

T-12552

T 12552

|                                                                                                         |                  |
|---------------------------------------------------------------------------------------------------------|------------------|
| 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-12552                                                                                      | 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>HONOMALINO BAY                                                                              |                  |
| 19 63 TO 1973                                                                                           |                  |
| REGISTRY IN ARCHIVES                                                                                    |                  |
| DATE                                                                                                    |                  |

|                                                                                                                                                                                                         |  |                                                                         |  |                                              |  |                              |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------|--|----------------------------------------------|--|------------------------------|--|
| NOAA FORM 76-36A<br>(3-72)                                                                                                                                                                              |  | U. S. DEPARTMENT OF COMMERCE<br>NATIONAL OCEANIC AND ATMOSPHERIC ADMIN. |  | TYPE OF SURVEY                               |  | SURVEY <del>XX</del> T-12552 |  |
| 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. 6402                 |  |
| PHOTOGRAMMETRIC OFFICE<br>Coastal Mapping Div.<br>Atlantic Marine Center, Norfolk, VA                                                                                                                   |  |                                                                         |  | LAST PRECEDING MAP EDITION                   |  |                              |  |
| OFFICER-IN-CHARGE<br>R. Matsushige                                                                                                                                                                      |  |                                                                         |  | TYPE OF SURVEY                               |  | JOB PH. _____                |  |
|                                                                                                                                                                                                         |  |                                                                         |  | <input type="checkbox"/> ORIGINAL            |  | MAP CLASS _____              |  |
|                                                                                                                                                                                                         |  |                                                                         |  | <input type="checkbox"/> RESURVEY            |  | SURVEY DATES:                |  |
|                                                                                                                                                                                                         |  |                                                                         |  | <input type="checkbox"/> REVISED             |  | 19__ TO 19__                 |  |
| I. INSTRUCTIONS DATED                                                                                                                                                                                   |  |                                                                         |  |                                              |  |                              |  |
| 1. OFFICE                                                                                                                                                                                               |  |                                                                         |  | 2. FIELD                                     |  |                              |  |
| Compilation Oct. 28, 1969<br>Amendment 1 Jan. 3, 1973<br>Memo. Sept. 1, 1978                                                                                                                            |  |                                                                         |  | Control/Field Inspection May 8, 1964         |  |                              |  |
| II. DATUMS                                                                                                                                                                                              |  |                                                                         |  |                                              |  |                              |  |
| 1. HORIZONTAL: <input type="checkbox"/> 1927 NORTH AMERICAN                                                                                                                                             |  |                                                                         |  | OTHER (Specify)<br>Old Hawaiian              |  |                              |  |
| 2. VERTICAL: <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 |  |                                                                         |  | OTHER (Specify)                              |  |                              |  |
| 3. MAP PROJECTION<br>Polyconic                                                                                                                                                                          |  |                                                                         |  | 4. GRID(S)                                   |  |                              |  |
|                                                                                                                                                                                                         |  |                                                                         |  | STATE<br>Hawaii                              |  | ZONE<br>1                    |  |
| 5. SCALE<br>1:10,000                                                                                                                                                                                    |  |                                                                         |  | STATE                                        |  | ZONE                         |  |
| III. HISTORY OF OFFICE OPERATIONS                                                                                                                                                                       |  |                                                                         |  |                                              |  |                              |  |
| OPERATIONS                                                                                                                                                                                              |  |                                                                         |  | NAME                                         |  | DATE                         |  |
| 1. AEROTRIANGULATION BY                                                                                                                                                                                 |  |                                                                         |  | J. Perrow                                    |  | June 1969                    |  |
| METHOD: Stereoplanigraph LANDMARKS AND AIDS BY                                                                                                                                                          |  |                                                                         |  |                                              |  |                              |  |
| 2. CONTROL AND BRIDGE POINTS PLOTTED BY                                                                                                                                                                 |  |                                                                         |  | J. Perrow                                    |  | June 1969                    |  |
| METHOD: Coradomat CHECKED BY                                                                                                                                                                            |  |                                                                         |  | J. Perrow                                    |  | June 1969                    |  |
| 3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY                                                                                                                                                                |  |                                                                         |  | R. White / L. Neterer                        |  | June 1972                    |  |
| COMPILATION CHECKED BY                                                                                                                                                                                  |  |                                                                         |  | A. Shands / R. White                         |  | June 1972                    |  |
| INSTRUMENT: Wild B-8                                                                                                                                                                                    |  |                                                                         |  | N.A.                                         |  |                              |  |
| SCALE: 1:10,000                                                                                                                                                                                         |  |                                                                         |  | N.A.                                         |  |                              |  |
| 4. MANUSCRIPT DELINEATION PLANIMETRY BY                                                                                                                                                                 |  |                                                                         |  | L. Neterer                                   |  | June 1972                    |  |
| CHECKED BY                                                                                                                                                                                              |  |                                                                         |  | A. Shands                                    |  | July 1972                    |  |
| METHOD: Smooth drafted                                                                                                                                                                                  |  |                                                                         |  | N.A.                                         |  |                              |  |
| CHECKED BY                                                                                                                                                                                              |  |                                                                         |  | N.A.                                         |  |                              |  |
| SCALE: 1:10,000 HYDRO SUPPORT DATA BY                                                                                                                                                                   |  |                                                                         |  | L. Neterer                                   |  | June 1972                    |  |
| CHECKED BY                                                                                                                                                                                              |  |                                                                         |  | A. Shands                                    |  | July 1972                    |  |
| 5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY                                                                                                                                                             |  |                                                                         |  | A. Shands                                    |  | July 1972                    |  |
| 6. APPLICATION OF FIELD EDIT DATA BY                                                                                                                                                                    |  |                                                                         |  | R. Minton                                    |  | July 1974                    |  |
| CHECKED BY                                                                                                                                                                                              |  |                                                                         |  | J. Roderick                                  |  | Nov. 1979                    |  |
| 7. COMPILATION SECTION REVIEW BY                                                                                                                                                                        |  |                                                                         |  | J. Roderick                                  |  | Nov. 1979                    |  |
| 8. FINAL REVIEW BY                                                                                                                                                                                      |  |                                                                         |  | J. Hancock                                   |  | Apr. 1987                    |  |
| 9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY                                                                                                                                                          |  |                                                                         |  | J. Hancock                                   |  | June 1987                    |  |
| 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY                                                                                                                                                          |  |                                                                         |  | P. Dempsey                                   |  | Aug. 1987                    |  |
| 11. MAP REGISTERED - COASTAL SURVEY SECTION BY                                                                                                                                                          |  |                                                                         |  | ELDAUGHERTY                                  |  | SEP 87                       |  |

NOAA FORM 76-36B  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYT-12552  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

|                                                                                                                                                                                           |               |                                                                                 |          |                        |                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------|----------|------------------------|----------------------------------------------|
| CAMERA(S)<br>Wild RC-8"S", S=152.29mm                                                                                                                                                     |               | 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) 7832-7835*                                                                                                                                                                         | Aug. 29, 1963 | 09:06                                                                           | 1:30,000 | 1.1Ft. above MLLW      |                                              |
| 63S(C) 7870-7875**                                                                                                                                                                        | Aug. 29, 1963 | 09:51                                                                           | 1:15,000 | 1.6FT. above MLLW      |                                              |
|                                                                                                                                                                                           |               |                                                                                 |          | Mean Tide Range=1.4Ft. |                                              |

## 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-9807        | 1979    | Registered       |               |         |                  |

## 5. FINAL JUNCTIONS

| NORTH   | EAST | SOUTH   | WEST |
|---------|------|---------|------|
| T-12551 | None | T-12553 | None |

## REMARKS

Inset map T-13312 (1:5,000 scale) is contained within the limits of this map.

T-12552  
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

| OPERATION                           | NAME                                                                                                                                                               | DATE            |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 1. CHIEF OF FIELD PARTY             | R. Newsom                                                                                                                                                          | Feb.-Sept. 1964 |
| 2. HORIZONTAL CONTROL               | RECOVERED BY E. Cline                                                                                                                                              | July 1964       |
|                                     | ESTABLISHED BY E. Cline                                                                                                                                            | July 1964       |
|                                     | PRE-MARKED OR IDENTIFIED BY E. Cline                                                                                                                               | July 1964       |
| 3. VERTICAL CONTROL                 | RECOVERED BY None                                                                                                                                                  |                 |
|                                     | ESTABLISHED BY None                                                                                                                                                |                 |
|                                     | PRE-MARKED OR IDENTIFIED BY None                                                                                                                                   |                 |
| 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<br><input type="checkbox"/> COMPLETE<br><input type="checkbox"/> SPECIFIC NAMES ONLY<br><input checked="" type="checkbox"/> NO INVESTIGATION |                 |
| 6. PHOTO INSPECTION                 | CLARIFICATION OF DETAILS BY E. Cline                                                                                                                               | Aug. 1964       |
| 7. BOUNDARIES AND LIMITS            | SURVEYED OR IDENTIFIED BY N.A.                                                                                                                                     |                 |

## II. SOURCE DATA

## 1. HORIZONTAL CONTROL IDENTIFIED

See Item #8

## 2. VERTICAL CONTROL IDENTIFIED

None

| PHOTO NUMBER | STATION NAME                                                        | PHOTO NUMBER | STATION DESIGNATION |
|--------------|---------------------------------------------------------------------|--------------|---------------------|
| 63(S)7835*   | OHEPUUPUU 1890<br>(Direct and Sub. Pt.)<br><br>*Partial ratio print |              |                     |

## 3. PHOTO NUMBERS (Clarification of details)

63(S)7832, 7833, 7835 (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)

Control data submitted with common inset map T-13312

NOAA FORM 76-36C  
(3-72)

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

T-12552

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION

☒ FIELD EDIT OPERATION

| OPERATION               | NAME                                                          | DATE                 |
|-------------------------|---------------------------------------------------------------|----------------------|
| 1. CHIEF OF FIELD PARTY | (NOAA Ship FAIRWEATHER)<br>C. Burroughs                       | April 1973           |
| 2. HORIZONTAL CONTROL   | RECOVERED BY<br>ESTABLISHED BY<br>PRE-MARKED OR IDENTIFIED BY | None<br>None<br>None |
| 3. VERTICAL CONTROL     | RECOVERED BY<br>ESTABLISHED BY                                | None<br>None         |

T-12552  
HISTORY OF FIELD OPERATIONSI. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION (Partial)

| OPERATION                           | NAME                                                                                                                                                                  | DATE      |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 1. CHIEF OF FIELD PARTY             | (NOAA Ship FAIRWEATHER)<br>B. Williams                                                                                                                                | Mar. 1979 |
| 2. HORIZONTAL CONTROL               | RECOVERED BY J. Quinlan                                                                                                                                               | Mar. 1979 |
|                                     | ESTABLISHED BY None                                                                                                                                                   |           |
|                                     | PRE-MARKED OR IDENTIFIED BY None                                                                                                                                      |           |
| 3. VERTICAL CONTROL                 | RECOVERED BY None                                                                                                                                                     |           |
|                                     | ESTABLISHED BY None                                                                                                                                                   |           |
|                                     | PRE-MARKED OR IDENTIFIED BY None                                                                                                                                      |           |
| 4. LANDMARKS AND AIDS TO NAVIGATION | RECOVERED (Triangulation Stations) BY None                                                                                                                            |           |
|                                     | LOCATED (Field Methods) BY None                                                                                                                                       |           |
|                                     | IDENTIFIED BY L. Roberts                                                                                                                                              | Mar. 1979 |
| 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 None                                                                                                                                      |           |
| 7. BOUNDARIES AND LIMITS            | SURVEYED OR IDENTIFIED BY N.A.                                                                                                                                        |           |

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

None

| PHOTO NUMBER | STATION NAME | PHOTO NUMBER | STATION DESIGNATION |
|--------------|--------------|--------------|---------------------|
|              |              |              |                     |

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

| PHOTO NUMBER | OBJECT NAME | PHOTO NUMBER | OBJECT NAME |
|--------------|-------------|--------------|-------------|
| 63S(P)7833   | TANK        |              |             |

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 (Hydrographer field photoidentified a Tank as a potential landmark to be positioned photogrammetrically for charting),  
1 Form 76-40

NOAA FORM 76-36D  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONT-12552  
RECORD OF SURVEY USE

## I. MANUSCRIPT COPIES

| COMPILATION STAGES                                            |           |                                  | DATE MANUSCRIPT FORWARDED |               |
|---------------------------------------------------------------|-----------|----------------------------------|---------------------------|---------------|
| DATA COMPILED                                                 | DATE      | REMARKS                          | MARINE CHARTS             | HYDRO SUPPORT |
| Compilation complete<br>pending field edit                    | July 1972 | Class II manuscript              | None                      | Jan. 1973     |
| Field edit applied                                            | July 1974 | Unreviewed Class I<br>manuscript | None                      | July 1974     |
| Potential landmark lo-<br>cated, compilation office<br>review | Nov. 1979 | Class I manuscript               | Nov. 1979                 | Nov. 1979     |
| Final review                                                  | Apr. 1987 | Final Map                        | July 1987                 | July 1987     |

## II. LANDMARKS AND AIDS TO NAVIGATION

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

| NUMBER<br>pages | CHART LETTER<br>NUMBER ASSIGNED | DATE<br>FORWARDED | REMARKS             |
|-----------------|---------------------------------|-------------------|---------------------|
| 1               |                                 | June 1980         | Landmark for charts |
|                 |                                 |                   |                     |
|                 |                                 |                   |                     |
|                 |                                 |                   |                     |
|                 |                                 |                   |                     |
|                 |                                 |                   |                     |
|                 |                                 |                   |                     |

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: June 19803. ☐ 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. <sup>76-40</sup> ~~55~~ ~~XXX~~ 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<br><br>MAP CLASS<br><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<br>EDITION  | SURVEY NUMBER<br>TP - _____ (3) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br><br>MAP CLASS<br><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<br>EDITION | SURVEY NUMBER<br>TP - _____ (4) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br><br>MAP CLASS<br><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       |                                                                                                                                                                                                                                                             |

JOB PH-6402  
SHORELINE MAPPING  
HAWAII IS. WEST COAST  
AILUA TO SOUTH CAPE  
SCALE 1:10,000

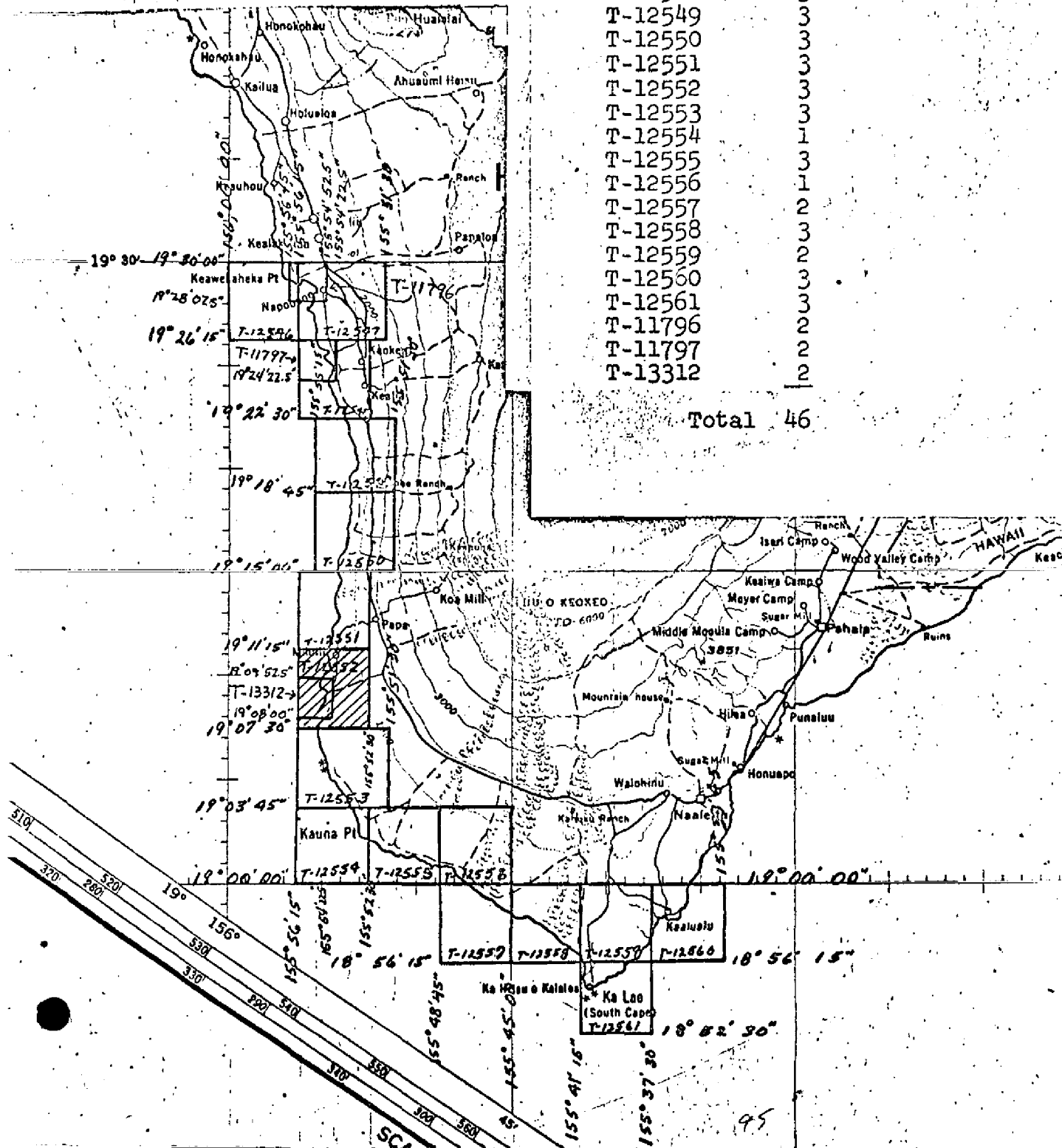
JOB PH-6402

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 | 3 |
| T-12559 | 2 |
| T-12560 | 3 |
| T-12561 | 3 |
| T-11796 | 2 |
| T-11797 | 2 |
| T-13312 | 2 |

Total 46



6

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

T-12552

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 Latitude 19° 07.5' to Latitude 19° 11.5'. A western portion of the map is portrayed by inset map T-13312, 1:5,000 scale.

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 July 1972. The shoreline from Latitude 19° 08' 00" to Latitude 19° 09' 52.5" was not compiled since it is mapped at 1:5,000 scale on inset map T-13312. 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 survey H-9357 by NOAA ship FAIRWEATHER personnel in April 1973. Additional field data concerning a potential landmark was submitted to compilation during 1979 hydrographic operations for H-9807 by the same ship.

T-12552

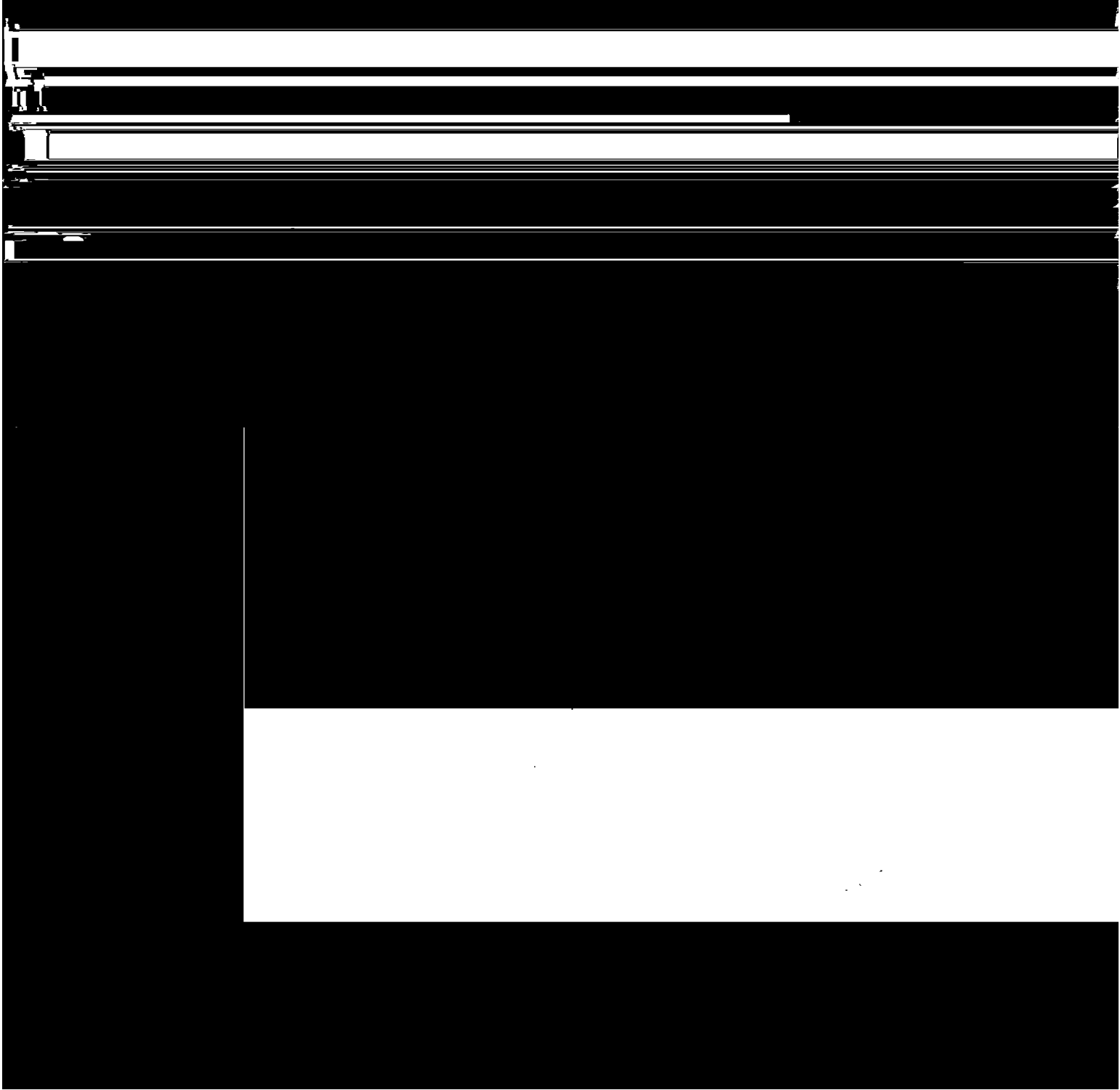
Application of field edit was performed at the original compilation office in July 1974. Map copies were submitted to the hydrographer for smooth sheet application. The additional field data submitted in February 1979 was applied November 1979 and applicable charting information was forwarded to Marine Charts.

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-12552

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 *ack*

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 a 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

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 north-west 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.

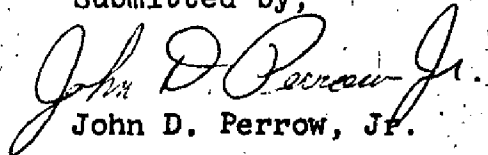
24. Supplemental Data

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

48

11

# SHORELINE MAPPING

JOB PH-6402

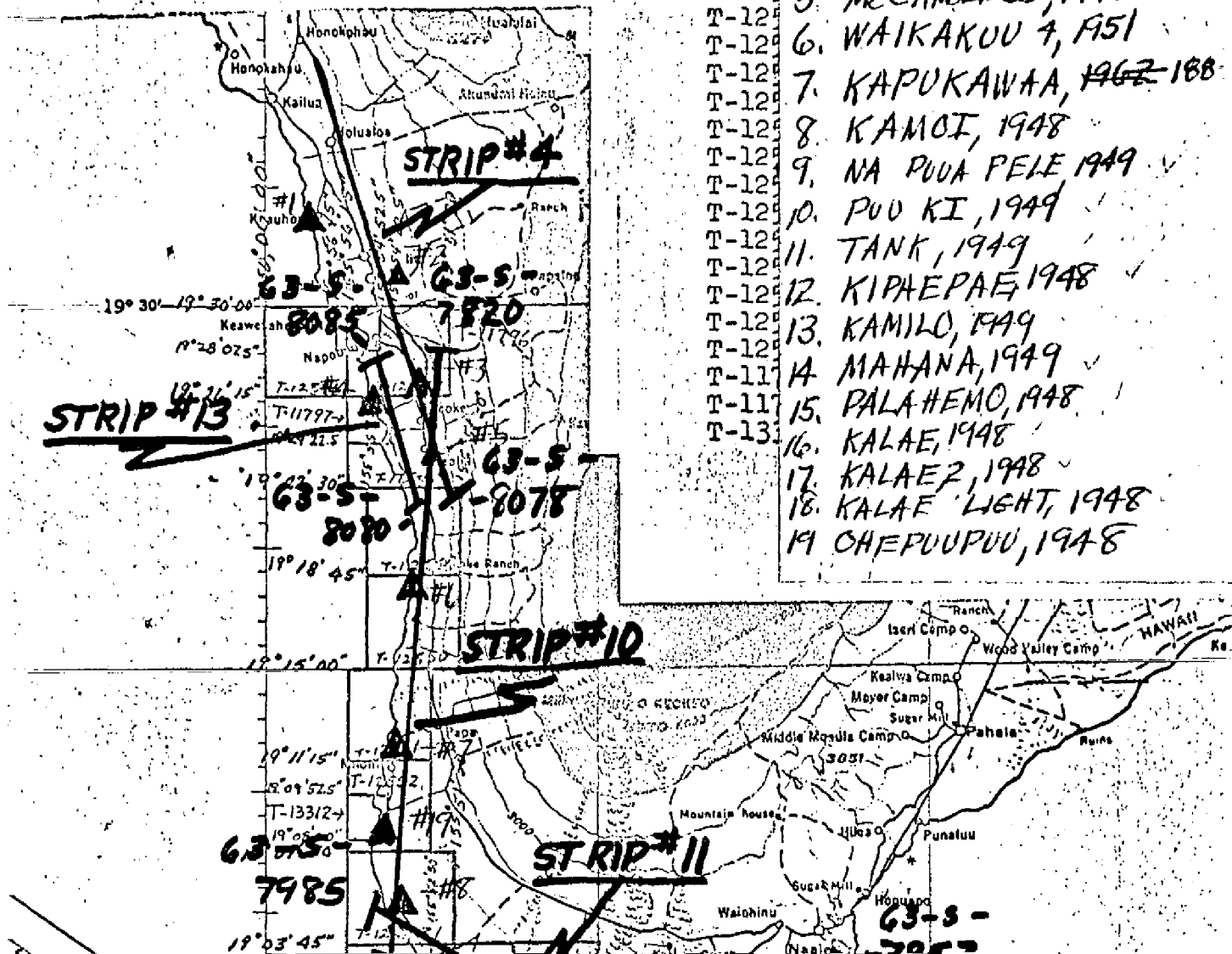
HAWAII IS. WEST COAST  
AILUA TO SOUTH CAPE

SCALE 1:10,000

OFFICE

Sheet  
No.

1. POINT, 1928
2. KANAKU, 1948
3. HONAUHUA ST. BENEDET  
CATH. CH. SPIRE, 1948
4. KEEI S. BASE, 1948
5. McCANDLESS, 1948
6. WAIKAKU 4, 1951
7. KAPUKAWAA, 1962-1988
8. KAMOI, 1948
9. NA PUA PELE, 1949
10. POU KI, 1949
11. TANK, 1949
12. KIPAEPAE, 1948
13. KAMILO, 1949
14. MAHANA, 1949
15. PALAHEMO, 1948
16. KALAE, 1948
17. KALAE 2, 1948
18. KALAE LIGHT, 1948
19. CHEPUUPUU, 1948



## DESCRIPTIVE REPORT CONTROL RECORD

| MAP NO.                   | JOB NO.          | PH-6402 | GEODETTIC DATUM                                                                   |                                                               | ORIGINATING ACTIVITY         |  |
|---------------------------|------------------|---------|-----------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------|--|
|                           |                  |         | Old Hawaiian Datum<br>COORDINATES IN FEET<br>STATE <u>Hawaii</u><br>ZONE <u>1</u> | Geographic Position<br>$\phi$ LATITUDE<br>$\lambda$ LONGITUDE | Coastal Mapping Section, AMC |  |
| T-12552                   |                  |         |                                                                                   |                                                               |                              |  |
|                           |                  |         |                                                                                   |                                                               |                              |  |
| OHEPUUPUU (H.G.S.), 1890  | G.P.<br>Pg. 18   |         | X=                                                                                | $\phi$ 19° 08' 15.598"                                        |                              |  |
|                           |                  |         | Y=                                                                                | $\lambda$ 155° 54' 52.428"                                    |                              |  |
|                           |                  |         | X=                                                                                | $\phi$ 19° 09' 29.810"                                        |                              |  |
| PUU NAHAHA (H.G.S.), 1884 | G.P.<br>Pg. 40   |         | Y=                                                                                | $\lambda$ 155° 53' 28.255"                                    |                              |  |
|                           |                  |         | X=                                                                                | $\phi$ 19° 09' 29.809"                                        |                              |  |
| PUU NAHAHA 2, 1948        | G.P.<br>Pg. 17   |         | Y=                                                                                | $\lambda$ 155° 53' 28.254"                                    |                              |  |
|                           |                  |         | X=                                                                                | $\phi$ 19° 07' 49.156"                                        |                              |  |
| NIUOU, 1948               | G.P.<br>Pg. 17   |         | Y=                                                                                | $\lambda$ 155° 55' 08.988"                                    |                              |  |
|                           |                  |         | X=                                                                                | $\phi$                                                        |                              |  |
|                           |                  |         | Y=                                                                                | $\lambda$                                                     |                              |  |
|                           |                  |         | X=                                                                                | $\phi$                                                        |                              |  |
|                           |                  |         | Y=                                                                                | $\lambda$                                                     |                              |  |
|                           |                  |         | X=                                                                                | $\phi$                                                        |                              |  |
|                           |                  |         | Y=                                                                                | $\lambda$                                                     |                              |  |
|                           |                  |         | X=                                                                                | $\phi$                                                        |                              |  |
|                           |                  |         | Y=                                                                                | $\lambda$                                                     |                              |  |
|                           |                  |         | X=                                                                                | $\phi$                                                        |                              |  |
|                           |                  |         | Y=                                                                                | $\lambda$                                                     |                              |  |
|                           |                  |         | X=                                                                                | $\phi$                                                        |                              |  |
|                           |                  |         | Y=                                                                                | $\lambda$                                                     |                              |  |
| COMPUTED BY               | A. C. Rauck, Jr. | DATE    | COMPUTATION CHECKED BY                                                            | DATE                                                          | 2-12-70                      |  |
| LISTED BY                 |                  | 7-29-69 | R. White                                                                          | DATE                                                          |                              |  |
|                           |                  | DATE    | LISTING CHECKED BY                                                                | DATE                                                          |                              |  |
| HAND PLOTTING BY          |                  | DATE    | HAND PLOTTING CHECKED BY                                                          | DATE                                                          |                              |  |

## COMPILATION REPORT

T-12552

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 landmarks or fixed aids within the limits of this manuscript.

T-12552

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 Milolii, Hawaii, scale 1:24,000, dated 1962.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with C. & 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:

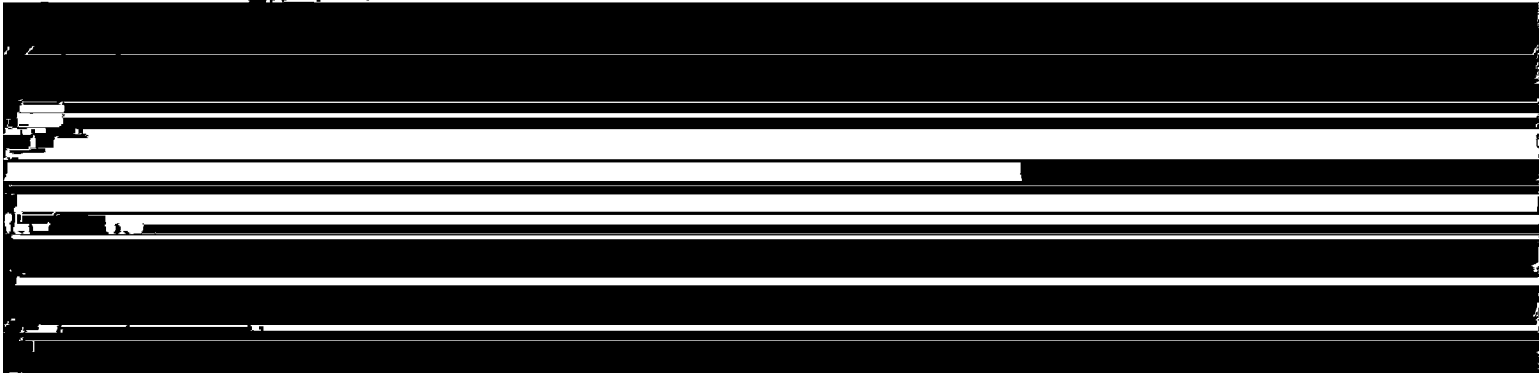
None.

Submitted by:

*Jerry L. Hancock*  
for L. Neterer, Jr.  
Cartographic Technician  
June 1972

Approved:

*Jerry L. Hancock*



ADDENDUM TO THE COMPILATION REPORT

T-12552

Field edit was performed in March 1973 by NOAA ship FAIRWEATHER personnel. Adequate field data was furnished to advance the manuscript to Class I.

Additional field data was submitted in February 1979 in conjunction with continuing hydrographic activity by the ship FAIRWEATHER. A prominent water tank was photoidentified for a subsequent photogrammetric location. This tank was positioned though it falls just beyond the east limit of the mapping area. The tank was positioned in the border of the manuscript and a completed 76-40 form was submitted to Marine Charts.

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6402 Hawaii

T-12552

(\* Compiled on inset map T-13312)

- \* Hanamalo Point
- Henomalino Bay
- Island of Hawaii
- \* Kakio Point
- Kamaohe Bay
- \* Kapua Bay
- Kapulau Point
- \* Kaupo Bay
- Lae Loa
- \* Lae o Ahole
- \* Lae o Humuhumu
- Milolii Bay-----Compiled on T-12551
- \* Mokunaia Point
- Mokuckahailani
- Niuou Point
- \* Oea Bay
- \* Okoe
- \* Okoe Bay
- Omokaa Bay
- Pacific Ocean
- \* Puu Hinahina Bay

Approved by:

*A. J. Wright*

A. Joseph Wright  
Chief Geographer

Prepared by:

*Frank W. Pickett*

Frank W. Pickett  
Cartographic Technician

## FIELD EDIT REPORTS

KONA COAST, ISLAND OF HAWAII

OPR-419 FA-73

MARCH - APRIL 1973

## MAPS

T-11797

T-12547

T-12550

T-12551

T-12552

T-13312

## FIELD EDIT REPORT

KONA COAST, ISLAND OF HAWAII

OPR-419

MARCH-APRIL 1973

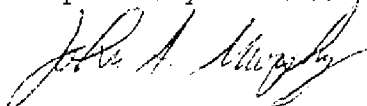
INTRODUCTION

Field edit reports are attached for the following maps: T-11797, T-12547, T-12550, T-12551, T-12552, T-13312.

Field photographs and copies of the field edit ozalids were taken into the field. Due to the small tidal range in the area, shoreline verification was done by visual inspection at various tide stages. Sextant fixes were plotted on the appropriate boat sheet. Height data for rocks, ledges, and reefs is either written directly on the ozalid, or entered in the field edit notebook along with position data, and referenced on the ozalid. Because of the rough surf conditions existing in the working grounds, sextant fixes could not be taken on some near shore rocks and ledges. In these cases positions are based on visual verification by the field editor. Due to the uncommon clarity of the off shore water, numerous submerged rocks and foul areas drawn on the ozalid were found to be at such depths so as not to constitute hazards. These have been noted, and new limits and locations appear on the ozalids. All times are based on the 135°W meridian. Compilation of these maps is in general good, and field inspection is complete.

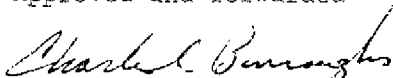
It is recommended that the maps be revised in accordance with the notes on the ozalids, and in the field edit notebook before acceptance as advanced manuscripts.

Respectfully submitted,



John A. Murphy Ens. N.O.A.A.

Approved and forwarded



Charles A. Burroughs CDR. N.O.A.A.

## FIELD EDIT REPORT

MAP T-12552  
OKOE BAY, ISLAND OF HAWAII  
APRIL, 1973

Field edit of map T- 12552 was done by Ens. John A. Murphy during April 1973. Inspection was done on foot and in a small skiff.

METHOD

Field photographs and a copy of the field edit ozalid were examined in the field. Shoreline verification was done by visual comparison of the beach area and the map in the field. Isolated rocks and ledges were located by sextant fixes, when surf conditions permitted, and plotted on boat sheet FA-10-2-73. Otherwise visual verification of location was used. An Apelco Fisherman's portable fathometer, s/n 34043, was used to determine the needed depths. Heights or depths of rocks, reefs, and ledges are noted in the field edit notebook or directly on the ozalid. All times are based on 135° W meridian.

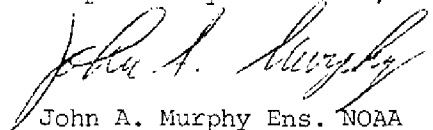
ADEQUACY OF COMPILATION

Compilation of this map is good, considering the prevailing surf conditions. Hydrographic location of features compares well to photogrammetric location. Field edit is complete.

RECOMMENDATIONS

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

Respectfully submitted,

  
John A. Murphy Ens. NOAA

T-12552  
OPR-T126-FA-79  
Okoe Bay

RECOMMENDATIONS

The tank described in the enclosed 76-40 is of landmark value and should be photogrammetrically located. This recommendation is made in spite of the fact that the tank falls off of the T-sheet and the T-sheet is a class 1 manuscript. There was not sufficient geodetic control to get a geodetic position for the tank.

Submitted by:

*Richard Schiro*  
Richard Schiro, LCDR, NOAA

Approved by:

*Bruce I. Williams*  
Bruce I. Williams, CDR, NOAA  
Commanding Officer  
NOAA Ship Fairweather

REVIEW REPORT  
SHORELINE

T-12552

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:

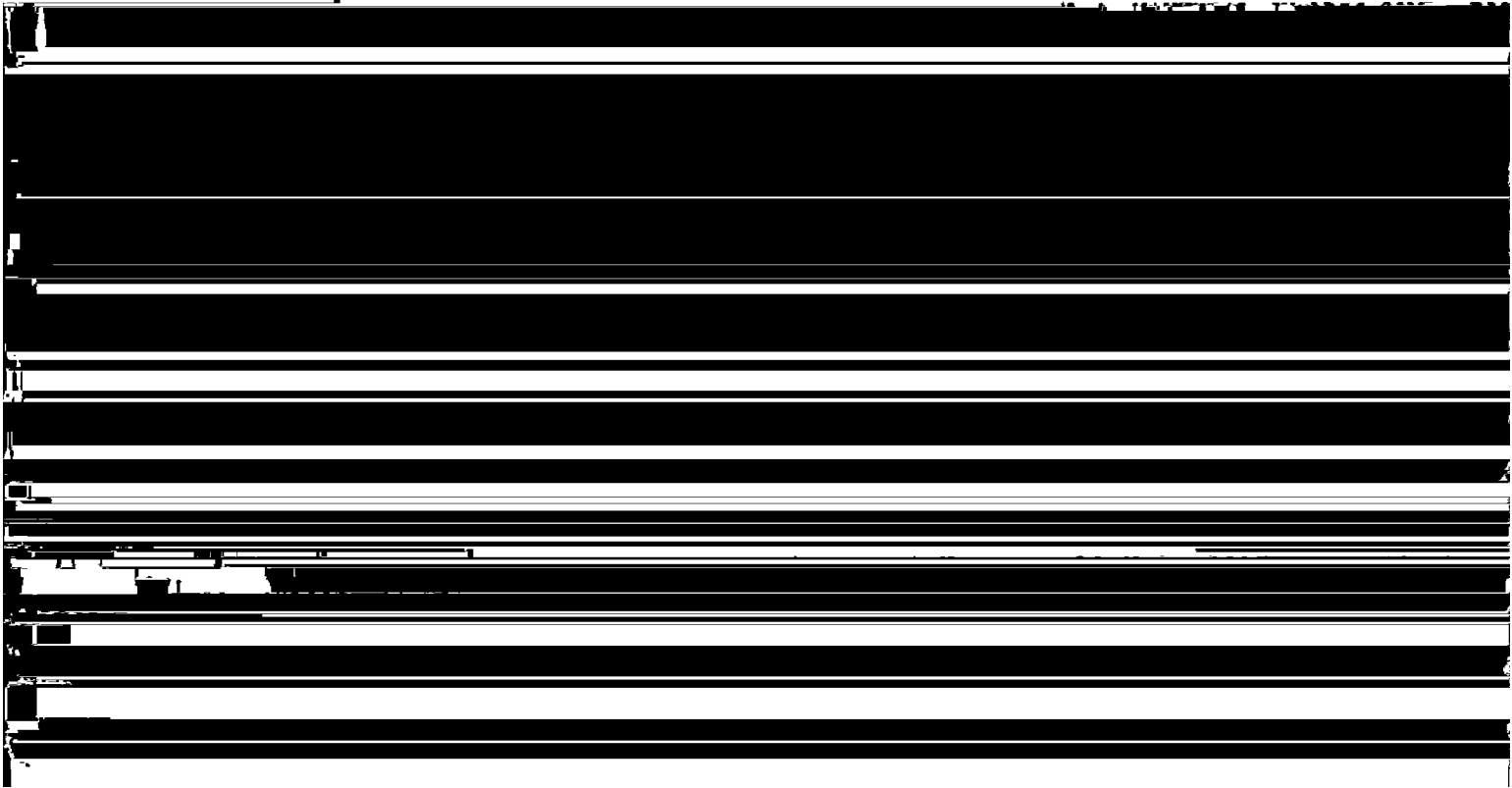
Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

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

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

This map is common to portions of hydrographic surveys H-9357 (1973) and H-9807 (1979). A comparison was made with a registered copy of H-9807, FA-10-1-79, 1:10,000 scale, surveyed 1979. No significant discrepancies were noted. A comparison was not made with survey H-9357.

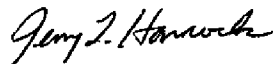


T-12552

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

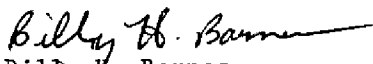
This map complies with the Project Instructions, and meets the requirements for National Standards of Map Accuracy.

Submitted by:



Jerry L. Hancock  
Final Reviewer

Approved for forwarding:



Billy H. Barnes  
Chief, Photogrammetric Section, AMC

Approved:



Chief, Photogrammetric Production Sec.



Chief, Photogrammetry Branch

|                                                                                   |
|-----------------------------------------------------------------------------------|
| ORIGINATOR                                                                        |
| FIELD PARTY                                                                       |
| GRAPHIC PARTY                                                                     |
| TIC PARTY<br>(Specify)                                                            |
| IVITY REPRESENTATIVE                                                              |
| CTIVITY REPRESENTATIVE                                                            |
| TER                                                                               |
| TY CONTROL AND REVIEW GROUP<br>RENTATIVE                                          |
| ctions** require<br>n or verification,<br>ber of the photo-<br>entify the object. |
| RED<br>Is also a tri-<br>red, enter 'Triang.                                      |
| N PHOTOGRAPH                                                                      |
| are dependent<br>rol established                                                  |



