

T-13045

T-13045

NOAA FORM 76-35

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

## DESCRIPTIVE REPORT

Type of Survey ..... Shoreline  
Job No. .... PH-6627 ..... Map No. T-13045...  
Classification No. Final Edition No. .... 1 .....  
Field Edited Map

### LOCALITY

State ..... Alaska  
General Locality ..... Duncan Canal  
Locality ..... Big Castle Island

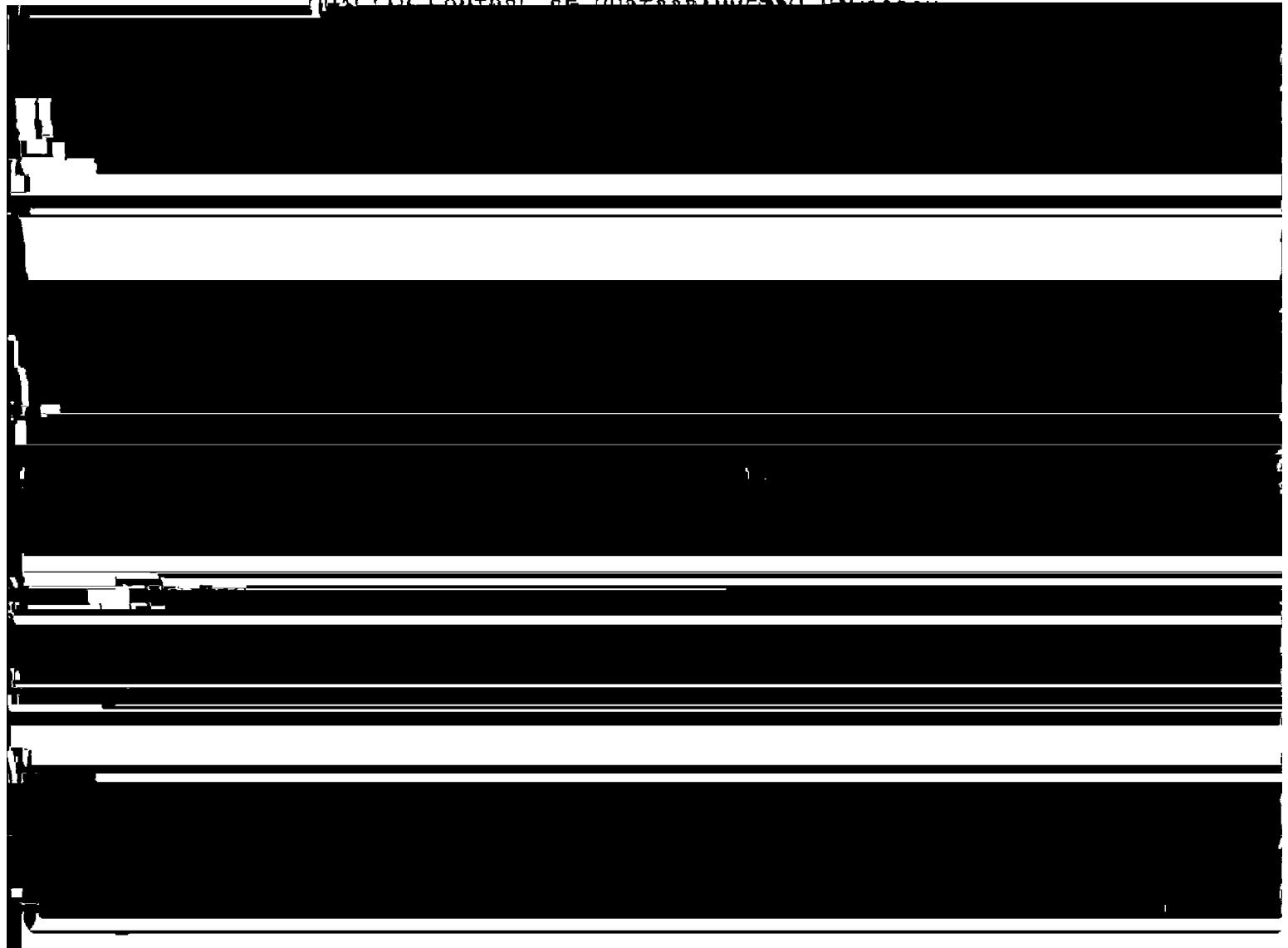
1966 TO 1972

### REGISTRY IN ARCHIVES

DATE .....

MAP NOT INSPECTED BY

QUALITY CONTROL OF PHOTOGRAPHIC REPRODUCTION



NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY		SURVEY <del>NR</del> T-13045					
DESCRIPTIVE REPORT - DATA RECORD				<input checked="" type="checkbox"/> ORIGINAL		MAP EDITION NO. (1)					
				<input type="checkbox"/> RESURVEY		MAP CLASS Final					
				<input type="checkbox"/> REVISED		JOB PH. 6627					
PHOTOGRAMMETRIC OFFICE				LAST PRECEDING MAP EDITION							
Coastal Mapping Division				TYPE OF SURVEY		JOB PH. _____					
Atlantic Marine Center, Norfolk, Virginia				<input type="checkbox"/> ORIGINAL		MAP CLASS _____					
OFFICER-IN-CHARGE				<input type="checkbox"/> RESURVEY		SURVEY DATES:					
Jeffrey G. Carlen, Cdr.				<input type="checkbox"/> REVISED		19__ TO 19__					
I. INSTRUCTIONS DATED											
1. OFFICE				2. FIELD							

[REDACTED]

NOAA FORM 76-36B  
(3-72)T-13045  
COMPILATION SOURCESU. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Focal Length 152.71 mm Wild RC-8		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		<input checked="" type="checkbox"/> (C) COLOR <input type="checkbox"/> (P) PANCHROMATIC <input type="checkbox"/> (I) INFRARED		ZONE Pacific	
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				MERIDIAN 120° W	
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT					
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
72 E(C) 3922	6/22/72	13:37	1:30,000	9.0 feet above MLLW	
72 E(C) 3839 and 3840	6/22/72	12:50	1:30,000	10.2 feet above MLLW	

REMARKS

## 2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high-water line was delineated from the photography listed above.

## 3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

No mean low-water line was compiled on this manuscript.

## 4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

## 5. FINAL JUNCTIONS

NORTH T-13043	EAST T-13046	SOUTH T-13048	WEST T-13044
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REMARKS

NOAA FORM 76-36C  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

T-13045

## HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. H. Houlder	5/72
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	NA NA NA
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	None None None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION BY	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

None

NOAA FORM 76-36C  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

T-13045

## HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	G. C. Saladin	10/72
2. HORIZONTAL CONTROL	RECOVERED BY G. C. Saladin	10/72
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY NA	
	ESTABLISHED BY NA	
	PRE-MARKED OR IDENTIFIED BY NA	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION	
	<input type="checkbox"/> COMPLETE	
	<input type="checkbox"/> SPECIFIC NAMES ONLY BY	
	<input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY NA	

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

1 Field Edit Ozalid, T-13045

NOAA FORM 76-36D  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONT-13045  
RECORD OF SURVEY USE

## I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete, pending field edit.	9/72	Class III Manuscript Superseded	9/72	9/72
Field edit applied, compilation complete.	11/73	Class I Manuscript	6/75	None
Final Review	7/80	Final Manuscript	12/81	

II. LANDMARKS AND AIDS TO NAVIGATION None

## 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: None3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

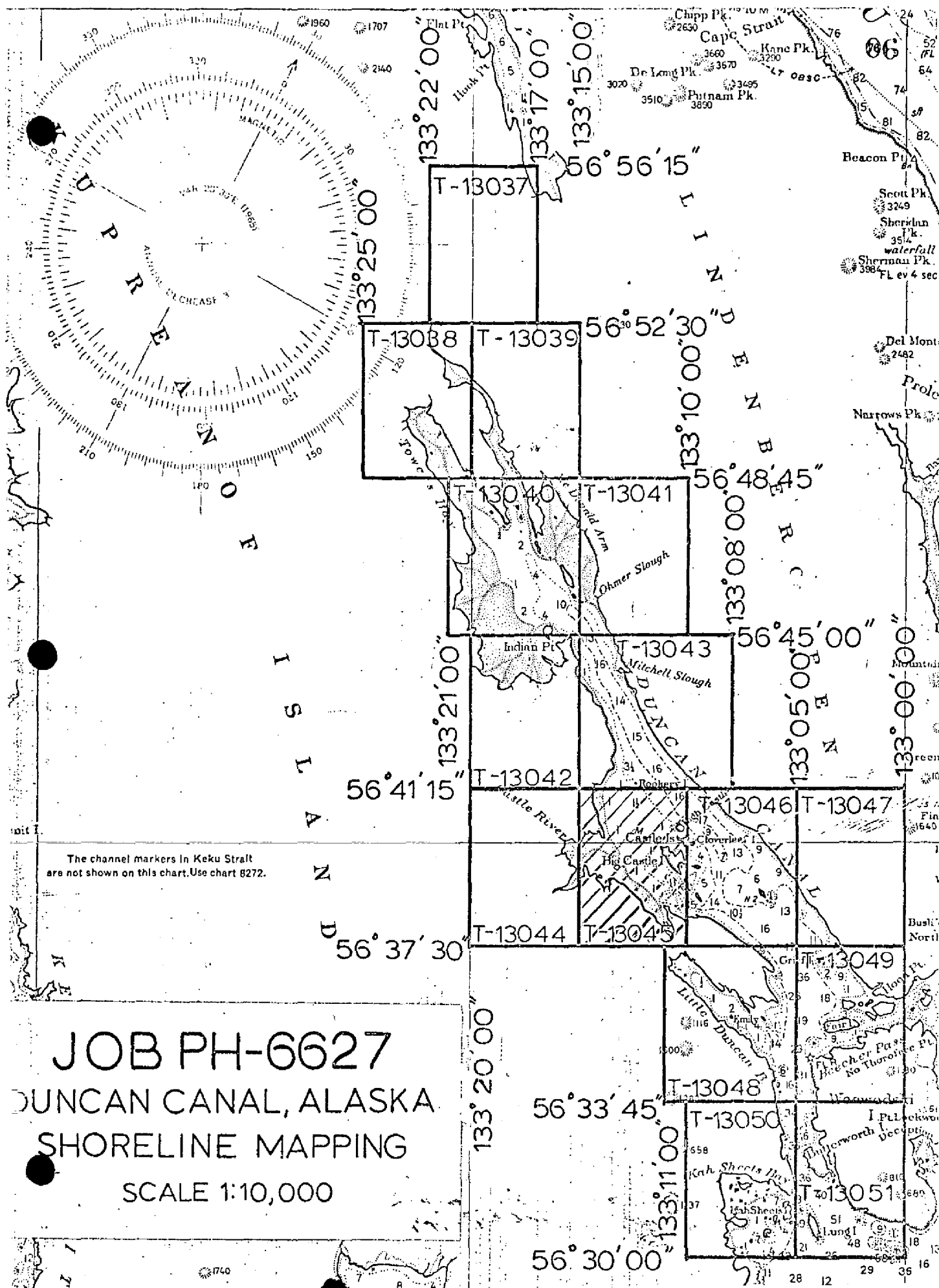
## III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.  
 2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☒ FORM NOS 567 SUBMITTED BY FIELD PARTIES.  
 3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.  
 ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: 12/16/81

## IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY  MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY  MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY  MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	





SURVEY TO ACCOMPANY  
DESCRIPTIVE REPORT  
T-13043, T-13045 thru T-13051

Project PH-6627 covers the entire area of Duncan Canal, Alaska from north of Towers Arm, south east to Lung Island.

There were fifteen (15) maps assigned in this project T-13037 thru T-13051 all at scale 1:10,000. The purpose of these maps was to provide contemporary shoreline data in the support of hydrographic operations and to aid in nautical chart revision.

Field work prior to compilation during the 1972 field season consisted of paneling horizontal control stations in advance of the aerial photography.

The area was flown in June 1972 with 1:50,000 scale B&W bridging photography with the "M" camera. Compilation photos were also taken with the "E" camera at 1:30,000 scale on color film.

Analytic aerotriangulation was performed at the Washington Science Center in August 1972.

The Maps T-13043, T-13045 thru T-13047 were compiled and hydro support ratios were prepared at AMC in August and September, 1972. Sheets T-13048 thru T-13051 were compiled in November and December 1971 using 1966 photography and bridge data and were revised using the June 1972 photos in September 1972.

Field edit was completed in November 1972. It was applied to the map at AMC in October and November 1973.

Final Review was performed at AMC in January-August 1980. The original base manuscript and all pertinent data was forwarded to the Washington Science Center for final registration.

## FIELD INSPECTION

T-13045

Field inspection was limited to the recovery and identification of horizontal control for aerotriangulation.

## PHOTOGRAMMETRIC PLOT REPORT

Job PH-6627

Duncan Canal, Alaska

August 1972

21. Area Covered

The entire area of Duncan Canal, Alaska, is covered by this report. The southeastern corner of the project has the coordinates of 56 30' 00" and 133 00' 00". Included in the project are T-sheets T-13037 thru T-13051.

22. Method

One strip of photography, 72-M-1086 thru 1095 at 1:50,000 scale, was bridged by analytic aerotriangulation methods. Four horizontal control stations were used in the adjustment with one station as a check. All points were drilled by the PUG method. Enough points were transferred and read to provide compilation and ratio points on four parallel strips of color photography. These strips, 72-E(C)-3830 thru 3847, 3854 thru 3862, 3912 thru 3930 and 66-L(C)-5659 thru 5661, all at 1:30,000 scale, will be used to compile the area. All points were plotted on Alaska Zone 1 coordinates using the Coradi Plotter. Ratios of the area were ordered.

23. Adequacy of Control

The control was adequate and complied with project instructions.

24. Supplemental Data

USGS topographic quadrangles were used to obtain vertical control for the bridged strip.

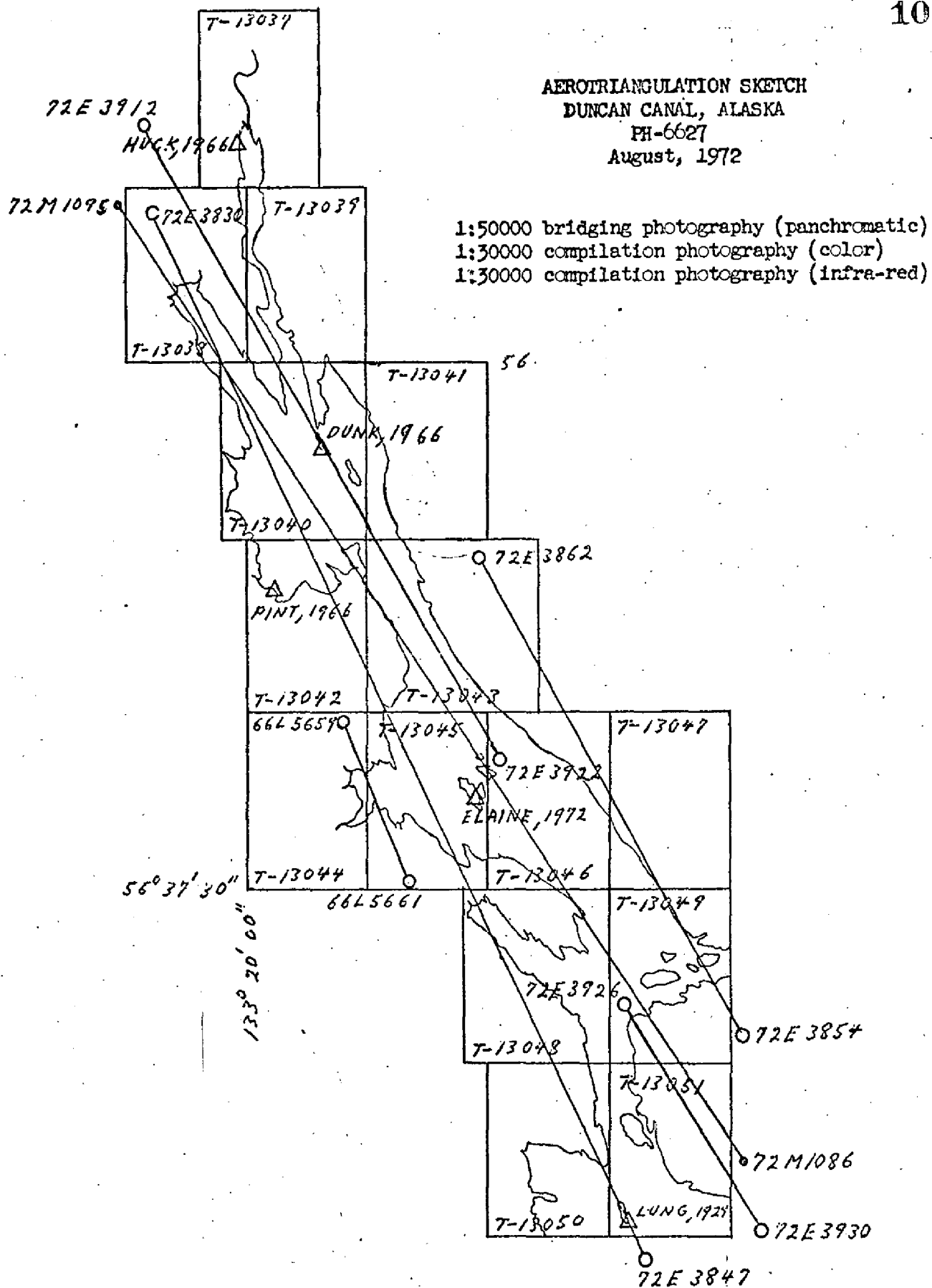
25. Photography

The photography was adequate as to coverage, overlap and definition.

Respectively submitted;



AEROTRIANGULATION SKETCH  
DUNCAN CANAL, ALASKA  
PH-6627  
August, 1972





## COMPILATION REPORT

T-13045

31. DELINEATION:

All details were compiled on the Wild B-8 stereoplotter using 1:30,000 scale color photography which was ratioed to the scale of the manuscript and processed for use as hydro-support.

Coverage was adequate. There was no field inspection prior to compilation.

32. CONTROL:

See "Photogrammetric Plot Report" dated August 1972.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage was delineated from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline was compiled from office interpretation of models set on the Wild B-8 without the benefit of prior field inspection. The photographs were flown at 10 feet above MLLW and much of the foreshore area details is not discernable. The field editor and hydrographer have been asked to completely develop these areas.

36. OFFSHORE DETAILS:

Several islands in the Castle Islands group were delineated from office interpretation of the photographs. See Item 35.

37. LANDMARKS AND AIDS:

No landmarks or aids are located within the limits of this manuscript.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Junctions have been made with T-13043 to the north, T-13046 to the east, T-13044 to the west, and T-13048 to the south.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with USGS Quadrangle PETERSBURG (C-4), ALASKA, scale 1:63,360 and dated 1951.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with Chart 8201, scale 1:217,828, 12th edition, dated July 4, 1966.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

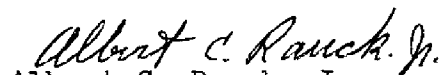
None.

Submitted by:



A. L. Shands  
Cartographer  
September 11, 1972

Approved:



Albert C. Rauck, Jr.  
Chief, Coastal Mapping Section, AMC

ADDENDUM TO THE COMPILATION REPORT

T-13045

FIELD EDIT

Field edit was adequate.



7/31/80

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-6627 (Duncan Canal, Alaska)

T-13045

Basin Cove

Big Castle Island

Castle Islands

Cloverleaf Island

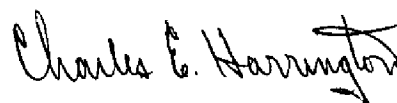
Duncan Canal

High Castle Island

Kupreanof Island

Middle Creek

Approved by:

Charles E. Harrington  
Chief Geographer, C3x5

FORM C&GS-1002  
(9-65)U.S. DEPARTMENT OF COMMERCE  
ESSA  
COAST AND GEODETIC SURVEY

## PHOTOGRAMMETRIC OFFICE REVIEW

T- 13045

1. PROJECTION AND GRIDS  LON		2. TITLE  LON		3. MANUSCRIPT NUMBERS  LON		4. MANUSCRIPT SIZE  LON	
CONTROL STATIONS							
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY  LON				6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)  NA		7. PHOTO HYDRO STATIONS  NA	
8. BENCH MARKS  NA		9. PLOTTING OF SEXTANT FIXES  NA		10. PHOTOGRAMMETRIC PLOT REPORT  LON		11. DETAIL POINTS  LON	
ALONGSHORE AREAS (Nautical Chart Data)							
12. SHORELINE  LON		13. LOW-WATER LINE  LON		14. ROCKS, SHOALS, ETC.  LON		15. BRIDGES  LON	
16. AIDS TO NAVIGATION  LON		17. LANDMARKS  LON		18. OTHER ALONGSHORE PHYSICAL FEATURES  LON		19. OTHER ALONGSHORE CULTURAL FEATURES  LON	
PHYSICAL FEATURES							
20. WATER FEATURES  LON				21. NATURAL GROUND COVER  NA		22. PLANETABLE CONTOURS  NA	
23. STEREOSCOPIC INSTRUMENT CONTOURS  NA		24. CONTOURS IN GENERAL  NA		25. SPOT ELEVATIONS  NA		26. OTHER PHYSICAL FEATURES  LON	
CULTURAL FEATURES							
27. ROADS  LON		28. BUILDINGS  LON		29. RAILROADS  LON		30. OTHER CULTURAL FEATURES  LON	
BOUNDARIES							
31. BOUNDARY LINES  NA				32. PUBLIC LAND LINES  NA			
MISCELLANEOUS							
33. GEOGRAPHIC NAMES  LON				34. JUNCTIONS  LON		35. LEGIBILITY OF THE MANUSCRIPT  LON	
36. DISCREPANCY OVERLAY  LON		37. DESCRIPTIVE REPORT  LON		38. FIELD INSPECTION PHOTOGRAPHS  NA		39. FORMS  NA	
40. REVIEWER <i>Lowell O. Neterer, Jr.</i> Lowell O. Neterer, Jr. 9/22/72				SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.			
41. REMARKS (See attached sheet)							
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT							
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.							
COMPILER <i>Charles Parker</i> Charles Parker FOR 11/02/73				SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.			
Reviewer <i>L. O. Neterer, Jr.</i> L. O. Neterer, Jr. 12/06/73							
43. REMARKS Field edit applied from:  1 Field Edit Ozalid, date October 26, 1972							

## FIELD EDIT REPORTS

DUNCAN CANAL

SOUTHEAST ALASKA

OPR 448

SEPTEMBER-NOVEMBER 1972

CDR Gerald C. Saladin  
NOAA Ship DAVIDSON

FIELD EDIT REPORT  
DUNCAN CANAL  
SOUTHEAST ALASKA  
OPR 448  
SEPTEMBER-NOVEMBER 1972

INTRODUCTION

Field edit reports are attached for the following maps:

T-13043	Rookery Island
T-13045	Big Castle Island
T-13046	Cloverleaf Island
T-13047	North of Grief Island
T-13048	Little Duncan Bay
T-13049	Fair Island
T-13050	Kah Sheets Island
T-13051	Lung Island

Field photographs and copies of the field edit ozalids were taken into the field. The mean higher high water line was verified by visual inspection of the shoreline and ozalids in the field. Isolated rocks, ledge limits and some shoreline were located with three-point sextant fixes.

Notes have been made on the appropriate photographs and have been cross-referenced on the field edit ozalids by photograph number. All times are based on 105°W meridian.

Approved,



Gerald C. Saladin  
CDR/NOAA

Commanding Officer, NOAA Ship DAVIDSON

FIELD EDIT REPORT  
MAP T-13045  
BIG CASTLE ISLAND  
SOUTHEAST ALASKA

ADEQUACY OF COMPILATION

Compilation was good with the following exception: the overhead conveyor on the first island south of Big Castle Island was shown as a pier. The placement of the MHHWL was accurate as determined by visual inspection. In most areas the photograph resolution was very poor. Because of this, determination of the shoreline was made by sextant fixes and distances to triangulation stations. The tidal flats to the south and west of Big Castle Island are foul with rocks.

RECOMMENDATIONS

None.

AIDS TO NAVIGATION

None

GEOGRAPHIC NAMES

It could not be determined from the locals whether Basin Cove was named correctly. No other geographic names investigation was made.

MISCELLANEOUS

All triangulation was searched for and a Form 526 submitted for each. Work was accomplished on 26 October and 1 November 1972. Time zone is 105°W.

Respectfully submitted,

*Efrem R. Krisher*

Efrem R. Krisher  
LT/NOAA

## REVIEW REPORT T-13045

## SHORELINE

July, 1980

61. GENERAL STATEMENT:

See Summary, included in this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not available

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Not applicable

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a verified copy of H-9333&H-9343. There were no significant differences noted.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with chart 17360, scale 1:217,828, 23rd ed. June 16/79.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with Project Instructions, and meets the requirements for Bureau Standards and National Standards of Map Accuracy.

Submitted by: Jim Byrd

*Jim Byrd*  
Final Reviewer

Approved for forwarding:

*Albert C. Rauch Jr. Act.*  
Chief Photogrammetric Branch, AMC

Approved:

Chief Photogrammetric Branch

Chief Photogrammetry Division