FORM 804
U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Planimetric

Field No. T-13417
Office No.

LOCALITY
State United States Possession
General locality Pacific Ocean
Locality Wake Island Boat Basin

1964 * see below

CHIEF OF PARTY

LIBRARY & ARCHIVES

DATE

* 1968-1970 (Refer to page 6)
# DESCRIPTIVE REPORT - DATA RECORD

**PHOTOGRAMMETRIC OFFICE**

Rockville, Maryland

**OFFICER IN CHARGE**

Richard H. Houlden

**INSTRUCTIONS DATED**

June 4, 1970

**DATUMS**

1. **HORIZONTAL:**
   - [ ] 1927 NORTH AMERICAN
   - [X] MEAN HIGH-WATER
   - [ ] MEAN LOW-WATER
   - [ ] MEAN LOWER LOW-WATER
   - [ ] MEAN SEA LEVEL

2. **VERTICAL:**
   - [ ] MEAN HIGH-WATER
   - [ ] MEAN LOW-WATER
   - [ ] MEAN LOWER LOW-WATER
   - [ ] MEAN SEA LEVEL

**MAP PROJECTION**

Mercator

**SCALE**

1:3,500

**HISTORY OF OFFICE OPERATIONS**

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AEROTRIANGULATION</td>
<td>J. D. Perron, Jr.</td>
<td>6/22/70</td>
</tr>
<tr>
<td>2. CONTROL AND BRIDGE POINTS</td>
<td>P. J. Dempsey</td>
<td>9/2/70</td>
</tr>
<tr>
<td>3. STEREOSCOPIC INSTRUMENT</td>
<td>E. L. Rolle</td>
<td>9/25/70</td>
</tr>
<tr>
<td>4. MANUSCRIPT DELINEATION</td>
<td>H. R. Brooks</td>
<td>9/25/70</td>
</tr>
<tr>
<td>5. OFFICE INSPECTION PRIOR TO FIELD EDIT</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>6. APPLICATION OF FIELD EDIT DATA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>7. COMPILATION SECTION REVIEW</td>
<td>E. L. Rolle</td>
<td>10/9/70</td>
</tr>
<tr>
<td>8. FINAL REVIEW</td>
<td>S. G. Blankenbaker</td>
<td>10/21/70</td>
</tr>
<tr>
<td>9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH</td>
<td>E. L. Rolle</td>
<td>10/14/70</td>
</tr>
<tr>
<td>10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH</td>
<td>S. G. Blankenbaker</td>
<td>10/14/70</td>
</tr>
<tr>
<td>11. MAP REGISTERED - COASTAL SURVEY SECTION</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
1. COMPILATION PHOTOGRAPHY

<table>
<thead>
<tr>
<th>NUMBER AND TYPE</th>
<th>DATE</th>
<th>TIME</th>
<th>SCALE</th>
<th>STAGE OF TIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>007 (P) and 008 (P)</td>
<td>8/24/64</td>
<td>10:10</td>
<td>1:25,000</td>
<td>MLLW</td>
</tr>
</tbody>
</table>

**COMMENTS**

The model of the camera used by the U. S. Navy unknown.

2. SOURCE OF MEAN HIGH-WATER LINE:

Photos dated 8/24/64.

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

Photos dated 8/24/64

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

<table>
<thead>
<tr>
<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
<th>SURVEY COPY USED</th>
<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
<th>SURVEY COPY USED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inapplicable</td>
<td></td>
<td></td>
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5. FINAL JUNCTIONS

<table>
<thead>
<tr>
<th>NORTH</th>
<th>EAST</th>
<th>SOUTH</th>
<th>WEST</th>
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</thead>
<tbody>
<tr>
<td>T-13416</td>
<td>T-13416</td>
<td>T-13416</td>
<td>T-13416</td>
</tr>
</tbody>
</table>

**REMARKS**

T-13417 falls within the limits of T-13416 (scale 1:15,000).
### HISTORY OF FIELD OPERATIONS

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CHIEF OF FIELD PARTY</td>
<td>G. M. Ward (Chief, Tide Observation Party)</td>
<td>Dec. 69' Jan. 70'</td>
</tr>
<tr>
<td>2. HORIZONTAL CONTROL</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>3. VERTICAL CONTROL</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>4. LANDMARKS AND AIDS TO NAVIGATION</td>
<td>John B. Courtney (Sec 39, Source Data)</td>
<td>June 69'</td>
</tr>
</tbody>
</table>

#### SOURCE DATA

<table>
<thead>
<tr>
<th>1. HORIZONTAL CONTROL IDENTIFIED</th>
<th>2. VERTICAL CONTROL IDENTIFIED</th>
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</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

#### PHOTO NUMBERS (Clarification of details)

- None

#### LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

Not identified on photography - all data included in chart letter #93 and Blueprint #77588.

#### GEOGRAPHIC NAMES

- Report
- None

#### BOUNDARY AND LIMITS

- Report
- None

#### FAA Plan and Chart Sections

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

**NOTE:** All field records filed in the Marine Data Branch [Blueprint #77588 and Chart Letter #93(70)]
### RECORD OF SURVEY USE

#### 1. MANUSCRIPT COPIES

<table>
<thead>
<tr>
<th>Data Compiled</th>
<th>Date</th>
<th>Remarks</th>
<th>Marine Charts</th>
<th>Hydro Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planimetry</td>
<td>10/2/70</td>
<td>No advance copy forwarded to Marine Charts</td>
<td></td>
<td>Inapplicable</td>
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#### II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

<table>
<thead>
<tr>
<th>Number</th>
<th>Chart Letter Number Assigned</th>
<th>Date Forwarded</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inapplicable</td>
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</tbody>
</table>

2. REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: Inapplicable

3. REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: Inapplicable

#### III. FEDERAL RECORDS CENTER DATA

1. Bridging photographs; Duplicate bridging report; Computer readouts.
2. Control station identification cards; Form C&GS 567 submitted by field parties.
3. Source data (except for Geographic Names Report) as listed in Section II, ESSA Form 76-36C. Account for exceptions.

#### IV. SURVEY REVISION

<table>
<thead>
<tr>
<th>First Revision</th>
<th>Survey Number</th>
<th>Job Number</th>
<th>Remarks</th>
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<tr>
<td></td>
<td>TP - (2)</td>
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<td></td>
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<tr>
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<td>Date of Photography</td>
<td>Date of Field Edit</td>
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<table>
<thead>
<tr>
<th>Second Revision</th>
<th>Survey Number</th>
<th>Job Number</th>
<th>Remarks</th>
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<tr>
<td></td>
<td>TP - (3)</td>
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<td></td>
<td>Date of Photography</td>
<td>Date of Field Edit</td>
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</table>

<table>
<thead>
<tr>
<th>Third Revision</th>
<th>Survey Number</th>
<th>Job Number</th>
<th>Remarks</th>
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<tbody>
<tr>
<td></td>
<td>TP - (4)</td>
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</tr>
<tr>
<td></td>
<td>Date of Photography</td>
<td>Date of Field Edit</td>
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</tr>
</tbody>
</table>
JOB PH-7009
WAKE ISLAND
CHART TOPOGRAPHY
SCALE 1:3,500 & 1:15,000

Official Mileage for Cost Accounts
Sheet No.-Area Sq.Mi.
T-13416 8
T-13417 2
Total 10
Summary
T-11316 and T-11317

These maps provide a new base for Nautical Chart 4195 - covering Wake, Wilkes and Peale Islands.

Control for aerotriangulation consisted of 5 office identified triangulation stations. All stations held within accuracy requirements and the bridge provided adequate control for compilation.

Field work consisted of cursory chart inspections by a tide observation party during the period December 1968 through January 1970. The field data is comprised of annotated copies of an FAA Plan, chart sections, and Forms 567. Data application as a guide in selecting features to be delineated from the photographs were utilized by the compiler. Data requiring application by transfer from the FAA Plan and the chart sections will be applied by the chart compiler.

The photography was found to be generally poor for compilation purposes (refer to Item 31 of the Compilation Report). The inadequacies in photography and field work called to the attention of the Marine Chart Division. The maps were accepted as adequate for charting purposes.

S. G. Blankenbaker
PH-7009
Wake Island

June 22, 1970

21. Area Covered

This project covered Chart #4195, Wake Island, N. W. Pacific Islands.

22. Method

Three models (006 through 009) were bridged on the C-8 stereoplanigraph to provide basic control for the construction of a new chart of the area. Three horizontal points were used to control the adjustment with two points as checks. Additional points were selected to enable the compilation office to complete model 009-010.

23. Adequacy of Control

Although many control stations existed on the Island, only five stations could be identified with any certainty by office identification methods. All five stations held within accuracy requirements.

24. Supplemental Data

None

25. Photography

1964 U. S. Navy photography was used for the project. Excessive tip was noted in flight 006-010, however this did not impair bridging operations. Coverage, overlap and definition was adequate.

Submitted by,

John D. Perrow, Jr.

Approved by,

Henry P. Eichert
Chief, Aerotriangulation Section
JOB PH-7009
WAKE ISLAND
CHART TOPOGRAPHY
SCALE 1:3,500 & 1:15,000
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR Y COORDINATE</th>
<th>LONGITUDE OR X COORDINATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAKE ISLAND AIRPORT BEACON, 1964</td>
<td>Form C&amp;GS-6355 and IBM Read-out</td>
<td>Astro 1952</td>
<td>10° 16.1' 37.384&quot;</td>
<td>166°38.1' 53.864&quot;</td>
</tr>
<tr>
<td>VORTAC &quot;AWK&quot;, 1964</td>
<td>&quot;</td>
<td>&quot;</td>
<td>19°17.1' 56.827&quot;</td>
<td>166°36.1' 03.992&quot;</td>
</tr>
<tr>
<td>CUPOLA (TANK) NAVOCEANO, 1958</td>
<td>Tabulation of Geodetic Data (TMS-237) pg 2</td>
<td>&quot;</td>
<td>19°17.1' 13.81&quot;</td>
<td>166°37.1' 00.14&quot;</td>
</tr>
<tr>
<td>RADIO TOWER NAVOCEANO, 1958</td>
<td>&quot;</td>
<td>&quot;</td>
<td>19°18.1' 15.67&quot;</td>
<td>166°38.1' 12.97&quot;</td>
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<tr>
<td>TANK NAVOCEANO, 1958</td>
<td>&quot;</td>
<td>&quot;</td>
<td>19°17.1' 15.96&quot;</td>
<td>166°37.1' 01.16&quot;</td>
</tr>
</tbody>
</table>
### Wake Island
Wake Island 1952 Astro Datum - International Ellipsoid

#### Final Geographic Positions

<table>
<thead>
<tr>
<th>Sta. No.</th>
<th>Latitude</th>
<th>East Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19° 16' 37.41001&quot;</td>
<td>166° 38' 53.87000&quot;</td>
</tr>
<tr>
<td>2</td>
<td>19° 17' 19.98858&quot;</td>
<td>166° 38' 46.29167&quot;</td>
</tr>
<tr>
<td>3</td>
<td>19° 17' 15.96344&quot;</td>
<td>166° 37' 01.16507&quot;</td>
</tr>
<tr>
<td>4</td>
<td>19° 18' 04.89798&quot;</td>
<td>166° 38' 09.42298&quot;</td>
</tr>
<tr>
<td>5</td>
<td>19° 18' 12.87457&quot;</td>
<td>166° 37' 22.61334&quot;</td>
</tr>
<tr>
<td>6</td>
<td>19° 17' 26.16789&quot;</td>
<td>166° 36' 39.61351&quot;</td>
</tr>
<tr>
<td>7</td>
<td>19° 18' 12.88190&quot;</td>
<td>166° 37' 22.58380&quot;</td>
</tr>
</tbody>
</table>

#### Numerical Index

<table>
<thead>
<tr>
<th>Sta. No.</th>
<th>Station Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 1</td>
<td>TOWER (USNHQ)</td>
</tr>
<tr>
<td>2</td>
<td>STA 3 (USE)</td>
</tr>
<tr>
<td>A 3</td>
<td>TANK (USNHQ)</td>
</tr>
<tr>
<td>A 4</td>
<td>SHOP</td>
</tr>
<tr>
<td>A 5</td>
<td>FLIPPER</td>
</tr>
<tr>
<td>A 6</td>
<td>WILKES</td>
</tr>
<tr>
<td>7</td>
<td>STA 7 (USE)</td>
</tr>
</tbody>
</table>
Compilation Report
T-13417

This survey was compiled to furnish a new base for the Wake Island Boat Basin in set on Chart 4195 (formerly H.O. 6034).

31. Delineation

The Wild B-8 stereoscopic instrument was used to compile this manuscript. A stereomodel was set-up at an approximate scale of 1:12,500 and the pantograph set for a 2.5 x enlargement. The result was a worksheet compiled at a scale close to 1:5,000.

The worksheet was enlarged to a scale of 1:3,500 (scale of the manuscript) by photographic process. The map data was then transferred from the worksheet to the manuscript.

The only photography available for this area was inadequate for compilation. These photos were badly tipped and the imagery was fuzzy.

32. Control

Refer to the Photogrammetric Plot Report.

The identification, density and placement of horizontal control was adequate.

The water level was sufficient to control the stereoscopic models vertically.

33. Supplemental Data

Blueprint 77588 and Chart Letter 93 (70) with chart inspection notes for the revision of Chart 4195.

Due to the difference in the time between the photography (1964) and the supplemental data (1970), not all of the data could be applied to the T-sheet. The Nautical Chart Branch will add these few details to Chart 4195 at the time of reconstruction.
34. Contours and Drainage

Contours - contours were not compiled due to the poor quality of the photography.

Drainage - all drainage on this manuscript is from office interpretation of the photographs.

35. Shoreline and Alongshore Details

There was no shoreline inspection. Shoreline was delineated from office interpretation of the photographs. The breaker-line was compiled as the approximate MLLW line. It was impossible to compile map detail in between the MHW line and the MLLW line.

36. Offshore Details

No comment.

37. Landmarks and Aids

All landmarks and aids to navigation field data will be applied to a copy of the manuscript by the Chart Compiler for use in charting.

Two mooring buoys visible on the photography were compiled.

38. Control for Future Surveys

No Form 524 submitted.

39. Junctions

Junction has been made with T-13416 (scale 1:15,000). This survey falls entirely within the limits of T-13416.
40. Horizontal and Vertical Accuracy

No comment.

41. through 45. Not applicable.

46. Comparison with Existing Maps

Comparison has been made with Army Map Service, Corps of Engineers Wake Island Quadrangle, Sheet 7579 IV NW, Series W823, scale 1:25,000, Edition 1-AMS (AFPE) 1954.

47. Comparison with Nautical Charts

Comparison has been made with Chart No. 4195 (formerly H.O. 6034) scale 1:15,000, 1st Edition, January 1969.

Items to be applied to Nautical Charts immediately: None

Items to be carried forward: None

Respectfully submitted,

Edward L. Rolle
Cartographer

Approved and forwarded,

Harold R. Brooks
Chief, Revision Surveys
Section
PHOTOGRAMMETRIC OFFICE REVIEW

T-13417


CONTROL STATIONS
5. Horizontal control stations of third-order or higher accuracy  ✔  6. Recoverable horizontal stations of less than third-order accuracy (topographic stations)  ✗  7. Photo hydro stations  ✗  8. Bench marks  ✗

ALONGSHORE AREAS
(Nautical Chart Data)

PHYSICAL FEATURES

CULTURAL FEATURES

BOUNDARIES
31. Boundary lines  ✗  32. Public land lines  ✗

MISCELLANEOUS

40. Edward E. Stowell
    Reviewer

Harold R. Brooks
Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

43. Remarks:
   ✔ Not applicable
Review Report
T-11316 and T-11317

61. General Statement

Inadequacies in photography and field work are outlined in the Descriptive Report Summary.

62. Comparison with Registered Topographic Surveys

Inapplicable

63. Comparison with Maps of Other Agencies

Wake Island Quad (AMS) 1:25,000 1954

No significant differences were noted. Much of the cultural information on the quadrangle is out dated.

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable

65. Comparison with Nautical Charts

Chart No. 4195 1:15,000 1st Edition, Jan. 20, 1969

No significant differences were noted.

66. Adequacy of Results and Future Surveys

The maps have been accepted for charting purposes; however, new photography and a thorough field inspection will be necessary to ensure compliance with National Standards of Map Accuracy and Bureau requirements.

Reviewed by,

[Signature]
S. G. Blankenbaker

Approved by,

[Signature]
Chief, Photogrammetric Branch

[Signature]
Chief, Photogrammetry Division
October 21, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7009 (Wake Island)
T-13417

Wake Island
Wilkes Island

Approved by:
A. J. Wright
Chief Geographer

Prepared by:
Frank W. Pickett
Cartographic Technician