

T-12555

T-12555

|                                                                                                         |                  |
|---------------------------------------------------------------------------------------------------------|------------------|
| NOAA FORM 76-35<br>(3-76)                                                                               |                  |
| U.S. DEPARTMENT OF COMMERCE<br>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION<br>NATIONAL OCEAN SURVEY |                  |
| DESCRIPTIVE REPORT                                                                                      |                  |
| Map No.<br>T-12555                                                                                      | Edition No.<br>1 |
| Job No.<br>PH-6402                                                                                      |                  |
| Map Classification<br>FINAL FIELD EDITED MAP                                                            |                  |
| Type of Survey<br>SHORELINE                                                                             |                  |
| LOCALITY                                                                                                |                  |
| State<br>HAWAII                                                                                         |                  |
| General Locality<br>HAWAII ISLAND, WEST COAST<br>KAILUA TO SOUTH CAPE                                   |                  |
| Locality<br>HUMUHUMU POINT                                                                              |                  |
| 19 63 TO 19 79                                                                                          |                  |
| REGISTRY IN ARCHIVES                                                                                    |                  |
| DATE                                                                                                    |                  |

|                                                                                                                                                                                                                                                                               |  |                                                                                |  |                                                                                                                                                                          |  |                                                                                                                             |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------|--|
| <b>NOAA FORM 76-36A</b><br>(3-72)                                                                                                                                                                                                                                             |  | <b>U. S. DEPARTMENT OF COMMERCE</b><br>NATIONAL OCEANIC AND ATMOSPHERIC ADMIN. |  | <b>TYPE OF SURVEY</b><br><input checked="" type="checkbox"/> ORIGINAL<br><input type="checkbox"/> RESURVEY<br><input type="checkbox"/> REVISED                           |  | <b>SURVEY</b> <u>XX-T-12555</u><br><b>MAP EDITION NO.</b> <u>(1)</u><br><b>MAP CLASS</b> FINAL<br><b>JOB</b> <u>PH-6402</u> |  |
| <b>DESCRIPTIVE REPORT - DATA RECORD</b>                                                                                                                                                                                                                                       |  |                                                                                |  |                                                                                                                                                                          |  |                                                                                                                             |  |
| <b>PHOTOGRAMMETRIC OFFICE</b><br>Coastal Mapping Division<br>Atlantic Marine Center, Norfolk, VA                                                                                                                                                                              |  |                                                                                |  | <b>LAST PRECEDING MAP EDITION</b><br><b>TYPE OF SURVEY</b><br><input type="checkbox"/> ORIGINAL<br><input type="checkbox"/> RESURVEY<br><input type="checkbox"/> REVISED |  |                                                                                                                             |  |
| <b>OFFICER-IN-CHARGE</b><br><br>R. Matsushige                                                                                                                                                                                                                                 |  |                                                                                |  | <b>JOB</b> <u>PH</u> <u>        </u><br><b>MAP CLASS</b> <u>        </u><br><b>SURVEY DATES:</b><br>19 <u>    </u> TO 19 <u>    </u>                                     |  |                                                                                                                             |  |
| <b>I. INSTRUCTIONS DATED</b>                                                                                                                                                                                                                                                  |  |                                                                                |  |                                                                                                                                                                          |  |                                                                                                                             |  |
| <b>1. OFFICE</b>                                                                                                                                                                                                                                                              |  |                                                                                |  | <b>2. FIELD</b>                                                                                                                                                          |  |                                                                                                                             |  |
| Compilation Oct. 28, 1969<br>Amendment 1 Jan. 3, 1973<br>Memo Sept. 1, 1978                                                                                                                                                                                                   |  |                                                                                |  | Control/Field Inspection May 8, 1964                                                                                                                                     |  |                                                                                                                             |  |
| <b>II. DATUMS</b>                                                                                                                                                                                                                                                             |  |                                                                                |  |                                                                                                                                                                          |  |                                                                                                                             |  |
| <b>1. HORIZONTAL:</b> <input type="checkbox"/> 1927 NORTH AMERICAN                                                                                                                                                                                                            |  |                                                                                |  | <b>OTHER (Specify)</b><br>Old Hawaiian                                                                                                                                   |  |                                                                                                                             |  |
| <b>2. VERTICAL:</b><br><input checked="" type="checkbox"/> MEAN HIGH-WATER<br><input type="checkbox"/> MEAN LOW-WATER<br><input type="checkbox"/> MEAN LOWER LOW-WATER<br><input type="checkbox"/> MEAN SEA LEVEL                                                             |  |                                                                                |  | <b>OTHER (Specify)</b>                                                                                                                                                   |  |                                                                                                                             |  |
| <b>3. MAP PROJECTION</b><br><br>Polyconic                                                                                                                                                                                                                                     |  |                                                                                |  | <b>4. GRID(S)</b><br><b>STATE</b> <u>Hawaii</u> <b>ZONE</b> <u>1</u>                                                                                                     |  |                                                                                                                             |  |
| <b>5. SCALE</b><br><u>1:10,000</u>                                                                                                                                                                                                                                            |  |                                                                                |  | <b>STATE</b> <u>        </u> <b>ZONE</b> <u>        </u>                                                                                                                 |  |                                                                                                                             |  |
| <b>III. HISTORY OF OFFICE OPERATIONS</b>                                                                                                                                                                                                                                      |  |                                                                                |  |                                                                                                                                                                          |  |                                                                                                                             |  |
| <b>OPERATIONS</b>                                                                                                                                                                                                                                                             |  |                                                                                |  | <b>NAME</b>                                                                                                                                                              |  | <b>DATE</b>                                                                                                                 |  |
| <b>1. AEROTRIANGULATION</b> BY <u>        </u><br>METHOD: Stereoplanigraph LANDMARKS AND AIDS BY <u>        </u>                                                                                                                                                              |  |                                                                                |  | <u>J. Perrow</u>                                                                                                                                                         |  | <u>June 1969</u>                                                                                                            |  |
| <b>2. CONTROL AND BRIDGE POINTS</b> PLOTTED BY <u>        </u><br>METHOD: Coradomat CHECKED BY <u>        </u>                                                                                                                                                                |  |                                                                                |  | <u>J. Perrow</u>                                                                                                                                                         |  | <u>June 1969</u>                                                                                                            |  |
| <b>3. STEREOSCOPIC INSTRUMENT</b> PLANIMETRY BY <u>        </u><br>COMPILATION CHECKED BY <u>        </u><br>INSTRUMENT: Wild B-8<br>SCALE: 1:10,000<br>CONTOURS BY <u>        </u><br>CHECKED BY <u>        </u>                                                             |  |                                                                                |  | <u>C. Blood</u>                                                                                                                                                          |  | <u>Jan. 1973</u>                                                                                                            |  |
|                                                                                                                                                                                                                                                                               |  |                                                                                |  | <u>A. Rauck / L. Graves</u>                                                                                                                                              |  | <u>Jan. 1973</u>                                                                                                            |  |
| <b>4. MANUSCRIPT DELINEATION</b> PLANIMETRY BY <u>        </u><br>CHECKED BY <u>        </u><br>METHOD: Smooth drafted<br>CONTOURS BY <u>        </u><br>CHECKED BY <u>        </u><br>SCALE: 1:10,000<br>HYDRO SUPPORT DATA BY <u>        </u><br>CHECKED BY <u>        </u> |  |                                                                                |  | <u>R. White</u>                                                                                                                                                          |  | <u>Jan. 1973</u>                                                                                                            |  |
|                                                                                                                                                                                                                                                                               |  |                                                                                |  | <u>A. Shands</u>                                                                                                                                                         |  | <u>Jan. 1973</u>                                                                                                            |  |
|                                                                                                                                                                                                                                                                               |  |                                                                                |  | <u>N.A.</u>                                                                                                                                                              |  |                                                                                                                             |  |
|                                                                                                                                                                                                                                                                               |  |                                                                                |  | <u>N.A.</u>                                                                                                                                                              |  |                                                                                                                             |  |
| <b>5. OFFICE INSPECTION PRIOR TO FIELD EDIT</b> BY <u>        </u>                                                                                                                                                                                                            |  |                                                                                |  | <u>A. Shands</u>                                                                                                                                                         |  | <u>Jan. 1973</u>                                                                                                            |  |
| <b>6. APPLICATION OF FIELD EDIT DATA</b> BY <u>        </u>                                                                                                                                                                                                                   |  |                                                                                |  | <u>I. Perkinson</u>                                                                                                                                                      |  | <u>Aug. 1979</u>                                                                                                            |  |
|                                                                                                                                                                                                                                                                               |  |                                                                                |  | <u>J. Roderick</u>                                                                                                                                                       |  | <u>Oct. 1979</u>                                                                                                            |  |
| <b>7. COMPILATION SECTION REVIEW</b> BY <u>        </u>                                                                                                                                                                                                                       |  |                                                                                |  | <u>J. Roderick</u>                                                                                                                                                       |  | <u>Oct. 1979</u>                                                                                                            |  |
| <b>8. FINAL REVIEW</b> BY <u>        </u>                                                                                                                                                                                                                                     |  |                                                                                |  | <u>J. Hancock</u>                                                                                                                                                        |  | <u>Apr. 1987</u>                                                                                                            |  |
| <b>9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH</b> BY <u>        </u>                                                                                                                                                                                                         |  |                                                                                |  | <u>J. Hancock</u>                                                                                                                                                        |  | <u>June 1987</u>                                                                                                            |  |
| <b>10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH</b> BY <u>        </u>                                                                                                                                                                                                         |  |                                                                                |  | <u>P. Dempsey</u>                                                                                                                                                        |  | <u>Aug. 1987</u>                                                                                                            |  |
| <b>11. MAP REGISTERED - COASTAL SURVEY SECTION</b> BY <u>        </u>                                                                                                                                                                                                         |  |                                                                                |  | <u>EL DARGHERTY</u>                                                                                                                                                      |  | <u>SEP 87</u>                                                                                                               |  |

T-12555  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

|                                                                                                                                                                                           |               |                                                                                 |          |                         |                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------|----------|-------------------------|----------------------------------------------|
| CAMERA(S)<br>Wild RC-8"S", S=152.29                                                                                                                                                       |               | TYPES OF PHOTOGRAPHY<br>LEGEND<br>(C) COLOR<br>(P) PANCHROMATIC<br>(I) INFRARED |          | TIME REFERENCE          |                                              |
| TIDE STAGE REFERENCE<br><input checked="" type="checkbox"/> PREDICTED TIDES<br><input type="checkbox"/> REFERENCE STATION RECORDS<br><input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY |               |                                                                                 |          | ZONE<br>Hawaii          | <input checked="" type="checkbox"/> STANDARD |
|                                                                                                                                                                                           |               |                                                                                 |          | MERIDIAN<br>150th       | <input type="checkbox"/> DAYLIGHT            |
| NUMBER AND TYPE                                                                                                                                                                           | DATE          | TIME                                                                            | SCALE    | STAGE OF TIDE           |                                              |
| 63S(P) 7977-7982*                                                                                                                                                                         | Aug. 31, 1963 | 09:39                                                                           | 1:30,000 | 1.1 FT. above MLLW      |                                              |
| 63S(C) 7989-7994**                                                                                                                                                                        | Aug. 31, 1963 | 09:57                                                                           | 1:15,000 | 1.1 FT. above MLLW      |                                              |
|                                                                                                                                                                                           |               |                                                                                 |          | Mean Tide Range 1.4 FT. |                                              |

## REMARKS

\*Bridging/compilation photographs, \*\*Compilation/hydro support photographs.

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

The mean high water line was compiled from office interpretation of the compilation photographs using stereo instrument and graphic methods.

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

No mean lower low water line was compiled.

## 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 |
|---------------|---------|------------------|---------------|---------|------------------|
| H-9808        | 1979    | Registered       |               |         |                  |
| H-9812        | 1979    |                  |               |         |                  |

## 5. FINAL JUNCTIONS

| NORTH | EAST    | SOUTH | WEST    |
|-------|---------|-------|---------|
| None  | T-12556 | None  | T-12554 |

## REMARKS

T-12555

## HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

| OPERATION                                                                                                                                                                                               | NAME      | DATE           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------|
| 1. CHIEF OF FIELD PARTY                                                                                                                                                                                 | R. Newsom | Feb.-Sept 1964 |
| 2. HORIZONTAL CONTROL<br>RECOVERED BY<br>ESTABLISHED BY<br>PRE-MARKED OR IDENTIFIED BY                                                                                                                  | E. Cline  | Aug. 1964      |
|                                                                                                                                                                                                         | E. Cline  | Aug. 1964      |
|                                                                                                                                                                                                         | E. Cline  | Aug. 1964      |
| 3. VERTICAL CONTROL<br>RECOVERED BY<br>ESTABLISHED BY<br>PRE-MARKED OR IDENTIFIED BY                                                                                                                    | None      |                |
|                                                                                                                                                                                                         | None      |                |
|                                                                                                                                                                                                         | None      |                |
| 4. LANDMARKS AND AIDS TO NAVIGATION<br>RECOVERED (Triangulation Stations) BY<br>LOCATED (Field Methods) BY<br>IDENTIFIED BY                                                                             | None      |                |
|                                                                                                                                                                                                         | None      |                |
|                                                                                                                                                                                                         | None      |                |
| 5. GEOGRAPHIC NAMES INVESTIGATION<br>TYPE OF INVESTIGATION<br><input type="checkbox"/> COMPLETE<br><input type="checkbox"/> SPECIFIC NAMES ONLY<br><input checked="" type="checkbox"/> NO INVESTIGATION |           |                |
| 6. PHOTO INSPECTION<br>CLARIFICATION OF DETAILS BY                                                                                                                                                      | E. Cline  | Aug. 1964      |
| 7. BOUNDARIES AND LIMITS<br>SURVEYED OR IDENTIFIED BY                                                                                                                                                   | N.A.      |                |

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

None

| PHOTO NUMBER | STATION NAME                                                             | PHOTO NUMBER | STATION DESIGNATION |
|--------------|--------------------------------------------------------------------------|--------------|---------------------|
| 63(S)7842*   | NA PUU A PELE, 1891<br>(Direct and Sub. Pt.)<br><br>*Partial ratio print |              |                     |

3. PHOTO NUMBERS (Clarification of details)

63(S) 7842-7844 (1:30,000 scale matte contacts)

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 Form 152 (CSI)

1 Project Field Report

NOAA FORM 76-36C  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYT-12555  
HISTORY OF FIELD OPERATIONSI. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

| OPERATION                           | NAME                                                                                                                                                                  | DATE                       |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 1. CHIEF OF FIELD PARTY             | (NOAA Ship FAIRWEATHER)<br>Cdr. B. Williams                                                                                                                           | Feb. 1979                  |
| 2. HORIZONTAL CONTROL               | RECOVERED BY<br>ESTABLISHED BY<br>PRE-MARKED OR IDENTIFIED BY                                                                                                         | J. Quinlan<br>None<br>None |
| 3. VERTICAL CONTROL                 | RECOVERED BY<br>ESTABLISHED BY<br>PRE-MARKED OR IDENTIFIED BY                                                                                                         | None<br>None<br>None       |
| 4. LANDMARKS AND AIDS TO NAVIGATION | RECOVERED (Triangulation Stations) BY<br>LOCATED (Field Methods) BY<br>IDENTIFIED BY                                                                                  | None<br>None<br>None       |
| 5. GEOGRAPHIC NAMES INVESTIGATION   | TYPE OF INVESTIGATION<br><input type="checkbox"/> COMPLETE<br><input type="checkbox"/> SPECIFIC NAMES ONLY BY<br><input checked="" type="checkbox"/> NO INVESTIGATION |                            |
| 6. PHOTO INSPECTION                 | CLARIFICATION OF DETAILS BY                                                                                                                                           | L. Roberts                 |
| 7. BOUNDARIES AND LIMITS            | SURVEYED OR IDENTIFIED BY                                                                                                                                             | N.A.                       |

## II. SOURCE DATA

|                                          |              |                                        |                     |
|------------------------------------------|--------------|----------------------------------------|---------------------|
| 1. HORIZONTAL CONTROL IDENTIFIED<br>None |              | 2. VERTICAL CONTROL IDENTIFIED<br>None |                     |
| PHOTO NUMBER                             | STATION NAME | PHOTO NUMBER                           | STATION DESIGNATION |
|                                          |              |                                        |                     |

## 3. PHOTO NUMBERS (Clarification of details)

635(C)7990-7994 (Cronapaque ratios, 1:10,000 scale)

## 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 report  
1 Field edit paper print

| I. MANUSCRIPT COPIES                        |            |                     |                           |               |
|---------------------------------------------|------------|---------------------|---------------------------|---------------|
| COMPILATION STAGES                          |            |                     | DATE MANUSCRIPT FORWARDED |               |
| DATA COMPILED                               | DATE       | REMARKS             | MARINE CHARTS             | HYDRO SUPPORT |
| Compilation complete<br>pending field edit  | Jan. 1973  | Class II manuscript | None                      | Jan. 1973     |
| Field edit applied,<br>compilation complete | Oct. 1979  | Class I manuscript  | Nov. 1979                 | Nov. 1979     |
| Final review                                | April 1987 | Final Map           | July 1987                 | July 1987     |
|                                             |            |                     |                           |               |

II. LANDMARKS AND AIDS TO NAVIGATION None

| 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH |                                 |                   |         |
|-----------------------------------------------------------|---------------------------------|-------------------|---------|
| NUMBER                                                    | CHART LETTER<br>NUMBER ASSIGNED | DATE<br>FORWARDED | REMARKS |
|                                                           |                                 |                   |         |
|                                                           |                                 |                   |         |
|                                                           |                                 |                   |         |
|                                                           |                                 |                   |         |
|                                                           |                                 |                   |         |
|                                                           |                                 |                   |         |
|                                                           |                                 |                   |         |

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: None
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: None

- 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: \_\_\_\_\_

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

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

JOB PH-6402

# SHORELINE MAPPING

HAWAII IS. WEST COAST  
AILUA TO SOUTH CAPE

SCALE 1:10,000

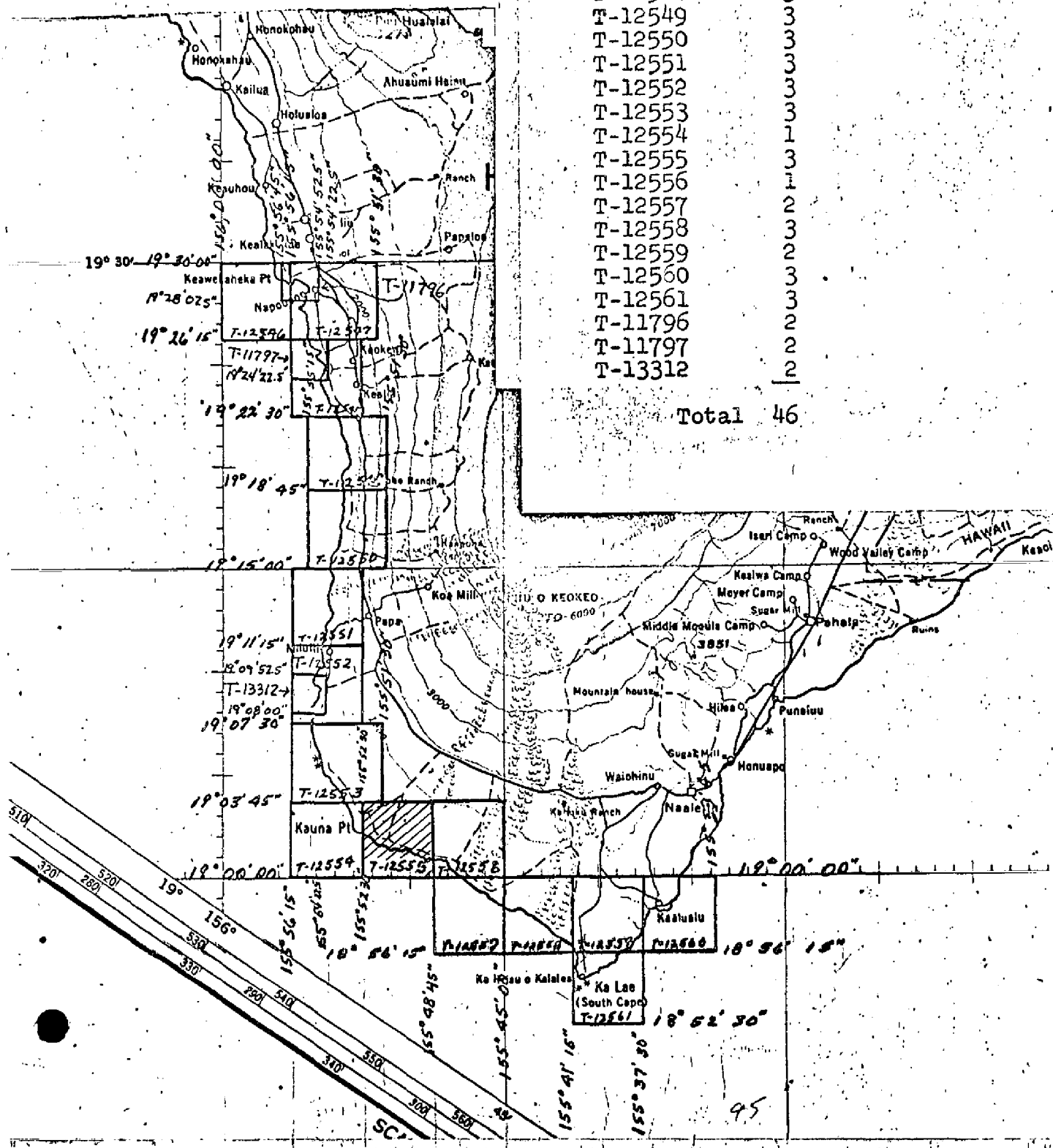
JOB PH-6402

OFFICIAL MILEAGE FOR COST ACCOUNTS

| Sheet No. | Area Sq. Miles |
|-----------|----------------|
|-----------|----------------|

|         |   |
|---------|---|
| T-12546 | 1 |
| T-12547 | 3 |
| T-12548 | 3 |
| T-12549 | 3 |
| T-12550 | 3 |
| T-12551 | 3 |
| T-12552 | 3 |
| T-12553 | 3 |
| T-12554 | 1 |
| T-12555 | 3 |
| T-12556 | 1 |
| T-12557 | 2 |
| T-12558 | 2 |
| T-12559 | 2 |
| T-12560 | 2 |
| T-12561 | 3 |
| T-11796 | 2 |
| T-11797 | 2 |
| T-13312 | 2 |

Total 46



6

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

T-12555

This 1:10,000 scale Final Field Edited Map is one of nineteen maps that comprise PH-6402, Hawaii Island, West Coast, Kailua to South Cape. The project consists of sixteen 1:10,000 scale maps (T-12546 thru T-12561) and three 1:5,000 scale inset maps (T-11796, T-11797, T-13312).

The purpose of this map was to furnish data in support of hydrographic operations and to provide current shoreline data for marine charts.

This map includes shoreline along the southwest coast of Hawaii Island from Longitude 155° 48' 45" to Longitude 155° 52' 30".

Photo coverage for the project was adequately provided in August/September 1963 using the Wild RC-8 "S" camera. Photography consisted of 1:30,000 scale panchromatic photographs used for field inspection, aerotriangulation, and compilation. Color photographs at 1:15,000 scale were obtained for compilation and hydro support. Additional color photographs at 1:15,000 scale were obtained in March 1969 with the Wild RC-8 "E" camera. These supplemental photographs were used to compile inset maps T-11796 and T-11797. The stage of tide for all project photographs was based upon predicted tide data. No infrared photographs were provided.

Field work prior to aerotriangulation consisted of the recovery and establishment of horizontal control by photoidentification methods. In addition, a field inspection was performed for the project area utilizing the 1:30,000 scale contact photographs. This activity was conducted in February thru September 1964 in conjunction with adjoining project PH-6401.

Analytic aerotriangulation was adequately provided by the Washington Science Center in June 1969. Tie points from photo strip #4 contained in adjoining project PH-6401 were included in this bridge. Aerotriangulation activity included ruling the base manuscripts and also provided ratio prints for compilation and hydrographic/field edit operations.

Compilation for this map was performed at the Coastal Mapping Section, Atlantic Marine Center in January 1973. Copies of the initial compilation and hydrographic support data were forwarded to the hydrographer for field edit.

Field edit was conducted in conjunction with hydrographic surveys H-9808 and H-9812 by NOAA ship FAIRWEATHER personnel in February 1979.

Application of field edit was performed at the original compilation office in October 1979. Map copies were submitted to Marine Charts and to the hydrographer for smooth sheet application.

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Final review was performed at the Atlantic Marine Center in April 1987. A comparison was made with the common hydrographic survey and nautical chart. The original base manuscript and related data along with a final Chart Maintenance Print and a Hydrographic Print were forwarded to the Washington Science Center for registration and distribution.

## FIELD INSPECTION

T-12555

Field activity prior to compilation included a field inspection of the shoreline and the recovery / photoidentification of horizontal control necessary for project aerotriangulation. Results of the 1964 field inspection were submitted on the 1:30,000 scale contact photographs.

UNITED STATES GOVERNMENT

# Memorandum

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

40

631W

TO : Chief, Photogrammetric Field Operations  
THRU : Honolulu Field Officer *not*

DATE: August 5, 1964

FROM : Lt(jg) Edward P. Cline

SUBJECT: Control Identification Project No. 21413

No problems were found in the control identification on Project 21413. The following is a list of the stations identified on the various Flight Lines:

FLIGHT STRIP NO. 5

WAIKAKUU, 4, 1951  
KAPUKAWAA, 1884  
OHEPUUPUU, 1890

FLIGHT STRIP NO. 6

KAMOI, 1948  
NA PUU & PELE, 1891  
PUU KI, 1914  
TANK, 1948

Supplimental Station Pricked:  
KAUNA POINT LIGHT, 1948

FLIGHT STRIP NO. 7

KALAE 2, 1948  
PALAHEMO 1898  
KAMILO, 1898  
KIPAEPAE, 1898

Supplimental Stations Pricked:  
KALAE LIGHT, 1948  
KALAE, 1887  
MAHANA, 1898

The ratio prints provided by the Washington Office were of great assistance in the identification of the stations and they were very well placed.

*Edward P. Cline*  
Edward P. Cline

8

Photogrammetric Plot Report  
Hawaii Island, Hawaii  
PH-6402

June 10, 1969

21. Area Covered

This project extends along the southwest shore of Hawaii Island. It includes T-sheets 12546 through 12561 at 1:10,000 and T-sheets 11796, 11797 and 13312 at 1:5,000. This project joins PH-6401 which extends along the northwest shore of the island.

22. Method

Strips were bridged on the stereoplanigraph and adjusted by IBM 1620 methods. Strip #4 discussed in the report for PH-6401. Strip #10 was adjusted on five triangulation stations with tie points from Strips #4 and #11 as checks. Strip #11 was adjusted on five stations with one station and tie points as checks. The adjustment of Strip #12 met with considerable problems. These problems were due to control identification on stations KAMILO, KIPAEPAE on the northeast end of the strip. Points were dropped from Strip #11 to enable model 63-S-7964 and 7965 to be set, thus enabling T-sheet 12561 to be completed.

T-sheets 12559 and 12560 must await further field work. Difficulties were also experienced in bridging Strip #13. This problem was resolved by dropping enough points from Strips #4 and #10 to set individual models between 63-S-8080 and 8085. All points between strips were averaged. Points were drilled by using the Wild PUG.

23. Adequacy of Control

Control provided by the field was adequate. The following stations could not be held in the bridging adjustments.

1. KEEI SOUTH BASE, 1948, SS #1 and SS #2, could not be held in Strip #13, as was the case of Strip #4 in PH-6401. No reasons could be determined for the lack of adjustment with other points.

2. KAMILO, 1949 and SS #1      3. KIPAEPAE, 1948  
and SS #1. Problems with these two stations could  
not be resolved. Re-identification of the stations  
is planned at the same time that work continues  
to the east.

4. McCANDLESS, 1948 SS #1 and SS #2 although held  
in the bridging could be seen on only one photograph  
in Strip #10 due to cloud coverage.

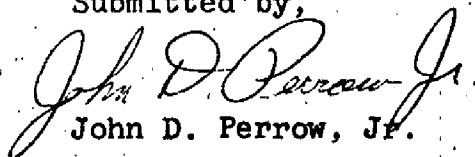
24. Supplemental Data

Ratio prints will be provided to aid in compilation.  
Local USGS quads were used to provide vertical points  
needed for the strip adjustment program.

25. Photography

Photography was not adequate to provide coverage of  
the 1:5,000 scale sheets. This inadequate coverage was  
caused by a change in the limits of the 1:5,000 areas  
after bridging was nearing completion. Photography was  
adequate in regard to definition and overlap.

Submitted by,

  
John D. Perrow, Jr.

Approved by,

  
Henry P. Eichert  
Chief, Aerotriangulation Section

Notes to Compiler  
PH-6402  
Hawaii Island, Hawaii

The following points should be used in setting individual models along Strips #12 and #13.

(1) 63-S-7964-7965

Points 68803, 68804, 67100, 67101, 64100, 64101, 64102 and 64103.

(2) 63-S-8080-8081

Points 22330, 23310, 23800, 23801

(3) 63-S-8081-8082

Points 77331, 78333, 22801, 23800, McCANDLESS SS #1 and SS #2

(4) 63-S-8082-8083

Points 76331, 77331, 77333

(5) 63-S-8083-8084

Points 75331 HONAUNAU ST. BENEDICT CATH. CH. SPIRE, 1948 plus points dropped from model 8082-8083.

(6) 63-S-8084-8085

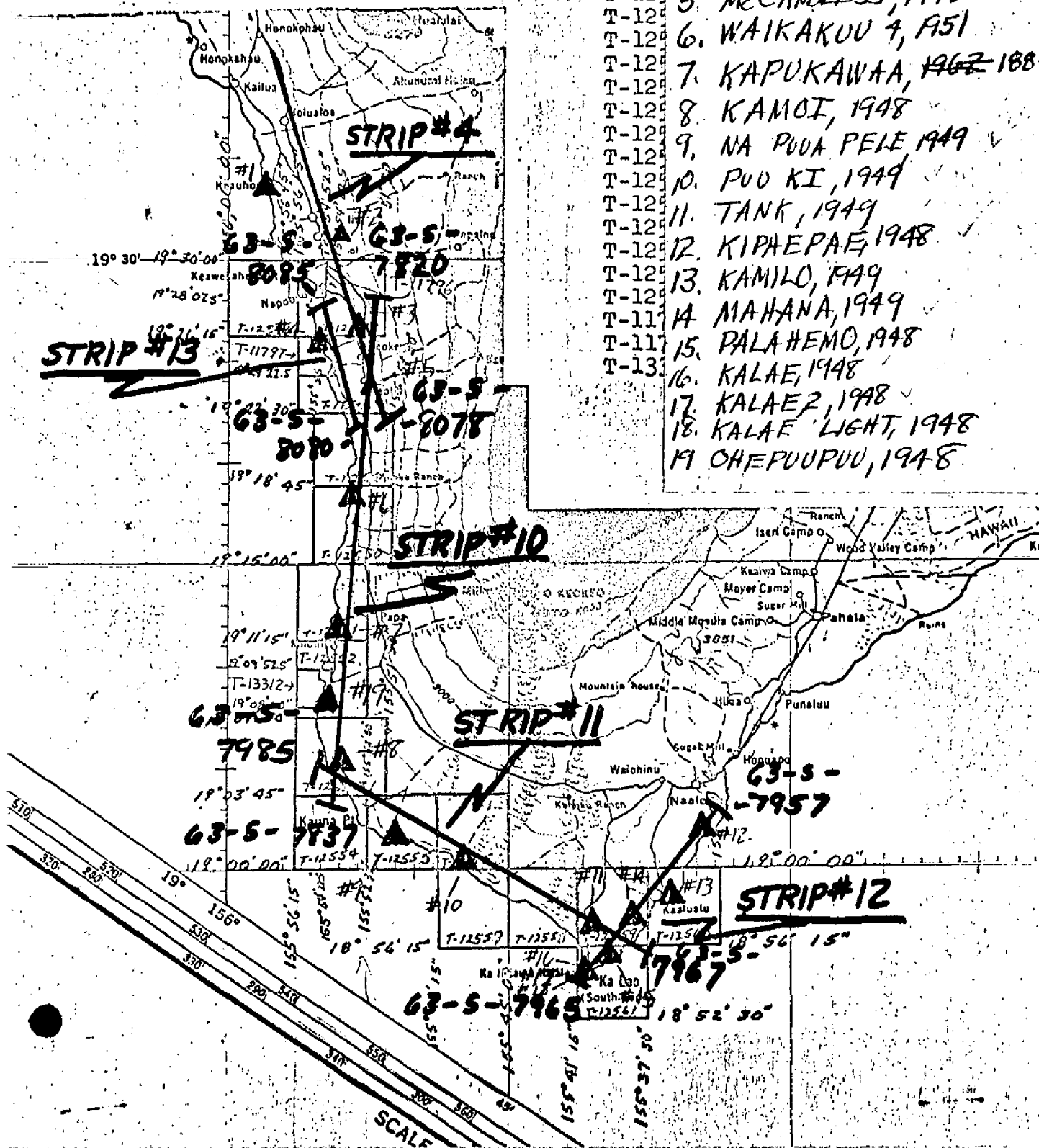
Points 75331, 75333 plus points dropped from model 8083-8084.

Plates 63-S-7821 and 7824 were not used in bridging Strip #10.

Plates 63-S-7976, 7978, 7880, 7982 and 7984 were not used in Strip #11.

JOB PH-6402

SCALE 1:10,000



## DESCRIPTIVE REPORT CONTROL RECORD

| MAP NO.                      | JOB NO. | SOURCE OF INFORMATION<br>(Index) | AEROTRIANGULATION<br>POINT<br>NUMBER | GEODETTIC DATUM                                                                   |                                        | GEOGRAPHIC POSITION                    |  | ORIGINATING ACTIVITY         |
|------------------------------|---------|----------------------------------|--------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|--|------------------------------|
|                              |         |                                  |                                      | Old Hawaiian Datum<br>COORDINATES IN FEET<br>STATE <u>Hawaii</u><br>ZONE <u>1</u> | $\phi$ LATITUDE<br>$\lambda$ LONGITUDE | $\phi$ LATITUDE<br>$\lambda$ LONGITUDE |  |                              |
| T-12555                      | PH-6402 |                                  |                                      |                                                                                   |                                        |                                        |  | Coastal Mapping Section, AMC |
|                              |         |                                  |                                      |                                                                                   |                                        |                                        |  |                              |
| NA PUU A PELE (H.G.S.), 1891 |         | G.P.<br>Pg. 18                   |                                      |                                                                                   |                                        | $\phi$ 19° 01' 48.274"                 |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\lambda$ 155° 51' 21.266"             |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\phi$                                 |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\lambda$                              |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\phi$                                 |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\lambda$                              |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\phi$                                 |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\lambda$                              |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\phi$                                 |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\lambda$                              |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\phi$                                 |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\lambda$                              |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\phi$                                 |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\lambda$                              |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\phi$                                 |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\lambda$                              |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\phi$                                 |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\lambda$                              |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\phi$                                 |  |                              |
|                              |         |                                  |                                      |                                                                                   |                                        | $\lambda$                              |  |                              |
| COMPUTED BY A. C. Rauck, Jr. |         |                                  | DATE<br>7-29-69                      | COMPUTATION CHECKED BY<br>R. White                                                |                                        |                                        |  | DATE<br>2-13-70              |
| LISTED BY                    |         |                                  | DATE                                 | LISTING CHECKED BY                                                                |                                        |                                        |  | DATE                         |
| HAND PLOTTING BY             |         |                                  | DATE                                 | HAND PLOTTING CHECKED BY                                                          |                                        |                                        |  | DATE                         |

## COMPILATION REPORT

T-12555

31. DELINEATION:

Delineation was by instrument methods using the Wild B-8 stereoplotter and 1:30,000 scale panchromatic compilation/bridging photographs. Ratio prints of the 1:15,000 scale color photographs were used graphically to supplement the compilation of minor detail and to assist in photo interpretation.

The field inspection supplied on the 1:30,000 scale contact prints was difficult to interpret. Individual rocks that could not be clearly identified during compilation were not compiled.

Photo quality and coverage were adequate.

32. CONTROL:

Refer to the Photogrammetric Plot Report, dated June 10, 1969.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage was delineated from the compilation photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline, coral and foul limits were delineated from office interpretation of the photographs and from the annotated photographs resulting from the precompilation field inspection. Because of the small tide range, no mean lower low water line was compiled.

36. OFFSHORE DETAILS:

Compilation of offshore detail was performed as described in Item #31.

37. LANDMARKS AND AIDS:

There were no charted fixed aids or landmarks within the limits of this manuscript.

T-12555

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Refer to the Data Record Form 76-36B, Item 5.

40. HORIZONTAL AND VERTICAL ACCURACY:

Refer to the Photogrammetric Plot Report dated June 10, 1969.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS quadrangle Pohue Bay, Hawaii, scale 1:24,000, dated 1962.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with C. &amp; G.S. Chart 4115, scale 1:250,000, 8th edition, dated September 9, 1963, revised January 1, 1967.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

*for* *Gerry L. Hancock*  
R. White  
Cartographic Technician  
January 1973

Approved:

*for* *Gerry L. Hancock*  
Albert C. Rauck, Jr.  
Chief, Coastal Mapping Section

## ADDENDUM TO THE COMPILATION REPORT

T-12555

Field edit was performed in February 1979 by NOAA ship FAIRWEATHER personnel. Adequate field data was furnished to advance the manuscript to Class I.

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6402 Hawaii

T-12555

Awili Point

Humuhumu Point

Island of Hawaii

Kaupuaa Point

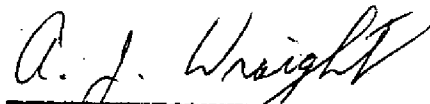
Keawaiki

Kukihiki Point

Na Puu a Pele

Pacific Ocean

Approved by:



A. Joseph Wright  
Chief Geographer

Prepared by:



Frank W. Pickett  
Cartographic Technician

T-12555  
OPR-T126-FA-79  
Humuhumu Point

#### Description

Jagged lava flow cliffs, ranging from 5 to 30 feet in height, extend along much of the coastline, along with a few volcanic cinder cones. There are a few small black-sand beaches. Submerged ledges and submerged rocks are common with extreme depths just offshore.

#### Method

Most of the field edit was done on foot with a skiff standing-by offshore to confirm submerged features. Skiff activities were directed by the shore party via radio. Some of the field edit was done completely from the skiff because of exceptionally calm seas. Existing features were compared to the discrepancy print and to the color photographs. Changes and additions were depicted on the photographs. Rock heights, deletions, and answers to questions posed by the stereo compiler were written on the discrepancy print. Discrepancies noted between the field edit and the hydrographic data have been resolved.

#### Adequacy and Completeness of Compilation

Compilation of the manuscript was adequate.

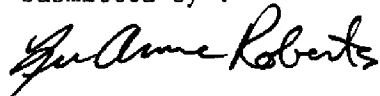
#### Manuscript Accuracy

The manuscript, as compiled, compared very well with items inspected. The terrain did not allow for measurements to the mean high water line from photo identifiable points.

#### Recommendations

This manuscript should be accepted for charting purposes after the corrections have been applied.

Submitted by :



LeeAnne Roberts, Lt(jg), NOAA

Approved by :



Bruce I. Williams, Cdr, NOAA  
Commanding Officer  
NOAA Ship Fairweather

REVIEW REPORT  
SHORELINE

T-12555

61. GENERAL STATEMENT:

Final review for this Final Field Edited Map was accomplished at the Atlantic Marine Center in April 1987. For a schedule of the office and field operations, refer to the Summary included with this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with USGS quadrangle Pohue Bay, Hawaii, 1:24,000 scale, dated 1962.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with hydrographic surveys H-9808, FA-10-2-79 and H-9812, FA-10-3-79; both surveyed in 1979 at 1:10,000 scale. No significant differences were noted.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with NOS Chart 19320, 13th edition, scale 1:250,000, July 10, 1982.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Submitted by:

*Jerry L. Hancock*

Jerry L. Hancock  
Final Reviewer

Approved for forwarding:

*Billy H. Barnes*

Billy H. Barnes  
Chief, Photogrammetric Section, AMC

Approved:

*Larry O. Robson*

Chief, Photogrammetric Production Sec.

*A. Y. Bupen*

Chief, Photogrammetry Branch

