11655

Diag. Cht. No. 5101-2.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey SHORELINE (PHOTOGRAMMETRIC)

Field No. Ph-5908 *Office No.* T-11655

LOCALITY

State CALIFORNIA

General locality CORONA DEL MAR

Locality REEF POINT

19 59-1961

CHIEF OF PARTY

FRED NATELLA

LIBRARY & ARCHIVES

DATE Sept. 1963

USCOMM-DC 5087

11655

FORM 181
(4-23-54)

2. U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T-11655

Project No. (II): PH-5908 Quadrangle Name (IV):

Field Office (II): SANTA ANA, CALIFORNIA Chief of Party: FRED NATELLA

Unit Chief: Charles H. Bishop

Photogrammetric Office (III): PORTLAND, OREGON Officer-in-Charge: FRED NATELLA

Instructions dated (II) (III): II,III 6 January 1960
II,III 13 April 1960 (Ammendment I)

Copy filed in Division of Photogrammetry (IV)

Method of Compilation (III): KELSH INSTRUMENT

Manuscript Scale (III): 1:10,000 Stereoscopic Plotting Instrument Scale (III): 1:6000
PANTOGRAPH SCALE 1:10,000

Scale Factor (III):

Date received in Washington Office (IV): Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV):

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): N.A.D27 Vertical Datum (III):

Mean sea level except as follows: X
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): PELICAN POINT, 1884

Lat.: 33° 35' 34.712" Long.: 117° 50' 18.996" Adjusted X
Unadjusted

Plane Coordinates (IV): State: CALIFORNIA Zone: VI

Y= 517,948.12 X= 1,512,187.86

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

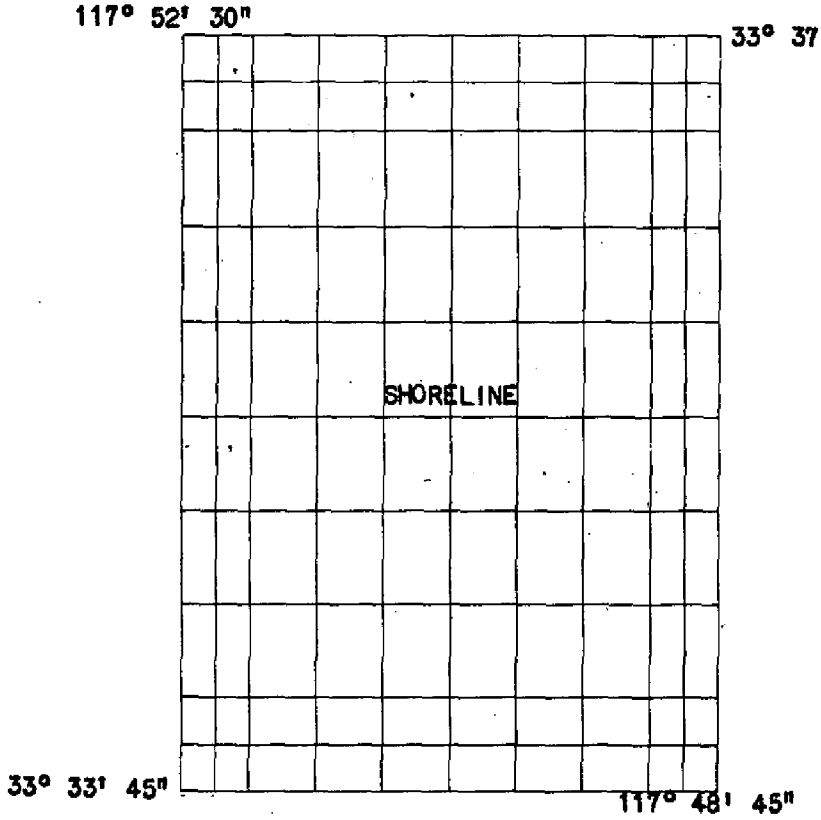
When entering names of personnel on this record give the surname and initials, not initials only.

COMM-DC-57842

FORM 181a
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD



Areas contoured by various personnel
(Show name within area)
(II) (III)

FORM 181b
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): Charles H. Bishop, Robert B. Melby
Iyle L. Riggers
Date: February 1961

Planetable contouring by (II):
Date:

Completion Surveys by (II):
Date:

Mean High Water Location (III) (State date and method of location): BY FIELD INSPECTION FEB. 1961 AND COMPILED BY KELSH INSTRUMENT.

Projection and Grids ruled by (IV):	R.A.C.	Date: 10-4-60
Projection and Grids checked by (IV):	J.D.C.	Date: 10-12-60
Control plotted by (III):	C. H. BISHOP	Date: 10-19-61
Control checked by (III):	L. L. GRAVES	Date: 10-31-61
Radial Plot or Stereoscopic Control extension by (III):	R. E. FUESCHEL	Date: OCT. 1960
Stereoscopic instrument compilation (III): Planimetry	D. N. WILLIAMS	Date: 2-5-62
Contours		Date:
Manuscript delineated by (III):	C. H. BISHOP, SCRIBING C. C. HARRIS, STICK-UP	Date: 6-21-62 10-26-62
Photogrammetric Office Review by (III):	J. L. HARRIS, ROUGH DRAFT J. L. HARRIS, ADVANCE	Date: 2-7-62 11-21-62
Elevations on Manuscript checked by (II) (III):	NONE.	Date:

COMM-DC-57842

FORM 181c
(4-23-54)

DESCRIPTIVE REPORT - DATA RECORD

5.

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

Camera (kind or source) (III): C&GS SINGLE LENS "S"

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
L59 S 8224 THRU 8227	10-3-59	11:35	1:30,000	0.5' BELOW M.H.W.
59 S 8257 THRU 8260	"	12:04	"	1.0' BELOW M.H.W.

RATIO: PRINTS OF ABOVE - SCALE 1:10,000

Tide (III)

		Ratio of Ranges	Mean Range	DIURNAL ~~Spring~~ Range
Reference Station:	LOS ANGELES, CALIFORNIA		3.8	5.4
Subordinate Station:	BALBOA (OCEAN PIER)		3.7	5.3
Subordinate Station:				

COMPUTED FROM PREDICTED TIDE TABLES

Washington Office Review by (IV): Date:

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 9

Shoreline (More than 200 meters to opposite shore) (III): 4

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 12 Recovered: 4 Identified: 1

Number of BMs searched for (II): 0 Recovered: 0 Identified: 0

Number of Recoverable Photo Stations established (III): NONE

Number of Temporary Photo Hydro Stations established (III): NONE

Remarks:

COMM-DC-57842

FIELD INSPECTION REPORT

Map Manuscripts T-11655,

T-11656, T-11657, T-11658 and T-11659

Project Ph-5908

February - March 1961

2. Areal Field Inspection:

The shoreline in this area runs in a general northwest - southeast direction. The terrain is mostly rolling hills, giving way to higher hills in the vicinity of Laguna Beach and South Laguna.

There are no railroads in the area.

U. S. Highway 101 Alternate (Coast Highway) parallels the coast throughout the area.

Towns within the area are the southeast section of Newport Beach (Corona Del Mar), Laguna Beach, South Laguna and Dana Point. Private communities are Emerald Bay and Three Arch Bay. Other private communities are being developed all the time.

Field inspection was done in accordance with standard practices.

The quality of the photographs furnished was adequate for field inspection and identification of horizontal control. It is the opinion of the field inspector that color photography could have been used to good advantage in this area, as reefs, ledges, and offshore rocks would have been easier to locate.

3. Horizontal Control:

(a) No supplemental control was established by the field party.

(b) No datum adjustments were made by the field party.

(c) No control not established by the Coast and Geodetic Survey was searched for or recovered.

(d) All stations required by the project instructions for control of the plot were recovered and positively identified.

(e) All stations established by the Coast and Geodetic Survey were searched for, except the following:

ABALONE HILL 1884	SAN JOAQUIN 1874
BROWNING 1933	SAN JOAQUIN 1928
CENTER 1933	San Joaquin Mtn., Cairn 1953
MUSTARD 1884	GUNA 1933
MUSTARD 2, 1933	PELICAN HILL 1884

All of these stations are on property of the Irvine Company. Permission to omit recovery of them was granted by letter 631-ms, dated 1 March 1961.

The following stations which were searched for have been listed as lost or destroyed:

Sheet 11655

ARCH ROCK 1884
POND 1875
SPARR 1933
SPURR 1875
Corona Del Mar, Red Water Tank 1911
Newport Beach, South Limits, Tract Office, Tower 1930
Reservoir No. 5, East Mast 1932
White Water Tank East of Rocky Bight 1933

Sheet 11656

EXTRA 1884
EXTRA 2, 1956

Sheet 11657

CORONA 1933
GOFF ISLAND 1884
WINSTON 1884
Laguna Beach Hotel, Center of Sign Support 1933
Laguna Beach, Coast Inn, Green Tower 1933
Laguna Beach, End Pier, North Light Pole 1933
Recreation Point, Flagpole 1933
Two Rocks Point, House, South Chimney 1933

Sheet 11658

None

Sheet 11659

Flagpole East of Mussel Cove 1933

(f) The quality of identification for each station is stated on the control station identification cards. None of the identification is substandard.

4. Vertical Control:

The requirement for vertical control was for the recovery and idntification of tidal bench marks only. There are no tidal bench marks within the area covered by this report.

5. Contours and Drainage:

Contours are not applicable.

There are no perennial drains. Several intermittent drains have been indicated on the photographs.

6. Woodland Cover:

Vegetation in the area is sparse. The low brush that covers parts of the unpopulated area is generally not of sufficient density to classify, but in two or three small areas thick sage-brush was classified as scrub.

7. Shoreline and Alongshore Features:

The entire shoreline within the area of this project was inspected by field party personnel who walked along the shore.

(a) The mean high water line was located as it existed at the time of field inspection by measurements from identifiable points on the photographs and by its relative position to the base of bluffs, rocks, etc. It will be noted that in many places along sand beaches, the mean high water line located by the field party does not coincide with what appears to be the mean high water line on the photographs. In other places it may be at a tangent to the apparent mean high water line. The reason for this is the beaches undergo a constant state of erosion and accretion. The sand erodes away from a beach, then builds up again; or it may wash away from one end of a beach and build up on the other end. One resident stated "You never know what to expect when you come to the beach".

(b) The low water line was not delineated.

(c) The character of the foreshore has been indicated on the photographs. Numerous irregular ledges extend seaward from the bases of the bluffs and cliffs.

(d) Bluffs and cliffs are characteristic of most of the shoreline in this area. These have been indicated on the photo-graphs..

(e) There are only two structures along the shoreline. These are a pier at Dana Cove Park and one at Goff Island. They have been indicated on Photographs 59 S 8233 and 59 S 8229 respectively.

(f) There are no submarine cables in the area.

(g) There are no other shoreline structures in the area.

8. Offshore Features:

The only offshore features in the area are rocks. Their heights were determined by hand-leveling from the mean high water line to a point that was on range in elevation with the top of the rock and the horizon. In one or two instances, elevations were determined by planetable methods. The heights of numerous small rocks close to shore were estimated, with frequest checks by hand level.

Kelp offshore from the low water line was observed along much of the coastline, but could not be identified on the photographs.

9. Landmarks and Aids:

(a) All charted landmarks for charts were investigated. Two are recommended for deletion and four are recommended for continued use as landmarks. The latter have been identified on the field photographs and their elevations determined by trigonometric methods. All landmarks are listed on Form 567, Landmarks for Charts.

(b) No interior landmarks or features of significance have been indicated.

(c) None.

(d) None.

(e) None.

10. Boundaries, Monuments and Lines:

Boundaries and monuments not applicable.

The limit lines of Heisler Park in Laguna Beach and Dana Cove Park at Dana Point have been indicated on Photographs 59 S 8227 and 59 S 8233 respectively.

11. Other Control:

No other control was established by the field party. The establishment of topographic stations and photo-hydro control was not required by the project instructions.

12. Other Interior Features:

Interior field inspection was conducted in accordance with project instructions and U. S. Highway 101 Alternate (Coast Highway) was taken as the inshore boundary.

Roads were classified in accordance with Photogrammetric Instruction 56, dated 1 July 1958. Occasional streets were named in populated areas. County road maps and city maps were obtained and are included with the field data for additional street names.

Only one building, the Laguna Hotel, was classified. This is a landmark building.

There are no airports or landing fields in the area.

There are no navigable waters, other than the Pacific Ocean.

13. Geographic Names:

Geographic names is the subjects of a special report.

14. Special Reports and Supplemental Data:

(a) GEOGRAPHIC NAMES, PART II, Pacific Coast, Terminal Island to Data Point, California (Submitted 2-20-61).

(b) COAST PILOT REPORT, Pacific Coast, Data Point to Point Vicente, California (Submitted January 1961).

(c) County road maps numberes 42E, 47W, 49W and 52.

(d) Map of City of Laguna Beach.

Respectfully submitted:

Charles H. Bishop

Charles H. Bishop
Surveying Technician

Approved:

Fred Natella, CAPT, C&GS
Portland District Officer

Robert B. Melby

Robert B. Melby
Surveying Technician

PHOTOGRAMMETRIC PLOT REPORT

MAP MANUSCRIPT T-11655

PROJECT PH-5908

REFER TO THE PHOTOGRAMMETRIC PLOT REPORT FOR THE ENTIRE

PROJECT PH-5908 BY ROBERT E. FUESCHEL, OCTOBER, 1960.

Filed with Desc. Report T-11640

FORM 164
(4-23-54)

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

DESCRIPTIVE REPORT TROL RECORD

MAP T-11655 PROJECT NO. PH-5908 SCALE OF MAP 1:10,000 SCALE FACTOR NONE

STATION	ZONE VI SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
PELICAN POINT 1884	P.89	N.A. 1927	517,948.12	2948.12	(2051.88)		898.6	(625.4)		
			1,512,187.86	2187.86	(2812.14)		666.9	(857.1)		
SUB. STA. A	OFFICE COMP.	"	518,578.78	3578.78	(1421.22)		1090.8	(433.2)		
			1,512,909.92	2909.92	(2090.08)		886.9	(637.1)		
SUB. STA. B	"	"	518,630.59	3630.59	(1369.41)		1106.6	(417.4)		
			1,512,990.29	2990.29	(2009.71)		911.4	(612.6)		
ARCH ROCK 2, 1958	L.A. D.O.	"	519,604.15	4604.15	(395.85)		1403.3	(120.7)		
			1,508,678.35	3678.35	(1321.65)		1121.2	(402.8)		
ROCKY BIGHT, 1884	P.89	"	515,048.33	48.33	(4951.67)		14.7	(1509.3)		
			1,516,473.04	1473.04	(3526.96)		449.0	(1075.0)		
SPUR 2, 1932	P.12	"	532.345.51	2345.51	(2654.49)		714.9	(809.1)		
			1,505,877.50	877.50	(4122.50)		267.5	(1256.5)		

13.

1 FT. = .3048006 METER

COMPUTED BY: J.L.H. C.H.B. DATE 3-9-60 10-9-61

CHECKED BY: D.N.W. J.E.D. DATE 3-9-60 10-13-61

COMM-DC-57843

COMPILATION REPORT

MAP MANUSCRIPT T-11655

PROJECT PH-5908

31. DELINEATION:

COMPILATION WAS BY KELSH INSTRUMENT.

32. CONTROL:

SUPPLEMENTARY CONTROL ESTABLISHED BY STEREOPLANIGRAPH BRIDGING AND BASED ON IDENTIFIED HORIZONTAL CONTROL STATIONS WAS ADEQUATE.

33. SUPPLEMENTAL DATA:

SHEET No. 42W, MAP OF ORANGE COUNTY, SCALE 1 INCH = 600 FT.

34. CONTOURS AND DRAINAGE:

CONTOURS ARE NOT APPLICABLE.

DRAINAGE HAS BEEN COMPILED AS INDICATED BY THE FIELD INSPECTION AND IS IN GOOD AGREEMENT WITH THE U.S.G.S QUADRANGLE.

35. SHORELINE AND ALONGSHORE DETAILS:

THE FIELD INSPECTION OF THE MEAN HIGH-WATER LINE WAS ADEQUATE. NO LOW-WATER PHOTOGRAPHY WAS AVAILABLE AND THE LOW-WATER LINE WAS NOT DELINEATED. FIELD INSPECTION INDICATED THE CHARACTER OF ROCK LEDGES AND FOUL AREAS ALONGSHORE AND THEIR EXTENT WAS DELINEATED FROM OFFICE INTERPRETATION OF THE PHOTOGRAPHS. HEIGHTS OF THE BARING OF THE SEVERAL ROCKS AND FOUL AREAS ADJACENT TO THE SHORELINE WAS FURNISHED BY THE FIELD UNIT FOR THE TIME OF FIELD INSPECTION. THESE DATA WERE TRANSPOSED TO THE VERTICAL DATUM OF THE MANUSCRIPT.

36. OFFSHORE DETAILS:

NONE.

37. LANDMARKS AND AIDS:

NONE.

38. CONTROL FOR FUTURE SURVEYS:

NONE.

39. JUNCTIONS:

SATISFACTORY JUNCTIONS WERE MADE WITH T-11656 ON THE SOUTH AND WITH T-11654 ON THE WEST. THERE ARE NO CONTEMPORARY SURVEYS TO THE NORTH AND EAST.

40. HORIZONTAL AND VERTICAL ACCURACY:

46. COMPARISON WITH EXISTING MAPS:

COMPARISON WAS MADE WITH THE U.S.G.S. 7½ MINUTE LAGUNA BEACH, CALIFORNIA QUADRANGLE, SCALE 1:24,000, EDITION 1948.'

47. COMPARISON WITH NAUTICAL CHARTS:

COMPARISON WAS MADE WITH THE FOLLOWING NAUTICAL CHARTS:

NAUTICAL CHART 5101, SCALE 1:234,270 AT LAT. 33° 20'
5TH ED. JAN. 6, 1947, REVISED MAY 18, 1959.

NAUTICAL CHART 5142, SCALE 1:80,000 AT LAT. 33° 31'
1ST ED. MARCH 5, 1951, REVISED NOV. 9, 1959.

NAUTICAL CHART 5108, SCALE 1:10,000 AT LAT. 33° 37'
8TH ED. AUG. 22, 1940, REVISED JUNE 15, 1959.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

NONE.

ITEMS TO BE CARRIED FORWARD:

NONE.

APPROVED:

FRED NATELLA, CAPT, C&GS
PORTLAND DISTRICT OFFICER

RESPECTFULLY SUBMITTED:

JAMES L. HARRIS
CARTOGRAPHER

49. NOTES FOR THE HYDROGRAPHER:

NONE.

C&GS FORM 1002
(11-13-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

T-~~10363~~ 11655

1. PROJECTION AND GRIDS	2. TITLE	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
X	X	X	X

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
X	None	None

8. BENCH MARKS	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
None	None	X	None

ALONGSHORE AREAS *(Nautical Chart Data)*

12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
X	X	X	None

16. AIDS TO NAVIGATION	17. LANDMARKS	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
None	None	X	X

PHYSICAL FEATURES

20. WATER FEATURES	21. NATURAL GROUND COVER	22. PLANETABLE CONTOURS
X	X	None

23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
None	None	None	X

CULTURAL FEATURES

27. ROADS	28. BUILDINGS	29. RAILROADS	30. OTHER CULTURAL FEATURES
X	X	None	X

BOUNDARIES

31. BOUNDARY LINES	32. PUBLIC LAND LINES
None	None

MISCELLANEOUS

33. GEOGRAPHIC NAMES	34. JUNCTIONS	35. LEGIBILITY OF THE MANUSCRIPT
X	X	X

36. DISCREPANCY OVERLAY	37. DESCRIPTIVE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
None	X	X	X

40. REVIEWER	SUPERVISOR, REVIEW SECTION OR UNIT
James L. Harris	

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

USCOMM-DC 18252-P61

T-11655

48. Geographic Names List

Buck Gully

Cameo Shores

Corona del Mar

Crystal Cove

Gulf of Santa Catalina

Los Trancos Canyon

Muddy Canyon

Pelican Point

Reef Point

Scotchmens Cove

Shore Cliffs

George M. Bale

Geographic Names Section
4 April 1963

Review Report
Shoreline Maps
T-11655 thru T-11659
May 1963

61. General Statement

These are five (5) shoreline maps of project PH-5908 Long Beach to Laguna Beach, California. These maps were prepared primarily for the location of all non-floating aids and landmarks for use in the revision of our nautical charts.

62. Comparison with Registered Topographic Surveys

T-5030A	1;10,000	1934
T-5417	1:10,000	1934
T-5418	1:10,000	1934

There are cultural and shoreline differences but in general, the agreemtne is good. There are some offshore rock and ledge differences. These should be reconciled when the hydrographic surveys are made.

63. Comparison with Maps of Other Agencies

Dana Point, Calif.	1:24,000	U.S.G.S.	1948
Laguna Beach, Calif.	1:24,000	U.S.G.S.	1948
San Juan Capistrano, Calif.	1:24,000	U.S.G.S.	1948

See Item 46.

64. Comparison with Contemporary Hydrographic Surveys - None

65. Comparison with Nautical Charts

5108	1:10,000	1940 revised to March 1961
5142	1:80,000	1960 revised to Dec. 1962

There are some small rock and ledge differences between the charts and the manuscripts.

66. Adequacy of Results and Future Surveys

These surveys were prepared according to project instructions and are within the required accuracy for Nautical Charting.

Reviewed by:
L C Lande
L. C. Lande

Approved by:
Charles Lauria
Chief, Cartographic Branch

Lynn D. Taylor
Chief, Nautical Chart Division

J E Vaughn 8/13/63
Chief, Photogrammetry Div.

Horace S Comph
Chief, Operations Division

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-11655

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
5142	11-25-63	E. M. Bogues	Full ~~Part Before~~ After Verification Review Inspection Signed Via Drawing No. Exam No Corr
5108	2-20-64	J. McMillan	Part ~~Full Part Before~~ After Verification Review Inspection Signed Via Drawing No. Applied to Part ~~Full~~ Entire Chart
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
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