

13416

13416

| | |
|------------------------------|--------------------------|
| Form 504 | |
| U. S. DEPARTMENT OF COMMERCE | |
| COAST AND GEODETIC SURVEY | |
| DESCRIPTIVE REPORT | |
| Type of Survey | Planimetric |
| Field No. | Office No. T-13416 |
| LOCALITY | |
| State | United States Possession |
| General locality | Pacific Ocean |
| Locality | Wake Island |
| 1964 * See below | |
| CHIEF OF PARTY | |
| LIBRARY & ARCHIVES | |
| DATE | |

USCOMM-DC 5087

* 1968-1970 (Refer to page 6)

TYPE OF SURVEY

☒ ORIGINAL☐ REVISED

SURVEY T/ - 13416

JOB PH - 7009

DESCRIPTIVE REPORT - DATA RECORD

PHOTOGRAMMETRIC OFFICE

Rockville, Maryland

OFFICER-IN-CHARGE

Richard H. Houlder

FOR REVISED SURVEY USE ONLY

ORIGINAL
SURVEY DATA:

JOB PH -

DATES:

19 TO 19

I. INSTRUCTIONS DATED

1. OFFICE

June 4, 1970

2. FIELD

None

II. DATUMS

1. HORIZONTAL:

☐ 1927 NORTH AMERICAN

OTHER (Specify)

Astro 1952

2. VERTICAL:

☒ MEAN HIGH-WATER
☐ MEAN LOW-WATER
☐ MEAN LOWER LOW-WATER
☐ MEAN SEA LEVEL

OTHER (Specify)

None

3. MAP PROJECTION

Mercator

4. GRID(S)

STATE

None

ZONE

None

5. SCALE

1:15,000

STATE

None

ZONE

None

III. HISTORY OF OFFICE OPERATIONS

| OPERATIONS | | NAME | DATE |
|---|-----------------------|--------------------|----------|
| 1. AEROTRIANGULATION | BY | J. D. Perrow, Jr. | 6/22/70 |
| METHOD: C-8 stereoplanigraph | MARKS AND AIDS BY | Inapplicable | |
| 2. CONTROL AND BRIDGE POINTS | PLOTTED BY | P. J. Dempsey | 9/2/70 |
| METHOD: Coradi Automatic Plotter | CHECKED BY | P. J. Dempsey | 9/2/70 |
| 3. STEREOSCOPIC INSTRUMENT | PLANIMETRY BY | E. L. Rolle | 9/14/70 |
| COMPILATION | CHECKED BY | H. R. Brooks | 9/14/70 |
| INSTRUMENT: Wild B-8 | CONTOURS BY | None | |
| SCALE: 1:15,000 | CHECKED BY | NA | |
| 4. MANUSCRIPT DELINEATION | PLANIMETRY BY | E. L. Rolle | 9/21/70 |
| | CHECKED BY | H. R. Brooks | 9/21/70 |
| METHOD: Drafted | CONTOURS BY | None | |
| | CHECKED BY | NA | |
| SCALE: 1:15,000 | HYDRO SUPPORT DATA BY | None | |
| | CHECKED BY | NA | |
| 5. OFFICE INSPECTION PRIOR TO FIELD EDIT | BY | None | |
| 6. APPLICATION OF FIELD EDIT DATA | BY | None | |
| | CHECKED BY | NA | |
| 7. COMPILATION SECTION REVIEW | BY | E. L. Rolle | 10/6/70 |
| 8. FINAL REVIEW | BY | S. G. Blankenbaker | 10/21/70 |
| 9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH | BY | E. L. Rolle | 10/19/70 |
| 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH | BY | S. G. Blankenbaker | 10/14/70 |
| 11. MAP REGISTERED - COASTAL SURVEY SECTION | BY | | |

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) U. S. Navy Photography
Focal length approx. 6"TYPES OF PHOTOGRAPHY
LEGEND

TIME REFERENCE

TIDE STAGE REFERENCE

- ☐ PREDICTED TIDES
☐ REFERENCE STATION RECORDS
☐ TIDE CONTROLLED PHOTOGRAPHY

- (C) COLOR
(P) PANCHROMATIC
(I) INFRARED

ZONE

24

☒ STANDARD

MERIDIAN

165th

☐ DAYLIGHT

| NUMBER AND TYPE | DATE | TIME | SCALE | STAGE OF TIDE |
|--------------------|---------|-------|----------|---------------|
| 006(P) thru 010(P) | 8/24/64 | 10:10 | 1:25,000 | MLLW |

REMARKS

The model of the camera used by the U.S. Navy for this photography
is 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.)

| SURVEY NUMBER | DATE(S) | SURVEY COPY USED | SURVEY NUMBER | DATE(S) | SURVEY COPY USED |
|---------------|---------|------------------|---------------|---------|------------------|
| Inapplicable | | | | | |

5. FINAL JUNCTIONS

| NORTH | EAST | SOUTH | WEST |
|-------|------|-------|------|
| None | None | None | None |

REMARKS
1-13417 falls within the limits of this survey and the junctions have
been made. There are no contemporary surveys in the area immediately
surrounding this survey.

3

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION cursory chart inspection
only

| OPERATION | NAME | DATE |
|--|---|----------------------|
| 1. CHIEF OF FIELD PARTY | G.M. Ward, Chief Tide Observation Party | Dec. 68' Jan. 70' |
| 2. HORIZONTAL CONTROL RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY | None | |
| 3. VERTICAL CONTROL RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY | None | |
| 4. LANDMARKS AND AIDS TO NAVIGATION RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY | John B. Courtney (see 11. Source Data) item 4 | June 69' |
| 5. GEOGRAPHIC NAMES INVESTIGATION TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE BY <input type="checkbox"/> SPECIFIC NAMES ONLY <input type="checkbox"/> NO INVESTIGATION | Refer to chart letter #93(70) | |
| 6. PHOTO INSPECTION CLARIFICATION OF DETAILS BY | None | |
| 7. BOUNDARIES AND LIMITS SURVEYED OR IDENTIFIED BY | None | |

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

Not identified on photography - all data included in Chart Letter
#93 and Blueprint #77588.

| PHOTO NUMBER | OBJECT NAME | PHOTO NUMBER | OBJECT NAME |
|--------------|-------------|--------------|-------------|
| (70) | | | |

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

7. SUPPLEMENTAL MAPS AND PLANS

FAA Plan and Chart Sections

8. 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

I. MANUSCRIPT COPIES

| COMPILATION STAGES | | | DATE MANUSCRIPT FORWARDED | |
|--------------------|---------|--|---------------------------|---------------|
| DATA COMPILED | DATE | REMARKS | MARINE CHARTS | HYDRO SUPPORT |
| Planimetry | 9/21/70 | No advance copy forward Marine Charts | | Inapplicable |
| | | | | |
| | | | | |
| | | | | |

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

| NUMBER | CHART LETTER NUMBER ASSIGNED | DATE FORWARDED | REMARKS |
|--------|---------------------------------|-------------------|---------|
| | | | |
| | | Inapplicable | |
| | | | |
| | | | |
| | | | |
| | | | |

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: Inapplicable3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: Inapplicable

III. FEDERAL RECORDS CENTER DATA

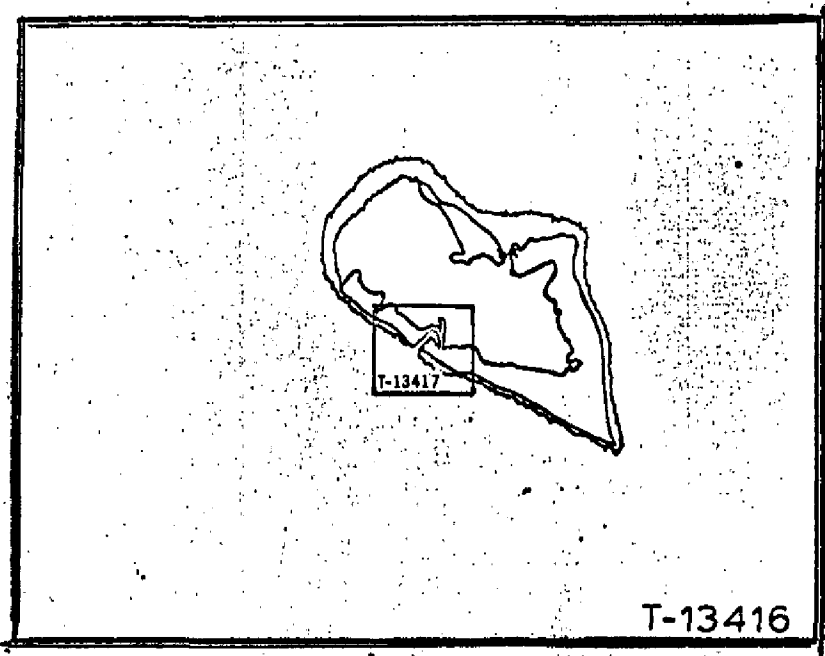
1. ☒ BRIDGING PHOTOGRAPHS; ☐ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM C&GS 567 SUBMITTED BY FIELD PARTIES.
3. ☐ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, ESSA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: October 23, 1970

IV. SURVEY REVISION (This section shall be completed when a revised survey is registered.)

| FIRST REVISION | SURVEY NUMBER | JOB NUMBER | REMARKS |
|--------------------|---------------------|--------------------|---------|
| | TP - (2) | PH - | |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | |
| SECOND REVISION | SURVEY NUMBER | JOB NUMBER | REMARKS |
| | TP - (3) | PH - | |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | |
| THIRD REVISION | SURVEY NUMBER | JOB NUMBER | REMARKS |
| | TP - (4) | PH - | |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | |

5



19°21' 00"

19°17' 40"

19°16' 45"

19°14' 00"

166°32' 00"

166°36' 30"

166°37' 45"

166 42 00

Official Mileage
for Cost Accounts

Sheet No.-Area Sq.Mi.

| | |
|---------|----|
| T-13416 | 8 |
| T-13417 | 2 |
| Total | 10 |

JOB PH-7009
WAKE ISLAND
CHART TOPOGRAPHY
SCALE 1:3,500&1:15,000

6

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 applicable 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 ^{were} work called to the attention of the Marine Chart Division. The maps were accepted as adequate for charting purposes.

S. G. Blankenbaker
S. G. Blankenbaker

(7)

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,

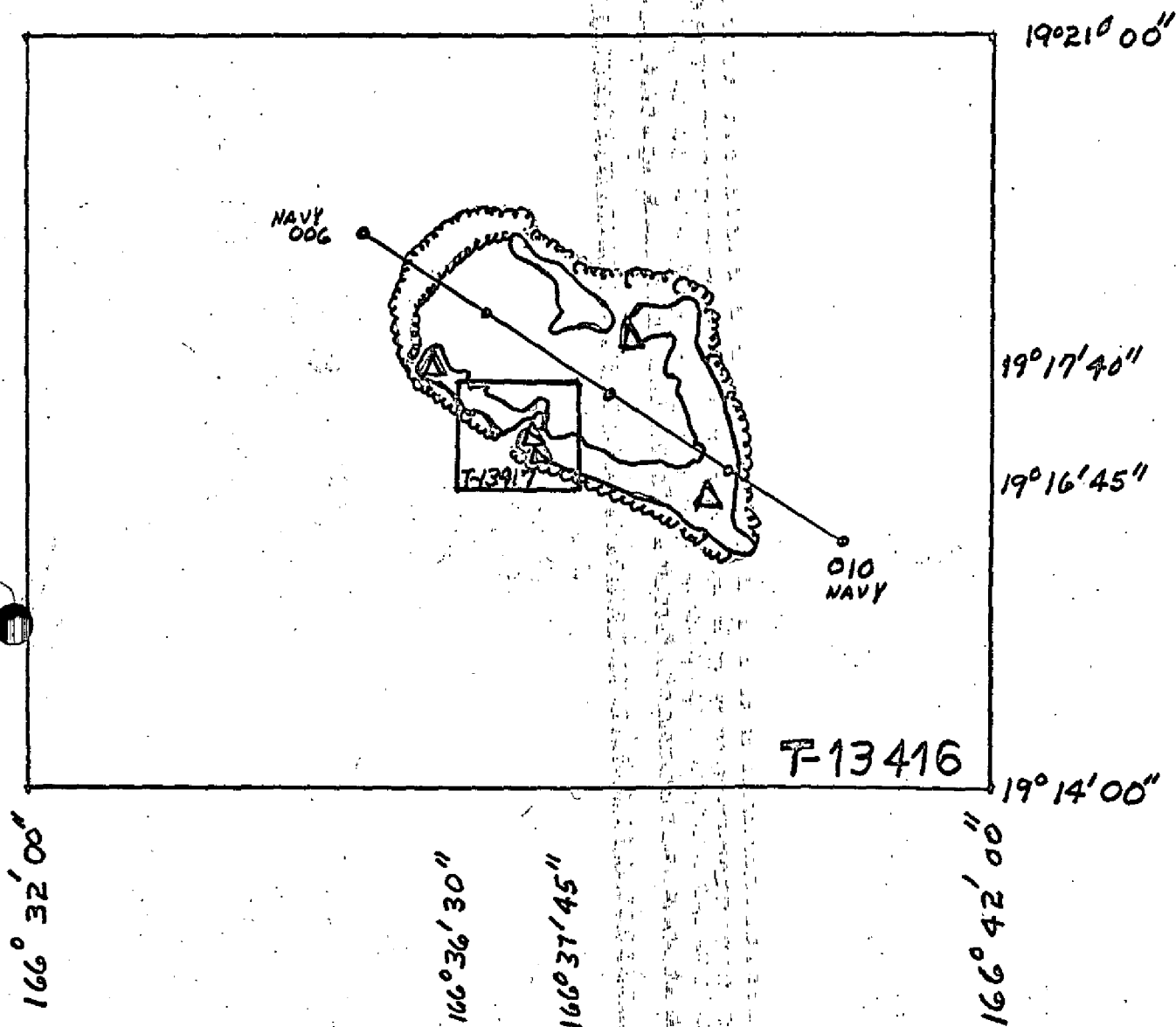
John D. Perrow Jr.
John D. Perrow, Jr.

Approved by,

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

(8)

△ CONTROL USED IN BRIDGING
(See following page)



JOB PH-7009
WAKE ISLAND
CHART TOPOGRAPHY
SCALE 1:3,500 & 1:15,000



DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 13416 PROJECT NO. PH-7009 SCALE OF MAP 1:15,000 SCALE FACTOR _____

[illegible]

COMPUTED BY

DATE _____

CHECKED BY






DATE

VGS






WAKE ISLAND

Wake Island 1952 Astro Datum - International Ellipsoid

Final Geographic Positions

| Sta. No. | Latitude | East Longitude |
|--|---------------------|---------------------|
| 1  | 19° 16' 37".41001 ✓ | 166° 38' 53.87000 ✗ |
| 2 | 19 17 19.98858 ✓ | 166 38 46.29167 ✗ |
| → 3  | 19 17 15.96344 ✓ | 166 37 01.16507 ✗ |
| 4  | 19 18 04.89798 ✓ | 166 38 09.42298 ✗ |
| 5  | 19 18 12.87457 ✓ | 166 37 22.61334 ✗ |
| → 6  | 19 17 26.16789 ✓ | 166 36 39.61351 ✗ |
| 7 | 19 18 12.88190 ✓ | 166 37 22.58380 ✗ |

Numerical Index

| Sta. No. | Station Name |
|---|-----------------|
| 1  | TOWER (USNHO) ✓ |
| 2 | STA 3 (USE) ✓ |
| 3  | TANK (USNHO) ✓ |
| 4  | SHOP ✓ |
| 5  | FLIPPER |
| 6  | WILKES |
| 7 | STA 7 (USE) ✓ |

Compilation Report
T-13416

This survey was compiled to furnish a new base for Chart 4195 (formerly H.O. 6034).

31. Delineation

The Wild B-8 stereoscopic instrument was used to compile this 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

Chart Letter 93 (70) and Blueprint 77588 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.

(11)

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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 fixed 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-13417, scale 1:3,500, which falls in the center of this survey.

There are no contemporary surveys in the area immediately surrounding this survey.

40. Horizontal and Vertical Accuracy

No comment.

-3-

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 (AFFE) 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

Edward L. Rolle
Cartographer

Approved and forwarded,

H. R. Brooks

H. R. Brooks
Chief, Revision Surveys
Section

PHOTOGRAMMETRIC OFFICE REVIEW

T-13416

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

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 ☒
9. Plotting of sextant fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours ☒ 23. Stereoscopic instrument contours ☒ 24. Contours in general ☒ 25. Spot elevations ☒ 26. Other physical features ☒

CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒

40. Edward L. Rolle Harold R. Brooks
Reviewer 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.

Compiler

Supervisor

43. Remarks: ~~No Form submitted~~ 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,

S. G. Blankenbaker
S. G. Blankenbaker

Approved by,

Charles L. Lamm
Chief, Photogrammetric Branch

Jack E. Lutz
Chief, Photogrammetry Division

October 24, 1976

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7009 (Wake Island)
T-13416

Flipper Point

Heel Point

Kuku Point

Peacock Point

Peale Island

Toki Point

Wake Island

Wake Island Airport

Wilkes Island

Approved by:

A. J. Wraight

A. J. Wraight
Chief Geographer

Prepared by:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician