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U. S. COAST & GEODETIC SURVEY
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Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No. P-1936-38

State California

LOCALITY

Cape Mendocino

Steamboat Rock to Bear River

1936-38

CHIEF OF PARTY

F. H. Hardy

U. S. GOVERNMENT PRINTING OFFICE

6614a

T. 6616 a

applied to class 5795 - June 1939 - H.S.B.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter P 1936-38REGISTER NO. T6614 aState CaliforniaGeneral locality Cape MendocinoLocality Steamboat Rock to Bear RiverSept. 1936Scale 1/10,000 Date of survey April 1938, 19Vessel U.S.C. & G.S.S. GUIDEChief of Party F.H. HardySurveyed by L.W. Swanson- H.F. GarberInked by L.W. Swanson - H.F. GarberHeights in feet above M.H.W. to ground to ~~tops of trees~~

Contour Approximate contour Form line interval _____ feet

Instructions dated May 2, 1935 - January 5, 1938, 19

Remarks: _____

DESCRIPTIVE REPORT
to accompany
GRAPHIC CONTROL SHEET "P" 1936
Project No. HT-206
COAST OF CALIFORNIA, VICINITY OF CAPE MENDOCINO

INSTRUCTIONS:

The graphic control on this sheet is apart of Project No. HT-206 The instructions for which were dated May 2, 1935 ✓

LIMITS:

The limits of this graphic control sheet are from Steamboat Rock to the Mouth of the Bear River, vicinity of Cape Mendocino, northern coast of California. ✓

SCALE:

The scale of this sheet is 1 : 10,000. ✓

DATES OF SURVEY:

The work on this sheet was accomplished from September 7 to September 9, 1936 inclusive. ✓

CONTROL:

The control for this work consisted of five triangulation stations of the 1928-29 scheme, plotted on the North American 1927 Adjusted Datum. These stations were not intervisible from the beach. They are; South of Cape 2, 1928-29; Steamboat Rock 1928, Hell Gate 1928, Mendocino 2, 1928-29; and Bear River 2, 1928-29. ✓

Sugar Loaf 1869 and Cape Mendocino Lighthouse 1869-71 were not used as part of the control for this work.

SURVEY METHODS:

It has been found while checking the old hydrographic surveys with those of the present field season (1937) in the vicinity of Cape Mendocino, that serious discrepancies were found in the positions of off lying rocks between the various surveys. Because of this a detailed description of the procedure of the work on this graphic control sheet is submitted. ✓

Triangulation station So. of Cape 2 was occupied. The table was oriented on Mendocino 2 and checked on station Hell Gate. Cuts were taken to Sheep, Muss, Wool, Olds, Lighthouse Gate, Lighthouse Flagpole, Cen, An and Gus. A declinoire reading was also taken. ✓

Triangulation station Mendocino 2 was occupied. Orientation was made on So. of Cape 2 and checked on Bear River 2 and Steamboat Rock. Setup #1 was taken by direction and distance. A declinoire reading was also taken. ✓

Setup #1 was occupied and the position checked by resection on Bear River 2, So. of Cape 2 and Steamboat Rock. Cuts were taken to Sheep, Spain, Day, Slat and Gus. ✓

SURVEY METHODS: Cont.

Setup #2 (Sheep) was occupied as determined from Setup #1 and So. of Cape 2. The position was checked by resection on Steamboat Rock. Muss was established by distance and direction and previous cut. Cuts were taken to Hemp, An, Mail and Chimney. ✓

Setup #3 Lighthouse Gate was occupied on the cut from So. of Cape 2 and the position determined by resection on Steamboat Rock, Hell Gate and check cuts to Sheep and Muss. Cuts were taken to Rip, Chimney, Wool and An. ✓

Setup #4 (Mail) was occupied on the cuts from Sheep and located by resecting to So. of Cape 2 and Steamboat Rock. Cuts were taken to Wool and Cen. ✓

Setup #5 was determined by a three point fix (So. of Cape 2, Steamboat Rock and Mail. A check cut was taken to Sheep. Cuts were taken to Hemp and Flagpole Lighthouse. Signals Chimney, Wool and Rip were located by rod readings, checking with previous cuts. ✓

Setup #6 (Hemp) as determined from setups #2 and #5 was occupied checking the position by resecting on Steamboat Rock and a rod reading to Sheep. ✓

Setup #7 (Muss) was occupied and checked by resecting on Steamboat Rock and Mail. Cuts were taken to Olds, Cen and An. A check cut was also taken to Wool. It was necessary to stop work in this vicinity because of fog. ✓

Bear River 2 was occupied, orientation was made on Mendocino 2. There was not a check on this ^{and} orientation. But a cut was taken to Gus checking the previous cuts at a very good angles. ✓ Thus it was felt that a strong position of Gus had been determined. This served as a check on the orientation. A declinatoire reading was also taken. Cuts were taken to Ban and Wally. ✓

Ban was occupied on the cut from Bear River 2 and resecting on Gus. A tentative position of Ban was determined. ✓

Setup #8 (Wool) was occupied. Cuts were taken to Olds, Cen and An. Check cuts were taken to Rip, Chimney, and Muss. ✓

Setup #9 (Olds) was occupied, checking the position by resecting on An and Cen. Setup #10 was located by distance and direction. ✓

Setup #10 was occupied and checked by resecting on Steamboat Rock and An. Check cut was taken to Cen. A cut was taken to Good. Setup #11 was located by distance and direction. ✓

Setup #11 was occupied and checked by resection on Olds, Cen, An and Gus. Signal good was located. ✓

Because of the tides during the daylight hours at this time it was impossible to continue down the beach from just north of this setup to just south of signal Faith. ✓

Setup #12 was determined by a three point fix near the Lighthouse Flagpole. The setup was made on the cut to the Flagpole from So. of Cape 2 resectioning on Good, Olds and Gus and using the cut from setup # 5. Setup #13 was located by distance and direction. ✓

Setup #13 was occupied and checked by resecting on Gus and Bear River 2. Cuts were taken to Spain, and Good; and a check cut to Good. Setup #14 was located by distance and direction. ✓

Setup #14 was occupied and checked by resection on Gus. Signals Gord and Hope were located. A cut was taken to Spain and Ban. Setup #15 was located by distance and direction. ✓

Setup #15 was occupied and checked by resection on Gus. Signal Hope was checked and signal Faith located. Cuts were taken to Spain, Mast, Rebel, War and Poison. A good position of Spain was determined by the various cuts.

Setup #16 (Spain) was occupied and the position checked by resection on Gus. Signal Day was located. Cuts were taken to Loyal, Some, Here, Mast, Rebel, Mis, War and Poison. A check cut was taken to Gord. Setup #17 and #19 were located by distance and direction.

Setup #17 was occupied and checked by resection on Gord and Gus. Setup #18 was located by distance and direction.

Setup #18 was occupied and checked by resection on Gus. Signals Loyal and Some were located.

Setup #19 as located from Setup #17 was not occupied being used only for a distance check.

Setup #20 is a three point fix eccentric at signal Here, signals used for this fix are Mendocino 2, Day and Gus. A check to Setup #19 verifies the position for closing traverse. Signal Here was located. Cuts were taken to Slat, Mis, War, Poison and Ban. Setup #21 was located by distance and direction.

Setup #21 was occupied and checked by resection on Gus. Signals Slat and Cold were located. A cut was taken to Mast. Setup #22 was located on distance and direction.

Setup #22 was occupied and checked by resection on Gus. Signal Mast was located and a check cut was taken to ~~Gord~~. Cuts were taken to Wally, Rebel, War and Ban. Setup #23 was located by distance and direction.

Setup #23 was occupied and checked by resection on Bear River 2 and Gus. Signal Wally was located and a cut taken to signal War. Setup #24 was located by distance and direction.

Setup #24 was occupied and checked by resection on Gus. Signals Rebel and Mis were located and a cut taken to War. Setup #25 was located by distance and direction.

Setup #25 was occupied and checked by resection on Gus. Signals War, Dam and Poison were located and a cut taken to Ban checking the previous determined tentative position.

Setup #27 was located by distance and direction.

Setup #26 (Ban) was reoccupied and again checked by resection on Gus and setup #25. All signals visible from Ban were checked from this position. Rod readings were taken to Signal Curb and setup #27 was checked by distance and direction.

Setup #27 was occupied and signal Curb located ending work on this sheet.

After this control sheet was completed a position was furnished by the Washington Office for signal Ban a triangulation station of 1919 located by a three point fix at that time. The position determined by this survey checks the position furnished by the office. The triangulation station was found by accident while climbing the mountain on the way to build signal on Bear River 2.

It should be noted that the work from signal Faith to signal Curb is based on a good location of signal Gus. If this signal is found to be in error, on the new topographic survey to be made of this area, by an appreciable amount, the work north of signal Faith should also be found to be in error. However it was felt by the topographer that a strong position of Gus had been determined.

A tracing of this sheet was checked against T 4511 (1929). The three rocks located on the graphic control sheet are north of the positions of these same rocks on the 1929 survey by approximately 22 meters or the amount that triangulation station Mendocino 2 was plotted in error on that sheet. The signals on the bluff and high water line do not agree with the bluff and high water line on T 4511 by varying amounts. ✓

This same tracing was checked against T 1134 (1869). The three rocks common to these sheets do not agree by varying amounts as to distance and direction. It must be noted that there is a different location for these same rocks on the three sheets. But the signals on the bluff and highwater line on the graphic control sheet do check exceeding well the bluff and high water line on T 1134. ✓

HYDROGRAPHIC SIGNALS:

The following topographic stations were described and marked (except for the natural objects) which were only described.

A considerable number were marked knowing that hydrographic and wire drag work would extend over several seasons in this vicinity. ✓

Hemp	Good	Spain	Dam	Here
Bay	Faith	Muss	Ban	Chimney (Russ House)
Wool	Gord	Cold	Poison	War
Rebel	Curb	Olds	Sheep	Gus
			Loyal	Hope

TELEMETER RODS:

The rods were checked and a correction table made before going into the field. ✓

Approved

for F. H. Hardy

Chief of Party, Commanding Ship GUIDE.

Respectfully submitted

L. W. Swanson
L. W. Swanson
Jr. H. & G. E.

SUPPLEMENTAL DESCRIPTIVE REPORT
to accompany
Topographic Sheet P 1936-38
Northern California Coast
Cape Mendocino
U.S.C. & G.S.S. Guide
1938

Note

The signal location and declinoire observations were made by L.W. Swanson, Jr. H. & G. E. in September 1936. The sheet was then held in the field pending the completion of the hydrographic surveys. A detailed survey of this area was found necessary at the close of the 1937 field season when discrepancies were found on T-4511 (1929); caused by an erroneous position of triangulation station Mendocino 2 1928-29. Accordingly, a detail topographic survey was executed by H.F. Garber, Jr. H. & G. E. in April, 1938. This supplemental report covers the 1938 portion of the work/

Authority

The detailed survey was made in accordance with instructions dated May 2, 1935 and the Directors letter of supplemental instructions dated January 5, 1938.

Limits

The work extends from Steamboat Rock at a juncture with field sheet N 1936, northward to a satisfactory juncture with T-4511, one-half mile south of Bear River.

Control

Additional control was established in 1938 just prior to this survey; locating Sharp Rock, Cape Rock, An, Cape Mendocino Lighthouse, Singley, Alpha and Dole by triangulation. Definite pointings were made on an iron rod atop Cape Rock. These stations supplemented the 1928-29 control.

Survey Methods

A traverse was started at Singley 1938 and extended northward, verifying the 1936 signal location, and locating the off-lying rocks as it progressed. Each set-up was checked on all visible triangulation stations. The traverse was tied into a strong three-point fix just off signal Good, Lat. 40-26.33, Long. 124-24.57 using stations Singley, Cape Rock and Sharp Rock, with a check on Cape Mendocino Lighthouse. The traverse was continued northward, checking the planetable positions by resections on Sharp Rock and Cape Rock; tying into the 1936 plane-table position of signal Spain with no closing error. Spain was occupied; backsighting on a previous cut from Mendocino 2, and resecting on Sharp Rock, which gave a strong verification of this point. The traverse was continued to a point about 110 meters north of signal Mast where a resection line to Bear River 2 verified the Plane Table set-up. The traverse was ended at this point inasmuch as a satisfactory juncture with sheet T-4511 was made.

The position of Signal Mast was verified; the location of the signal being common to T-4511 and this sheet. The signal is a steel mast of a wrecked ship so recovery was certain. In addition, the location of the stream at signal Wally and the position of the high water water line on T-4511 were verified so that the juncture was considered satisfactory. As this is the first point on the beach that sees Bear River 2, progressing northward, undoubtedly a strong three point fix was obtained on T-4511 in this vicinity using Cape Rock, Bear River 2, and False Cape Rock.

As the present traverse was checked at the vicinity of signal Good, again at signal Spain, checking signal Mast, common to both sheets, and a direction to Bear River 2 at a right angle to the line of progress, it was felt that the traverse was sufficiently strong to end at this point. Owing to the steep grades from the beach to Bear River 2, a traverse closing on that station was not feasible. No three point fix was available on the sheet at this point.

A traverse was then run southward from Singley, 1938 to signal Jag on sheet N 1936, making a satisfactory juncture with that sheet.
T-6560

After the offlying rocks had then been located from the beach, their positions were verified with cuts taken from station Dole, 1938. This proved to be a very commanding station for this purpose.

With the exception of signals An and Cen, the 1936 signal locations were verified. The triangulation position of An was about 10 meters SE of the topographic location, and the new position of Cen was found to be about five meters SE of its 1936 position. The position of Sharp Rock (Gus) was verified by triangulation.

The shape of Cape Rock was taken from the Army air photographs of this area in conjunction with tangents taken with the alidade. Those rocks surrounded by dots (•) were located by the plane-table, while the remaining inshore rocks were taken from the air photographs, shown thusly: (*).

Comparison with Air Photographs

The offlying rocks, streams, shoreline, buildings, and road were compared with the air photographs and no discrepancies were noted.

Comparison with Hydrographic Sheet 1-1937-38

The offlying rocks located by cuts by the hydrographic party agreed with the topographic locations, while some of those on the hydrographic sheet located by estimated distances failed to agree by a few meters. These were changed to conform with the topographic positions. The heights of the rocks above MLLW and

HW were compared and agreed within one or two feet. The heights as given by the hydrographic party were given weight owing to their proximity to the rocks, and working with observed rather than predicted tides. The heights were made to conform on both sheets.

Comparison with T-1134

A comparison with T-1134 shows no large discrepancies in the relative positions of the offlying rocks. A recession of the shoreline of about ten meters is shown from just south of signal Good to signal Faith. This portion of the Cape is continually sliding and washing into the sea. The mouth of the stream just north of Singleys Flat has been built up, and shows a different formation. Singleys Flat shown as sand on T-1134 is now grass covered and is used for pasture.

Comparison with T-4511

Owing to Mendocino 2-1928, a principal control station, being out of position, a detailed comparison as to position could not be made. However, no large discrepancies in the relative positions of offlying rocks and general trend of the shoreline were noted; with the following exception: the rock shown on the meridian 124 -25' at Lat. 40 - 26.87' as baring two feet at low water was not seen by either the topographic or hydrographic party; nor is there any evidence of a rock in this position on the air photographs. However, a sunken rock located by the hydrographic party and verified by a breaker shown on the air photographs, lies about 100 meters west of the above position.

The heights of some of the rocks vary from one to four feet between the topographic surveys. These differences were verified in the field and were, in general, substantiated by the hydrographic survey. An error must have been made on the height of signal Cen on T-4511, as it is shown as awash at LW. This rock is definitely the highest in the group, 12 feet above HW, and was used as a signal by the hydrographic party.

Four observations were made to determine the height of Cape Rock. They were: 328, 327, 325, and 325 feet, with a mean of 326 feet above HW. This elevation is midway between the height of 320 feet determined on T-1134 and 333 feet as determined on T-4511.

Comparison with Chart 5795

With a single exception the surveys agree in general with Chart 5795. This exception is the existence of Lone Rock at Lat. 40 - 27.4; Long. 124 - 24.1. This rock apparently originates with sheet H-1150 (1872) when it was located by the hydrographic party and used as a signal (Lone Rock). However, this rock is not shown on T-1134 (1869), T-4511 (1929) nor on the hydrographic field sheet No. 1, 1937-38. There is no evidence of its existence on the air photographs. The rock was especially looked for during the survey, but there was no sign of its existence. Although the search was made at about half tide, it does not seem possible that a rock covered at half tide would be used for a hydrographic signal at a distance of one-half mile. It is believed that this was possibly an old hulk that gave the appearance of a rock from seaward, and was later destroyed by the elements.

(404243-4 GNFik)
 ✓ GHE

Geographic Names

The following Geographic names appear on Chart 5795:

Name	Remarks	Recommendation
Lone Rock	Existence very doubtful. (See report)	Expunged from Chart.
Outer Twin Rock	Not sufficiently prominent for charting	Name deleted from chart
Sharp Rock	Very descriptive	Sharp Rock
Off Rock	Large prominent rock 15 feet high	Off Rock
Sugar Loaf or Cape Rock	Often known as Cape Rock as shown on many survey sheets	Sugar Loaf or Cape Rock
Beach Rock	Not especially prominent for charting	Name deleted from chart
Singleys Flat	Since this flat has become grass covered, it blends with the background and is not especially conspicuous from seaward.	Name deleted from chart
Cape Mendocino	Well established name	Cape Mendocino

No additional names are recommended.

Statistics

Statute miles of shoreline	4.1
Statute miles of road	1.2
Area, square statute miles	2.5

Respectfully submitted,

Harry F. Garber
 H.F. Garber, Jr. H. & G.E.

F.H. Hardy
 Approved and forwarded.

F.H. Hardy, Chief of Party

Remarks.

Decisions

1		File No 404244
2		" 404244
3	See D.R.	" 404243
4		" 404243
5		" 404244
6		" 404244
7		" 404244
8		" 404244
9		" 404244
10	See D.R.	" 404244
11	See D.R.	" 404244
12		" 404243
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GEOGRAPHIC NAMES

Survey No. T 6614 a

GEOGRAPHIC NAMES										
Survey No. T6614 a										
Name on Survey	<div>On Chart No. 5795</div> <div>On previous survey No.</div> <div>On U. S. quadrangle Maps</div> <div>From local information</div> <div>On local Maps</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>U. S. Light List</div>									
	A,	B,	C,	D	E	F	G	H	K	
<u>Cape Mendocino</u> ✓	✓									1
<u>Steamboat Rock</u> ✓	✓									2
Singleys Flat	✓									3
<u>singley Creek</u> ✓										4
<u>Beach Rock</u> ✓	✓									5
<u>Sugar Loaf</u> ✓	✓									6
<u>Off Rock</u> ✓	✓									7
<u>Twin Rocks</u> ✓										8
<u>sharp Rock</u> ✓	✓									9
Outer Twin Rock	✓									10
Lone Rock	✓									11
<u>Bear River</u> ✓	✓									12
										13
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										27

Names underlined in red approved

by HFE on 2/17/39

M 234 R

Names underlined in red approved

by HFE on 2/17/39

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

~~No. 1000~~

No. T-6614a

received Feb. 2, 1939
registered Feb. 17, 1939
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
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83			
88			
90			

RETURN TO

82	T. B. Reed
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✓ JBR

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6614a (1936-38) FIELD NO. P

Steamboat Rock to Bear River, Cape Mendocino, California
Surveyed in September, 1936 - April, 1938, Scale 1:10,000
Instructions dated May 2, 1935, January 5, 1938 (GUIDE)

Plane Table Survey

Aluminum Mounted

Chief of Party - F. H. Hardy
Surveyed by - L. W. Swanson and H. F. Garber
Inked by - L. W. Swanson and H. F. Garber

1. Junctions with Contemporary Surveys

- (a) The junction on the south with T-6560 (1936) is satisfactory.
- (b) The present survey overlaps a considerable portion of T-4511 (1929). Discrepancies in the 1929 topography, caused by erroneous plotting of Triangulation Station Mendocino 2-1928, necessitated the resurvey, which was carried far enough to the north to obtain good agreement with the older work. The present survey should supersede T-4511 (1929) in future charting of the common area.

2. Comparison with Prior Surveys

T-1134 (1869), 1:10,000

The above survey covers the entire area of the present work. There are some changes in shoreline, particularly above Lat. $40^{\circ}27'$ where an accretion of 10 to 25 meters has probably been caused by scaling off of the bluffs. Offshore detail on the two surveys is in fairly good agreement. T-1134 (1869) shows a sunken rock (charted) in Lat. $40^{\circ}26.75'$, Long. $124^{\circ}25.25'$. Neither T-4511 (1929) nor the present survey show the sunken rock, but both show a rock baring 4 feet at M.L.L.W. about 100 meters to the eastward. The matter has been discussed in detail in paragraph 5b(4), review of H-6407 (1937-38) and it was concluded there that the sunken rock was an erroneous representation of the rock awash shown on the present survey and should not be charted. Only a short section of the 20 foot contour was located on the present survey and T-1134 (1869) must necessarily be used

for the charting of such inland detail. The present survey is quite adequate, however, to supersede the old survey in future charting of all other detail in the common area.

3. Comparison with Chart 5795 (New Print dated Aug. 1, 1938).

Within the area of the present survey, the chart is based principally on surveys discussed in the foregoing paragraphs. Lone Rock charted in Lat. $40^{\circ}27.4'$, Long. $124^{\circ}24.1'$ originates with H-1150 (1872). It has already been discussed in detail in paragraph 5b (3), review of H-6407 (1937-38), taking into consideration the intensive search for it discussed on the supplemental descriptive report for the present survey, page 3, chart comparison. The conclusion arrived at was that the feature does not exist at the present time and should be removed from the chart.

4. Condition of Survey

- (a) The descriptive report is satisfactory.
- (b) The field drafting is very good.

5. Compliance with Instructions for the Project

Satisfactory.

6. Additional Field Work Recommended

None

7. Reviewed by - J. A. McCormick, May 11, 1939.

Inspected by - E. P. Ellis

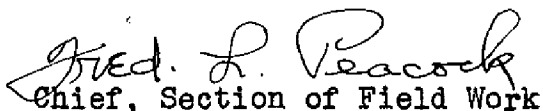
Examined and approved:



T. B. Reed,
Chief, Section of Field Records



Chief, Division of Charts



Chief, Section of Field Work



Chief, Division of H. & T.

6614b

Graphic Control

U. S. COAST & GEODETIC SURVEY
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Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. ~~11~~ Q

State California

LOCALITY

Northern California Coast

~~No. 2 Cape Mendocino and vicinity.~~

~~No. 7 False Cape and vicinity~~

1937

CHIEF OF PARTY

F. H. Hardy

U. S. GOVERNMENT PRINTING OFFICE

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. ~~P-9~~

T6614 b

Graphic Control

REGISTER NO.

State California

General locality Northern California Coast

Locality ~~Sheet No. P - Cape Mendocino~~
No. Q - False Cape & Vicinity

Scale 1:10,000 Date of survey June, 1937

Vessel U S C & G S S Guide

Chief of party F. H. Hardy

Surveyed by Sheet No. P - L. W. Swanson
No. Q - L. W. Swanson & E. E. Stohsner

Inked by Sheet No. P - L. W. Swanson
No. Q - E. E. Stohsner

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated _____ May 2, 1935

Remarks: Surveyed for signal location

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SHEET FIELD LETTER "Q"
Scale, 1:10,000.
Coast of California
U.S.C. & G.S.S.GUIDE
1937.

INSTRUCTIONS: Director's instructions dated May 2, 1935.

PURPOSE AND GENERAL DESCRIPTION OF COAST: The purpose of this survey is the location of signals to furnish control for inshore and offshore hydrography as well as for wire drag operations.

The stretch of shoreline on this sheet is very rough and irregular. Bluffs of several hundred feet in height rise abruptly from the beach in many places obscuring the signals from triangulation stations back from the shore.

CONTROL: Control for this sheet is the 1928 second order scheme of coastal triangulation.

SURVEYING METHODS: FALSE CAPE ROCK 1869 was somewhat indefinite as to the highest point because of the rounding top so was not used for control. Signal location was started from the southern end of the sheet. Signals BAN and JA were located by cuts from the three triangulation stations BEAR RIVER₂, FORTUNAS₂, and FALSE CAPE₂. Signal SHAG was then located by cuts from BEAR RIVER₂ and FORTUNAS₂ and a resection on BAN. CHEV was located by rod reading from SHAG, checked by a cut from BEAR RIVER₂ and resection on signal JA. Traverse was then carried north from CHEV to a setup close to signal STING, at which point a resection on JA checked the traverse. The traverse checked sufficiently close that no adjustment was necessary. Signals BEMER and AXE were located by three cuts each from previous setups and BEMER was also checked by a rod reading from the setup close to signal STING as the cuts on it were rather slim.

The azimuth was carried from the setup close to STING to a setup near signal BEN and position determined there by resection on BAN and signal JA, previously located. Traverse was carried from this position to a setup near signal ROCK, where a three point fix was taken to BEAR RIVER₂, FALSE CAPE₂ and signal MIKE. MIKE was located by a checked rod reading from FALSE CAPE₂. The traverse ran was too long by about 3 meters and the adjustment was made here.

Traverse was then carried northward from signal ROCK to signal BURP. The position of BURP and new position of MUSSEL ROCK were transferred from the adjoining sheet "R". It was found that the traverse run was too long again by about 10 meters, the azimuth checked good. The traverse was not run back to signal ROCK but the signals were relocated by carrying the azimuth and resecting on the now determined position of MUSSEL ROCK. It was found that the error in in the traverse had been consistantly accumulative.

COMPARISONS WITH PREVIOUS SURVEYS: A few offshore rocks that were visible and could be clearly identified were cut in during the progress of signal location. They failed to check the 1929 positions taken from the photostat of Sheet No. T-4511, as shown in pencil. Signal FIN is the highest point of large rock, but in comparing with rock transferred from old photostat it falls on its north edge. Although this shows a discrepancy between new and old work the new location of the highest point is strong with four cuts.

Outline of rock
adjusted on H-6420
(1937-38)

SIGNAL ROCK is not the large rock which is detached from the mainland at low water but is a sharp thumb-shaped rock at the base of the rocky cliff.

Respectfully submitted,

E. E. Stohsner

E. E. Stohsner,
Aid,
Coast & Geodetic Survey.

Forwarded, approved,

F. H. Hardy

F. H. Hardy,
Chief of Party, C. & G. S.,
Commanding Ship Guide.

*Inspected. Detailed review
unnecessary.*

*J. A. McCormick
May 11, 1939.*

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

~~No. 11~~

No. T-6614b (Graphic
Control)

received Feb. 2, 1939
registered Feb. 17, 1939
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
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62			
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83			
88			
90			

RETURN TO

82	T. B. Reed
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✓ 7/30/39