

12225

12225

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-6206 Map No. T-12225

Classification No. Edition No.
Field Edited

LOCALITY

State Alaska

General Locality Keku Strait

Locality Point Barrie

19 61 TO 19 70

Alfred C. Holmes, Director, AMC

REGISTRY IN ARCHIVES

DATE

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR
TO REGISTRATION

DESCRIPTIVE REPORT - DATA RECORD

T-12225

OBJECT NO. (II): PH-6206		
FIELD OFFICE (III): None	CHIEF OF PARTY	
PHOTOGRAMMETRIC OFFICE (III): Atlantic Marine Center	OFFICER-IN-CHARGE Alfred C. Holmes, Director, AMC	
INSTRUCTIONS DATED (II) (III): OFFICE SUPPLEMENT III December 19, 1967 OFFICE " IV April 14, 1970		
METHOD OF COMPILATION (III): Wild B-8 Stereo Plotter		
MANUSCRIPT SCALE (III): 1:10,000	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:20,000 Pantographed to 1:10,000	
DATE RECEIVED IN WASHINGTON OFFICE (IV):	DATE REPORTED TO NAUTICAL CHART BRANCH (IV):	
APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV): Sept. 4, 1975
GEOGRAPHIC DATUM (III): N.A.	VERTICAL DATUM (III): MEAN LOW WATER MEAN HIGH WATER EXCEPT AS FOLLOWS: Elevations shown as (25) refer to mean high water Elevations shown as (5) refer to sounding datum i.e., mean lower low water	
REFERENCE STATION (III): END, 1927		
LAT.: 56° 26' 11.102" (343.4M)	LONG.: 133° 39' 09.501" (162.8M)	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): Y = X =	STATE Alaska	ZONE 1
<p>NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE.</p> <p>WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.</p>		

DESCRIPTIVE REPORT - DATA RECORD

T-12225

FIELD INSPECTION BY (III): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air Photo Compilation: Date of Photography: Aug. 5, 1970 ⁶⁹		
PROJECTION AND GRIDS RULED BY (IV): J. Dempsey - Coradomat		DATE April 10, 1970
PROJECTION AND GRIDS CHECKED BY (IV): E. Homick Coradomat		DATE April 10, 1970
CONTROL PLOTTED BY (III): Aerotriangulation - Coradomat- Dempsey Triangulation (CATH, 1915 Only) B. Wilson		DATE April 10, 1970 June 30, 1970
CONTROL CHECKED BY (III): Aerotriangulation - E. Homick Triangulation - F.P. Margiotta		DATE April 10, 1970 June 30, 1970
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): Robert E. Fisher		DATE Feb. 19, 1970
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY L.O. Neterer Reviewed: A.L. Shands & A.C. Rauck	DATE June 24, 1970 June 24, 1970
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): B. Wilson		DATE July 7, 1970
SCRIBING BY (III): F. Margiotta		DATE 5/15/72
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): R.J. Pate		DATE July 13, 1970
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD
T-12225

AREA (KIND OR SOURCE) (III):

Wild RC-8 "E"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
69-E-(c)-954 thru 956	Aug. 5, 69	12:02	1:40,000	4.5 ft. above MLLW
61-W-9526 thru 9528	July 16, 61	10:25	1:20,000	0.2 ft. below MLLW
61-W-9530 thru 9536	"	10:33	"	At MLLW

Predicted TIDE (III)

Diurnal

	RATIO OF RANGES	MEAN RANGE	RANGE
REFERENCE STATION: Ketchikan, Alaska		13.0	15.4
SUBORDINATE STATION: Monte Carlo Island		10.3	12.5
SUBORDINATE STATION:			

Atlantic Marine Center
DATE: May 1973

PROOF EDIT BY (IV): C.H. Bishop

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 2
RECOVERED: 2
IDENTIFIED: 2

NUMBER OF BM(S) SEARCHED FOR (II): None
RECOVERED: None
IDENTIFIED: None

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): None

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): None

REMARKS:

T-12225

COMPILATION RECORD

COMPLETION DATE

REMARKS

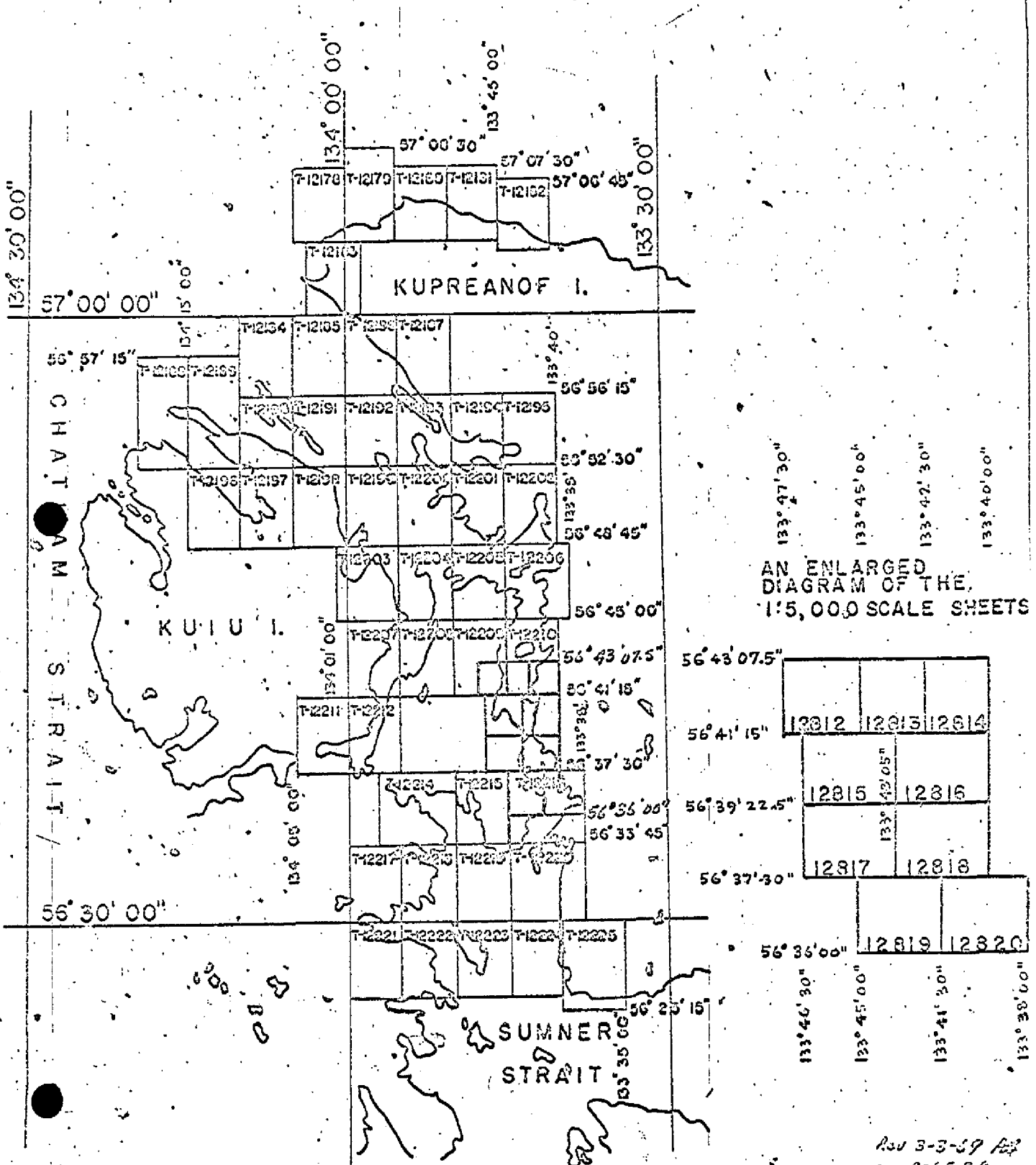
Compilation Complete Pending Field Edit	July 7, 1970	Superseded
Field Edit Applied	July 1971	Superseded
Final Review	May 1973	

SHORELINE MAPPING PROJECT

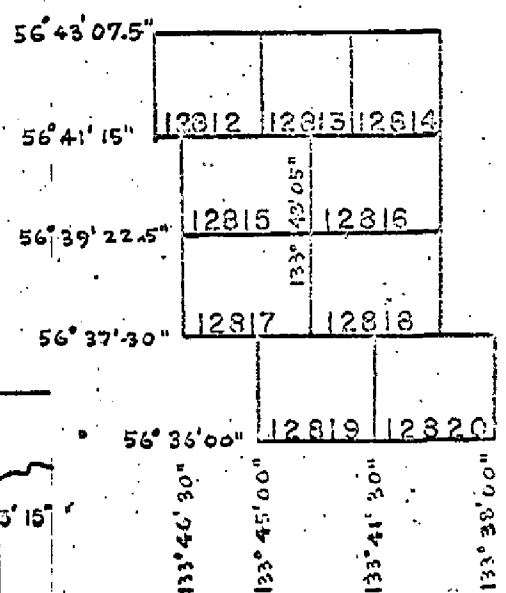
Ph-6206

KEKU STRAITS, ALASKA

SCALE 1:10,000



AN ENLARGED
DIAGRAM OF THE
1:5,000 SCALE SHEETS



Rev 3-3-59 P.P.
Rev. 7-65 R.G.
Revised 1-6-65
A.P.

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12225

This 1:10,000 scale shoreline manuscript is one of 53 maps that comprise Project PH-6206, Keku Strait, Alaska. The project diagram indicates the location of T-12225 in the project.

There was no field work before compilation, except the identification of horizontal control for aerotriangulation. Compilation was by Wild B-8 methods with control based on a stereoplanigraph bridge using color photographs taken in August, 1969. Panchromatic photographs taken in July 1961 at low water were used to compile graphically the mean lower low water line, rocks, and reefs. Stable transparent copies of the map manuscript, ozalids, and specially prepared photographs were furnished for transfer of shoreline to the boat sheet, location of photo-hydro signals, and field edit.

Field edit was done in 1970. After application of field edit data to the map, it was as scribed and reproduced on cronaflex.

Final review was done at the Atlantic Marine Center in May, 1973.

The compilation manuscript was a vinylite sheet 4 minutes 45 seconds in latitude by 5 minutes in longitude.

A cronaflex copy of the final reviewed manuscript and a negative have been forwarded for record and registry.

FIELD INSPECTION REPORT

JOB PH-6206

T-12225

There was no field inspection prior to compilation.

Aerotriangulation Report
PH-6206
Keku Strait, Alaska

February 19, 1970

21. Area Covered

This project covers areas in the vicinity of Keku Strait -
Kuiu Island, Alaska. T-sheets covered are as follows:

T-12203 thru T-12225
all T-sheets are at 1:10,000 scale

22. Method

Five strips were bridged to provide horizontal positions
of pass points needed for compilation. Strip #12 was
bridged in two parts, 12a and 12b, because of open water.
Strip #14 was not bridged due to satisfactory pass point
coverage from Strips 13, 15 and 16.

Strip #11 was bridged on the C-5. Strips 12a, 12b, 13, 15
and 16 were bridged on the C-8. All were adjusted by
electronic computer.

Strip #11 used seven control points and a tie point in
a third degree adjustment.

Strip #12a used a first degree adjustment with two control
points. One tie point was available for a check.

Strip #12b used a third degree adjustment with five control
points.

Strip #13 used three control points in a second degree
adjustment.

Strips 15 and 16 used four control points in third degree
adjustments.

All pass points, except one in Strip #16, were drilled.

Corresponding tie point values were averaged.

This project was tied through common control stations with
the 1966 project in this area.

-2-

23. Adequacy of Control

Horizontal control was adequate in all strips. However station "SPIT 1927" and its subpoint appearing in both Strip #11 of this project and in Strip #1 of the adjacent "Sumner Strait" project had residual errors on the order of 15 feet in X. These errors were similar in direction and magnitude for both points and in both strips. The reason for not obtaining a better check with these points is not known.

Many control stations in this project were recovered in 1965 and pricked on 1964, 1:20,000 scale photography. The 1970 bridge was run with new 1:40,000 scale photography, therefore, much of the old control was not visible in these bridges. All 1969 identified control used in this project was targeted.

The RMS errors in fit to control for the 1969 identified control, (except "SPIT 1927") and including the 1965 identified control "ALL 1927" and "CEN 1927" were 2.5 feet in X and 1.2 feet in Y. The maximum errors were 6.8 feet in X and 3.3 feet in Y.

24. Supplemental Data

U. S. Geological Survey quadrangles were used to provide elevations for vertical adjustment of the bridges.

25. Photography

Photography was satisfactory with regards to coverage, overlap and definition.

Submitted by,

John P. Bertram Jr. for
Robert E. Fisher
Cartographer (Photo)

Approved and forwarded,

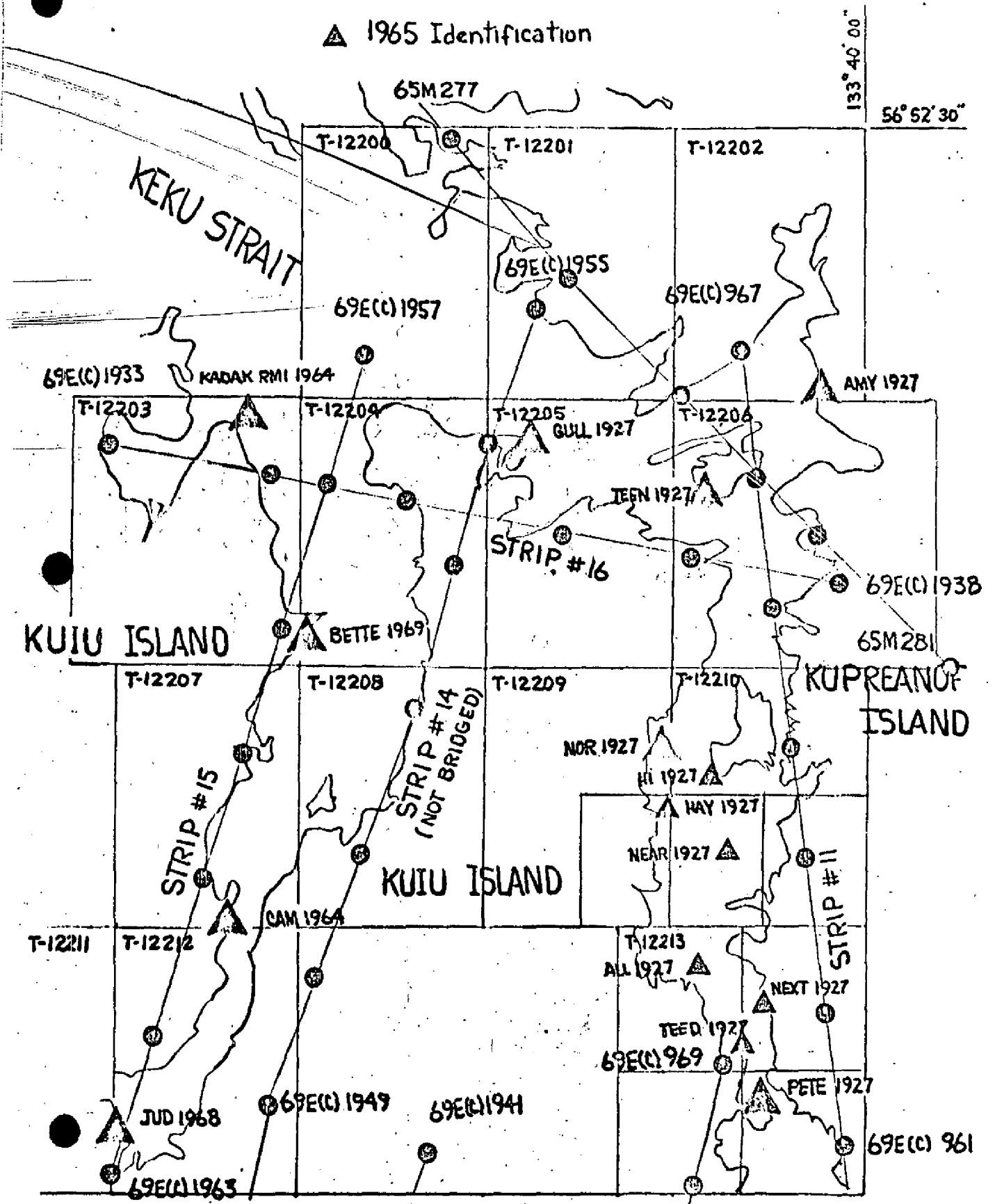
Henry P. Eichert
Henry P. Eichert
Chief, Aerotriangulation
Section

KEKU STRAIT ALASKA

PH 6206 FEB 1970

▲ 1969 Identification

△ 1965 Identification

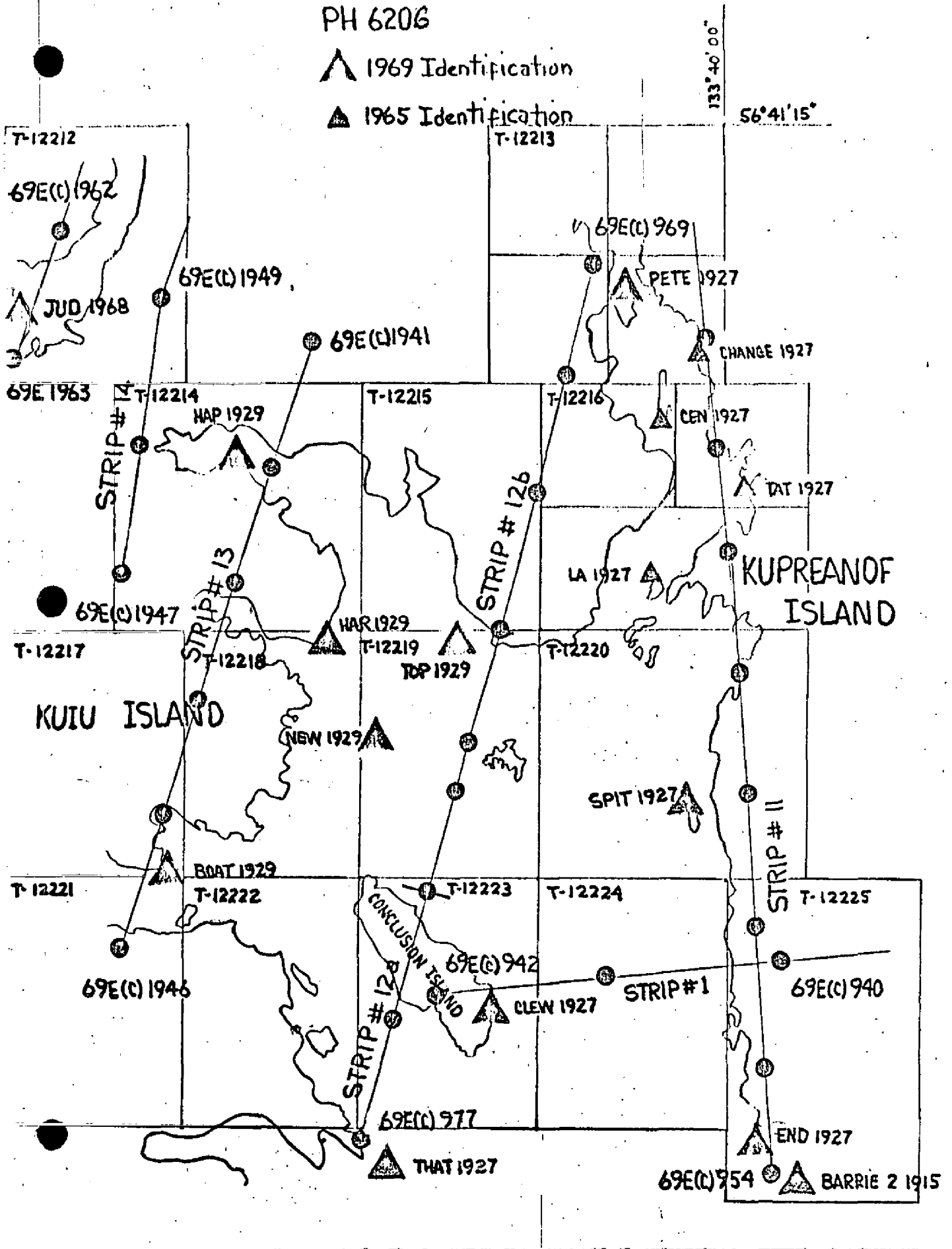


KEKU STRAIT ALASKA

PH 6206

▲ 1969 Identification

▲ 1965 Identification



COMPILATION REPORT

T=12225

31. DELINEATION

The Wild B-8 plotter was used.

There was no field inspection prior to compilation.

The "61W" photos (centers not located) were excellent for foreshore detail, but the ratios were of very poor scale. The tremendous enlargement of the color "E" photos produced very poor definition on the ratio prints.

32. CONTROL

See the Aerotriangulation Report dated Feb. 19, 1970.

The two identified stations were very difficult to see in the B-8, although paneled. Here again, the contact scale being so small and the enlargement so great resulted in increased difficulty.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage was delineated from office interpretation of the photos.

35. SHORELINE AND ALONGSHORE DETAILS

The mean high water line was delineated from office interpretation of the photos.

The approximate mean lower low water line, ledges and rocks were taken from the "61W" photos. The foul line was applied considering also the higher tide "E" photos which seemed to have greater penetration of the water despite the loss of definition in the ratios.

36. OFFSHORE DETAILS

One rock awash, very clear on the "61W's" is covered and too nondistinct on the "E's" to locate with sufficient accuracy. It was referred to the editor.

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Satisfactory junctions were made with T-122200 to the north and T-12224 to the west. There are no contemporary surveys to the east and south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

41 through 45. Not used.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with USGS Quadrangle PETERSBURG (B-5), ALASKA, scale 1:63,360, dated 1949, with minor revisions 1963. Extensive ledges along the southern part of the manuscript do not appear on the quadrangle.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart 8201, scale 1:217,828, 15th Edition, Nov. 15, 1969 (Corrected thru Notice to Mariners 46/69).

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Respectfully submitted,

Charles H. Bishop

for B. Wilson
Cartographic Technician
July 8, 1970

Approved for forwarding:

Melvin J. Umbach
Melvin J. Umbach, CDR, NOAA
Chief, Coastal Mapping Division, AMC

Approved:

Alfred C. Holmes
Alfred C. Holmes
RADM, NOAA
Director, Atlantic Marine Center

August 28, 1972

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6206

T-12225

Barrie Island

Keku Strait

Kupreanof Island

Kushnirkin Creek

Point Barrie

Summer Strait

Approved by:

A. J. Wraight
A. Joseph Wraight
Chief Geographer

Prepared by:

F. W. Pickett (by d. w.)
Frank W. Pickett
Cartographic Technician

T-12225

49. NOTES FOR THE HYDROGRAPHER

None other than those on the Field Edit Ozalid.

FORM C&GS-1002
(9-66)

U.S. DEPARTMENT OF COMMERCE
ESSA
COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW
T-12225

1. PROJECTION AND GRIDS RJP	2. TITLE RJP	3. MANUSCRIPT NUMBERS RJP	4. MANUSCRIPT SIZE RJP
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RJP	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) RJP		7. PHOTO HYDRO STATIONS XX
8. BENCH MARKS XX	9. PLOTTING OF SEXTANT FIXES XX	10. PHOTOGRAMMETRIC PLOT REPORT RJP	11. DETAIL POINTS RJP
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE RJP	13. LOW-WATER LINE RJP	14. ROCKS, SHOALS, ETC.	15. BRIDGES XX
16. AIDS TO NAVIGATION XX	17. LANDMARKS XX	18. OTHER ALONGSHORE PHYSICAL FEATURES XX	19. OTHER ALONGSHORE CULTURAL FEATURES XX
PHYSICAL FEATURES			
20. WATER FEATURES RJP		21. NATURAL GROUND COVER XX	22. PLANETABLE CONTOURS XX
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES XX
CULTURAL FEATURES			
27. ROADS XX	28. BUILDINGS XX	29. RAILROADS XX	30. OTHER CULTURAL FEATURES XX
BOUNDARIES			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES RJP		34. JUNCTIONS RJP	35. LEGIBILITY OF THE MANUSCRIPT RJP
36. DISCREPANCY OVERLAY RJP	37. DESCRIPTIVE REPORT RJP	38. FIELD INSPECTION PHOTOGRAPHS XX	39. FORMS XX
40. REVIEWER R.J. Pate July 13, 1970		SUPERVISOR, REVIEW SECTION OR UNIT A.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 B. Wilson July 22, 1971		SUPERVISOR A.C. Rauck, Jr.	
43. REMARKS Field Edit Applied From: Work of Oct. 1970 on 1 ozalid and Photo 69-E-955.			

FIELD EDIT REPORT
Keku Strait
Southeast Alaska
OPR-448

18

June - October 1970

INTRODUCTION

Field edit reports are attached for the following maps:

T-12205	(TP-00205)
T-12206	(TP-00206)
T-12209	(TP-00209)
T-12210	
T-12216	
T-12220	
T-12224	
T-12225	

Field photographs and copies of the field edit ozalids were taken into the field. The mean high water line was verified by visual inspection of the shoreline and ozalids in the field. Isolated rocks, high points of ledges, ledge limits, and some shoreline were located by three-point fixes with check angles. Fixes were plotted on boat sheets:

DA-10-4-70
DA-10-5-70
DA-10-6-70
DA-10-7-70

and then transferred to the T-sheets and ozalids for comparison.

Notes have been made in red on the field photographs and have been cross referenced on the Field Edit Ozalids by photograph number. All times are based on 105° West meridian. Individual reports by manuscripts are attached.

TIDE NOTES

The following tide stations were used for hydrography in the Keku Strait area:

Pup Island
High Island
Eagle Island
Monte Carlo Island

Manuscripts T-12201 and T-12202 were inspected. Since no field edit was requested by the compilers the inspection was to check the manuscript in general. The manuscripts agreed quite well with the field inspection.

FIELD EDIT REPORT
MAP T-12225
Southeast Alaska
Keku Strait - Point Barrie

The investigation was done by LCdr. F.T. Smith. Field work was performed from a small boat.

METHOD

Field photographs and a copy of the field edit ozalid were taken into the field. All verification was done by visual observations. The specific items in question were visited for verification. Field work was performed the first week of October 1970. The 69 E photos were difficult to use due to rainy weather and rough seas. Hydrography on the northwest portion was performed in 1970. MHW line is difficult to delineate due to lack of ground control and the poor resolution on the 69 E photographs. Hydrography was performed on the southern part in 1965 and the Patton sheet PA 10-1-65 was used to obtain least depths on some offshore rocks and reefs.

Notes have been made on the field edit ozalid given the desired information. The DAVIDSON will be working in this area in 1971 if additional information is desired.

ADEQUACY OF COMPILATION

The compilation of the map appears to be adequate.

RECOMMENDATIONS

It is recommended that the manuscript be revised in accordance with the notes on the ozalid and photographs and that the map be accepted as an advance manuscript.

Respectfully submitted,



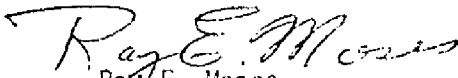
F.T. Smith
LCdr. NOAA

APPROVAL SHEET FOR FIELD EDIT

The field edit of the following manuscripts was accomplished under my supervision:

- T-12205.....TP-00205
- T-12206.....TP-00206
- T-12209.....TP-00207
- T-12210
- T-12216
- T-12220
- T-12224
- T-12225

Inspection of the work was made.



Ray E. Moses
CDR. NOAA
Commanding Officer
NOAA Ship DAVIDSON

REVIEW REPORT T-12225

SHORELINE

May 2, 1973

61. GENERAL STATEMENT

See Summary, which is page 6 of this descriptive report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A comparison was made with Survey No. 4330, scale 1:20,000, dated Sept. 1 - Oct. 15, 1927. Differences between this survey and T-12225 were shown in blue on the comparison print.

T-12225 supersedes all previous surveys for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A visual comparison was made with USGS Quadrangle PETERSBURG (B-5), ALASKA, scale 1:63,360, dated 1953. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with Survey H-8861 (PA-10-1-65), scale 1:10,000, dated 1965, and with Survey H-9160, (DA-10-6-70) scale 1:10,000, dated 1970. Significant differences between these surveys and T-12225 were shown in purple on the comparison print.

The base map for shoreline on the hydrographic surveys apparently was a copy of the Preliminary Manuscript compiled around 1965, and it was assumed by the final reviewer that most of the ledges and reefs also came from the same source. A copy of the Preliminary Manuscript was not available at the time of final review.

In much of the area around Point Barrie, no soundings were taken to prove or disprove ledges and reefs and many were unverified by the field editor. Field edit in the area was done at a 6 foot or higher stage of tide above mean lower low water. Each reef, rock, and ledge was reviewed. Some of these unverified features were removed from the manuscript on the assumption that they were kelp-others were retained - according to their appearance on the photographs and the judgment of the final reviewer.

Photographs used mainly were 1:10,000 ratio prints of the 1961 panchromatic photographs taken at mean lower low water, predicted at Monte Carlo Island. Contact color photographs taken in 1970 at a 6 foot predicted tide were also helpful; they had good penetration.

65. COMPARISON WITH NAUTICAL CHARTS

A visual comparison was made with Chart 8201, scale 1:217,828, 16th edition, dated November 7, 1970. The scale was too small for an adequate comparison. No significant differences were noted.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with job instructions and meets the requirements of the National Standards for Map Accuracy.

Reviewed by:

Charles H. Bishop

Charles H. Bishop
Cartographer

Approved for forwarding:

Melvin J. Umbach
Melvin J. Umbach, CDR, NOAA
Chief, Coastal Mapping Division, AMC

Approved:

Alfred C. Holmes
Alfred C. Holmes
RADM, NOAA
Director, Atlantic Marine Center

Approved:

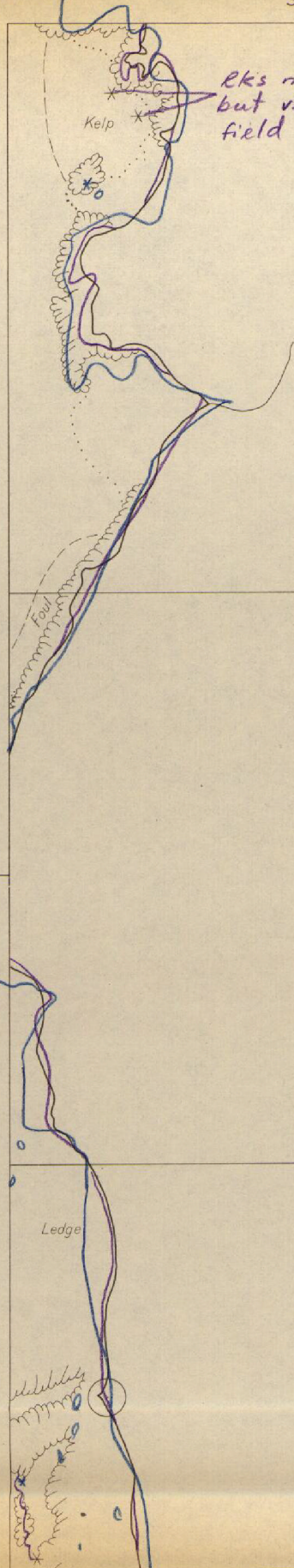
Chief, Photogrammetric Branch Chief, Coastal Mapping Division

133° 40' 00"
56° 30' 00"

39' 30"

39' 00"

T



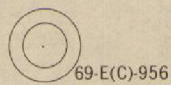
*Eks not on H-9160,
but verified by
field edit.*

Kelp

Ledge

COMPARISON PRINT

Purple = H-9160
Blue = T-4330



y = 1,700,000 FT.

29' 00"

T-12225
1:10,000

56° 28' 30"

y = 1,695,000 FT.



COMPARISON PRINT

Purple = H-9160 & H-8861
Blue = T-4330

28' 00"

y = 1,690,000 FT.

56° 27' 30"

H-9160
 H-8861
 Not on H-8861

133° 40' 00"



69-E(C)-955

T-12225
1:10,000

COMPARISON PRINT

Purple = H-8861
Blue = T-4330

Not on 8861
Visible on
61W 9533

Not visible on
61W 9533

Not visible
on photos
61W 9531-32

Not visible
here - not even
Kelp.

Not identifiable on
Photos - 61W 9531-32

Not on H-8861;
retained on T-12225
Photos 61W 9531-32

T-12225

Foul 1:10,000

27'00"

y=1,685,000 FT.

K
E
K
U

26'30"

S

T

R

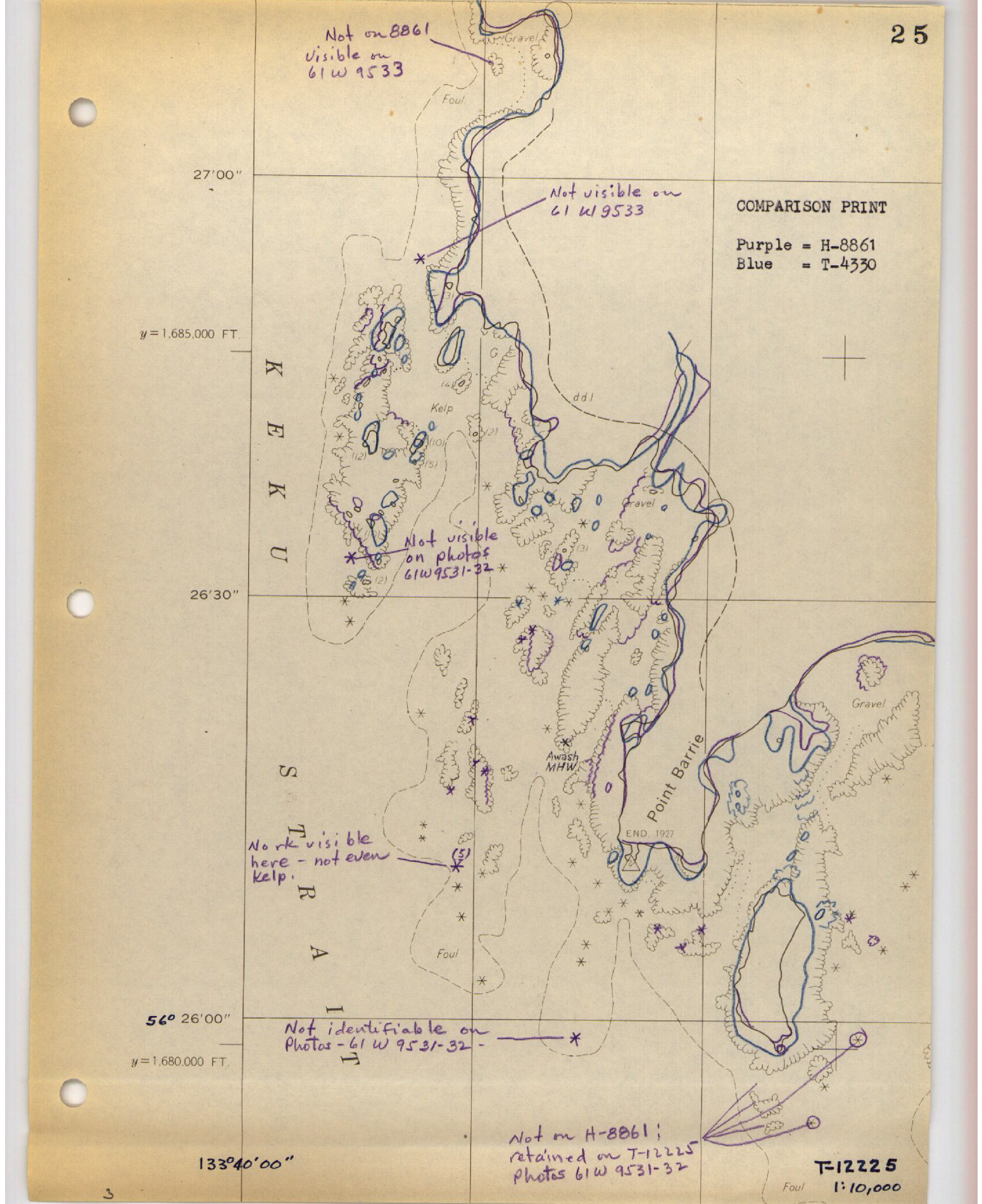
A

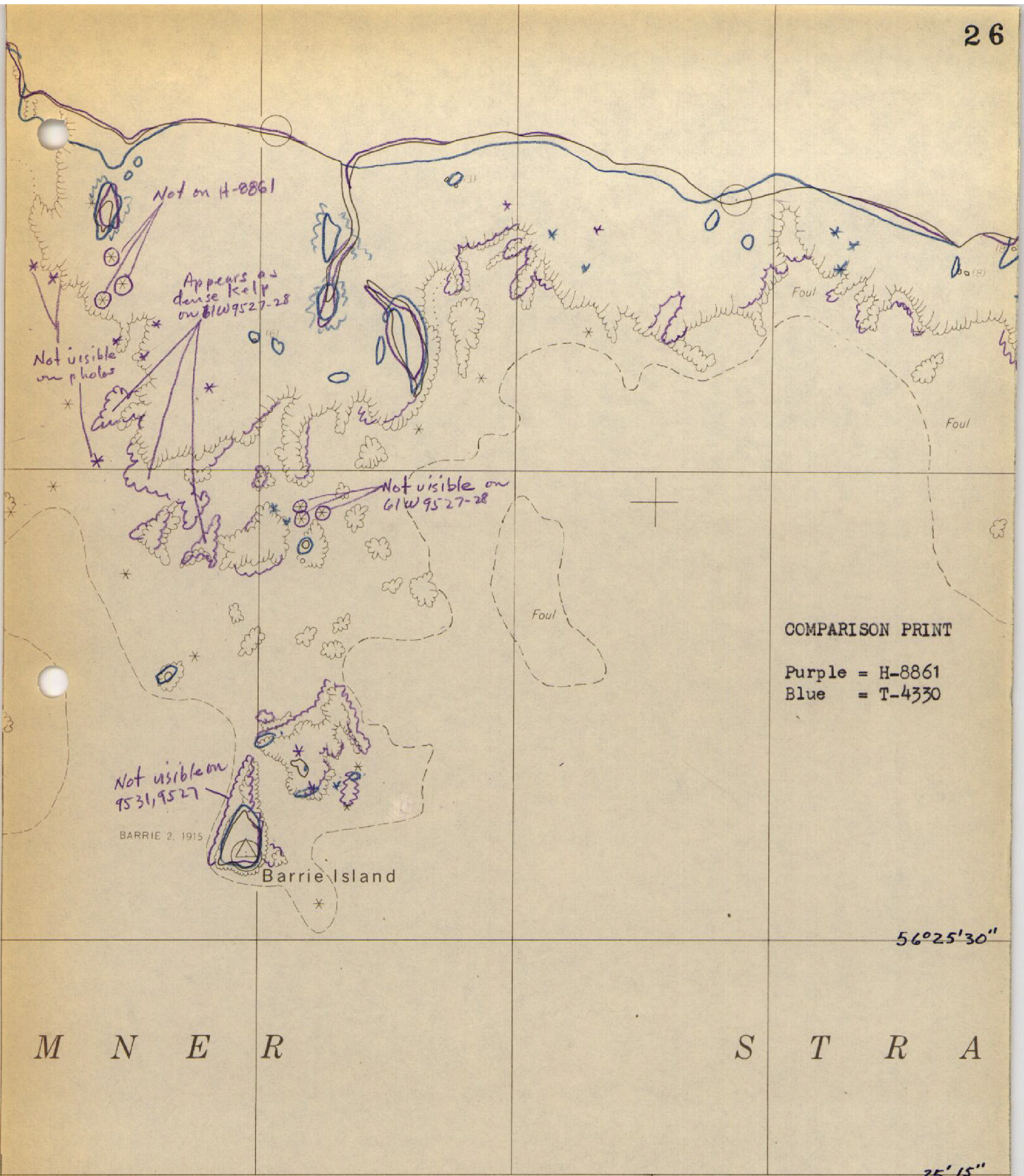
I

56° 26'00"

y=1,680,000 FT.

133°40'00"





COMPARISON PRINT

Purple = H-8861
 Blue = T-4330

Not visible on
 9531, 9527

BARRIE 2, 1915

Barrie Island

Not visible on
 61W 95 27-28

Not on H-8861

Appears as
 dense kelp
 on 61W 95 27-28

Not visible
 on photos

56°25'30"

M N E R S T R A

25' 15"

30" 38'00" 37'30" 133°37'00" 36

x=2,695,000 FT.

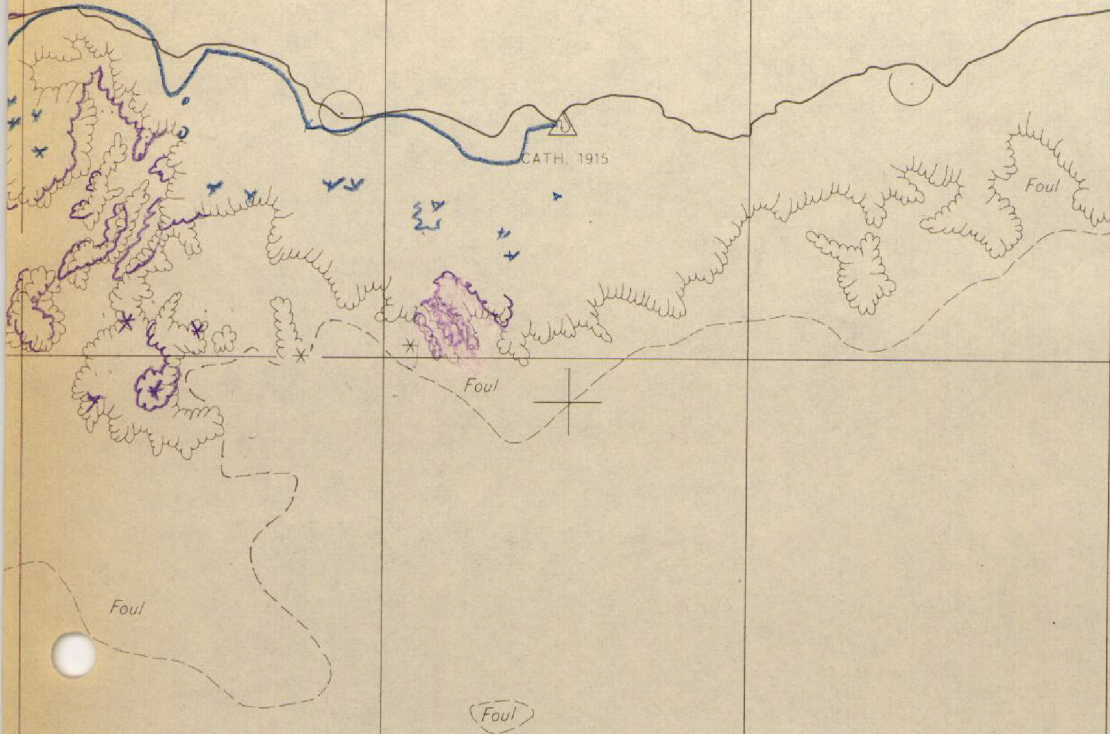
Unlabeled circles are photogrammetric
 points, not map features

LEGEND

Rock ledge

T-12225
 1:10000

△ Recoverable horizontal control station
 Approximate mean lower low-water line
 The heavy shoreline defines the approximate
 Compiled by photogrammetric methods.
 Date of Photography July 1961
 Date of Field Inspection None



26'00"
 $y = 1,680,000$ FT.

COMPARISON PRINT

Purple = H-8861
 Blue = T-4330

25'30"

56°25'15"

5'30" 36'00" 35'30" 133°35'00"
 $x = 2,700,000$ FT.

third-order or higher accuracy

mate mean high water.
 from aerial photographs
 Aug. 1969

NATIONAL OCEAN SURVEY
 SHORELINE MANUSCRIPT
 T-12225
 ALASKA
 KEKU STRAIT

1:10,000 scale

