

9483

Diag. Cht. No. 8201-3

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey HYDROGRAPHIC
Field No. DA-10-1-74
Office No..... H-9483

LOCALITY
State ALASKA
General Locality UPPER DUNCAN CANAL
Locality INDIAN PT. TO TOWERS ARM

.....
19 74
.....
CHIEF OF PARTY
M. H. FLEMING
.....

LIBRARY & ARCHIVES
DATE 6-23-76

9483

Area 6
Chart:
8201

HYDROGRAPHIC TITLE SHEET

H-9483

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-10-1-74

State Southwest Alaska

General locality Upper Duncan Canal

Locality Indian Pt. to Towers ^{Arm} Bay

Scale 1/10,000 Date of survey October 1974

Instructions dated 14 June 1974 Project No. 448

Vessel NOAA Ship DAVIDSON CSS-31 Launch DA-2

Chief of party Michael H. Fleming, Cdr., Cmdg., NOAA

Surveyed by Lt. Hopkins, Lt(jg) Eilers, Oswald, Mercer; Ens. Sarb, Tennesen

Soundings taken by echo sounder, ~~XXXXXX~~ Ross 5000 Fineline Serial #1053

Graphic record scaled by Ship's Personnel

Graphic record checked by Ship's Personnel

Positions verified Thelma O. Jones Automated plot by PMC/Harris Plotter ^{Xynerics}

Soundings verified Thelma O. Jones

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

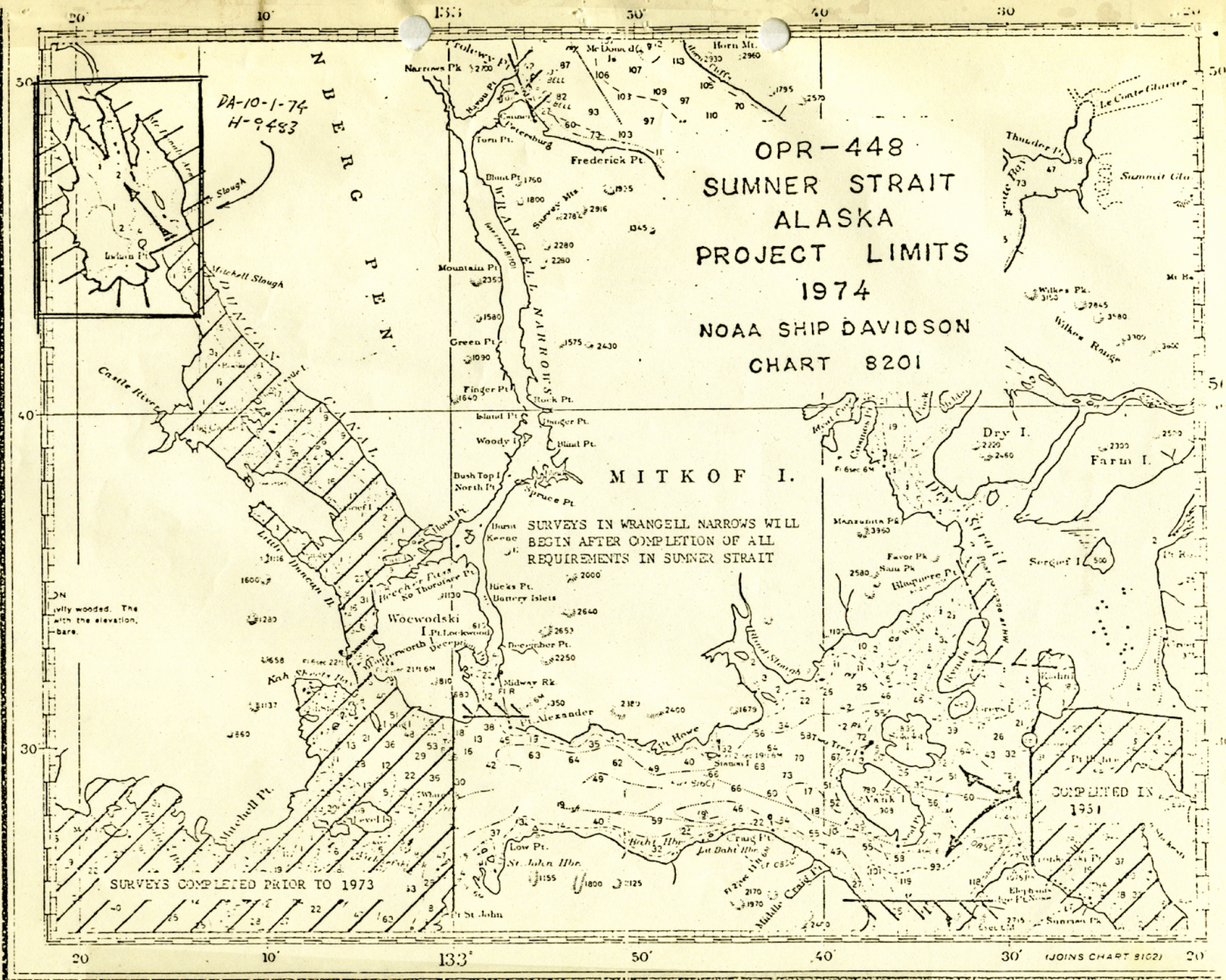
REMARKS: Survey Time Zone 0000 GMT

Mean Survey Longitude 133°19' West

This boat sheet is complete as defined by approved boat sheet layout.

There was no descriptive report available for prior surveys.

*Applied to map 8/74
1/78*



DA-10-1-74
H-9483

OPR-448
SUMNER STRAIT
ALASKA
PROJECT LIMITS
1974
NOAA SHIP DAVIDSON
CHART 8201

SURVEYS IN WRANGELL NARROWS WILL
BEGIN AFTER COMPLETION OF ALL
REQUIREMENTS IN SUMNER STRAIT

COMPLETED IN
1951

SURVEYS COMPLETED PRIOR TO 1973

ON
lively wooded. The
with the elevation,
bars.

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* Hydro I, II, and III Parameter Cards

* *This data filed with field records.*

A PROJECT

This survey was completed under Project Instructions OPR-448-DA-74 dated 14 June 74. ✓

B AREA SURVEYED

The area surveyed is Upper Duncan Canal, Alaska. The survey extends ~~throughout~~^{into} the northern area of Duncan Canal, north from Indian Point. The survey was conducted during the month of October 1974. ✓

C SOUNDING VESSELS

Only one vessel was used on this survey with the following color code: ✓

Vessel: DA-2 (WZ3040) Color: Blue

D SOUNDING EQUIPMENT

The following fathometers were used on this survey:

Vessel: DA-2 Type: Ross 5000 Fineline Serial #1053

The DA-2 Ross fathometer was used exclusively for hydrography and bottom samples in depths ranging from 0 to 20 fathoms.

DA-2 uses the digitizing sounding systems which is not subject to fine arc, initial or phase error. Digital soundings were accepted as being correct unless suspected, on the basis of fathogram scanning, of being reflections from mid-water objects, or side echos from a steeply sloping bottom. The analog initial was maintained at zero, and phase checks were made twice per day. The Ross system performed very well for this survey. ✓

beat sheet
All soundings are in fathoms and tenths of fathoms and reduced for predicted tides at Duncan Canal referenced to the Ketchikan tide gage. TRA correctors were applied to inked soundings on the field smooth sounding overlay.

Echo sounder correctors were determined from daily bar checks and two salinity/temperature (Nansen) casts. For abstracts of TRA TC/TI and velocity correctors see report on "Correctors to Echo Sounders".

E BOAT SHEETS

The projections of the field boat sheets were constructed by Processing Division, Pacific Marine Center. ✓

The smooth ~~boat~~ sheets will be constructed and plotted by Processing Division, Pacific Marine Center.

F STATION CONTROL

Existing triangulation stations were recovered and additional stations established. These stations were located by second and third order triangulation methods. Refer to Signal List in the Appendix and "Horizontal Control Report Duncan Canal OPR-448-DA-74". ✓

G DATUM

The North American 1927 Datum was used for this survey. ✓

H POSITION CONTROL

The MOTOROLA MINI-RANGER III SYSTEM was used to control the hydrography on this survey. Four stations were occupied by MINI-RANGER transponders. For station pairs and station locations see the Abstract of Daily Electronic Correctors and Signal List respectively.

Calibrations were conducted twice on each station pair each day except where short durations of hydrography or bad weather allowed only one calibration. Calibrations were made by using three-point sextant fixes. The ranges to the fixed position were then calculated using the Wang Geodetic Inverse Program, and the correctors then determined. All computations for the correctors are available on the original records in the raw data printouts. ✓

All electronic correctors were determined by averaging pre- and post-hydro calibrations. They are abstracted in the appendix. Correctors were not applied to the positions plotted on the field boat sheets.

I SHORELINE

Photogrametric support was available for this survey. The shore- ✓

line was subsequently verified by Field Edit methods and inked on the boatsheet in black. All shoreline for this boatsheet was compiled from T-sheets numbers: 13038, 13039, 13040, 13041, 13042, and 13043.

J CROSSLINES

Crosslines represent 10.3% of total mileage run. A slight discrepancy in crossline sounding agreement was discovered when the predicted tides were used for reducing soundings. Differences of as much as one half fathom were noted when using the predicted tides for sounding reduction. The actual tides observed at Castle Island were then applied to the soundings at random times and an excellent agreement to within 0.1 fathom resulted. The difference between the predicted tides and the actual tides was probably due to the inclement weather and strong winds observed during the days that hydrography was conducted. This combined with the long fetch of Duncan Canal could easily explain a large difference between predicted and actual tides. For the predicted versus actual tide sounding reducer calculations see the "Smooth Data Printout". ✓

K JUNCTIONS

This survey junctions with ^{Contemporary}~~prior~~ survey H-9343, 1/10,000, 1972. Selected soundings from this survey are inked on the field smooth sounding overlay in BLUE. This survey junctions quite well with H-9343. 85% of the soundings are within 0.1 fathoms of agreement, 95% of the soundings agree within 0.2 fathoms and the last 5% agree within 0.5 fathoms the difference explainable to steep sloping bottom areas. ✓

L COMPARISON WITH CHART

The largest scale chart of the survey area is ETOLIN ISLAND to MIDWAY ISLANDS, including SUMNER STRAIT, #17630 (C&GS 8201), 19th ed., dated March 2, 1974, 1:217828. ✓

A random sampling of soundings show this survey agreeing within 2 fathoms of the charted depth.

M COMPARISON WITH PRIOR SURVEYS

This survey was preceded by survey H-1804, 1/80,000, 1887. Selected soundings from this survey were inked on the smooth sounding overlay in GREEN. ^{boat sheet} ✓

This survey compares quite well. Depth discrepancies vary up to several fathoms. The differences may be attributed to different surveying techniques and different sounding equipment plus any bottom changes due to the long time difference.

N ADEQUACY OF THE SURVEY

This survey is complete and adequate to supersede prior surveys for charting.

All fathograms and field survey records were scanned and checked for peaks and deeps with appropriate changes to original records.

O AIDS TO NAVIGATION

There are two ^{landmarks used as} aids to navigation on this survey. Two Tanks (fixed aids), one located at the FAA site on Indian Point, and the other at the RCA Communications Pier. The fixed aids were located by means of sextant intersections. Refer to Appendix "Non-Floating Aids or Landmarks for Charts" and to the "Horizontal Control Report Duncan Canal".

P STATISTICS

Total Number of Positions	55 7 8
Sounding Lines	66.3 nm
Survey Area	7.5 sq. miles

Q REFERENCES TO REPORTS

<u>title</u>	<u>date submitted</u>
HORIZONTAL CONTROL REPORT Duncan Canal OPR-448-DA-74	December 1974
FIELD EDIT REPORT OPR-448-DA-74	December 1974
CORRECTIONS to ECHO SOUNDERS REPORT OPR-448-DA-74	December 1974

APPROVAL SHEET

This survey was performed under my command with frequent examinations of the field smooth sheet and all field records. This survey is complete as submitted.

Submitted by

David J. Tennesen

David J. Tennesen
Ensign, NOAA

Approved by

Michael H. Fleming

Michael H. Fleming Cdr.
Commanding Officer
NOAA Ship DAVIDSON CSS-31

POSITION ABSTRACT
H-9483

DA-10-1-74

DAY	POSITION NUMBER	CRTL	S1---M---S2	REMARKS	BASELINE
289	001-094	04	100---118	Hydro	A+
	095-166	04	118---109	Hydro	A+
290	169-384*	04	118---109	Hydro	A+
291	385-413	04	100---118	Hydro	A+
292	414-537**	04	100---118	Hydro	A+
	538-545	04	118---109	Hydro	A+
293	546-552	04	118---109	Hydro	A+
292	701-703	04	100---118	Bottom Samples	A+
	704-705	04	118---109	Bottom Samples	A+
	706	04	100---118	Bottom Samples	A+
	707	04	118---109	Bottom Samples	A+

* No position numbers 168, ¹⁶⁷~~169~~.

** No position numbers 518, 519, 520, 521.

STATION LIST

H-9483

DUNCAN CANAL

OPR-448, 1974

STA	LATITUDE	LONGITUDE	CRT	ELEV	F. KHz	NAME	SOURCE	SHEET
009	56 44 12.331	133 12 44.566	139	0000	000000	Ohmer, 1959	*	
010 ✓	56 44 54.982	133 15 00.970	139	0000	000000	RNG, Petersberg PSG, 1959	*	
012	56 41 27.811	133 12 01.329	139	0000	000000	Rook, 1959	*	
013	56 42 28.550	133 12 55.406	139	0000	000000	Carl, 1959	*	
100 ✓	56 45 02.595	133 14 51.967	254	0000	149835	Styx, 1974	**	T-13041
103 ✓	56 45 31.341	133 13 25.419	254	0000	149835	Gone, 1974	**	T-13041
105 ✓	56 45 58.257	133 14 45.642	253	0000	000000		***	T-13041
107	56 46 27.737	133 15 07.830	253	0000	000000		***	T-13040
109 ✓	56 47 00.148	133 16 07.691	254	0000	149835	Dunk, 1966	*	
111	56 47 45.388	133 17 51.885	253	0000	000000		***	T-13040
112 ✓	56 44 33.364	133 18 01.941	253	0000	000000		***	T-13042
114 ✓	56 45 09.408	133 19 04.354	253	0000	000000		***	T-13040
116	56 46 19.494	133 20 08.418	253	0000	000000		***	T-13040
118 ✓	56 46 52.100	133 19 46.564	254	0000	149835	Brenk, 1974	**	
120	56 48 00.873	133 19 44.485	253	0000	000000		***	T-13040

* These stations were derived from the Horizontal Control Data, Alaska 56133 1, dated November 1972.

** These stations were determined by triangulation carried out by DAVIDSON this season. Refer to the Horizontal Control Report, OPR-448, Duncan Canal, 1974. *Shown as topo signal on S.S.*

*** These stations were located by Field Photogrammetric Techniques conducted by DAVIDSON during this project.

CONTROL FOR: C09483

DATE OF LISTING: 03-12-76

GEOGRAPHIC POSITIONS IN DEGREES, MINUTES, AND METERS

RECORD NUMBER	YR	STA NUM	CARTO CODE	LABEL ANGLE	VECTOR DISP.	PLOT CODE	NAME	STATION HEIGHT	FREQUENCY (KHZ)	LATITUDE -(S)	LONGITUDE -(E)
1	74	10	139	253.00	10.30	0	RNG PETERSBURG PSG 1959	0.0	0.00	56 44 1700.666	133 15 16.486
2	74	100	254	209.00	7.20	0	STYX 1974	0.0	149835.00	56 45 80.424	133 14 883.204
3	74	103	243	317.00	1.40	0	GONE 1974	0.0	0.00	56 45 969.425	133 13 431.909
4	74	105	253	106.00	7.10	0		0.0	0.00	56 45 1802.130	133 14 775.310
5	74	109	254	109.00	13.20	0	DUNK 1966	0.0	149835.00	56 47 4.640	133 16 130.574
6	74	112	253	168.00	1.50	0		0.0	0.00	56 44 1031.906	133 18 32.976
7	74	114	253	201.00	1.40	0		0.0	0.00	56 45 291.075	133 19 73.922
8	74	118	254	155.00	2.40	0	BRENK 1974	0.0	149835.00	56 46 1611.589	133 19 790.624

FILE CERTIFIED CORRECT FOR PLOTTING BY:..... DATE:.....
EOF..

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE REVISED~~
~~TO BE DELETED~~ } STRIKE OUT TWO

OCTOBER, 1974

I recommend that the following objects which have (*have not*) been inspected from seaward to determine their value as landmarks be charted on (*deleted from*) the charts indicated.

The positions given have been checked after listing by _____

M.H. FLEMING CDR NOAA

Chief of Party.

STATE	ALASKA	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
					LATITUDE*		LONGITUDE*								DATUM
					°	'	°	'							
					31 " 156 D.M. METERS		"								
		TANK	THIS IS A FUEL TANK AT THE RCA MICRO-WAVE FACILITY. THE TANK IS GREY, 35 FEET IN DIAMETER, 60 FEET HIGH AND SLIGHTLY POINTED ON TOP.		31.156 963.7	56 45	133 13	22.694 633.6	NAD 1927	SEXTANT	16 OCT 74	X		8201	
		TANK	THIS IS A FUEL TANK AT THE FAA LOW FREQ. SITE ON INDIAN POINT, 10 FEET IN DIAMETER, 20 FEET HIGH, SLIGHTLY POINTED ON TOP AND PAINTED SILVER.		2.006 62.1	56 45	133 14	52.270 888.3	NAD 1927	SEXTANT T-130401974	17 OCT 74	X		8201	

Copy to Hdq of C.G, Wash D.C.
Copy to 17th C.G
DEC 21 1976 AEL

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

VELOCITY CORRECTIONS TABLE #1

OPR- 448-DA-74
DA-10-1-74
H-9483

31328974

000200 0 0000 0001 000^{H/T} 000000 000000

FIELD TIDE NOTE

OPR-448-DA-74

DUNCAN CANAL, ALASKA

CONTROL GAGE: Ketchikan, Alaska
PREDICTED TIDES: Castle Island, Duncan Canal
TIME OF ALL DATA: 0000 GMT
LOCAL TIME: Pacific Standard Time, +8 hours on GMT

Predicted tides of Castle Island, Duncan Canal, were applied as tide correctors to soundings. These tides were obtained from the PDP8/e computer aboard the NOAA Ship FAIRWEATHER, using program AM500.

There is a total of two (2) tide gages operating in Duncan Canal.

SOUTH CASTLE ISLAND

N 56°38.6'	Bristol Bubbler	This bubbler began operation on 9 October 74, and good traces have been recorded at this gage. No serious problems have occurred at this gage.
133°09.3' W	S/N 73A233	

OHMER SLOUGH

N 56°45.5'	Bristol Bubbler	This bubbler began operation on 9 October 74, and good traces have been recorded at this gage. On 10 Oct 74 the gage orifice was moved into deeper water and the gage relocated on the top of the USAF communications pier, Duncan Canal. No further adjustments were required at this gage.
133°13.5' W	S/N 73A234	

LEVELS

The staff at SOUTH CASTLE ISLAND was leveled to four existing benchmarks and one new benchmark. The staff at OHMER SLOUGH was leveled to five new benchmarks established at that station. The four existing marks at SOUTH CASTLE ISLAND were all recovered in good condition. A summary of before- and after-leveling and results are as follows:

SOUTH CASTLE ISLAND

ELEVATION OF BENCHMARK ABOVE ZERO OF TIDE STAFF

	<u>9 OCT 74</u>	<u>19 OCT 74</u>	<u>DIFFERENCE</u>
BM #1	26.744 ft	26.745 ft	+0.001 ft
BM #2	24.151 ft	24.158 ft	+0.007 ft
BM #3	24.527 ft	24.531 ft	+0.004 ft
BM #4	24.922 ft	24.931 ft	+0.009 ft
BM #5	27.426 ft	27.424 ft	-0.002 ft

A slight settling of the staff might have occurred here if there was any at all (a positive increase in the height of the benchmark indicates a settling of the staff - average here +0.004 ft).

OHMER SLOUGH

ELEVATION OF BENCHMARK ABOVE ZERO OF THE TIDE STAFF

	<u>9 OCT 74</u>	<u>19 OCT 74</u>	<u>DIFFERENCE</u>
BM #1	13.634	13.647	+0.013
BM #2	13.419	13.435	+0.016
BM #3	14.326	14.341	+0.015
BM #4	12.229	12.245	+0.016
BM #5	12.298	12.300	+0.002

There appears to have been some slight settling of the staff at Ohmer Slough; average here: +0.012 ft.

RECOMMENDATIONS

Ohmer Slough tides be used for obtaining tide reducers on sheet (Field No.) DA-10-1-74, DUNCAN CANAL.

November 13, 1975

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Pacific Marine Center:

Hourly heights are approved for Form 362

Tide Station Used (NOAA Form 77-12): Ohmer Slough

Period: October 16 - 20, 1974

HYDROGRAPHIC SHEET: H-9483

OPR: 448

Locality: Duncan Canal, Alaska

Plane of reference (mean lower low water): 4.1 ft.

Height of Mean High Water above Plane of Reference: 15.4 ft.

Remarks: Zone direct

James R. Hillband

1901 Chief, Tides Branch

Survey No.

H-9483

Name on Survey

	On Chart No.	On previous No.	On U.S. Coast Survey Charts	From local information	On local maps	P.O. Guide or Rand McNally	U.S. Limited			
	A	B	C	D	E	F	G	H	K	
DUNCAN CANAL										1
DUNCAN CREEK										2
GOOSE POINT										3
INDIAN POINT										4
KUPREANOF ISLAND										5
LINDENBERG PENINSULA										6
MCDONALD ARM										7
OHMER SLOUGH										8
TAYLOR CREEK										9
TOWERS BAY ARM										10
										11
										12
										13
NOTE: GOOSE POINT AND DUNCAN CREEK ARE FROM USGS PETERSBURG D-4										14
QUADRANGLE. TAYLOR CREEK IS FROM THE USGS PETERSBURG D-5										15
QUADRANGLE.										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26

APPROVED

Chas. E. Harrington

STAFF GEOGRAPHER-051X2

9 Nov. 1976

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. H-9483

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET & 2-Overlays		1	BOAT SHEETS		2	
DESCRIPTIVE REPORT		1	OVERLAYS		4	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES	1 Filed with Printouts					
CAHIERS						
VOLUMES						
BOXES			1-Containing Fathograms & P/O.			
T-SHEET PRINTS (List) T-13037 thru T-13039 T-13040, T-13041, T-13042, T-13043						
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				558
POSITIONS CHECKED		553		
POSITIONS REVISED		0		
DEPTH SOUNDINGS REVISED		12		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		1		
	TIME (MANHOURS)			
Verification of Control		8		
Verification of Positions		37		
VERIFICATION OF SOUNDINGS		74		
Smooth Sheet		68		
ALL OTHER WORK		30		
TOTALS		217	HIT 8	
PRE-VERIFICATION BY <i>A.E. Eichelberger</i> A.E. Eichelberger	BEGINNING DATE	3/16/75	ENDING DATE	3/17/75
VERIFICATION BY Thelma Jones	BEGINNING DATE	7/16/75	ENDING DATE	5/26/76
REVIEW BY	BEGINNING DATE		ENDING DATE	

Q.C. *Robert W. Derkazanian* 24 hrs. 7-28-76
Constantine S 11/2/76

R. Sanocki 4 hrs. 11/22/76
U.S. G.P.O. 1972-769-562/439 REG.#6

REGISTR. NO. H-9483

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 REQUIRED _____ INITIALS _____

REMARKS:

*Pos 34301
34302*

REGISTRY NO. _____

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE _____ TIME REQUIRED _____ INITIALS _____

REMARKS:

H-9483

Information for Future Presurvey Reviews

The area covered by the survey is considered to be relatively stable. The bottom is considered adequately developed in navigable areas.

<u>Position Index</u>		<u>Bottom Change Index</u>	<u>Use Index</u>	<u>Resurvey Cycle</u>
<u>Lat.</u>	<u>Long.</u>			
564	1332	2	1	50 years

VERIFIER'S REPORT

DA-10-1-74

H-9483

This survey was verified and plotted at the Pacific Marine Center, Seattle, Washington. Information relating to this survey is provided as specified in Chapter 6 of the Provisional Hydrographic Manual.

I. INTRODUCTION

Few problems were encountered during the verification of this survey.

II. CONTROL AND SHORELINE

Shoreline shown in ink originates from unreviewed Class I Photogrammetric Manuscripts T-13040 to T-13043, compiled from photos taken in June 1972. Field edit was accomplished in October 1974. The difference between rock elevations on the smooth sheet and the T-sheets is due to the application of actual tides to the elevations on the smooth sheet. Horizontal Control is adequately described in Paragraph F of the Descriptive Report.

T-13043 Field edited in Sept-Nov 72.

III. HYDROGRAPHY

The basic hydrography incorporated in this survey was adequate to delineate the bottom configuration and to determine least depths. There were no major difficulties encountered in the verification of the main scheme soundings and the crosslines were in excellent agreement, generally within 0.2 of a fathom. There are seven bottom samples in this survey.

IV. CONDITION OF SURVEY

The smooth sheet, overlays, hydrographic records, and reports are adequate and conform to the requirements of the Provisional Hydrographic Manual.

V. JUNCTIONS

This survey junctions with contemporary survey H-9343, 1:10,000 (1972) to the south. Junction curves and soundings were in excellent agreement.

VI. COMPARISON WITH PRIOR SURVEY

This survey compares quite well with prior survey H-1804, 1:80,000 (1887). There are some discrepancies which is probably due to the long time span between surveys and the difference in surveying techniques. The copy

of H-1809, 1:20,000 (1887) had no projection, thus making a comparison very difficult. No soundings from the prior surveys were carried forward. This survey is adequate to supersede all prior surveys of the area.

VII. COMPARISON WITH CHART

Comparison was made with chart number 17630 (C&GS 8201) Etolin Island to Midway Islands, 1:217,828, 19th Edition, dated 2 March 1974. The agreement of soundings was good.

The present survey should supersede charted hydrography in the area.

There are no aids to navigation incorporated in this survey, but there are two landmarks used as aids to navigation; a tank at the RCA Communications Pier, and a tank at the FAA site on Indian Point.

VIII. COMPLIANCE WITH INSTRUCTIONS

This survey adequately complies with the project instructions, dated 14 June 1974.

IX. ADDITIONAL FIELD WORK

This is a good navigable area survey and is adequate to supersede charted information in the area. No additional field work is recommended.

X. NOTES TO THE COMPILER

accepted as correct, Chief Geog. Names Div. 7/76
There are two waterways identified as Duncan Creek on the T-sheets. One on T-13041, north of Ohmer Slough and one on T-13043, north of Mitchell Slough. After checking the USGS quadrangle, it is the verifier's opinion that the correct Duncan Creek is north of Ohmer Slough.

This survey was verified by Thelma Jones, Cartographic Technician, a verifier trainee, under my supervision.

Respectfully submitted,

A. E. Eichelberger

A. E. Eichelberger
Cartographic Technician
May 28, 1976

Examined and approved,

James S. Green
Chief, Verification Branch



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY, Pacific Marine Center
1801 Fairview Ave. E., Seattle, WA 98102

Date: 11 June 1976

To: H. R. Lippold, Jr., RADM
Director, PMC

From: Donald E. Nortrup, LCDR
Chief, Processing Division

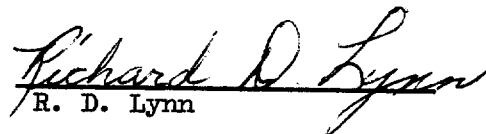
Subject: PMC Hydrographic Inspection Team Report, H-9483

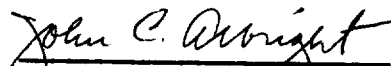
This survey is a Navigable Area Survey of the head of Duncan Canal, AK conducted by NOAA Ship DAVIDSON in 1974 in compliance with Project Instructions OPR-448-DA-74, dated 14 June 1974. Several minor cartographic and report modifications have been made as a result of the inspection process.


This survey is a small, straight-forward survey. No significant problems were encountered in its verification. The inspection has no comments to add to the foregoing reports.

The inspection team finds H-9483 to be a good Navigable Area Survey, complete and adequate for charting purposes and to supersede the prior survey. Administrative approval is recommended.


D. E. Nortrup, LCDR

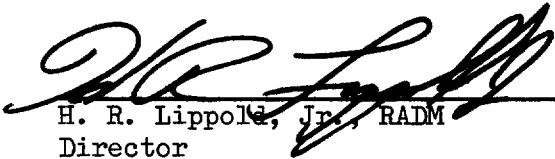

R. D. Lynn


J. C. Albright, LCDR


D. R. Seidel, LCDR

ADMINISTRATIVE APPROVAL
H-9483

The smooth sheet and reports of this survey have been reviewed and the survey is complete, within the navigable area concept, and adequate to supersede the prior survey.



H. R. Lippold, Jr., RADM
Director
Pacific Marine Center

6/14/76
Date



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Rockville, Md. 20852

C352

July 29, 1976

TO: *A. J. Patrick*
A. J. Patrick
Chief, Marine Surveys Division

THRU: Chief, Quality Control Branch

FROM: R. W. DerKazarian *Robert W. DerKazarian*
Quality Evaluator

SUBJECT: Quality Control Report for H-9483 (1974), Indian Point to
Towers Arm, Upper Duncan Canal, Alaska

Survey H-9483 was inspected with respect to data acquisition, development of least depths and bottom configuration, adequacy of junctions and sounding line crossings, shoreline transfer, cartographic presentation, smooth plotting, verification, and review. In general, it was found to conform to the National Ocean Survey standards and requirements except as follows:

1. It would have been desirable to have recorded detached positions in volumes.
2. The foul limit line provided by the hydrographer was not used in lieu of the shoreline manuscript position.
3. The large smooth sheet size is not in accordance with section 1.2.4 of the Provisional Hydrographic Manual. Fifteen inches could have been trimmed off the top end of the sheet.
4. Two features shown on both the field sheet and the smooth sheet were referenced to MHHW; the correct datum to use is mean high water.
5. The Verifier's Report did not include a statement in the "Comparison with Chart" as to the source of the charted information, which is H-1809 (1887). The verifier should determine the source of all charted information in the area of the present survey, if possible. Generally, most of the charted hydrography will have originated with the prior surveys discussed under "Comparison with Prior Surveys" and will have been superseded by a statement in that section of the report. If such is true, a reference to that statement should be made here. Items for which a source cannot be determined by the verifier and have not been verified or disproved by the present survey should be so noted for disposition by Headquarters personnel.



H-9483

2

With the above exceptions, this survey is considered to be complete and adequate to conform to the standards of the National Ocean Survey.

cc:
C351



4316 W.D. & Supp.

4037
 8.
 (CHANNEL 40370
 SWEEP) 4955
 F.E.No.4-1958
 W.D.

9483

9343

9333

F.E.No.4
 (1965)

9333

9332

Vegetation
 The land is generally heavily wooded. The woods decrease in density with the elevation, leaving the higher elevations bare.

Chart - 8201

133° 20'

(30)

