

8960 TO
8965 INCL.

Diag. Cont. No. 5602-2

8960 TO
8965 INCL.

Form 504	
U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	PLANTING IC & SHORELINE
Field No.	25 (121)
Office No.	8960-8961-8962-8963-8964-8965
LOCALITY	
State	CALIFORNIA
General locality	HUMBOLDT BAY
Locality	EMERSON AND MICHOTA CALIFORNIA
194 2	
CHIEF OF PARTY	
C. W. Clark R. A. Eakin, Ordnance Photogrammetric Office	
LIBRARY & ARCHIVES	
DATE August 29, 1951	

B-1870-1 (1)

DATA RECORD

T-8960 to T-8965 Inclusive

• Project No. (II): Ph-25(47) Quadrangle Name (IV):

Portland, Oregon
Field Office (II): Eureka, California (Field Unit) Chief of Party: R.A. Earle

Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: W. H. Bainbridge
Charles W. Clark

Instructions dated (II) (III): 27 February 1948
Copy filed in Division of
Photogrammetry (IV)
Office Files.

Completion Report (Archives)

Method of Compilation (III): Graphic

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

Scale Factor (III): None

Date received in Washington Office (IV): 11-22-49 Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): 7-9-51

Publication Scale (IV): 1:10,000 Publication date (IV): Jan to June 1951

Geographic Datum (III): N.A. 1927 Vertical Datum (III): Mean Sea Level
Mean sea level except as follows:
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): See reverse side.

Lat.: Long.: Adjusted
~~Unadjusted~~

Plane Coordinates (IV): State: California Zone: 1

Y= X=

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.

Reference Stations

T-8960	SAMOA 2, 1941	Lat. 40° 49' 21.350"	658.6m (1192.2m)	y = 550,067.76
		Long. 124° 11' 10.082"	236.3m (1169.8m)	x = 1,395,048.96
T-8961	ARCATA, 1941	Lat. 40° 52' 56.433"	1740.8m (110.0m)	y = 571,261.53
		Long. 124° 06' 09.789"	229.2m (1175.6m)	x = 1,418,649.37
T-8962	ZAHNER, 1941	Lat. 40° 45' 33.025"	1018.7m (832.1m)	y = 524,926.79
		Long. 124° 10' 47.718"	112.3m (295.1m)	x = 1,396,216.01
T-8963	MEADOW, 1928	Lat. 40° 28' 49.682"	1532.5m (318.3m)	y = 546,335.88
		Long. 124° 06' 29.638"	694.6m (711.6m)	x = 1,416,524.58
T-8964	RICKS, 1941	Lat. 40° 40' 39.595"	1221.3m (629.4m)	y = 497,997.00
		Long. 124° 17' 11.228"	263.7m (1145.4m)	x = 1,365,917.33
T-8965	SISSON 2, 1919	Lat. 40° 42' 53.399"	1647.1m (203.6m)	y = 579,927.22
		Long. 124° 12' 04.414"	103.6m (1304.7m)	x = 1,389,887.41

All recovered in 1948.

Adjusted Positions.

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

No contours

DATA RECORD

Field Inspection by (II): Charles Hanavich, J. H. Winniford,
J. L. Harris, E. H. Taylor, and
R. B. Melby Date: 3/15/48
to
4/28/48

Planetable contouring by (II): — Date: —

Completion Surveys by (II): *None* Date: —

Mean High Water Location (III) (State date and method of location): Located by field inspection between 3/18/48 and 4/28/48. Field data transferred to office photographs with the aid of the stereoscope and then compiled on map manuscripts.

Projection and Grids ruled by (IV): Date:

Projection and Grids checked by (IV): Date:

Control plotted by (III): John C. Lajoie & Roy A. Davidson (all Sheets) Date: March 1949

Control checked by (III): Ree Barron & Frank H. Elrod (all Sheets) Date: March 1949

Radial Plot or Stereoscopic Control extension by (III): Ree Barron, John C. Lajoie, & J.E. Deal Date: April 15, 1949

Stereoscopic Instrument compilation (III):
Planimetry Date:
Contours Date:

Manuscript delineated by (III): See reverse side. Date:

Photogrammetric Office Review by (III): Ree H. Barron (all Sheets) Date: 6/15/49 to 7/29/49

Elevations on Manuscript checked by (II) (III): Ree H. Barron (Tidal Bench Marks) Date: 6/15/49 to 7/29/49

Manuscript delineated by:

Date

T-8960 John H. Winniford
T-8961 Carita C. Wiebe
T-8962 Helen L. Laube
T-8963 Carita C. Wiebe
T-8964 John C. Lajoye
T-8965 Helen L. Laube

4/12/49 to 6/6/49
4/12/49 to 5/31/49
4/19/49 to 6/29/49
6/7/49 to 7/14/49
4/19/49 to 5/31/49
6/29/49 to 7/26/49

Field Inspection Photographs

T-8960: 47-D-310 to 314; 333-4; 368-9.
T-8961: 47-D-482 to 488; 502 to 506
T-8962: 47-D-314 to 317; 330; 335 to 338; 363 to 365
T-8963: 47-D-364-5; 488 & 488
T-8964: 47-D-317 to 322; 325 & 328; 352 to 356
T-8965: 47-D-339; 352 to 356

L.T.S.

Camera (kind or source) (III):

Single lens Camera "D"

Number	Date	Time	Scale	Stage of Tide
47 D 313 & 314	11/22/47	14:30	1:10,000 ratio	2.9 ft. above M.L.W.
47 D 352 to 356 Inc.	11/22/47	13:51 to 13:54	" "	2.8 ft. " "
47 D 363 to 367	" 11/22/47	13:39 to 13:41	" "	2.8 ft. " "
48 D 376 to 436	" 11/21/48	12:14 to 12:57	" "	5.7 to 6.3 ft. " "
48 D 447 to 492	" 11/21/48	13:10 to 13:40	" "	6.4 to 6.5 ft. " "

See layout (p. 31) for photographs used in the compilation of each map.
L.T.S.

Tide (III)

Reference Station: Humboldt Bay, California

Subordinate Station: None

Subordinate Station:

Ratio of Ranges	Mean Range	Diurnal
		Spring Range
	4.5	6.4

Washington Office Review by (IV):

Lena T. Stevens

Final Drafting by (IV):

8960 Berry, Breene
8961 Webber, Breene, Lucas
8962 Breene, Berry
8963 A. Berry, Breene, Weber
8964 Breene, Bahlcy

Drafting verified for reproduction by (IV):

8960 Hupiel
8961 "
8962 "
8963 "
8964 "
8965 "

Proof Edit by (IV):

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

44.9

Shoreline (More than 200 meters to opposite shore) (III): 73.7 Statute Miles

Shoreline (Less than 200 meters to opposite shore) (III): 30.3 " "

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 188

Recovered: 102

Identified: 65

Number of BMs searched for (II): (Tidal)

Recovered: 11

Identified: 11

Number of Recoverable Photo Stations established (III): 51

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

Remarks:

In addition 19 triangulation stations were established.
Above statistics are for the entire project.

Bureau Archives
941-6-7581
672

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Summary to Accompany
Descriptive Report for T-8960 to T-8965

Project Ph-25(47) covers the area Latitude 40°40' to 54', Longitude 124°02' to 19' and consists of ^{four} ~~six~~ planimetric maps, T-8960 to T-8965, ^{and two shoreline maps, T-8966, T-8967,} at a scale of 1:10,000.

None of the maps in this project have been delineated to the full extent of ~~their~~ respective geographic limits. This is in accord with the project instructions which state that the mapping shall extend "generally back to where the mountainous or hilly areas begin."

Field inspection work for the project was completed in the spring of 1948. The compilations were made from the field inspection photographs taken in November 1947 plus high-water photographs taken in November 1948.

Data pertaining to Project Ph-25(47) ~~are~~ filed as follows:

A. Division of Photogrammetry General Files

1. Acetate map manuscripts
2. 48 Forms 524
3. Field inspection photographs

B. Bureau Archives

1. One volume Form 250 (Horizontal Angles) ⁹⁴¹ ~~GH~~ G-7579
2. Special Report, Third-order triangulation ⁹⁴¹ ~~GH~~ G-7581
3. 190 Forms 526 } ⁹⁴¹ ~~GA~~ G-7580
16 Form 525 }
4. Registered lithographic print of the reviewed manuscript at compilation scale
5. Registered original descriptive report

C. Geographic Names Section

1. Investigation of Geographic Names Ph-25(47).

Lena T. Stevens
1 May 1950

PH-25 (47)
HUMBOLDT
BAY
CALIF.

PH-22 (47)
UMPQUA RIVER
OREGON

PH-23 (47)
COOS BAY

PH-24 (47)
COQUILLE RIVER
ENTRANCE

LEGEND
○ TO BE STARTED NEXT
● IN PROGRESS
■ COMPLETED 1948
X NOT APPLICABLE

FIELD INSPECTION REPORT
Sheets 8960 to 8965 Inclusive
Project Ph-25(47)

1. Description of the Area:

Humboldt Bay, which is the largest and most suitable harbor between San Francisco and the Columbia River, is situated in the northwestern part of California along the Pacific Ocean. A narrow strip of beach and sand separates the bay from the ocean. It is bordered on the north by the Arcata flatlands which comprise the delta of the Mad River. On the east and southeast, smaller bodies of low alluvial lands are found with laterals extending up Jacoby and Freshwater Creeks, The Elk River, and Salmon Creek. Terraces of old marine or coastal plane deposits are found north and east of these lowlands. On the south is Table Bluff; a prominent terrace, it extends westward to the ocean. South of Table Bluff is the extensive delta of the Eel River.

The bench lands or river terraces are in the main from 100 to 500 feet high. On the whole, they are a marine deposition but in some areas have been modified by the rivers and larger creeks.

The lowlands of the area are either tidal flats or river flood plains that lie only a few feet above tide water. The tidal flats are found north of and around Humboldt Bay and southwest of Table Bluff. These tidal flats, however, have been reclaimed for the most part. Along the bay and the various creeks, numerous tide gates have been installed and the low lands crisscrossed with drainage ditches so that the tide does not reach them except for a certain amount of underground seepage. The river flood plain is associated with the Mad River in the northern part.

Tidal marsh land is found close to the bay. It is traversed by numerous tidal sloughs and channels, and is covered by a salt-marsh vegetation. At one time it was extensive but most of it has been reclaimed by the construction of dikes and is utilized chiefly for grazing purposes. At one time Gunther Island was reclaimed, but the dikes are broken in many places and the land has reverted to its original state.

Along the beaches - the South Spit and the North Spit areas - are wind-blown sand dunes loosely held in place by a sparse growth of grass. Inland along the North Spit, some of the dunes attain a height of 60 to 70 feet, with a vegetal growth of trees, brush, or grass.

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South Bay and North Bay in the south and north parts of Humboldt Bay, respectively, become extensive mud flats at low tide and are traversed by tidal channels.

East of the agricultural lowlands or valleys, the land is rough, mountainous, and wooded. The forests consist of redwood, Douglas fir, white fir, and other lesser growths. Much of the land has been cut over but it is now springing up with second growth timber. The land has little value except for forestry.

The drainage of the entire area is mainly toward the west and northwest. In the mountainous and hilly areas, the drainage is well established. Drainage is poor in the plains of the streams emptying into Humboldt Bay. The low lying lands on the deltas of the Mad and Eel Rivers are also poorly drained. The northern part of the area is drained by Mad River Slough and Mad River. The Eel River drains the southern part. Salmon Creek, Elk River, Freshwater Creek and Jacoby Creek drain the eastern side of the Humboldt Bay area and enter the bay.

The close proximity of the ocean is responsible for a mild, moist, and even climate the year round. The climate is characterized by a rainy season that lasts from October to May and a dry season from June to September. Prevailing winds, which are moderate, are from the north during the summer and from the southeast during the winter.

In addition to being a great lumbering center, the Humboldt area is noted for its dairying industry. Another important mainstay is the fish industry. Vegetables, berries, fruit, and other products are raised chiefly for local consumption.

Eureka, the county seat of Humboldt County and the largest town, is an important agricultural trading center and shipping point. The main concentration of docks and wharfs, and a variety of industrial buildings, railroad yards, and other commercial sites are found along the city's waterfront. Next in importance is the City of Arcata. It is a trading and shipping center for lumber, dairy products, and other minor agricultural commodities. The smaller communities of Samoa and Fields Landing are important for their large lumber mills.

One major highway, U.S. 101 (Redwood Highway), traverses the area north and south along the east side of Humboldt Bay. Another major highway, U.S. 299, extends into the area from the east and ⁴²¹⁷³junctions with U.S. Highway 101 north of Arcata. In addition to these highways, there are numerous connecting county roads which are kept in good condition in the settled sections.

-3-

Transportation by rail is more rapid and regular than by boats. As a result the railroad carries the bulk of outgoing and incoming freight. The principal railroads are the Northwestern Pacific and the Humboldt Northern. The former provides the towns of Arcata and Eureka rail connection with San Francisco and other points south, while the latter leads northerly up the coast from Arcata for a short distance. At the present time there are no rail connections with any of the states or large towns to the north.

Humboldt Bay was discovered in 1849, and shortly thereafter the area was settled by pioneers. It is isolated by rugged mountain ranges to the north, east, and south, and for many years practically the only way of communicating with the outside world was by boat. In spite of this, the influx of population was rapid, especially during the last two wars, so that in the cleared and settled parts the population is quite dense.

2. Completeness of Field Inspection:

The field inspection for the clarification of details on the photographs, and for the classification and identification of features such as roads, buildings, wooded areas, drainage, etc., has been completed in accordance with the instructions for this Project. In general, the detail limits indicated on the index map by the Washington Office were adhered to.

Various maps have been obtained to supplement the field inspection work. (*See 33, Compilation Report, pp 43-44*)

3. Interpretation of the Photographs:

Each type of vegetation such as woodland, grassland, cultivated areas, marsh, swamp, and other characteristics have been classified a sufficient number of times on the field photographs to enable the office personnel to interpret the photographic detail correctly.

Softwoods are recognized by a darker tone of color as well as by the spire-like shadows. Hardwoods are light grey in color and, in general, show a more rounded outline. The lowland areas range in shading from a light grey to a dark grey and have a mottled appearance. In the bay area the mud flats, which bare at low water, range from light grey to dark grey; the darker shading is eel grass on the mud flats. (The eel grass areas are further recognized by the crisscrossed tidal sloughs and rills.) Sand areas are light, and the dunes are recognized by the dark shadows visible on the photographs.

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4. Horizontal Control:

The subject of supplemental control established in this area is discussed in a "Special Report, Third-order Triangulation, Project Ph-25(47)", which has been submitted.

Library:
841] G-7581
872]

A thorough search has been made for all USC&GS stations established during prior surveys in this area as well as for control stations established by other agencies (USE and USGS). Most of the stations originally established by the other agencies have been occupied by our Bureau in later years. Many of the old stations have been lost or destroyed; however, the majority of the more recently described and established stations were recovered.

¹⁹⁰ Recovery notes on Form 526 have been prepared for all stations for which a search was made. It is believed that about 30% more stations were identified on the field photographs than were necessary to adequately control the radial plots for this project. This additional control was identified to offset the possible loss of any of the stations when this project is re-photographed because of insufficient end lap in the field photographs taken in November, 1947. In addition, the field recovery units were instructed that stations identified by the substitute station method should be selected with care to prevent their immediate future loss. For additional information refer to paragraph 7 of the instructions for this project.

941] G-7580
GA]

5. Vertical Control:

The instructions for this project did not request the recovery of vertical control; however, Photogrammetry Instructions No. 17, dated 9/15/47, under side heading 23d, page 9, specify that tidal bench marks shall be shown on planimetric and shoreline manuscripts, and in accordance therewith a search was made for them. The descriptions for the tidal bench marks were obtained from the horizontal and vertical control data for the Eureka, Fortuna, and Ferndale quadrangles issued by the Office of the Chief of Engineers, Washington, D.C. Recovery notes on Form 685 have been prepared for all tidal bench marks in the area which were listed in the control data mentioned above.

Geodetic bench marks were not searched for except where they were recovered and identified on the field photographs to satisfy the topographic requirements for control along the waterfront areas. In such cases, recovery notes on Form 685 were prepared as well as on Form 524.

6. Contours and Drainage:

No contouring is involved in the area.

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All drainage, except for minor ditches, was located and classified in the field. Drainage features, which were indistinguishable on the photographs were located by pacing or taping. In addition, the drainage defined in the field was rechecked under the stereoscope by the field inspector; but in some instances this was not possible because of insufficient end lap in the field photographs.

In cases where it was doubtful whether drainage was perennial or intermittent, the classification was verified by local inquiry.

In the low alluvial areas around the bay, many of the tidal creeks or channels have been diked along the sides and tide gates installed. With these artificial restrictions, these creeks and channels are not affected by tidal changes except for the unavoidable seepage in a few areas where the dikes and tide gates are in disrepair.

Certain portions of the lowland areas adjoining the bay become flooded during heavy run-offs and rains with the result that the streams and channels spill over when the overload becomes too great for the tide gates to handle. The flow is aggravated still more during periods of high tide when the force of the incoming tides closes the gates.

7. Mean High-Water Line:

The mean high-water line was identified in the field on the photographs in accordance with the supplemental instructions dated 18 March 1944 and 20 June 1938, and with Photogrammetry Instructions No. 17, dated 9-15-47. The entire shoreline was inspected visually in the field either by walking along the shoreline or by examination from a boat. No difficulty was encountered in ascertaining the mean high-water line on the field photographs except in the vicinity of the bluffs at Buhne Point and Southport Landing, because of the shadows from the bluff cast along the shoreline. However, since the mean high-water is at the foot of these bluffs, the shoreline can be readily delineated by the use of a stereoscope. 7-8964

The northwest face of Buhne Point is subject to additional erosion and ^{recession} receding from the strong impinging action of the flood tides surging through the entrance to Humboldt Bay.

Changes are to be expected in the small cove just south of Buhne Point where dredging operations are now in effect as well as at the extreme southwest corner of South Bay just north of Table Bluff where future dredging operations are contemplated. 1948 photos show results.

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Along the seaward side, the mean high-water line is distinguishable by a visible line on the photographs. The storm high-water is irregular and parallels the west side of the foot of the sand dunes or else the west side of the debris line (logs, trees, stumps, and other refuse).

Inside the bay, the mean high-water either follows closely the limits of vegetation or a visible line on the photographs along the sandy beaches. Frequently, the shoreline follows the offshore edge of dikes where they are found. Where marsh areas are found, the shoreline is the edge of the marsh; and along the channels and sloughs, it is marked by a bank line, vegetation line, or the offshore edges of dikes.

8. Lower Low-Water Line:

Where practical and possible the lower low-water line was identified and noted on the photographs. In other areas the lower low-water line was noted by an approximate symbol on the field photographs.

At low tide extensive portions of Humboldt Bay, especially in Arcata Bay and South Bay, are mud flats. It should be noted that some of the areas indicated on chart 5832 as shoal areas are mud flats (or mud flats covered with eel grass) at low tide.

On the seaward side, the prominent berm at the water's edge on the photographs, can be readily delineated as an approximate low-water line. It has not been noted on the field photographs as it is readily distinguishable. The definite lower low-water line can not be delineated along the coast as several field measurements taken in the field at low-water indicate that the photographs used for field inspection were not taken at the time of low water.

9. Wharves and Shoreline Structures:

The waterfront areas were carefully investigated during the shoreline inspection. All wharves, piers, bulkheads, retaining walls, jetties, marine railways, and other shoreline features were inspected and identified on the photographs. All essential and less well-defined detail has been clarified by appropriate notations and markings. All anchored floats were either deleted or noted as such on the photographs.

10. Details Offshore from the High-water Line:

Dolphins, piling, remains of old wharves and piers, foul and debris areas, cable areas, wreckage, and other offshore obstructions

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or details were inspected, identified, and clarified on the photographs by appropriate notations and markings during shoreline inspection operations.

Numerous log booms are to be found in the vicinity of Samoa, Fields Landing, and along Eureka Slough.

At the head of Arcata Bay are several old trestles and wharves in ruins. A line of old and broken piling, which are the remains of a previous trestle, are found in the bay south of Jacoby Creek. T-8961

A large ship-wreck along the coast line and southwest of Samoa, which is noted on chart 5832, was not seen when the shoreline was inspected in that area. The wreck is believed to be still in the vicinity. T-8962

Not visible on photographs 47-D 314 or 350, at near low water stage.

11. Landmarks and Aids to Navigation:

All charted landmarks have been investigated and verified as to their value when seen from offshore. In addition, a selection was made of other prominent objects along the shore which are definite landmarks, and these were recommended for charting.

A complete investigation of all fixed aids to navigation was made in the field. Where an aid to navigation was a triangulation station, its location was verified and reported in accordance with the instructions. They were either identified on the photographs if visible or located by triangulation methods. Their correct names, distinctive markings, et cetera, were verified from the latest edition of the Light List - Pacific Coast". Several discrepancies were found; they are:

1. Arcata Channel Lights 1, 2, 3, and 4, which are noted on chart 5832 just northwest of Gunther Island and are listed in the 1948 Light List, were found upon field investigation to have been removed in January of 1946. The Director was notified about this error in a letter from Lt. Comdr. R.A. Earle dated 26 May 1948. T-8960 *Removed from elds by 26 May*
2. The light located just south of the south tip of Gunther Island is listed in the 1948 Light List as "Indian Island Spit Light". This name is in disagreement with the approved name for the geographic feature - *Gunther Island - T-8962 which is a decision of the Board on Geographical Names, and is also the approved name in the special report on geographic names submitted for this project. This light

Checked by J. Richardson with Coast Guard

** The name "Gunther Island Spit" first appears in the 1950 Light List.*

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was located by triangulation methods on April 28, 1948. Later it was ascertained from the Commanding Officer of the Humboldt Bay Coast Guard Station that this light would be moved about 20 feet SW from its present position in the near future. The triangulation name of the station is Gunther Island Spit Light.

3. Triangulation station "Humboldt Bay, Green Blinker, at Fog Signal Station, 1941", which was established by D. H.K., is misnamed and confusing. This station is a light and is listed in the 1948 Light List as the North Jetty Light. This Light List name is recommended in order to avoid confusing it with the name Humboldt Bay Fog-Signal Station which is listed in the Light List and is described as being a siren on a white frame building. *1. Still listed "North Jetty" in 1950 Light List*
2. Now on Humboldt Bay Approach, R.F., as a diaphane. 1949 Light List.

In accordance with Photogrammetry Instructions No. 6, dated 12-30-46, Mr. Heck of the Division of Charts was notified of the data contained in item 2 and Mr. Sutcliffe of the Division of Geodesy on the subject matter listed in item 3.

All charted landmarks as well as those recommended for charting and fixed aids to navigation have been reported on Form 567 as well as on either Forms 524, 525, or 526.

98 (16) (190)

Carbon copy attached hereto sheet no. 926 (1949)

Library: 941/G-7580

12. Hydrographic Control:

No photo-hydro stations were established; this is in accordance with the instructions for the project.

Where a sufficient number of existing control stations, nautical and aeronautical landmarks, and fixed aids to navigation, were not available to comply with the requirements for topographic control, additional ones were selected and identified in accordance with subject 235 of the Hydrographic Manual.

All topographic stations have been reported on Form 524. For additional information refer to side heading 5, last paragraph, *and attached list (p 64)*

13. Landing Fields and Aeronautical Aids:

The following landing fields were inspected in the area:

1. Eureka Airport located on the North Spit. This airport was established by the Navy during the last war; it is now leased by a private party. *7-8962*

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2. Humboldt County Airport located east of the City of Eureka on the SE side of U.S. Highway 101. 7-8963

All aeronautical aids in the area have been investigated and reported on Form 567 as well as on either Forms 524, 525, or 526. A high frequency beam station has been established by the U.S. Civil Aeronautics Authority on Table Bluff since the field photographs had been taken. It was located on a photograph by reference measurements and reported on Forms 567 and ~~524~~. 7-8964

14. Road Classification:

All roads have been traversed and classified in accordance with Photogrammetry Instructions No. 10, and amendment thereto, dated 4-14-47, and 10-24-47, respectively.

Route numbers and names were verified from road signs and other local sources, and shown on the photographs. Names, if any, of all roads in rural areas were noted on the photographs. In urban areas with a pattern of many streets, a sufficient number of street names, usually the more prominent ones, were labeled on the photographs to provide an adequate orientation whereby the remaining street names could be easily identified by the compiler from city maps of the area. These official maps, showing streets and street names, were obtained from local authorities.

15. Bridges:

*Entered in Bridge Book
Standard by J. Richardson*

All bridges for the area covered by this report as listed in the U.S. Engineers "List of Bridges Over Navigable Waters in the U.S." dated July 1, 1941, were inspected in the field; all clearances were carefully measured with a steel tape in accordance with Photogrammetry Instructions No. 13. Since the latest edition of the bridge book is not available, a complete listing of the bridges is made below with all necessary data to be compared with the latest edition of the bridge book for any discrepancies. The local District Engineer should be notified of any discrepancies. The bridge clearances, type of bridge, and the time of the field measurements have been noted on the photographs. A list of the bridges investigated follows:

6. Miles above Mouth: .5 7-8962
 Name: None
 Location: Eureka Slough, California
 Owner: Northwestern Pacific Railway
 Kind: Although a swing type bridge, it has been discontinued as such and is now fixed.
 Number of Spans: 1
 Channel Span: Hor. Cl. - 78 feet left and right spans
 Vert. Cl. to WL - 9.0 feet; to MLLW - 11.4 feet
MHW 4.9

*(6.4)
 MLLW figure - Diurnal Range figure = MHW clearance*

-10-

Purpose of Bridge: Railroad
Date of Field Measurements: 4/29/48, PST 1450
Remarks: The navigable channel is under the right span
in proceeding upstream.

2. Miles above Mouth: .5 T-8962
Name: None
Location: Eureka Slough, California
Owner: California State Highway Commission
Kind: Fixed
Number of Spans: 1
Channel Span: Hor. Cl. - 75 feet
Vert. Cl. to WL - 20.0 feet; to MLLW - 22.5 feet MHW 16.1
Purpose of Bridge: Highway
Date of Field Measurements: 4/29/48, PST 1500
Remarks: This highway bridge was rebuilt around 1941.
3. Miles above Mouth: 2.3 T-8963
Name: None
Location: Eureka Slough, California
Owner: The Pacific Lumber Company
Kind: See remarks
Number of Spans: See remarks
Channel Span: Hor. Cl. - 10.0 feet; see remarks
Vert. Cl. - unlimited; see remarks
Purpose of Bridge: None
Date of Field Measurements: 4/29/48
Remarks: Railroad bridge gone; bridge piling in place with
10.0 - foot Hor. Cl. Overhead crossbeams and rails
removed with vert. Cl. unlimited.
4. Miles above Mouth: 2.9 T-8963
Name: None
Location: Eureka Slough, California
Owner: N.M. Deroy
Remarks: This bridge has been removed.
5. Miles above Mouth: 3 T-8963
Name: None
Location: Eureka Slough, California
Owner: Humboldt County
Remarks: This bridge has been removed.
6. Miles above Mouth: 2.0 T-8963
Name: None
Location: Eureka Slough, California
Owner: The Pacific Lumber Co.

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Kind: Fixed
 Number of Spans: 1
 Channel Span: Hor. Cl. - 10.0 feet
 Vert. Cl. to WL - 7.0 feet; to MLLW - 10.0 feet *MHW 3.6*
 Purpose of Bridge: Abandoned railroad trestle
 Date of Field Measurements: 4/29/48, PST 1530
 Remarks: Not listed in 1941 bridge book. Overhead rails have been removed but some of the crossbeams, including the bridge piling, remain.

7 Miles above Mouth: .5 *T-8863*
 Name: None
 Location: Freshwater Slough, California
 Owner: Peter H. Christensen
 Kind: Fixed Arch
 Number of Spans: 1
 Channel Span: Hor. Cl. - 35.6 feet
 Vert. Cl. to WL - 15.0 feet; to MLLW - 15.9 feet *MHW = 9.5*
 Purpose of Bridge: Private (road)
 Date of Field Measurements: 4/29/48, PST 1320
 Remarks: None

8 Miles above Mouth: 1.66 *T-8963*
 Name: None
 Location: Freshwater Slough, California
 Owner: M. Brazil
 Kind: Fixed Arch
 Number of Spans: 1
 Channel Span: Hor. Cl. - 35.6 feet
 Vert. Cl. to WL - 17.0 feet; to MLLW - 17.8 feet *MHW 11.4*
 Purpose of Bridge: Cattle crossing
 Date of Field Measurements: 4/29/48, PST 1310
 Remarks: None

9 Miles above Mouth: 1.85 *T-8963*
 Name: None
 Location: Freshwater Slough, California
 Owner: Humboldt County
 Kind: Fixed
 Number of Spans: 1
 Channel Span: Hor. Cl. - 18.0 feet
 Vert. Cl. to WL - 13.8 feet; to MLLW - 14.5 feet *MHW 8.1*
 Purpose of Bridge: Highway
 Date of Field Measurements: 4/29/48, PST 1300
 Remarks: None

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- 10 Miles above Mouth: 3.5 7-8963
Name: None
Location: Freshwater Slough, California (*Ryan Slough branch*)
Owner: Humboldt County
Remarks: No clearances were obtained for this fixed highway bridge listed in the 1941 bridge book as the slough is not navigable upstream from the bridge.
- 11 Miles above Mouth: .5 7-8962
Name: None
Location: Elk River, California
Owner: N.W. Pacific Railway Co.
Kind: Fixed
Number of Spans: 1
Channel Span: Hor. Cl. - 35.0 feet
Vert. Cl. to WL - 9.5 feet; to MLLW - 9.8 feet
Purpose of Bridge: Railroad NAHW 3.4
Date of Field Measurements: 4/29/48, PST 1200
Remarks: This bridge may have been rebuilt; the vertical clearance does not agree with the 1941 bridge book.
- 12 Miles above Mouth: .75 7-8962
Name: None
Location: Elk River, California
Owner: California State Highway Commission
Kind: Fixed
Number of Spans: 1
Channel Span: Hor. Cl. - 32.0 feet
Vert. Cl. to WL - 9.7 feet; to MLLW - 10.0 feet NAHW 3.6
Date of Field Measurements: 4/29/48, PST 1210
Remarks: This highway bridge was rebuilt in 1937
- 13 Miles above Mouth: .8 7-8962
Name: None
Location: Elk River, California
Owner: Dolbeer and Carlson Lumber Co.
Kind: Fixed
Number of Spans: 1
Channel Span: Hor. Cl. 10.0 feet
Vert. Cl. to WL - 7.0 feet; to MLLW - 7.4 feet
Purpose of Bridge: Railroad; see remarks NAHW 1.0
Date of Field Measurements: 4/29/48, PST 1215
Remarks: This is a railroad not a highway bridge as listed in the 1941 bridge book; it is possible that this bridge was rebuilt into a railroad bridge.
- 14 Miles above Mouth: .85 7-8962
Name: None
Location: Elk River, California

17 Miles above Mouth: 1.5
Name: None
Location: Mad River Slough, California
Owner: Humboldt Northern RR
Kind: Fixed
Number of Spans: 1
Channel Span: Hor. Cl. - 7.2 feet
Vert. Cl. to WL - 13.0 feet; to MLLW - 13.1 feet
Purpose of Bridge: Railroad
Date of Field Measurements: 4/28/48, PST 1058
Remarks: The above data applies to two bridges, one on the east channel and the other on the west channel; either channel may be used in navigating. These railroad bridges were rebuilt around 1942. One of these bridges was not listed in the 1941 bridge book.

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18 Miles above Mouth: 3
 Name: None
 Location: Mad River Slough, California
 Owner: Humboldt County
 Kind: Fixed
 Number of Spans: 11 (choice of either span in navigating)
 Channel Span: Hor. Cl. - 13.0 feet each span
 Vert. Cl. to WL - 12.6 feet; to MLLW - 12.6 feet
 Purpose of Bridge: Highway
 Date of Field Measurements: 4/28/48, PST 1030
 Remarks: This highway bridge was rebuilt around 1945.

16. Buildings and Structures:

A complete field investigation was made of all buildings and structures within the approximate detail limits indicated on the index map by the Washington Office.

In rural areas all buildings to be shown have been circled or adequately indicated on the field photographs. In many instances, buildings have been deleted in green ink or referenced so that the office compiler would have no doubt concerning the field investigation. Obscured buildings have been shaped with ink.

In urban areas only public and landmark buildings have been circled, outlined, or appropriately noted. Public parks, college grounds, and similar places within the urban limits were inspected as rural areas.

Along waterfront areas all the buildings have been circled, outlined, or adequately noted, and large buildings and structures were named.

In both rural and urban areas all public and important buildings have been classified and named.

For additional information refer to side heading 2.

17. Boundary Monuments and Lines:

With the exception of public land lines and political boundaries, the investigation of boundary monuments and lines was accomplished. This is in accordance with the instructions for the project.

Except for the boundary limits of small areas such as cemeteries, parks, schools, landing fields, et cetera, which were obtained by the various field inspection parties, this phase of the work was done by a special 2-man field party.

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The city limits of Eureka and Arcata have been indicated on the field photographs. All of the boundary monuments that were recovered have been reported on Form 524. City maps have been obtained to supplement the delineation of the corporate limits. The corporate limits of Arcata were extended only to the detail limits; however, the necessary information has been noted in ink on a map of the City of Arcata to enable the compiler to delineate the complete limits, if need be. *This map is to be filed in the Geographic Section, Division of Charts.*

A photostatic copy (in two pieces) showing the boundary limits in red ink was obtained of Humboldt State College from the school authorities. The limits of the college grounds have not been indicated on any of the field photographs.

No legal descriptions were available for the city limits of Eureka or Arcata.

18. Geographic Names: *814 ✓*

The investigation of geographic names was accomplished by a special 1-man field party and is the subject of a special report "Investigation of Geographic Names, Project Ph-25(47)", which has been submitted. *Filed in Geographic Names Section*

The local names of roads and highways, small parks and cemeteries, railroad stations, et cetera, were obtained by the various field inspection parties. Various maps showing street and other local names were obtained from the local authorities to supplement the field work.

19. Power Transmission, Telephone and Telegraph Lines:

The field inspection of this phase of the work was done in accordance with the Field Edit Instructions - Supplement 1, dated 4 February 1946.

Submarine and overhead cable crossings across navigable waterways have been indicated on the field photographs. The vertical clearances of the overhead cable crossings indicated on the photographs are to the estimated mean high-water level (MHW along the bank or shore).

Three submerged cable crossings were noted; they are:

1. A Pacific Gas and Electric Co. cable crossing from South Eureka to the Wilson Lumber Co. yards (Fairhaven). *F-8962*
2. A Pacific Telephone and Telegraph cable crosses the bay in the vicinity of item 1 above. *"*
3. A Coast Guard telephone cable crossing from the South *"*

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Spit to the North Spit.

No evidence in the field was found of any submerged cable crossings in the vicinity of Bucksport as indicated on Chart 5832. It was ascertained locally that the Corps of Engineers of the San Francisco District had issued a permit for a cable crossing in the vicinity but to whom the permit had been issued and whether the cable had ever been installed could not be established by local inquiry. *See also Review Report, Heading 65, T-8962*

20. Field Photographs:

To avoid duplication of work among the various field units, the approximate limits of each sheet were indicated on a selected number of field photographs in purple ink; however, the field work was not limited to these photographs when others were available in the area. The sheet limits on the photographs are not the true limits; they follow natural boundaries such as highways, creeks, or in such a way as to provide photograph coverage in adjacent sheets.

The urban limits were indicated in white pigment ink on a selected number of photographs and follow natural boundaries (streets).

The junctions between field photographs have been checked by the field inspectors. For the field photographs used in any one sheet refer to the Data Record, Form N. T-1.

20^A Symbols, Color Scheme, and Station Names:

SYMBOLS (standard symbols used)

1. Ground and Photogrammetric Points - Refer to Photogrammetry Instructions No. 5, No. 6, and No. 12.
2. Shoreline Inspection - Refer to Supplemental Instructions, Shoreline Inspection, 3-18-44; Field Memorandum No. 1, 6-20-38 and Photogrammetry Instructions No. 17.
 - a. Inshore and approximate offshore (indefinite) limits of marsh, swamp, etcetera, at mean high-water indicated by short dashes. Approximate offshore limits, in addition, noted as "Flooded at MHW", et cetera.
3. Interior Field Inspection - Refer to:
 - a. Road Classification - Photogrammetry Instructions

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No. 10 (and Amendment thereto) and No. 17.

- b. Bridge Classification - Photogrammetry Instructions No. 13 (and supplement thereto in the Acting Director's letter dated 12-16-47) and No. 17.
 - c. Woodland Classification - Photogrammetry Instructions No. 15 and No. 17.
 - d. Field Edit Instructions, 8-24-45, and Field Edit Instructions - Supplement 1, 2-4-46.
3. Shoreline, culture, drainage, vegetation and swamp features, and boundaries and abbreviations - Photogrammetry Instructions No. 17.

COLOR SCHEME

- 1. Horizontal Points (direct identification and substitute point or reference measurement methods).
 - a. Horizontal control point, azimuth point and topographic point - Red
- 2. Photogrammetric Points (direct identification and substitute point or reference measurement methods)
 - a. Photo point - Red (horizontal points) or purple (other points such as section corner and boundary monument)
 - b. Photo-hydro point (hydrographic signal point) - Blue
- 3. Vertical Points
 - a. Bench point - Blue
 - b. Spot point - Blue
- 4. Other points
 - a. Recovered and unrecovered section corners, boundary monument, etc. - Purple
- 5. Mean High-water Line - Red

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6. Approx. Mean High-Water Line - Red and labeled
7. Indefinite Shoreline (definite and approximate offshore limits as well as inshore limits of marsh, swamp, et cetera) - Blue
8. Low-Water Line (MLW on East Coast and MLLW on West Coast) - Red
9. Approx. Low-Water Line (MLW on East Coast and MLLW on West Coast) - Red
10. Shoal or reef line - Red and labeled
11. Drainage
 - a. Streams, sloughs, ditches, etc., if single lined - Blue
 - b. Ponds, streams, canals, sloughs, etc., if double lined - Red

Note: No streams, ditches, canals, etc., have been double lined unless its actual width could be shown on the photo.
12. Cultural features - Red
13. Boundaries - Purple
14. Deletions - Green
15. Tick Mark (to denote change in stream or shoreline identification, etc.) - Red
16. Notes on Photographs - All notes in red unless noted otherwise

STATION NAMES (examples)

Triangulation and Traverse

Landmark Stations ----- TANK, ELEV (Eureka Tank, 1948)
(Naut., Aero., or Int. Ldmk,
90 feet high)

Fixed Aids to Navigation ---Reeder Lt. (Reed Lt., 1935)
Light List name (unused) -
if abandoned
Front Daybn 4 (Beacon 4, 1946)
- Light List Name

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Shoreline Control for Ship

Hydrography -----Eureka, 1946 - first 4 letters
underlined or all
if less than 4

Topographic

Landmark Stations -----CUPOLA (Humboldt Club), 1946
(Naut., Aero., or Int. Ldmk)

Fixed Aids to Navigation--Reeder Lt. - Light List name
Reeder Lt. (unused) - if abandoned
Front Daybn 4 - Light List name

N.B.: Any permanent (steel or masonry) abandoned
light structure recommended as nautical land-
mark. The correct names for all fixed aids
to navigation have been obtained from the
latest edition of the Light List and their
distinctive markings and descriptions checked
in the field.

Shoreline Control for Ship

Hydrography -----Flagpole, 1948 - a descriptive
name of natural
object
Jacoby (Tidal BM 4), 1948
Buck (BM 53, USGS), 1948

Interior Marked Stations ---Eureka Az Mk, 1946
PTS 14 (USGS, 1910), 1948 -
control less than
3-order

Hydrographic Station

Shoreline Control -----6001 (lone fir tree) - first sig-
nal site in T-8960; described
in sketchbook

Bench Mark

Spotted -----BM L 104, 1947

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N.B.: New triangulation stations are given names of 5 or more letters; topographic stations - 4 letters; however descriptive, geographic, or personal names were preferred to arbitrary ones.

Approved:

R.A. Earle

by:

Charles W. Clark

for W.H. Bainbridge
Comdr.-USC&G Survey
Chief of Party

Respectfully submitted:

Charles Hanavich
Topographic Engineer

PHOTOGRAMMETRIC PLOT REPORT
Map Manuscripts No's. T-8960 to T-8965, Incl.
Project Ph-25(47)

21: AREA COVERED:

This radial plot comprises Map Manuscripts No's. T-8960 to T-8965, inclusive. The area covered is in the State of California and includes Humboldt Bay, Arcata Bay, the cities of Eureka and Arcata, and the lowlands adjacent thereto.

22: METHOD:

It was not necessary to use base grid sheets and the radial plot was run directly on the six map manuscripts which had been joined together with clear cellulose tape.

The photographs were taken with Camera "D" in 1947 and 1948 and ratio prints at a scale of 1:10,000 were furnished for the project. These ratio prints did not contain special fiducial marks for use in correcting for paper distortion and no attempt was made to correct for paper distortion by other methods.

Radials were drawn on templets made of pieces of .005" clear acetate, 18" X 18" square, which were cut from a roll 36" X 100'. Craftint Red Plastic Ink #111 was used to draw all the radials.

In all but a few instances the radials to horizontal control stations passed directly through the points of their plotted positions on the map manuscripts. In no case was any radial held more than 0.1 mm off the plotted point. The closure was excellent and about 90% of the intersections of radials to pass points were practically perfect.

After all the templets were oriented and securely fastened with masking tape to the joined six map manuscripts, the radial plot was turned face down on the radial plot table.

This office has constructed a glass top table, with lights, at the same height as the radial plot table. This table can be conveniently moved about and can be abutted to any portion of each side of the radial plot table.

In its face down position the radial plot was placed over the glass top table, a portion at a time, and the photograph centers and intersections of radials to pass points, for that portion of the plot, were pricked and circled directly on the reverse side of the map manuscripts. Craftint Blue Ink #234 was used for this purpose. This process was repeated until the entire radial plot was covered and all photograph centers and pass points had been pricked and circled on the reverse side of the joined map manuscripts.

The radial plot was then turned face up and the templets and map manuscripts dismantled.

The transferring of photograph centers and pass points from within the projection limits of one map manuscript to the margin of an adjoining map manuscript was done by matching meridians and parallels common to each sheet.

23: ADEQUACY OF CONTROL:

The field unit identified an ample number of horizontal control stations for this radial plot.

Several stations, which were not marked and not described, were tentatively identified by the field unit, subject to how well they could be held to in the radial plot. They are:

WEST HOUSE WITH WHITE DOOR ON S. SIDE, WEST GABLE, 1919 in T-8960
PEN (USE), 1911 in T-8961
JIM (USE), 1911 in T-8962
PRICE (USE), 1911 in T-8962
HOWE, 1919 in T-8962

These stations, ~~and numerous other well-identified stations~~ could not be held ~~to along with numerous other well-identified stations and~~ This fact has been noted on their respective recovery notes.

Facts concerning station "CUPOLA, BAYSIDE COMMUNITY PRESBYTERIAN CHURCH, 1948" are contained in a copy of a letter to The Director, T-8961 which is attached. (p.60)

24: SUPPLEMENTAL DATA:

There were no graphic control surveys or other supplemental control data furnished for the area of this project.

25: PHOTOGRAPHY:

The photographs taken in 1948 furnished adequate coverage and overlap except as follows:

- ✓ In T-8965 in the vicinity of Fields Landing.
- ✓ In T-8965 in the vicinity of Salmon Creek.
- ✓ In T-8960 between Eureka and Arcata.
- ✓ In T-8962 along the west limits of the map manuscript.
- ✓ For the mean high-water line along the Pacific Ocean shoreline.

In the above listed areas the photographs taken in 1947 were used to supplement the 1948 photography.

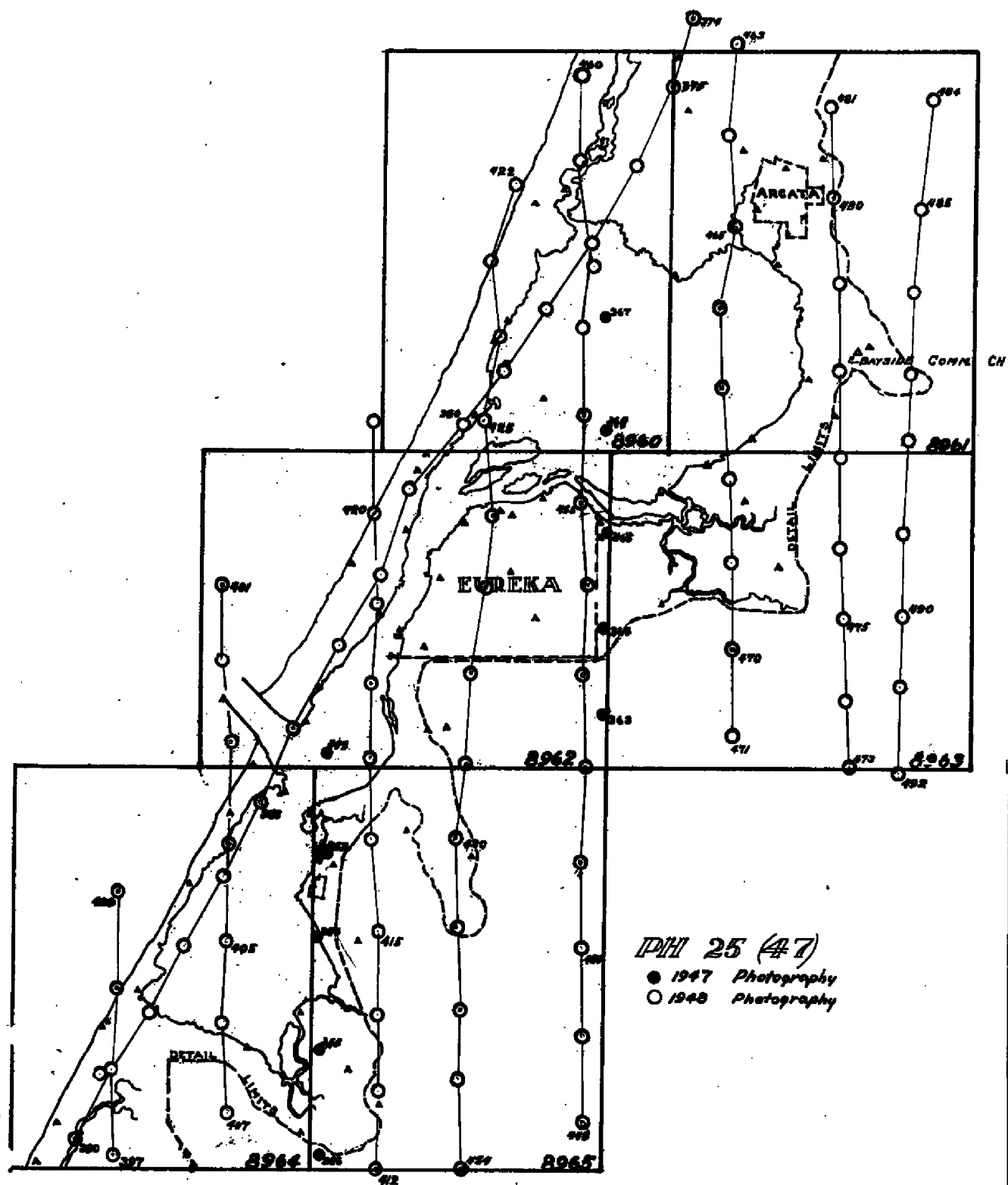
A sketch is attached showing the location of photograph centers and horizontal control stations in the area.

Approved:

Charles W. Clark
Charles W. Clark
Chief of Party

Respectfully submitted:

J. Edward Deal Jr.
J. Edward Deal, Jr.
Cartographer



MAP T8960

PROJECT NO. Ph-25(47)

SCALE OF MAP 1:10,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR λ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD (BACK)		FORWARD (BACK)	FORWARD (BACK)
BIRD (USE)	Page XI	N.A.	40° 49' 38.323"			1182.1 (668.7)	
1911 r. 1929	109	1927	124° 09' 17.482"			409.6 (996.3)	
HIGH 3, 1941	Page XV	N.A.	40° 51' 10.077"			310.8 (1540.0)	
	291	1927	124° 09' 23.893"			559.6 (845.7)	
AVILLA, 1927	Office	N.A.	40° 54' 19.091"			588.9 (1261.9)	
RM# 3, 1942	Comp.	1927	124° 08' 28.282"			662.0 (742.4)	
DYKE 2,	Page XV	N.A.	40° 51' 11.841"			365.3 (1485.5)	
(USE) 1941	291	1927	124° 07' 04.247"			99.5 (1305.9)	
CAR (USE)	Page XV	N.A.	40° 49' 40.334"			1244.2 (606.6)	
1919 r. 1941	291	1927	124° 10' 02.831"			66.3 (1339.6)	
SAM 2 (USE)	Page	N.A.	40° 49' 26.297"			811.2 (1039.6)	
1941	290	1927	124° 10' 27.598"			646.7 (759.3)	
MOZZETTI 1941	Page	N.A.	40° 52' 09.297"			286.8 (1564.0)	
	286	1927	124° 09' 28.862"			675.9 (729.2)	
WAD (USE)	Page XV	N.A.	40° 50' 18.714"			577.3 (1273.5)	
1919 r. 1941	291	1927	124° 10' 03.246"			76.0 (1329.6)	
MAD (USE)	Page XV	N.A.	40° 52' 15.090"			465.5 (1385.3)	
1919 r. 1941	291	1927	124° 08' 56.860"			1331.5 (73.5)	
LARGE BARN, WEST	G-6168	N.A.	40° 53' 53.80 "			1659.6 (191.2)	
GABLE, 1919	Page XI	1927	124° 07' 02.92 "			68.4 (1336.1)	
SAMOA HAMMOND RED	Page 105	N.A.	40° 49' 07.690"			237.2 (1613.6)	
WOOD CO. WHITE CONC. Page	303	1927	124° 10' 47.071"			1103.1 (303.0)	
STACK 1928. 1941						658.6 (1192.2)	
SAMOA 2, 1941	Page	N.A.	40° 49' 21.350"			236.3 (1169.8)	
	271	1927	124° 11' 10.082"				

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1 FT. = 3048006 METER
COMPUTED BY F. H. Elrod

DATE 9/20/48

CHECKED BY James L. Harris

DATE 9/21/48

M-2388-12

MAP T-8960

PROJECT NO. Ph-25(47)

SCALE OF MAP 1:10,000

SCALE FACTOR.....None

[illegible]

1 FT. = .3048006 METER

COMPUTED BY: F. H. Elrod

DATE 9/20/48

CHECKED BY. J. L. Harris

DATE 9/21/48

M-2388.12

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MAP T-8961 PROJECT NO Ph-25(47) SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR U-COORDINATE LONGITUDE OR X-COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION		N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
DOCK (USE) ✓ 1919 r. 1941	Page 292	N.A. 1927	40° 51' 22.220"	124° 05' 20.163"					685.4 (1165.4) 472.3 (933.1)			
ARCATA, CATHOLIC CHURCH, GOLD CROSS ✓ 1941	G-6013 Page XV 306	N.A. 1927	40° 52' 31.995"	124° 05' 11.162"					986.9 (863.9) 261.4 (1143.6)			
HOUSE WITH RED ✓	G-6168 Page XI 101	N.A. 1927	40° 53' 15.602"	124° 06' 51.238"					481.3 (1369.5) 1199.5 (205.1)			
ROOF, CUPOLA 1919 ✓	Page 286	N.A. 1927	40° 49' 28.554"	124° 04' 24.867"					880.8 (970.0) 582.7 (823.3)			
WILLIAMSON ✓	Page 292	N.A. 1927	40° 49' 13.028"	124° 05' 37.881"					491.9 (1448.9) 887.7 (518.4)			
JOE (USE) ✓	Page 292	N.A. 1927	40° 49' 57.283"	124° 04' 53.571"					1767.0 (83.8) 1255.2 (150.6)		Destroyed (1948)	
BAY 2 (USE) ✓ 1941	Page 286	N.A. 1927	40° 52' 56.433"	124° 06' 09.789"					1740.8 (110.0) 229.2 (1175.6)			
ARCATA 1941 ✓	G-6013 Page XV 306	N.A. 1927	40° 52' 38.215"	124° 04' 34.636"					1178.8 (672.0) 811.0 (593.9)			
ARCATA HUMBOLDT STATE TEACHERS COL - ✓ LEGE CUPOLA 1921	Page 287	N.A. 1927	40° 55' 25.676"	124° 05' 16.108"					792.0 (1058.8) 376.9 (1027.0)		North of map limit	
McCLUSKI HILL ✓	Page 287	N.A. 1927	40° 52' 11.15 "	124° 05' 26.62 "					343.9 (1506.9) 623.4 (781.7)			Page 34
ARCATA, GOLDEN STATES ✓	G-6013 Page XV 306	N.A. 1927	40° 49' 57.607"	124° 04' 53.181"					1777.0 (73.8) 1246.0 (159.8)			
CREAMERY CO. BLACK ✓ STACK, 1941	Field Comp.	N.A. 1927	40° 50' 34.197"	124° 03' 42.563"					1054.9 (795.9) 997.1 (408.5)			
BAY 2 (USE) ✓ RM #2 1941	Field Comp.	N.A. 1927										
BELFRY FINIAL, J.A. ✓ COBY CREEK SCHOOL 1948	Field Comp.	N.A. 1927										

MAP T 8962

PROJECT NO. Ph-25(47)

SCALE OF MAP 1:10,000

SCALE FACTOR Name

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -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)
SOUTH EUREKA HAM- MOND REDWOOD CO. PLANT NO. 2 WHITE CLARK, S.K. 1941	Page 302	N.A. : 1927	40° 47' 39.083" 124° 11' 03.753"			1205.6 (645.2) 88.0 (1318.7)	
SOUTH EUREKA HOLMES EUREKA LUMBER CO. BRICK STACK, 1941	Page 302	N.A. : 1927	40° 46' 46.238" 124° 11' 32.927"			1426.3 (424.5) 772.1 (634.8)	
DEPOT (USE) 1941	Page 290	N.A. : 1927	40° 48' 11.314" 124° 10' 33.364"			349.0 (1501.8) 782.1 (624.4)	
FORT (USE) 1941	Page 290	N.A. : 1927	40° 46' 39.326" 124° 11' 16.177"			1213.1 (637.7) 379.4 (1027.6)	
ZAHNER 1941	Page 285	N.A. : 1927	40° 45' 33.025" 124° 10' 47.418"			1018.7 (832.1) 1112.3 (295.1)	
TOSTE (USE) 1941	Page 290	N.A. : 1927	40° 45' 31.292" 124° 11' 08.896"			965.2 (885.6) 208.7 (1198.7)	
EUREKA, DOLBERT & CARSON LUMBER CO. BLACK WATER TANK, 1941	G-6013 Page 305	N.A. : 1927	40° 48' 28.90 " 124° 09' 09.04 "			891.5 (959.3) 211.9 (1194.5)	
EUREKA HUMBOLDT CO. COURT HOUSE, GLOBE AT TOP 1919	Page 304	N.A. : 1927	40° 48' 10.952" 124° 09' 39.887"			337.8 (1513.0) 935.0 (471.5)	
EUREKA CITY HALL	G-6168	N.A. : 1927	40° 48' 13.145"			405.5 (1445.3)	
DOME, 1919	XI 103	1927	124° 09' 51.443"			1205.9 (200.6)	
HUMBOLDT BAY SOUTH JETTY, WEST END, RED LIGHT 1941	G-6013 XV 305	N.A. : 1927	40° 45' 51.797" 124° 14' 31.560"			1597.8 (253.0) 740.2 (667.1)	
FENCE (USE) 1911 r. 1939	G-6168 XI 94	N.A. : 1927	40° 46' 56.370" 124° 12' 00.030"			1738.8 (112.0) 0.7 (1406.2)	Page 38
HUMBOLDT BAY FOG SIGNAL STATION GREEN BLINKER, 1941	G-6013 XV 305	N.A. : 1927	40° 45' 35.88 " 124° 13' 12.30 "			1106.8 (744.0) 288.5 (1118.9)	Page 38

1 FT. - 3048006 METERS
COMPUTED BY F. H. Elrod

DATE 9/21/48

CHECKED BY J. H. Winniford

DATE 10/7/48

M-2388.12

MAP T-8962

PROJECT NO. Ph-25(47)

SCALE OF MAP 1:10,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -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)
COG (USE) 1911 r. 1940	G-6168 XI 94	N.A. : 1927	40° 47' 58.761" 124° 11' 31.441"			1812.6 (38.2) 737.0 (669.5)	
JOHN 1928 r. 1941	Page 285	N.A. : 1927	40° 47' 31.493" 124° 12' 28.430"			971.5 (879.3) 666.5 (740.2)	
FLAG NO. 1 (USE) 1941	Page 285	N.A. : 1927	40° 46' 26.366" 124° 13' 11.975"			813.3 (1037.5) 280.8 (1126.2)	
SAMOA, LONE TANK 1919 r. 1939	G-6168 XI 98	N.A. : 1927	40° 48' 43.259" 124° 11' 16.020"			1334.4 (516.4) 375.5 (1030.8)	
HUMBOLDT BAY, COAST GUARD BAR-	G-6013 Page	N.A. : 1927	40° 46' 00.849" 124° 13' 01.132"			26.2 (1824.6) 26.5 (1380.7)	
RACKS CUPOLA 1941	XV 305						
EUREKA, FIRST METH-	Page	N.A. : 1927	40° 47' 25.57 " 124° 09' 43.43 "			788.8 (1062.0) 1018.2 (388.5)	
ODIST SPIRE WEATHER VANE 1941	304						
EUREKA, RADIO STA- TION KIEM TOWER, RED LIGHT AT TOP	Page 304	N.A. : 1927	40° 48' 11.288" 124° 08' 17.632"			348.2 (1502.6) 413.3 (993.1)	
SAMOA HAMMOND RED WOOD CO. WOODEN WATER TANK 1941	Page 303	N.A. : 1927	40° 48' 59.740" 124° 11' 11.617"			1842.8 (8.0) 272.3 (1133.9)	
CITY WATER TANK 1948	Field Comp.	N.A. : 1927	40° 46' 51.910" 124° 09' 22.186"			1601.3 (249.5) 520.2 (886.7)	
KHUM RADIO TOWER 1948	Field Comp.	N.A. : 1927	40° 47' 25.340" 124° 10' 56.213"			781.7 (1069.2) 1317.9 (88.8)	
KIEM RADIO TOWER TALLER OF TWO 1948	Field Comp.	N.A. : 1927	40° 48' 10.188" 124° 08' 15.301"			314.2 (1536.6) 358.7 (1047.8)	
EUREKA 2, 1941	Page 286	N.A. : 1927	40° 47' 25.115" 124° 09' 41.124"			774.7 (1076.1) 964.2 (442.5)	

1 FT. = 3048008 METER
COMPUTED BY: F. H. Elrod

DATE 9/23/48

CHECKED BY: J. L. Harris

DATE 10/4/48

M-2388-12

Page 38

MAP T. 8962 PROJECT NO. Ph-25(47) SCALE OF MAP 1:10,000 SCALE FACTOR 1.00

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -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)
EUREKA, M STREET	Page	N.A.	40° 48' 20.454"			630.9 (1219.9)	
CARSON RES. CUPOLA 1919	304	1927	124° 09' 26.142"			612.8 (793.6)	see p. ed
EUREKA CATHOLIC CHURCH GOLD CROSS 1919	Page 303	N.A. 1927	40° 48' 04.919"			151.7 (1699.1)	
EUREKA, DOLBEER & CARSON LUMBER CO. BRICK STACK, 1941	Page 304	N.A. 1927	124° 09' 43.934"			1029.9 (376.6)	"
FRESH 2 (USE) 1939	Page 291	N.A. 1927	40° 48' 27.646"			852.8 (998.0)	"
GEAR (USE), 1941	Page 290	N.A. 1927	124° 09' 08.488"			199.0 (1207.4)	"
HAM, 1941	Page 286	N.A. 1927	40° 48' 39.781"			1227.1 (623.7)	"
HUMBOLDT NORTH BASE, 1941	Page 285	N.A. 1927	124° 08' 36.484"			(855.1) (551.2)	"
MANN (USE) 1919	Page XV 291	N.A. 1927	40° 47' 56.944"			1756.6 (94.3)	"
OIL (USE) 1919	Page 290	N.A. 1927	124° 11' 39.260"			920.3 (486.2)	"
POINT (USE) 1919	Page XI 97	N.A. 1927	40° 48' 39.582"			1221.0 (629.8)	"
ROLPH SHIPYARD SOUTH TANK, 1919	Page G-6168	N.A. 1927	124° 11' 18.483"			433.2 (973.1)	"
SOUTH EUREKA, HOLMES & EUREKA LUMBER CO. BLACK TANK 1941	Page XI 98	N.A. 1927	40° 45' 05.939"			155.2 (1695.6)	"
	Page 302	N.A. 1927	124° 13' 51.856"			1216.5 (191.1)	"
		N.A. 1927	40° 48' 32.621"			1006.3 (844.5)	"
		N.A. 1927	124° 09' 32.130			753.1 (653.2)	"
		N.A. 1927	40° 48' 30.631			944.9 (905.9)	"
		N.A. 1927	124° 09' 54.031"			1266.4 (139.9)	"
		N.A. 1927	40° 48' 43.342"			1337.0 (513.8)	"
		N.A. 1927	124° 08' 54.030"			1266.4 (139.9)	"
		N.A. 1927	40° 47' 18.20 "			561.4 (1289.4)	"
		N.A. 1927	124° 11' 52.44 "			1229.5 (177.3)	"
		N.A. 1927	40° 46' 46.517			1434.9 (415.9)	"
		N.A. 1927	124° 11' 34.498"			808.9 (598.0)	"

MAP T. 8962 PROJECT NO. Ph-25(47) SCALE OF MAP 1:10,000 SCALE FACTOR None

[illegible]

11 FT. = 3048006 METER
COMPUTED BY: J. L. Harris

DATE 9/24/48

CHECKED BY: J. H. Winniford

DATE 10/7/48

M-2388-12

Page 38
7

MAP T. 8964 PROJECT NO. Ph-25(47) SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
TABLE BLUFF LIGHT STATION RADIO TOWER (USE) 1941	Page 301 Vol 15	N.A. 1927	40° 41' 46.654" 124° 16' 22.047"	<i>Removed from map</i>		1429.1 (411.7) 517.6 (891.1)	<i>Tower destroyed. 3-29-48 Base intact</i>
TABLE BLUFF LIGHT HOUSE, 1941	Page 301	N.A. 1927	40° 41' 43.903" 124° 16' 27.259"			1354.2 (496.5) 640.0 (768.7)	
HOOKTON (USE) 1941	Page 289	N.A. 1927	40° 41' 24.826" 124° 13' 50.568"			765.8 (1085.0) 1187.4 (221.5)	
FILL 2, 1941	Page 289	N.A. 1927	40° 40' 29.467" 124° 13' 09.097"			908.9 (941.8) 213.7 (1195.5)	
MOUND (USE) 1919 r. 1941	Page 289	N.A. 1927	40° 44' 24.467" 124° 14' 25.417"			754.7 (1096.1) 596.4 (811.4)	
SHEEP (USE) 1941	Page 288	N.A. 1927	40° 41' 59.023" 124° 13' 19.248"			1820.6 (30.1) 451.9 (956.7)	
RICKS, 1941	Page 288	N.A. 1927	40° 40' 39.595" 124° 17' 11.228"			1221.3 (629.4) 263.7 (1145.4)	
CANNIBAL, 1941	Page 284	N.A. 1927	40° 38' 31.572" 124° 17' 48.899"			973.9 (876.9) 1149.0 (260.9)	<i>S. of limits</i>
TABLE (USE) 1911 r. 1940	Page 284	N.A. 1927	40° 42' 08.243" 124° 15' 59.144"			254.3 (1596.4) 1388.5 (20.1)	
SALT RIVER RM #2 1937	Office Comp.	N.A. 1927	40° 40' 03.585" 124° 17' 38.483"			110.6 (1740.1) 903.9 (505.5)	
FILL (USE) 1911 r. 1941	G-6168 XI 92	N.A. 1927	40° 40' 30.184" 124° 13' 08.372"			931.1 (919.7) 196.6 (1212.5)	<i>Page 40 39</i>
GUARD, 1941	Page 284	N.A. 1927	40° 41' 51.591" 124° 16' 15.636"			1591.4 (259.4) 367.1 (1041.6)	

1 FT. - 3048006 METER
COMPUTED BY: J. L. Harris
CHECKED BY: J. H. Winniford
DATE 9/23/48
DATE 10/7/48
M-2388-12

COMPILATION REPORT
Map Manuscripts No's. T-8960 to T-8965 Incl.
Project Ph-25(47)

31: DELINEATION:

The compilation was accomplished entirely by graphic methods.

The 1948 photography was taken during a high stage of tide and on these photographs the mean high-water line along the shoreline of the Pacific Ocean was obscured by breakers. This mean high-water line was clearly visible on the 1947 photographs, which were taken when the tide was at a low stage. This office had not foreseen this difficulty and had not requested office photographs of the 1947 photographs in this area. The 1947 photographs, however, had been used for the field inspection work and these were utilized to supplement the 1948 photography when compiling the high-water line. Detail points were first selected along the beach, which were common to each set of photographs. These were radially plotted from the 1948 photographs and the line was detailed from the 1947 field photographs.

Refer to side heading 25: "Photography" of the Photogrammetric Plot Report for additional facts pertaining to photographs in this project.

32: CONTROL:

The placement and density of identified control stations were satisfactory.

Refer to side heading 23: "Adequacy of Control" of the Photogrammetric Plot Report for additional facts.

33: SUPPLEMENTAL DATA:

The following plans and maps, which were used to supplement the photographs are being forwarded with the map manuscripts.

- | | |
|---|-----------------------------|
| 1 City of Eureka California, Eureka Chamber of Commerce | Scale 1"= 400' |
| 2 Land USE Map of the City of Eureka | Scale 1"= ⁶ 800' |
| 3 City of Eureka, California | Scale 1"=1400' |
| 4 Diagram of the south limits of Eureka | Scale Unknown |

5 Map of the City of Arcata, Humboldt
County California 1947

Scale 1"= 400'

6 Map of Arcata, Humboldt Co., Calif. 1933

Scale 1"= 550' Approx.

7 Plan, State of California Board of Control
Normal School, Humboldt Co. (2 parts)

Scale 1"= 200'

*Nos. 2, 3, 4, 5, 7 bound with "Completion Report" (Aug. 1951, LTS)
No. 186 sent to Map Files Section*

34: CONTOURS AND DRAINAGE:

Not applicable.

35: SHORELINE AND ALONGSHORE DETAILS:

The mean high-water line was located by the field inspection party on the 1947 photographs. The photographs were examined, with the aid of the stereoscope and the field location was refined to agree with the definite line visible on the photographs. Refer to side heading 31: "Delineation" of this Compilation Report.

The lower low-water lines in Humboldt Bay could be readily determined on the 1947 photographs and these were compiled as delineated on the field photographs by the field unit. The areas between the mean high-water and lower low-water lines in Humboldt Bay either bare at low-water or are very shoal.

No attempt was made to determine the foreshore and approximate shoal areas in the Pacific Ocean either by field inspection or office examination of the photographs.

All alongshore details appearing on the photographs, except these deleted by the field unit, were compiled.

36: OFFSHORE DETAILS:

There were no offshore details indicated by field inspection in this part of the Pacific Ocean and none were discernable by office inspection of the photographs. All offshore details in Humboldt Bay have been compiled.

37: LANDMARKS AND AIDS:

Forms 567 are being submitted with this descriptive report for all Landmarks and Aids in the area of these map manuscripts.

38: CONTROL FOR FUTURE SURVEYS:

Fifty-one recoverable topographic stations were radially plotted and Forms 524 are being forwarded with this descriptive report for forty-eight of these stations. The three stations for which Forms 524 are not being submitted are Azimuth Marks.

A list of recoverable topographic stations by map manuscripts has been prepared and included as part of paragraph 49. (P. 54)

There were no photo-hydro stations radially plotted in this project.

39: JUNCTIONS:

Satisfactory junctions have been made between all map manuscripts in this project.

40: HORIZONTAL AND VERTICAL ACCURACY:

There are no areas considered to be subnormal in horizontal accuracy. Vertical accuracy is not applicable to this project.

46: COMPARISON WITH EXISTING MAPS:

A visual comparison was made between these map manuscripts and the Eureka, FERNDALE, and FORTUNA, California 15 min. quadrangles Scale 1:62,500, Edition of 1942, 1943 and 1944 respectively. The cultural and physical features of the map manuscripts should supercede those of the quadrangles.

Comparison was made with all maps listed under side heading 33: and in general it is believed that only approximate distances can be scaled from these maps. For the most part these maps were used to obtain the names of streets in Eureka, and Arcata, California.

47: COMPARISON WITH NAUTICAL CHARTS:

Comparison was made, by use of the vertical projector, with nautical chart 5832, Scale 1:30,000 dated December 1944. Changes that are believed of importance to warrant immediate application to the chart are:

The numerous new wharves, piers and other structures along the waterfront of the City of Eureka which have been built since the chart was made.

Exam by H5m
7-8962

Numerous deletions and new shoreline structures along the remaining shoreline of Humboldt Bay. The building up of a spit in Humboldt Bay at Lat. $40^{\circ} 46' 15''$ and Long. $124^{\circ} 12' 00''$. The deletion from the chart of a portion of the Humboldt Northern Railroad on North Spit between Lat. $40^{\circ} 45' 40''$ and Lat. $40^{\circ} 47' 25''$. The addition to the chart of Eureka Airport on North Spit and Humboldt County Airport near Freshwater Junction. T-8962

The correction of the mean lower low-water lines shown on the chart in upper Humboldt Bay to agree with those shown for the area on Map Manuscript T-8960.

48: GEOGRAPHIC NAME LIST: *714 WA*

Geographic names, shown on the attached sheets, except those otherwise noted, were listed in Special Report, "Investigation of Geographic Names", Project Ph-25(47) and on Final Name Sheets 7/8/48 Project Ph-25(47) furnished by the Washington Office.

Names listed in the above report and not shown on the map manuscripts were either disputed names or they fall outside the detail limits of the map manuscripts.

The street names, cemetery names, parks, public buildings, etc. in the cities of Arcata and Eureka were obtained from field inspection notes and the maps of Arcata and Eureka listed under side heading 33: "Supplemental Data".

49: NOTES FOR HYDROGRAPHER:

The recoverable topographic stations have been listed on an attached sheet. *(page 84)*

Approved:

Charles W. Clark
Charles W. Clark
Chief of Party

Respectfully submitted:

J. Edward Deal Jr.
J. Edward Deal, Jr.
Cartographer

50. PHOTOGRAMMETRIC OFFICE REVIEW

T-8960

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. Robert H. Barrons J. Edward Moore Jr.
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:

PHOTOGRAMMETRIC OFFICE REVIEW

T-8961

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. Ree H. Barron J. Edward Deal Jr.
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:

PHOTOGRAMMETRIC OFFICE REVIEW

T- 8962

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. Ree H. Barron J. Edward Deal Jr.
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:

PHOTOGRAMMETRIC OFFICE REVIEW

T. 8963

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. Rev. H. Barron J. Edward Barron
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:

PHOTOGRAMMETRIC OFFICE REVIEW

T-8964

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. Rec. H. Barron J. Edward Ware Jr.
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:

PHOTOGRAMMETRIC OFFICE REVIEW

T- 8965

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 ☒

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BOUNDARIES

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MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒
40. Rec. H. Barron J. Edward Barron Jr.
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

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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:

Page 1 of 2

April, 1941

Project Ph-25(47)

BE DELETED] I recommend that the following objects which have ~~(inserted from)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(inserted from)~~ the charts indicated.

The positions given have been checked after listing by _____

Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION					DATE OF LOCATION	METHOD OF LOCATION AND SURVEY No.	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE		LONGITUDE		DATUM						
				°	'	D. M. METERS	°							
California	* ✓	Indian Island Spit Light		40 48	643.8	124 10	1077.9	N.A.	1927	Radial Plot 8962	X		5832	
		This light is not listed in 1949 Light List.		40 48	421.2	124 10	859.2	"	"	"	X		"	
	✓	Union Oil Wharf Light		40 47	1459.9	124 11	216.0	"	"	"	X		"	
	* *	Humboldt Bay Fog Signal Station		40 45	1170.0	124 13	396.5	"	"	"	X		"	
	✓	North Jetty Light (Δ Humboldt Bay, Green Blinker at Fog Signal Station)		40 45	1106.8	124 13	288.5	"	Triangulation 8962	1941	X		"	
	✓	Lifeboat Station Pier, North End Lt. (Eureka Navy Base Pier, North End Lt.)		40 46	181.4	124 12	1149.8	"	Radial Plot 8962	1949	X		"	
	✓	Lifeboat Station Pier, South End Lt. (Eureka Navy Base Pier South End Lt.)		40 46	76.7	124.12	1217.2	"	"	"	X		"	
	✓	Humboldt Bay Entrance Lt. (Δ Humboldt Bay Red Lt. W. End of South Jetty)		40 45	1597.8	124 14	740.2	"	Triangulation 8962	1941	X		"	
	✓	Standard Oil Wharf Lt.		40 46	1270.8	124 11	985.3	"	Radial Plot 8962	1949	X		"	
	✓	TABLE BLUFF LIGHT (Table Bluff Lighthouse)		40 41	1354.2	124 16	640.0	"	Triangulation 8964	1941	X		"	
	✓	Hookton Channel 6 Lt. (Δ South Bay Channel 2A Lt.)		40 44	1263.6	124 13	734.4	"	"	1948	X		"	
	✓	Buene Spit Shoal 9 Lt. (Δ Hookton Channel 1, Lt., 1948)		40 44	822.6	124 13	555.0	"	"	"	X		"	
✓	Hookton Channel 10 Lt. (Hookton Channel 2 Lt., 1948)		40 44	84.7	124 13	232.6	"	"	"	X		"		
✓	Hookton Channel 12 Lt. (Hookton Channel 4 Lt., 1948)		40 43	1635.7	124 13	262.9	"	"	"	X		"		

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by the charting authority. Information under each column heading should be given.

* This Fog Signal position was changed during 1988. See light list 1989 for new position (No. 733.2.)

U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS TO NAVIGATION

TO BE CHARTED } STROKE OUT ONE

Project PH-25(47)

Eureka, California

April, 1961

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~(attached form)~~ the charts indicated.

The positions given have been checked after listing by

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

NONTECHNICAL LANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

Project Ph-25(47)

Eureka, California

April

1948

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~the~~ the charts indicated.

The positions given have been checked after listing by

Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE		LONGITUDE		DATUM							
				°	'	D. M. METERS	°		'						
California	STACK	Samoa White Concrete Stack, Hammond Redwood Co. (216' high)		40	49	237.2	124 10	1103.1	N.A. 1927 Triang.	1928	X			5832	
	SPIRE	Arcata, Gold Cross, Catholic Church (76' high)		40	52	986.9	124 05	261.4	" "	1941	X			"	
	DOWN	Arcata, Cupola, State Teachers College		40	52	1178.8	124 04	811.0	" "	1921	X			"	
	TANK	Elevated water tank, (60' high)	EASY	40	51	1718.2	124 05	1121.9	" Radial Plot	1949	X			"	
	TOWER	Wooden Signal Tower over LOST 3 (USE) 1948 (50' high)		40	43	794.8	124 15	272.5	" Triang.	1948	X			"	
	TOWER	Wooden Signal Tower over MOUNT (USE) 1919		40	44	754.7	124 14	596.4	" "	1919	X			"	
	CUPOLA	Barn Cupola, circular Barn	ANTI	40	40	1256.0	124 15	182.6	" Radial Plot	1949	X			"	

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

NON-FLOATING LANDMARKS FOR CHARTS

STRIKE OUT ONE

Project Ph-25(47)

Eureka, California

April

1948

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~the~~ the charts indicated.

The positions given have been checked after listing by _____

Chief of Party

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION					METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE		LONGITUDE								
				D. M. METERS	D. M. METERS	D. P. METERS	DATUM							
California														
DOME		Eureka, Humboldt County Court House, Globe at top (150' high).		40 48	337.8	124 09	N.A. 1927 Triang.	8962	1941	X	X		5832	
	TANK	Eureka, Water Tank, Black, Dolbeer & Carson Lumber Co. (75' high)		40 48	891.5	124 09	"	"	"	"	X	X	"	
		Carson Residence, Eureka, Cupola (95' high)		40 48	630.9	124 09	"	"	1919	X	X	"		
		So. Eureka, Stack Concrete, White Hammond Redwood Co. Plant #2 (200' high)		40 47	1205.6	124 11	"	"	1941	X	X	"		
STACK	So. Eureka Holmes - Eureka Lumber Co. Brick Stack (150' high)		40 46	1426.3	124 11	"	"	"	"	X	X	"		
TANK	So. Eureka, Holmes Eureka Lumber Co. Black Tank (80' high)		40 46	1434.9	124 11	"	"	"	"	X	X	"		
RADIO MAST	K.H.U.M. Radio Tower (203' high)		40 47	781.7	124 10	"	"	"	1948	X	X	"		
RADIO MAST	Eureka, Radio Station KLEM Tower, Red Light at Top. (184' high)		40 48	346.2	124 08	"	"	"	1941	X	X	"		
RADIO MAST	KLEM Radio Tower - Taller of Two (384' high)		40 48	314.2	124 08	"	"	"	1948	X	X	"		
TANK	City Water Tank (100' high)		40 46	1601.3	124 09	"	"	"	"	X	X	"		
ELEVATED TANK	Samoa, Lone Tank (91' high)		40 48	1394.4	124 11	"	"	"	1919	X	X	"		
														53

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

April 1945

U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED

STRIKE OUT ONE

LANDMARKS FOR CHARTS

Project Ph-25(47)

Eureka, California

April

1948

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by

Chief of Party

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE		LONGITUDE									
				°	'	D. M. METERS	°	'	D. P. METERS						
California	TANK	Rolph Shipyard South Tank (85' high)		40	47	561.4	124	11	1229.5	N.A. 1927 Triang.	1919	X		5832	
	TOWER	Flag No. 1 (USE) (50' high)		40	46	808.2	124	13	280.8	"	1941	X		"	
	CUPOLA	Humboldt Bay Coast Guard Barracks (50' high)		40	46	26.2	124	13	26.5	"	"	X		"	
	LOOKOUT TOWER	Humboldt Bay Coast Guard Look-out Tower, 1948 (50' high)	INTO	40	45	1716.0	124	13	1238.0	" Radial Plot	1949	X		"	
	MAST	Brack, Tallest Mast (84' high)		40	45	1642.4	124	13	1225.5	" Triang.	1919	X		"	
	REMARK TOWER	U.S. Coast Guard Observation Tower near Barracks (92' high)	LOOK	40	46	363.1	124	13	46.6	" Radial Plot	1949	X		"	
	TOWER	Wooden Signal Tower over LOG (USE) (50' high)		40	45	15.7	124	14	164.8	" Triang.	1919	X		"	
	TANK	Samoe, Hammond Redwood Company Wooden Water Tank (115' high)		40	48	1842.8	124	11	272.3	"	1941	X		"	
	TANK	Black Tank, Pacific Lumber Co. (45' high)	ROSE	40	43	116.0	124	12	1366.1	" Radial Plot	1949	X		"	
	TANK	Fields Landing Red Tank (25' high)		40	43	1426.9	124	12	1061.4	" Triang.	1919	X		"	
	TOWER	Wooden Signal Tower over Δ SPITZ 2 (USE) 1948 (50' high)		40	44	802.9	124	13	27.2	" Triang.	1948	X		"	
	STAND-PIPE	Silver Standpipe (60' high)	QUIL	40	42	1439.3	124	11	1342.9	" Radial Plot	1949	X		"	
														6	
														6	

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

Aeronautical

KNOWLEDGE TO MEET CHALLENGES LANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

Eureka, California

April 19 1948

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~the~~ the charts indicated.

The positions given have been checked after listing by

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

NONFLOATING AIDS COUNTELDOWNMARKS FOR ORGANS

STRIKE OUT ONE

Project Ph-25(47)

Eureka, California

Friday 1948

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be ~~deleted from~~ (deleted from) the charts indicated.

The positions given have been checked after listing by

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

U. S. COAST AND GEODETIC SURVEY

NONFLOATING-AIDSCC LANDMARKS FOR CHARTS

STRIKE OUT ONE
Project Ph-25(47)

Eureka, California.

April

1948

I recommend that the following objects which have ~~(been removed)~~ been inspected from seaward to determine their value as landmarks be ~~started on~~ *(deleted from)* the charts indicated.

The positions given have been checked after listing by

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

COPY

c/o Swan Island Postal Station
Portland 18, Oregon

8 September 1949

To: The Director
U.S. Coast and Geodetic Survey
Washington 25, D.C.

Subject: Intersection station "CUPOLA, BAYSIDE COMMUNITY PRES-
BYTERIAN CHURCH, 1948"

T-8961

The intersection station "CUPOLA, BAYSIDE COMMUNITY PRESBYTERIAN CHURCH, 1948" could not be held during the running of the radial plot for Project Ph-25(47). This station is located about 1.5 miles south-east of Arcata, California, in the village of Bayside.

It is believed that an error in identification was made, when observing this station and that the geographic position submitted for this station on June 11, 1948, is not correct.

Charles W. Clark
Lieut. Comdr.-USC&G Survey
Chief of Party

CWC/cw

7312-rb

16 September 1949

COPY

To: Lt. Comdr. Charles W. Clark
U.S. Coast and Geodetic Survey
c/o Swan Island Postal Station
Portland 18, Oregon

Subject: Intersection Station "CUPOLA, BAYSIDE
COMMUNITY PRESBYTERIAN CHURCH, 1948"
Project Ph-25(47)

This is in reply to your letter informing this office that Intersection Station "CUPOLA, BAYSIDE COMMUNITY PRESBYTERIAN CHURCH 1948" could not be held in the radial plot of Project Ph-25.

It is noted that you believe an error in identification was made when observing this station, however, it is not clear in this office whether or not one direction was observed to an erroneous object or the object observed upon was erroneously named and described.

The geographic position computation for the no check position of this station has been verified as correct in this office.

It is requested that you determine from the radial plot and field inspection photographs whether or not the geographic position should be rejected or a new name given to the station. You are to report your findings, both in the radial plot report and by letter to this office.

/S/ J. H. Hawley
Acting Director

COPY

c/o Swan Island Postal Station
Portland 18, Oregon

22 September 1949

To: The Director
U.S. Coast and Geodetic Survey
Washington 25, D.C.

Subject: Intersection Station "CUPOLA, BAYSIDE COMMUNITY PRES-
BYTERIAN CHURCH, 1948", Project Ph-25(47).

Reference: Letter No. 7312-rb, dated 16 September 1949.

The error of identification of the subject station as referred to in my letter dated 8 September 1949 was believed to be an erroneous identification of the object on one of the triangulation cuts and that the two cuts were not on the same object.

A further study of the situation indicated the above may not be a correct assumption.

One cut on this station was from station PEN (U.S.E.), 1911. This station was identified but would not hold in the radial plot. The recovery card (not yet submitted) indicated some doubt about the recovery of station PEN. No description of PEN was available to the field party. A pipe was found in the vicinity of the geographic position and was assumed to be the station but apparently it was not the correct station.

The radial plot position of PEN is about 50 meters northwest of the geographic position. The radial plot position of CUPOLA, BAYSIDE COMMUNITY PRESBYTERIAN CHURCH is about 10 meters southwest of the computed geographic position.

The conclusion reached at this office is that both cuts were on the same object but the cut recorded as being from PEN (U.S.E.), 1911 was from an unknown point. It is thought that the computed geographic position of CUPOLA, BAYSIDE COMMUNITY PRESBYTERIAN CHURCH is incorrect and should not be listed in the list of geographic positions.

*Removed from
list by Div. of
Geodesy
L.S.*

The field observations in question were made by Mr. Charles Hanavich who is now in the Washington Office. He may be able to give further information on the subject.

Charles W. Clark
Lt. Comdr.-USC&G Survey
Chief of Party

CWC/gw

71
7 October 1949

To: Lt. Comdr. Charles W. Clark
U. S. Coast and Geodetic Survey
c/o Swan Island Postal Station
Portland 18, Oregon

Subject: Intersection Station "CUPOLA, BAYSIDE
COMMUNITY PRESBYTERIAN CHURCH, 1948",
Project Ph-25(47)

This is in reply to your letter dated 22 September 1949, recommending that the geographic position of CUPOLA, BAYSIDE COMMUNITY PRESBYTERIAN CHURCH be rejected. Your investigation appears to have been satisfactory, and this office is rejecting the position of the station.

The information furnished in your letter was corroborated by Mr. Charles Hanavich, and it has been concluded that Station PEN (U.S.E.) 1911 was both erroneously recovered and identified, making the observations from PEN to CUPOLA of no value.

It is requested that you include a statement on the recovery card for station PEN, adding emphasis to the fact that recovery was very doubtful.

(Signed) E. T. ADAMS

Acting Director.

48: GEOGRAPHIC NAME LIST:

T-8960

- ✓ Arcata Bay (shift name)
- ✓ Arcata Channel
- ✓ Bird Island
- ✓ Gunther Island
- ✓ Humboldt Bay (shift name)
- ✓ Humboldt Meridian
- ✓ Humboldt Northern RR.
- ✓ Liscom Slough
- ✓ Mad River Slough
- ✓ Mad River Slough Channel
- ✓ Northwestern Pacific RR
- ✓ Pacific Ocean
- ✓ Samoa
- ✓ *Samoa School (Elem.)

*Note: Not shown in Geographic Names Reprot but the name is shown on field inspection photograph 47-D-335 and the building is indicated on USGS Eureka, Calif. 15 min. quadrangle.

T-8961

- Alliance
- Arcata
- Arcata Bay
- *Bay School
- Bayside
- Brainard
- Gannon Slough
- Humboldt Northern RR
- Humboldt State College
- Jacoby Creek
- ✓ Janes Creek
- Janes School
- ✓ Jolly Giant Creek
- ✓ Liscom Slough
- ✓ McDaniel Slough
- Northwestern Pacific RR
- Redwood Highway (U.S. 101)
- U.S. 299
- Bloomfield Acres
- Fickle Hill
- Fickle Hill Road
- Greenwood Cemetery
- ✓ Grotzman Creek
- Humboldt Bay

* Bay School is shown on the USGS Eureka, Calif. 15 min. quadrangle and on field inspection photograph 47-D-481. It was not considered in the geographic names investigation.

Groatzman Creek is not shown on the map manuscript because an examination of the photographs does not reveal the creek to be as extensive as shown on the USGS Eureka, Calif., 15 min. quadrangle. The creek is believed to terminate west of the detail limits of the map manuscript, in Fickle Hill (LTS).

T-8962

- ✓ Arcata Bay
- ✓ Bayview
- ✓ Bucksport
- Coast Guard Lookout
- ✓ Daby Island
- ✓ Elk River Corner
- ✓ Eureka
- ✓ Humboldt Bay
- Humboldt Bay Lifeboat Station USCG
- Humboldt Bay Fog Signal Station
- Humboldt Northern RR
- ✓ North Spit
- U.S.C.G. No. 316

T-8960: names preceded by . are approved 2-27-50 L. Heck

T-8961: names preceded by . are approved 2-27-50 L. Heck

(This spelling is new: older USGS. quad. and 1948 Names Report both have Grotzman, as approved above)

Additional approved names on T-8962:

On sheet:

✓ Clark Slough ✓
✓ Elk River ✓

Added:

Eureka Channel ✓

- Franklin School (Elem.) ✓
- ✓ Myrtle Grove Cemetery ✓
- ✓ Eureka Junior High School ✓
- ✓ Eureka Senior High School ✓
- Marshall Grammar School ✓
- ✓ St. Joseph Hospital ✓
- ✓ St. Bernard School ✓
- ✓ Carson Park ✓
- ✓ Humboldt County Hospital ✓
- ✓ Parkston Addition (City Park) ✓
- ✓ Sequoia Park ✓
- ✓ General Hospital ✓
- Lincoln School (Grammar) ✓
- Community Hall and Grammar School ✓
- ✓ Oceanview Cemetery ✓
- ✓ St. Bernard Cemetery ✓
- ✓ Sunset Memorial Park Cemetery ✓
- ✓ Albee Stadium ✓
- ✓ Ed Ross Memorial Playground ✓
- Jefferson School (Grade) ✓

✓ Names approved

MCA ✓

11-21-50

a.j.w.

- ✓ *Eureka Airport ✓
- ✓ Eureka Slough ✓
- ✓ Fairhaven ✓
- ✓ Fort Humboldt Museum ✓
- ✓ Gunther Island ✓

(see attached list
of additional names)

- ✓ Northwestern Pacific RR ✓
- ✓ Pacific Ocean ✓
- ✓ Redwood Highway = U.S. 101. ✓
- ✓ Samoa ✓
- ✓ South Spit ✓
- ✓ Swain Slough ✓
- ✓ Woodley Island ✓

✓ = Checked + approved
11-21-50
a.j.w.
Names preceded
by . and attached
list are approved.
4-17-50. L. Heck

* Eureka Airport was not considered during geographic names investigation. It is shown as a geographic name on the "Mt. Shasta" sectional aeronautical chart and on field photograph 47-D-316.

T-8963

- Arcata Bay .
- Eureka Slough .
- Fay Slough .
- Freshwater Corners .
- Freshwater Creek .
- Freshwater Junction .
- Freshwater Slough .
- Redwood Acres State Fair Grounds .

- Humboldt Bay .
- *Humboldt County Airport .
- Indianola (2) .
- ~~Humboldt RR~~ ✓
- Redwood Highway .
- Ryan Slough .
- Worthington School No. 1 .
- Freshwater School .

- Park St. .
- Cottage St. .
- Edgewood Rd. .
- Trinity St. .
- Myrtle Ave. .
- Harris St. .

* Humboldt County Airport was not considered during the geographic names investigation. It is shown as a geographic name on the "Mt. Shasta" sectional aeronautical chart and on field photograph 47-D-487.

Names preceded
by . approved
4-21-50
a.j.w.

9-18-53, checked with Aero.
charts: present official name is
Eureka County Airport. L. Heck

T-8964

- Buhne Point ✓
- Clark School ✓
- Fields Landing ✓
- Hookton ✓
- Hookton Channel ✓
- Humboldt Bay ✓
- Indianola (1) ✓
- McNulty Slough ✓
- Northwestern Pacific RR ✓
- Pacific Ocean ✓

- South Bay .
- South Bay Station ✓
- South Spit ✓
- Southport Channel ✓
- Southport Landing ✓
- Table Bluff (bluff) ✓
- Table Bluff Light Station ✓
- Table Bluff Rancheria (~~Indian Reservation~~) ✓
- Hookton Slough ✓
- West Ave. ✓
- Pacific Lumber Co (private RR spur) ✓
- Lighthouse Road .

Names marked
by . approved
4-27-50
a.j.w.

T-8965

- Beatrice .
- Bucksport School .
- Buhne Spit Shoal .
- Elk River ✓

- Northwestern Pacific RR ✓
- Orton Creek ✓
- Red Bluff .
- Redwood Highway (U.S. 101) .

- Elk River School
- Fields Landing
- Hookton Slough
- Humboldt Bay
- Humboldt Hill
- Humboldt Grange
- Lumber R.R. (purely descriptive) = Pacific Lumber Co. R.R.
- Swain slough
- Salmon Creek School
- Fields Landing Elem. School.
- Salmon Creek
- South Bay
- South Bay Station (suggest omission)
- Spruce Point (Road Fork) - settlement
- Willow Brook

- Harrison Avenue.
- West Ave.
- 2nd Ave.
- 3rd Ave.
- Railroad Ave.
- B st.
- C st.

Names preceded by .
are approved 5-2-50.
L. Heck

49: NOTES FOR THE HYDROGRAPHER: (see also heading 38, page 45)

List of Recoverable Topographic Stations
Map Manuscripts T-8960 to T-8965 Inclusive
Project Ph-25(47)

T-8960	TOSS, 1948		
	JACK, 1948		
	BUCK, 1948	GABLE	
	ABLE, 1948		
	CAST, 1948	GABLE	
	DART, 1948	GABLE	
T-8961	EASY, 1948	W. Tank (in mts)	
	HUMP, 1948	Mon	
	PULL, 1948	Mon	
	GOSH, 1948	Mon	
	JACO, 1948		
T-8962	LOOK, 1948	Tower	
	TONE, 1948	Mon	
	KATE, 1948	Mon	
	MOSS, 1948	Mon	
	NEST, 1948	Mon	
	QUIT, 1948	Mon	
	POOR, 1948	Mon	
	UNTO, 1948	Tower	
	ROAD, 1948	Mon	
	SLIP, 1948	EUREKA	
	UNION OIL WHARF LT., 1948	Light	
	INDIAN IS. SPIT LT., 1948	Light	
	EUREKA CHANNEL 2 LT., 1948	Light	
	EUREKA NAVY BASE PIER, NORTH END LT., 1948	Light	
	" " " " SOUTH " " " "	" " " "	
	STANDARD OIL WHARF LT., 1948	Light	Light
	HUMBOLDT BAY FOG-SIGNAL, 1948	signal	
T-8963	WANE, 1948	GABLE	
	VOTE, 1948	GABLE	
T-8964	ANTI, 1948	CUPOLA (in mts)	
	BELL, 1948	TANK	
	CORE, 1948	TANK	
	DONE, 1948	GABLE	
	EVER, 1948	GABLE	
	FRED, 1948	TRIPOD	
	NOON, 1948	BEAM	
	GONE, 1948	TRIPOD	
	HILL, 1948	"	
	JUMP, 1948	"	
	KEEP, 1948	"	
	LORE, 1948	"	
	MONT, 1948	"	
T-8965	TOSTE (USE), 1948		
	ROBE, 1948	TANK	
	SOME, 1948	BRIDGE	
	POST, 1948	West Gable	
	QUIL, 1948	Standpipe	

48
+ 3 Az mts
51

Review Report
Planimetric Maps T-8960 & T-8965 Inc.
2 May 1950

61. Bridges:

Vertical clearances in the bridge list are for MHHH.
Clearances on the map manuscript were adjusted to MHH.
(Listed in the Field Inspection Report).

62. Comparison with Registered Topographic Surveys:

474	1:10,000	1854	with contours	(T-8962,64,65)
1137	1:10,000	1869	" "	(T-8962,64)
1174	1:10,000	1870	" "	(T-8962,64,65)
1175	1:10,000	1870	" "	(T-8960,62,63)
1176	1:10,000	1870	" "	(T-8961,63)
1177	1:10,000	1870	" "	(T-8960,61)
3776	1:10,000	1919	Shoreline & Control	(T-8962,64,65)
3777	1:10,000	1919	" "	(T-8960,61,62)
4512	1:10,000	1929	" "	(T-8962,64,65)
4513	1:10,000	1929	" "	(T-8960,61,63)
4514	1:20,000	1929	With contours	(T-8964)
4515	1:20,000	1929	" "	(T-8960)

The maps in this project supersede the other surveys
for charting purposes for all detail except contours.

T-6616	1:10,000	1936	Graphic control
T-6814	1:10,000	1939	" "

63. Comparison with Maps of Other Agencies:

USGS	Eureka	1:62,500	ed. 1942 rep. 1948	T-8960,61,62,63
USGS	Fortuna	1:62,00	ed. 1944	T-8964
USGS	Ferndale	1:62,500	ed. 1944	T-8964,65

The Arcata city boundary line on T-8961 differs considerably from that shown on the quadrangles. The boundary limits drawn on T-8961 were authenticated, as of the date of field inspection. It supersedes the line shown on the quadrangles.

64. Comparison with Contemporary Hydrographic Surveys: None

65. Comparison with Nautical Charts:

5832 1:30,000 ed. Dec. 1934, Rev. Jan. 2, 1950

Page 2
T-8960 to T-8965

Discrepancies

T-8960

1. Humboldt Northern RR has been relocated.
2. A breached dike has made a mud flat of the fast land area south of Mad River Slough entrance.
3. The pier north of Samoa no longer exists.
4. A lone pile at $40^{\circ} 49' 27''/124^{\circ} 08' 20''$ is not on the chart.
5. A lone pile at $40^{\circ} 50' 03''/124^{\circ} 07' 22''$ on the chart is absent on T-8960. It is not visible on the photographs and not noted by field inspection.

T-8961

A charted dolphin opposite the wharf ruins by Arcata Channel is not on the manuscript, because it is not visible on the photographs and was not labeled by field inspection.

T-8962

A charted cable crossing from Eureka to Gunther Island Spit Light is not on the manuscript. It was not located by field inspection.

Six visible aids were plotted during review.

Humboldt Bay Lighted Buoys "3" and "6"
Nun Buoys "8" and "10"
Samoa Channel, Lighted Buoy "1"
Eureka Entrance Channel Lighted Buoy

Because T-8962 was compiled from 1948 field inspection, the following items appear on T-8962 but are not on the chart revised to January 1950.

- (1) Lookout Tower at Coast Guard Station
- (2) Fog Signal
- (3) Eureka Channel Light 2

Two lights, built in 1949 and listed in the 1950 Light List, are not on T-8962:

- (1) Humboldt Bay Approach, Range Front.
This light is on the tower built to replace the old "Lookout Tower", (1) above, and has a diaphone to replace the "Fog Signal", (2) above.

Page 3
T-8960 to T-8965

Discrepancies

T-8962 Continued

(2) Humboldt Bay Approach Range Rear.

The "Tank" on the chart northwest of Coast Guard Cupola is an observation tower and should be labeled "Tower" on future reprints of Chart 5832

The peninsula-shaped strip of land extending southward from Samoa to Humboldt Bay entrance, and a similar strip south of the entrance (on T-8964), are dune areas.

The strip on T-8962 differs from the other in that there is a considerable amount of shrub growth which prevents a shifting of the sand except along the Pacific Ocean side of the area.

Because this condition is peculiarly characteristic of the northern strip, the shrub-covered areas have been delineated as "brush", even though the present mapping practice is to ignore the category "brush".

T-8964

The cable area Buhne Point - South Spit and the "obstruction" off shore from Fields Landing are not entered on T-8964, because no field information was given to indicate their existence.

T-8965

1. The dike system in Hookton Slough area, with consequent land reclamation.

2. Lumber RR east of Elk Creek.

66. Adequacy of Results:

These compilations comply with project instructions; meet the National Standards of Accuracy and are adequate for chart publication and maintenance.

Reviewed by:

Leha T. Stevens
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Approved by:

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Division of Photogrammetry

H. E. Houghton
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NAUTICAL CHARTS BRANCH

SURVEY NO. T8960-1-2-3-4-5

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.