

13417

13417

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Planimetric
Field No.	Office No. T-13417
LOCALITY	
State	United States Possession
General locality	Pacific Ocean
Locality	Wake Island Boat Basin
1964 * see below	
CHIEF OF PARTY	
LIBRARY & ARCHIVES	
DATE	

USCOMM-DC 5087

* 1968-1970 (Refer to page 6)

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY

☒ ORIGINAL☐ REVISEDSURVEY 13417JOB PH. 7009

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

1:3,500

STATE

None

ZONE

None

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY <i>inapplicable</i>	J. D. Perrow, Jr.	6/22/70
METHOD: C-8 Stereoplanigraph	LANDMARKS AND AIDS BY	J. D. Perrow, Jr.	6/22/70
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	9/25/70
COMPILATION	CHECKED BY	H. R. Brooks	9/25/70
INSTRUMENT: Wild B-8	CONTOURS BY	None	
SCALE: approx. 1:12,500 Panto.	CHECKED BY	NA	
4. MANUSCRIPT DELINEATION 5:2 enlarge	PLANIMETRY BY	E. L. Rolle	10/2/70
	CHECKED BY	H. R. Brooks	10/2/70
METHOD: Drafted	CONTOURS BY	None	
SCALE: 1:3,500	CHECKED BY	NA	
	HYDRO SUPPORT DATA BY	None	
	CHECKED BY	NA	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	None	
	BY	None	
6. APPLICATION OF FIELD EDIT DATA	CHECKED BY	NA	
7. COMPILATION SECTION REVIEW	BY	E. L. Rolle	10/9/70
8. FINAL REVIEW	BY	S. G. Blankenbaker	10/21/70
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY	E. L. Rolle	10/14/70
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 <input checked="" type="checkbox"/> U. S. Navy photography Focal length approx. 6"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE	<input checked="" type="checkbox"/> STANDARD
<input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				24	<input type="checkbox"/> DAYLIGHT
				MERIDIAN	165th
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
007 (P) and 008 (P)	8/24/64	10:10	1:25,000	MLLW	

REMARKS

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.)

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

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
T-13416	T-13416	T-13416	T-13416
REMARKS			
T-13417 falls within the limits of T-13416 (scale 1:15,000).			

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 <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		2. VERTICAL CONTROL IDENTIFIED	
None		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 ☒ NONE
6. 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	10/2/70	No advance copy forwarded to 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

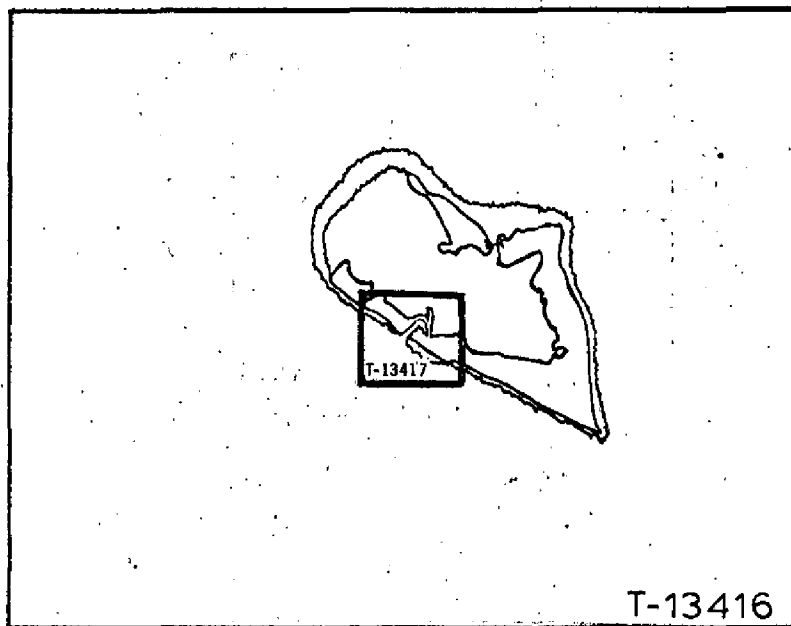
1. ☒ BRIDGING PHOTOGRAPHS; ☐ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM C&GS 567 SUBMITTED BY FIELD PARTIES.
3. ☐ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, ESSA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: Oct. 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
T-13417

8
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 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^{were} 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,

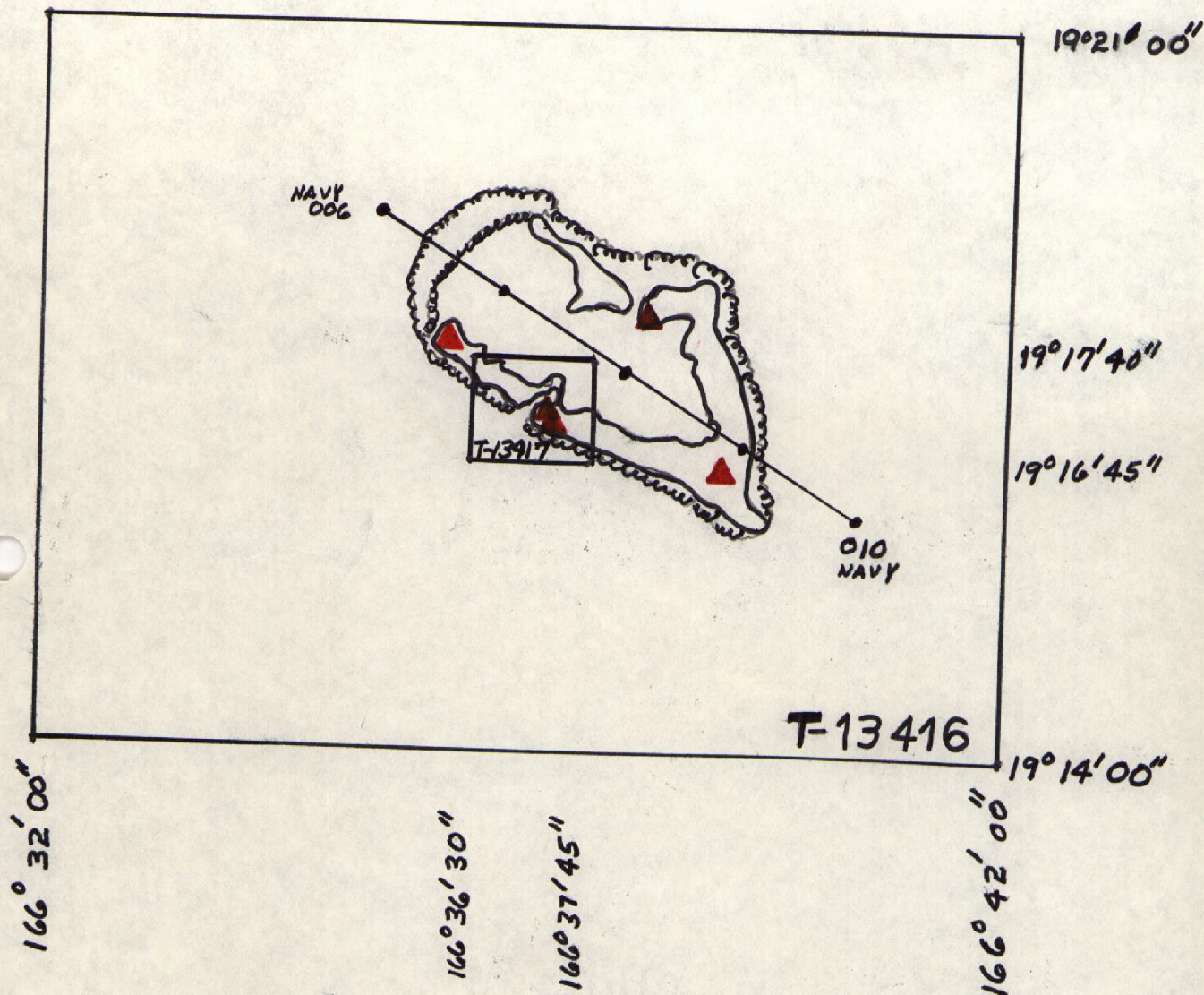
John D. Perrow Jr.
John D. Perrow, Jr.

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



IRM C&GS-164
(8)
COMM-DC
118-P68



U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 13416

PROJECT NO. PH-7009

SCALE OF MAP 1:15,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 ft. = 3048006 meter) FORWARD (BACK)
WAKE ISLAND AIRPORT BEACON, 1964	Form C&GS-6355 and IBM Read- out	Astro 1952	19° 16' 37.384" 166° 38' 53.864"	
VORTAC "AWK", 1964	"	"	19° 17' 56.827" 166° 36' 03.992"	
CUPOLA (TANK) NAVOCEANO, 1958	Tabulation of Geodetic Data (TMS-237) pg 2 of 8 & IBM Read- out	"	19° 17' 13.81" 166° 37' 00.14"	
RADIO TOWER NAVOCEANO, 1958	"	"	19° 18' 15.67" 166° 38' 12.97"	
TANK NAVOCEANO, 1958	"	"	19° 17' 15.96" 166° 37' 01.16"	
				8A

COMPUTED BY






DATE

CHECKED BY






DATE

CVGS

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 ✗
set → 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 ✗
set → 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-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.

-2-

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.

-3-

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 (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,

Harold R. Brooks
Harold R. Brooks
Chief, Revision Surveys
Section

PHOTOGRAMMETRIC OFFICE REVIEW

T-13417

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 A. Rolfe 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 9-7 submitted, not applicable

14

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. Hearn
Chief, Photogrammetric Branch

Jack E. Luth
Chief, Photogrammetry Division

15

October 21, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7009 (Wake Island)
T-13417

Wake Island

Wilkes Island

Approved by:

A. J. Wright
A. J. Wright
Chief Geographer

Prepared by:

Frank W. Pickett
Frank W. Pickett
Cartographic Technician