: Year: 1969

Plane of reference is mean lower low water

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

Pup Island, Keku Strait, Alaska

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

13.3 feet

Remarks

J. M. Symons

Chief, Tides and Currents Branch

FORM C&GS-946
(REV. 11-65)
(PRESC. BY HYDROGRAPHIC MANUAL 20-2, 6-94, 7-13)

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

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-9082

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	BOAT SHEETS	1
DESCRIPTIVE REPORT	1	OVERLAYS	4& 2 (in report)

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES			[redacted]			
CAHIERS	1					
VOLUMES	20					
BOXES			1			

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				3629
POSITIONS CHECKED		3607		
POSITIONS REVISED		149		
DEPTH SOUNDINGS REVISED		720		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		2		
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		32	50	
JUNCTIONS		6	2	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		28	25	
SPECIAL ADJUSTMENTS			20	
ALL OTHER WORK		738	122	
TOTALS		804	219	

PRE-VERIFICATION BY	BEGINNING DATE	ENDING DATE
VERIFICATION BY A. E. Eichelberger	BEGINNING DATE 4/21/70	ENDING DATE 1/3/72
REVIEW BY George Myers	BEGINNING DATE 11-3-72	ENDING DATE 3-15-73

Smp Cartog 13 hrs 3/31/73

USCOMM-DC 36271-P65

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9082 FIELD NO. DA-10-4-69

Alaska - Keku Strait - Port Camden

SURVEYED: August 20, 1969 through September 12, 1969

SCALE: 1:10,000 PROJECT NO.: OPR-448

SOUNDINGS: Raytheon DE-723 Fathometers CONTROL: Sextant fixes on shore signals.

Chief of Party	R. E. Moses
Surveyed by	G. H. Endrud
	B. W. Fisher
	G. F. Tornberg
	J. D. Bossler
Protracted by	Gerber Digital Plotter
Soundings plotted by	Gerber Digital Plotter
Verified and inked by	A. E. Eichelberger (AMC)
Reviewed by	G. K. Myers, Jr.
	Date: March 15, 1973
Inspected by	R. H. Carstens

1. Description of the Area

This is a survey of the northern portion of Port Camden, an arm whose entrance leads into Keku Strait.

Generally, the bottom in the northern part of the survey is characterized by steep slopes alongshore which terminate in a gently sloping bottom at depths of about 25-fms. to 45-fms. In the southern part, several islands and shoals constrict the passage.

The predominate bottom characteristics in this area are green mud, sand, and shells. Rocky ledges extend intermittently with sand and pebble beaches along the foreshore.

2. Shoreline and Control

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

The shoreline originates with reviewed photogrammetric manuscripts T-12203-4 and T-12207-08 compiled from 1961, 1969 air photography and a 1970 field edit.

3. Hydrography

A. Depths at crossings are in good agreement. The usual depth curves are adequately delineated. In some cases, brown curves were drawn by the reviewer to emphasize lesser depths in areas of deeper soundings.

B. The development of bottom configuration and the investigation of least depths are considered adequate. However, additional development for least depth and verification by handlead of the following features would have been desirable:

Sdg. (fms.)	Lat.	Long.
6.3	56°43.20'	133°53.58
4.3	56°47.52'	133°~~56~~55.95'

4. Condition of the Survey

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

5. Junctions

An adequate junction was effected with H-9083 (1969) on the south. The junction on the north with H-9041 (1968) will be discussed in the review of that survey.

6. Comparison with Prior Surveys

H-2150 (1892) 1:40,000

The reconnaissance nature of this prior smaller scale survey provides only general information of this area. In general only unimportant differences are noted between prior and present depths. A few prior soundings appear erratic probably as a result of the methods of surveying. The present survey reveals the delineation of the bottom in much greater detail and is adequate to supersede the prior survey in the common area.

7. Comparison with Chart

Chart 8201 (Latest print date Janaury 1, 1972)

A. Hydrography

The charted hydrography originates with the previously discussed survey which requires no further consideration supplemented by depths from the boat sheet of the present survey (Bp 77802).

The present survey is adequate to supersede the charted information in the common area.

B. Aids to Navigation

There are no aids to navigation in the area of the present survey.

8. Compliance with Project Instructions

This survey adequately complies with the project instructions except as noted in item 3.

9. Additional Field Work

This is a very 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-9082

Items for Future Pre-Survey Review

This is a survey of the northern part of Port Camden. A comparison with the only prior survey H-2150 (1892) falling within the area of the present survey reveals no noteworthy changes in the bottom.

Position index - lat. 564, long. 1340
Bottom change index - 2
Use change index - 1
Resurvey cycle - 50 yrs.

Reg. No. 9082

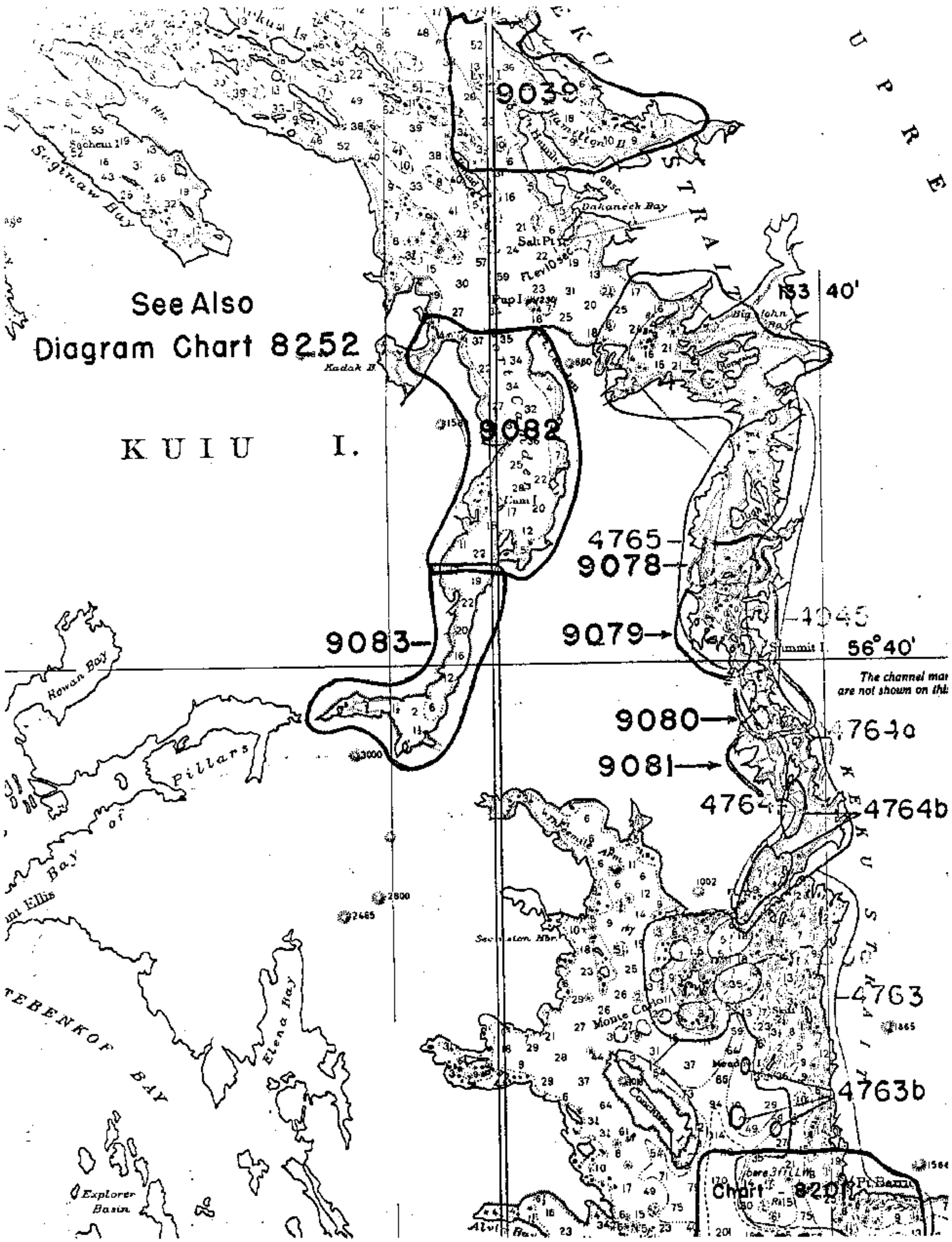
The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

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:



See Also
Diagram Chart 8252
KUIU I.
9039
9082
9083
4765
9078
9079
4045
56°40'
133 40'
9080
4764a
9081
4764
4764b
4763
4763b
Chart 8201
Kadak B.
Dakaneek Bay
Big John Bay
Summit I.
Rowan Bay
Bay of Pillars
Saginaw Bay
Elena Bay
Explorer Basin
Monte Carlo I.
Pt. Baker
The channel mar
are not shown on thi

(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9082

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
8201	8-26-72	James Graham	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via Basic
			Drawing No. 13 Appld misc critical corrections only from Smooth Sheet
8252	10/31/72	E. Frey	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. Appld misc critical corrections only from smooth sheet via cht 8201 = 13
8175	6-26-73	J. STUART	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			~~Drawing No. 1~~
8175	1/21/74	R.D. DAVIS	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 1
~~8252~~	~~1/24/74~~	~~R.D. KANIS~~	
8252	11/26/74	M.D. KANIS	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. Thru Chart 8175 before Review
8201	10/17/75	Raitor	~~Full~~ Part ~~Before~~ After ~~Verification Review Inspection~~ INSPECTED Signed Via
			Drawing No. 25 Appld thru 8175 and 8252
17320	11/1/90	Dr Hook	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 24 APPLD THRU 17368
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8852 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8558-P63