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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: California

DESRIPTIVE REPORT

Topographic } Sheet No. A, B, & C.
~~Hydrographic~~

LOCALITY

Tomales Bay and Tomales Point
to Point Reyes.

1931

CHIEF OF PARTY

L. C. Johnson, Jr. H. & G. E.

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Appd 5601 effd 11/21/63

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

Through: L. C. Johnson, Jr. H. & G. E.,
Chief of Party, C. & G. Survey.

From: Karl B. Jeffers,
Jr. H. & G. E., C. & G. Survey.

Subject: Descriptive Report.

There is attached hereto a descriptive report to
accompany topographic sheets A, B, and C of the 1931 field
season. The sheets cover part of the northern coast of
California and were executed in accordance with your in-
structions dated April 29, 1930.

Respectfully submitted,

Karl B. Jeffers
Karl B. Jeffers,
Jr. H. & G. E.

Approved and forwarded.

L. C. Johnson
L. C. Johnson, Jr. H. & G. E.
Chief of Party.

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEETS A B & C 1931

NORTHERN COAST OF CALIFORNIA

TOMALES BAY AND TOMALES POINT TO POINT REYES

INSTRUCTIONS:

The topography was executed in accordance with the Director's instructions dated April 29, 1930 and orders dated May 7, 1931 covering Projects No. 60, 1930 and 20, 1931.

AREA

The area covered by this survey has been previously surveyed. The registry numbers of the former sheets are as follows:

Sheet A	T439, T849 & T3840
Sheet B	T849 & T880
Sheet C	T881 & T882

LIMITS

The topography was continued from the point reached at the close of the 1930 field season. A satisfactory junction was made with T4597 at Hamlet, Tomales Bay, Latitude $38^{\circ} 12'$ and Longitude $122^{\circ} 55'$; and with T4495 (1929) at Point Reyes Light House in Latitude $37^{\circ} 59'$ and Longitude $123^{\circ} 01'$.

PURPOSE OF SURVEY

The purpose of this survey was twofold: To revise or verify the existing surveys and to provide control for the hydrographic surveys of the adjacent waters.

GENERAL DESCRIPTION OF THE COAST

The description of the coast as found in the Pacific Coast Pilot is correct with the following exceptions and additions:

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SHEET C. The Coast Guard Station north of Point Reyes has been burned down except the boat house, a red roofed building close to the beach, and has been abandoned. The Coast Guard Station is now in Drakes Bay.

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The Naval Radio Compass Station was built on the same property just north of the old Coast Guard Station. There are two prominent white buildings. The most prominent land mark in the vicinity, however, is the N. R. C. water tank on the sand dune back of the station. It is a large, white tank and shows very prominently from seaward.

Abbotts Lagoon is shut off from the sea except in very stormy weather when the waves break over the beach.

SHEET ⁴⁶³⁷
A. Bird Rock is round topped and white in appearance; it shows prominently from the South and North but not from a point directly offshore.
⁴⁶³⁸

SHEET B. Tomales Bay: A range for swinging ship is provided at Marconi. The range is the high, black mast (rear) on the hill and the four legged tower (front range) back of the receiving station (third tower from the South). The range as scaled from the sheet is N 66° 30' E. The tower is on the line from Triangulation Station Foster to the Mast and that azimuth may be used for the range. This range was suggested by a man who has a boat in the bay.

Tomales Bay: A Pacific Gas and Electric Company cable crosses the Bay in Latitude 38° 08' and Longitude 122° 53' as shown.

CONTROL

The topography was based on triangulation done in 1906 supplemented by that done in 1929.

Stations Hog Island and Reynolds could not be found and were reported lost. The flag pole at Cypress Point has been removed as has the Cupola on the School House on the hill at Point Reyes Station.

Station Cabesa on Point Reyes is believed to be in error as plotted from the field computation. Cuts and resections from Point Reyes Head and Drake give a position 50 meters N. W. of the plotted position. A red circle topographic location is shown on Sheet C. The position was checked by plane table, by three point fix and traverse from Point Reyes Head 2.

SURVEY METHODS

No new or unusual methods were used; in most cases three point fixes or resection methods were used. There were a few short traverses all of which closed within the allowable error and were adjusted in the usual manner except at the South end of Sheet A, these traverses were re-run and closed correctly.

The topographic stations were located by three or more intersecting cuts or by rod reading.

The high and low water lines were located by rod reading wherever possible. In some inaccessible places on the outside coast of Tomales Point they were located by cuts to prominent objects on the beach and sketching between them.

Off lying rocks were located by three intersecting cuts; those in-shore were rodded in or sketched in with relation to rocks definitely located at points where rocks were very numerous. In all cases the outside rocks and dangers were cut in if possible.

The contours were checked by transferring the hundred foot curves from copies of the old sheets to the new ones and the elevations obtained were compared with the old ones. The contours were found to be very accurate and true to the terrain.

COMPARISON OF SURVEYS

SHEET A. 4637 The photostat of Tomales Point is so distorted that an accurate comparison could not be made. The shore line remains unchanged for the most part. It was found necessary to revise the rocks on the outside coast; considerable change in number and location was made. Some of the changes are listed below.

Three sunken rocks in Latitude $38^{\circ} 14.2'$ and Longitude $122^{\circ} 58'$ are not shown on previous surveys.

A rock awash in Latitude $38^{\circ} 13.2'$, Longitude $122^{\circ} 58.9'$ is not shown on previous surveys.

The high water line along the sand beaches in Latitude $38^{\circ} 11'$ and Longitude $122^{\circ} 58'$ has advanced 10 to 35 meters. A group of rocks at the northern end of this beach, Latitude $38^{\circ} 11.8'$, Longitude $122^{\circ} 58.9'$, off Station YUM was not found. The point at YUM is composed of rotten granite and it is believed that the rocks shown there by previous surveys have been destroyed by wave action.

A rocky point in Latitude $38^{\circ} 11'$ and Longitude $122^{\circ} 58'$ is 15 meters farther to the South than shown on previous surveys. The position of GOO was checked on Sheet C by cuts and traverse to Station Tomales Bay.

Two sunken rocks south of this point 218 and 420 meters respectively, are not shown on previous surveys. The southern one of them is shown on Chart 5603.

A rock, bare one foot at low water in Latitude $38^{\circ} 10.3'$, Longitude $122^{\circ} 57.3'$, is not shown on previous surveys.

A rock ledge extends past the low water line in Latitude $38^{\circ} 14.1'$ and Longitude $122^{\circ} 58.9'$ whose limits are not known. A group of ROCKS AWASH, shown on Chart 5603, at this point were not found and should not be shown as rocks awash. The Northwestern Pacific Railroad from Point Reyes Station north has been abandoned and the rails torn up except as shown on Sheet B.

The rocks awash in Latitude $38^{\circ} 11'$ and Longitude $122^{\circ} 55'$ are not shown on Sheet T3840.

There is considerable difference between this survey and the old one at Young Landing and the gulch north of it. The shore line at the landing has advanced 20 meters and the shape and location of the gulch is altered. The junction of the two sheets made at Station SOB is fixed by a three point fix and by intersecting cuts from stations across the bay. The control at this point on Sheet A is weak, the traverse was run twice and closed within the allowable error at Station SOB as located on Sheet B.

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SHEET B. The shore line on the south side of the point in Latitude $38^{\circ} 09'$ and Longitude $122^{\circ} 54'$ has receded from 10 to 40 meters.

The high and low water lines around the point in Latitude $38^{\circ} 07'$ and Longitude $122^{\circ} 51.5'$ has been revised.

The high water line at the head of the bay has advanced and the main channel of the creek has altered. The grass line extends about 800 meters north of the point locally called Railroad Point. At mean high water this grass land is submerged to Railroad Point as shown on the sheet. At extreme high tide most of the area indicated as swamp is flooded. The land at the southern end of the swamp is now under cultivation and is flooded only in seasons of heavy rains.

The creek can be waded anywhere south of Railroad Point at mean low water. The main branch of the stream is the center one. The western branch of the stream has no water in it at mean low water.

A stake fence enclosing oyster pens and clam beds has been erected from Millerton Point to Railroad Point as shown.

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SHEET C. There is a general advance of the shore line along this beach of 1 to 60 meters. A bar has built up across the entrance to Abbott Lagoon completely closing it off from the ocean. The sand has drifted in on the north side of the lagoon and advanced the shore line as much as 100 meters.

Two sunken rocks, ²⁵⁰~~600~~ meters off Point Reyes Lighthouse, are not shown on previous surveys.

* Corrected from letter of Mar. 23, 1932 from R. C. Johnson

The R. C. A. Communications, Inc. have built a trans-pacific short wave receiving station at a point about 1 mile south of Abbott Lagoon, and a mile inshore, there are six groups of radio antenna in the area marked. A ~~true~~ North and South line was established near the station and is the base for the layout of antenna systems.

The American Bell Telephone Company has established a wireless telephone station about one-half mile Southwest of the R. C. A. Station.

NAMES

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SHEET A. The names on Chart 5603 are well established local names except "McDonald" which is no longer used.

Shute Point, shown on the sheet in pencil, is suggested because of its proximity to two abandoned wood shutes, one on the north about a mile and the other an equal distance to the south. The point has no local name.

Cave Rock, shown on the sheet in pencil, is an arched rock with three entrances to the cavern underneath. It has no local name.

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SHEET B. The names shown on Chart 5603 are well known local names except "Reynolds" which is no longer used and "Lagunitas Creek" which is erroneously applied to "Paper Mill Creek" a well established name in Marin County as well as locally.

Corvallis Point is a local name in little use. The point is so called because a man of that name who lives in that vicinity once owned it.

Railroad Point is a well established local name.

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SHEET C. The name "Point Reyes" as applied to the ranch at the place indicated on the chart is no longer used.

Mussel Rocks is a local name not very widely known.

Point Reyes Beach is not a local name ^{but} and is suggested because of the location of the beach. Various sections of the beach are named temporarily for the owners or renters of the adjacent property. The beach as a whole has no local name.

The A, B and C Ranches are local designations that have been long in use.

MAGNETICS

Compass Declinometer observations were made at five triangulation stations. The error of the Declinometer (H22) was determined at a standard station of known declination before and after the season's work. Declinatoire observations were made at the same time and at two other stations as shown.

PHOTOGRAPHS

Two pages of photographs are included in this report. All of them were taken by the topographic party while surveying Tomales Point.

STATISTICS

SHEET A. 4637

Statute miles of shore line -----	22.5
" " " " " of islands -----	0.9
" " " roads -----	15.4
" " " streams -----	1.6
Square statute miles of topography -----	9.8

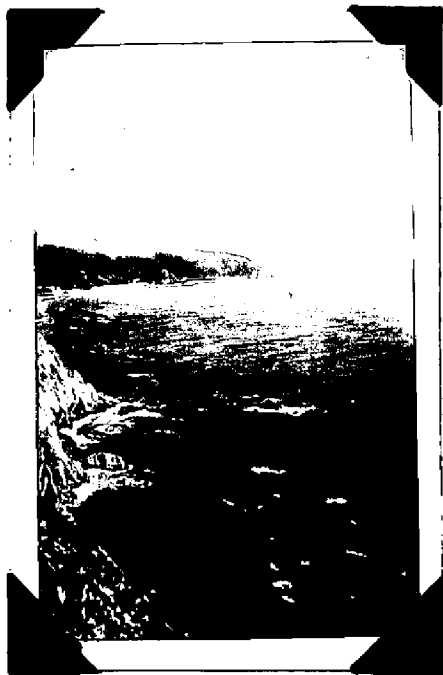
SHEET B. 4638

Statute miles of shore line -----	21.6
" " " road -----	27.6
" " " railroad -----	2.0
" " " streams -----	7.8
Square statute miles of topography -----	16.3

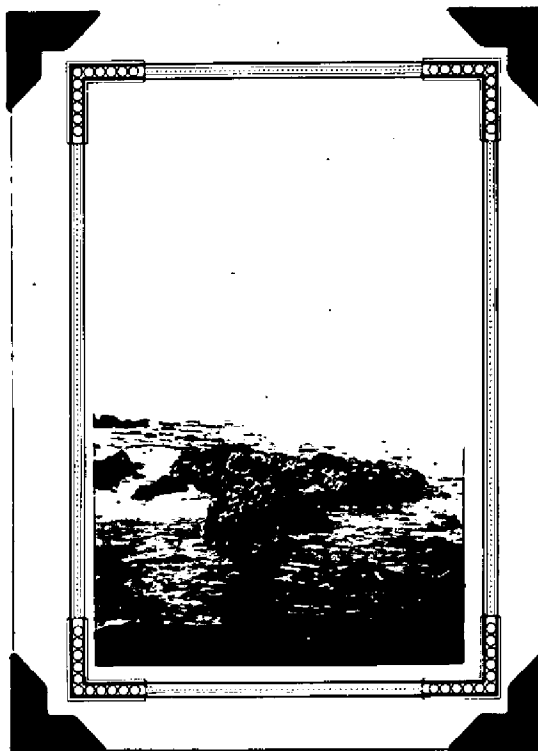
SHEET C. 4639

Statute miles of shore line -----	16.0
" " " road -----	20.4
" " " streams -----	1.7
Square statute miles of topography -----	13.2

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A portion of the outside coast of Tomales Point as seen from a point near Station ROW looking south to Shute Point and Point Reyes Beach.



Looking north - west across the rock ledge off Tomales Bluff as seen from a point near Sta. ED.



Bird Rock as seen from the main land
at a point on the bluff above Sta. GO.



A portion of the outside coast of Tomales
Point as seen from a point near Station ROW
with Bird Rock in the upper left hand corner

PLANE TABLE POSITIONS

Project No. 20.

SHEET A 4637

L. C. Johnson, Chief of Party.

Name & Description	LAT.	D.M.	LONG.	D.P.
JOB w.w. rock	38 12	622.6 (1227.4)	122 55	651.0 (808.9)
SEN w.w. rock	38 12	543.0 (1307.0)	122 55	566.5 (893.4)
BLU w.w. rock	38 12	421.9 (1428.1)	122 55	521.2 (938.7)
TAM w.w. rock	38 12	228.3 (1621.7)	122 55	433.0 (1026.9)
NAP w.w. rock	38 12	17.0 (1833.0)	122 55	373.1 (1086.8)
HIM chim. white house	38 12	15.5 (1834.5)	122 55	236.8 (1223.1)
CUL w.w. on culvert	38 11	1815.9 (34.1)	122 55	264.3 (1196.0)
PET w.w. rock	38 11	1675.3 (184.7)	122 55	280.0 (1180.3)
TEL w.w. tel. pole	38 11	1564.6 (285.4)	122 55	245.0 (1215.3)
ANT w.w. rock	38 11	1330.7 (519.3)	122 55	187.3 (1273.0)
BE S.G. red ro'f'd ho.	38 11	1112.8 (737.2)	122 55	73.8 (1386.5)
CAB w.w. on bluff	38 11	1026.4 (823.6)	122 55	38.7 (1421.6)
DAP w.w. on tree	38 11	876.0 (974.0)	122 54	1434.1 (26.2)
EX w.w. on rock	38 11	764.3 (1085.7)	122 54	1409.3 (51.0)
FOG w.w. pole on rock	38 11	674.1 (1175.9)	122 54	1258.2 (202.1)
GO NW corner of shed	38 11	618.7 (1231.3)	122 54	1071.3 (389.0)
HIS sign	38 11	333.3 (1516.7)	122 54	995.2 (465.1)
ING w.w. tel. pole	38 11	206.9 (1643.1)	122 54	960.3 (500.0)
JIG w.w. on bridge	38 11	21.6 (1828.4)	122 54	817.6 (642.7)
KAT w.w. tel. pole	38 10	1698.2 (151.8)	122 54	776.1 (684.5)

PLANE TABLE POSITIONS : (cont.)

SHEET A (cont.) 4637

Name & Description	LAT.	D.M.	LONG.	D.P.
LAB ban. on tel. pole	38 10	1545.6 (304.4)	122 54	703.3 (757.3)
MAN w.w. tel. pole	38 10	1345.8 (504.2)	122 54	550.6 (910.0)
NUN w.w. tar. on fence	38 10	1186.6 (663.4)	122 54	488.1 (972.5)
OX w.w. on tree	38 10	1076.6 (773.4)	122 54	408.0 (1052.6)
POT w.w. rock	38 10	853.1 (896.9)	122 54	240.9 (1219.7)
QUI w.w. rock	38 10	594.5 (1255.5)	122 54	242.1 (1218.5)
SAD SW corn. Wh. ho.	38 09	1778.1 (71.9)	122 54	8.9 (1452.0)
TIT w.w. rock	38 09	1595.4 (254.6)	122 53	1277.0 (183.9)
UMP w.w. rock	38 09	1476.7 (373.3)	122 53	1119.3 (341.6)
VOX w.w. rock	38 09	1441.7 (408.3)	122 53	1044.6 (416.3)
WIN w.w. rock	38 09	1450.0 (400.0)	122 53	909.8 (551.1)
YUM end of dock	38 09	1353.2 (496.8)	122 53	864.7 (596.2)
ZIM smoke stack	38 09	1299.0 (551.0)	122 53	856.3 (604.6)
AS mast on dock	38 09	1215.8 (634.2)	122 53	939.2 (521.7)
CUT B.M. on rock	38 09	1112.2 (737.7)	122 53	933.6 (527.3)
DED w.w. tel. pole	38 09	1010.0 (840.0)	122 53	830.9 (630.0)
TOT w.w. rock & flag	38 08	1821.1 (28.8)	122 54	278.0 (1183.3)
SOB w.w. rock	38 09	162.8 (1687.1)	122 54	449.0 (1021.9)
RIB w.w. rock	38 09	242.2 (1607.8)	122 54	548.1 (912.8)
CUE w.w. rock	38 09	284.8 (1565.2)	122 54	615.2 (845.7)
PUN w.w. rock	38 09	260.1 (1589.9)	122 54	746.8 (714.1)
OHM target	38 09	254.3 (1595.7)	122 54	914.9 (546.0)
NOT w.w. rock	38 09	379.3 (1470.7)	122 54	794.9 (666.0)
LEM HUN w.w. rock	38 09	461.4 (1388.6)	122 54	714.0 (746.9)
KID w.w. rock	38 09	506.5 (1343.5)	122 54	656.9 (804.0)
JIG ban. on tree	38 09	592.6 (1257.4)	122 54	620.0 (840.9)

PLANE TABLE POSITIONS : (cont.)

SHEET A (cont.) 4637

Name & Description	LAT.	D.M.	LONG.	D.P.
IN w.w. rock	38 09	660.7 (1189.3)	122 54	557.9 (903.0)
HOT red shack	38 09	720.0 (1130.0)	122 54	558.8 (902.1)
GEM w.w. rock	38 09	846.2 (1003.8)	122 54	576.1 (884.8)
FOT w.w. rock	38 09	928.8 (921.2)	122 54	623.9 (836.0)
EVA w.w. rock	38 09	1032.8 (817.2)	122 54	702.5 (738.4)
DAD w.w. rock	38 09	1109.0 (741.0)	122 54	744.0 (716.9)
GOP w.w. rock	38 09	1148.7 (701.3)	122 54	859.1 (601.8)
BEN w.w. rock	38 09	1165.0 (685.0)	122 54	1038.4 (422.5)
ASP w.w. rock	38 09	1221.7 (628.3)	122 54	1116.0 (344.9)
WON banner on tree	38 09	1539.5 (310.5)	122 54	1272.9 (188.0)
VIM w.w. rock	38 09	1684.2 (165.8)	122 54	1280.9 (180.0)
UP w.w. rock	38 09	1708.6 (141.4)	122 54	1300.3 (160.6)
TUD w.w. rock	38 09	1822.8 (27.2)	122 54	1402.7 (58.2)
SIP w.w. rock	38 10	29.7 (1820.3)	122 54	1450.0 (10.6)
RAT w.w. rock	38 10	206.4 (1643.6)	122 55	73.9 (1386.7)
PAN w.w. rock	38 10	246.3 (1603.7)	122 55	122.2 (1338.4)
OBE w.w. pole	38 10	312.7 (1537.3)	122 55	343.8 (1116.8)
NIG w.w. rock	38 10	454.5 (1395.5)	122 55	332.1 (1134.5)
MAP w.w. rock	38 10	635.8 (1214.2)	122 55	392.3 (1068.3)
LOS w.w. rock	38 10	723.1 (1126.9)	122 55	570.0 (890.0)
KEN tripod	38 10	942.2 (907.8)	122 55	489.4 (971.2)
JAG w.w. rock	38 10	1009.3 (840.7)	122 55	520.4 (940.2)
IZZY w.w. rock	38 10	1060.5 (789.5)	122 55	632.2 (828.4)
HIT w.w. stump	38 10	1118.9 (731.1)	122 55	832.0 (628.6)
GOB w.w. rock	38 10	1345.9 (504.1)	122 55	850.6 (610.0)
FUN w.w. rock	38 10	1503.1 (346.9)	122 55	989.8 (470.8)

PLANE TABLE POSTIONS : (cont.)

SHEET A (cont.) 4637

Name & Description	LAT.	D.M.	LONG.	D.P.
EM ban. & w.w. f.post	38 10	1630.7 (219.3)	122 55	1162.2 (298.4)
DUB w.w. rock	38 10	1841.0 (9.0)	122 55	1117.3 (343.3)
CAM w.w. rock	38 11	129.1 (1720.9)	122 55	1112.3 (348.0)
BUG banner	38 11	256.1 (1593.5)	122 55	1226.7 (233.6)
ABE flag	38 11	367.0 (1483.0)	122 55	1323.8 (136.5)
FIN w.w. rock	38 11	458.3 (1391.7)	122 55	1438.4 (21.9)
EIN w.w. rock	38 11	550.0 (1300.0)	122 56	104.0 (1356.3)
DAT w.w. rock	38 11	619.1 (1230.9)	122 56	113.4 (1346.9)
CUB w.w. rock	38 11	646.5 (1203.5)	122 56	139.8 (1320.5)
BOG S gable of house	38 11	668.0 (1182.0)	122 56	312.2 (1148.1)
AN w.w. rock	38 11	823.2 (1026.8)	122 56	281.7 (1178.6)
ZIM w.w. rock	38 11	865.5 (984.5)	122 56	295.7 (1164.6)
YUP w.w. rock	38 11	973.1 (876.9)	122 56	426.0 (1034.3)
WIG flag pole on dock	38 11	1034.6 (815.4)	122 56	571.9 (888.4)
VAP w.w. rock	38 11	1122.5 (727.5)	122 56	632.8 (827.5)
UNC w.w. rock	38 11	1201.1 (648.9)	122 56	724.4 (735.9)
TY cloth target	38 11	1246.2 (603.8)	122 56	869.0 (591.3)
SET w.w. rock	38 11	1228.2 (621.8)	122 56	1000.6 (459.7)
HOG target	38 11	1580.0 (270.0)	122 56	92.5 (1367.8)
RUM pole and banner	38 11	1160.6 (689.4)	122 56n	1088.5 (371.8)
PAL pole on NE gable	38 11	1148.2 (701.8)	122 56	1371.6 (88.7)
NED w.w. rock	38 11	1378.7 (471.3)	122 56	1233.7 (226.6)
MIN w.w. rock	38 11	1409.0 (441.0)	122 56	1181.4 (278.9)
LEO w.w. rock	38 11	1472.8 (377.2)	122 56	1150.3 (310.0)
KEG cloth banner	38 11	1602.9 (247.1)	122 56	1218.5 (241.8)
JAM w.w. rock	38 11	1618.0 (232.0)	122 56	1114.2 (346.1)
ISM w.w. rock	38 11	1652.3 (197.7)	122 56	1060.9 (399.4)

PLANE TABLE POSITIONS : (cont.)

SHEET A (cont.) 4637

Name & Description	LAT.	D.M.	LONG.	D.P.
HOL w.w. rock	38 11	1763.5 (86.5)	122 56	1036.2 (424.1)
GYP w.w. rock	38 11	1830.6 (19.4)	122 56	1021.4 (438.9)
FLO w.w. rock	38 12	71.6 (1678.4)	122 56	1053.6 (406.3)
EBA w.w. rock	38 12	225.0 (1525.0)	122 56	1084.7 (375.2)
DUG w.w. rock	38 12	276.3 (1373.7)	122 56	1118.1 (341.8)
CON w.w. rock	38 12	328.1 (1521.9)	122 56	1153.9 (306.0)
BET w.w. rock	38 12	334.5 (1515.5)	122 56	1169.9 (290.0)
AMY w.w. rock	38 12	355.5 (1494.8)	122 56	1258.2 (201.7)
EX w.w. rock	38 12	492.6 (1357.4)	122 56	1415.1 (44.8)
ZIT w.w. rock	38 12	557.1 (1292.9)	122 56	1395.0 (64.9)
YAP w.w. rock	38 12	635.2 (1214.8)	122 56	1432.4 (27.5)
WIN w.w. rock	38 12	693.5 (1156.5)	122 57	61.3 (1398.6)
VET w.w. rock	38 12	716.0 (1134.0)	122 57	143.6 (1316.3)
UTE w.w. rock	38 12	749.0 (1101.0)	122 57	219.8 (1240.1)
TOS w.w. rock	38 12	752.8 (1097.2)	122 57	290.0 (1169.9)
SIN w.w. rock	38 12	791.4 (1058.6)	122 57	404.6 (1055.3)
ROT w.w. rock	38 12	892.8 (987.2)	122 57	476.5 (983.4)
PUS w.w. rock	38 12	951.2 (898.8)	122 57	561.9 (898.0)
ORB w.w. pole	38 12	965.8 (884.2)	122 57	701.8 (758.1)
NAT w.w. rock	38 12	1086.4 (763.6)	122 57	772.6 (687.3)
MEN w.w. rock-	38 12	1160.0 (690.0)	122 57	802.4 (657.5)
LAM w.w. rock	38 12	1225.1 (624.9)	122 57	880.7 (569.2)
KIT w.w. rock	38 12	1371.9 (478.1)	122 57	929.9 (530.0)
JOT w.w. rock	38 12	1423.3 (426.7)	122 57	947.1 (512.8)
IKE w.w. rock	38 12	1461.5 (366.5)	122 57	1000.6 (459.3)
HEN w.w. rock	38 12	1532.4 (317.6)	122 57	1069.6 (390.3)

PLANE TABLE POSITIONS : (cont.)

SHEET A (cont.) 4637

Name & Description	LAT.	D.M.	LONG.	D.P.
GUM w.w. rock	38 12	1621.6 (228.4)	122 57	1089.9 (370.0)
FUN w.w. rock	38 12	1692.5 (157.5)	122 57	1164.0 (295.9)
EAT w.w. target	38 12	1758.1 (91.9)	122 57	1199.9 (260.0)
DID w.w. rock	38 13	Flat	122 57	1275.2 (184.4)
COG w.w. rock	38 13	109.5 (1740.5)	122 57	1375.5 (84.1)
BAM w.w. rock	38 13	214.2 (1635.8)	122 58	4.0 (1455.6)
AT target	38 13	313.6 (1536.4)	122 58	62.9 (1396.7)
ZEK w.w. rock	38 13	402.8 (1447.2)	122 58	116.0 (1343.6)
YET w.w. rock	38 13	515.9 (1334.1)	122 58	219.4 (1240.2)
WAS target	38 13	614.2 (1235.8)	122 58	248.9 (1210.7)
VIM w.w. rock	38 13	778.7 (1071.3)	122 58	324.8 (1134.8)
UMP w.w. rock	38 13	859.5 (990.5)	122 58	410.8 (1048.8)
TOT w.w. stump	38 13	921.2 (928.8)	122 58	553.6 (906.0)
SAD w.w. rock	38 13	1015.6 (834.4)	122 58	659.6 (800.0)
ROD w.w. rock	38 13	1088.8 (761.2)	122 58	^{775.8} 659.6 (683.8)
PAN w.w. B on shack	38 13	1137.9 (712.1)	122 58	875.7 (583.9)
OUT w.w. rock	38 13	1322.5 (527.5)	122 58	936.3 (523.3)
NUM w.w. rock	38 13	1430.7 (419.3)	122 58	1002.0 (457.6)
MIT w.w. rock	38 13	1505.1 (344.9)	122 58	1111.5 (348.1)
LIP w.w. stump	38 13	1611.6 (238.4)	122 58	1199.6 (260.0)
KEN w.w. pole	38 13	1768.4 (81.6)	122 58	1258.4 (201.2)
JEAG w.w. stake	38 14	83.3 (1766.7)	122 58	1307.8 (151.5)
IS w.w. rock	38 14	167.9 (1682.1)	122 58	1423.1 (36.2)
HIS w.w. target	38 14	301.2 (1548.8)	122 59	122.9 (1336.4)
GAB w.w. rock	38 14	414.8 (1435.2)	122 59	220.0 (1239.3)
FAT w.w. rock	38 14	489.5 (1360.5)	122 59	268.8 (1190.5)

PLANE TABLE POSITIONS : (cont.)

SHEET A (cont.) 4637

Name & Description	LAT.	D.M.	LONG.	D.P.
ED w.w. rock	38 14	553.9 (1296.1)	122 59	369.4 (1089.9)
DIC w.w. rock	38 14	619.7 (1230.3)	122 59	595.9 (863.4)
CAB w.w. rock	38 14	673.0 (1177.0)	122 59	669.0 (790.3)
BUT w.w. rock	38 14	716.3 (1133.7)	122 59	819.1 (640.2)
AM w.w. rock	38 14	866.4 (983.6)	122 59	942.9 (516.4)
BID target	38 14	763.0 (1087.0)	122 59	936.9 (522.4)
CUT w.w. rock	38 14	297.1 (1552.9)	122 59	861.8 (597.5)
DUB w.w. pole & rocks	38 13	1798.5 (51.5)	122 59	669.1 (790.5)
FAN w.w. rock	38 13	1716.3 (133.7)	122 59	619.7 (839.9)
GO w.w. rock	38 13	1620.0 (230.0)	122 59	522.4 (937.2)
EZ top of Bird rock	38 13	1548.2 (301.8)	122 59	920.2 (539.4)
HEM HUN w.w. rock	38 13	1442.4 (407.6)	122 59	416.6 (1043.0)
JIB pole & target	38 13	1185.9 (664.1)	122 59	177.4 (1282.2)
KIT tripod & target	38 13	1009.0 (841.0)	122 59	85.2 (1374.4)
LOB w.w. target	38 13	875.8 (974.2)	122 58	1309.6 (150.0)
MAG target	38 13	587.7 (1262.3)	122 58	1115.4 (344.2)
NOT target	38 13	280.6 (1569.4)	122 58	1126.8 (332.8)
PUG w.w. on bluff	38 12	1822.9 (27.1)	122 58	1143.8 (316.1)
ROW target	38 12	1547.0 (303.0)	122 58	975.7 (484.2)
TOP w.w. rock	38 12	1358.4 (491.6)	122 58	526.4 (933.5)
PON w.w. rock	38 12	770.0 (1080.0)	122 58	61.9 (1398.0)
SAM w.w. rock	38 12	398.3 (1451.7)	122 58	191.2 (1268.7)
VAN w.w. rock	38 12	328.7 (1521.3)	122 58	46.8 (1413.1)
WAX w.w. rock	38 12	164.6 (1685.4)	122 57	1392.6 (67.3)
YUM w.w. rock	38 11	1570.8 (279.2)	122 57	1322.7 (137.6)
ABEL w.w. log	38 11	1371.1 (478.9)	122 57	1162.4 (297.9)

PLANE TABLE POSITIONS : (cont.)

SHEET A (cont.) 4637

Name & Description	LAT.	D.M.	LONG.	D.P.
COR w.w. rock	38 11	962.0 (888.0)	122 57	1111.8 (348.5)
DIP target	38 11	917.2 (932.8)	122 57	1116.7 (343.6)
BUR w.w. rock	38 11	947.1 (902.9)	122 57	1296.3 (164.0)
EX target	38 11	605.6 (1244.4)	122 57	1149.9 (310.4)
FUM w.w. rock	38 11	287.5 (1562.5)	122 57	1213.5 (246.8)
GOO w.w. pk of rky pt	38 10	1830.4 (19.5)	122 58	20.0 (1440.6)
HAD target	38 10	1800.2 (49.8)	122 57	1110.1 (350.5)
JO target	38 10	1560.5 (289.5)	122 57	706.2 (754.4)
KIS target on fence	38 10	1304.2 (545.8)	122 57	316.3 (1144.3)
LOT w.w. on bluff	38 10	884.0 (966.0)	122 57	171.8 (1288.8)
MY w.w. on ridge	38 10	472.5 (1377.5)	122 57	181.1 (1279.5)
NOG w.w. on beach	38 10	220.0 (1630.0)	122 57	75.4 (1385.2)
ON w.w. rock	38 10	24.6 (1825.4)	122 57	77.0 (1383.6)
PIN w.w. on bluff	38 09	1745.7 (104.3)	122 57	9.3 (1451.6)
RIP w.w. on bluff	38 09	1487.0 (363.0)	122 56	1333.7 (127.2)
SAL w.w. rock	38 09	1311.3 (539.7)	122 56	1350.9 (110.0)

PLANE TABLE POSITIONS

Project No. 20.

SHEET B 4638

L. C. Johnson, Chief of Party.

Name & Description	LAT.	D.M.	LONG.	D.P.
CUT rock	38 09	1112.2 (737.7)	122 53	933.6 (527.3)
DED w.w. tel. pole	38 09	1010.0 (840.0)	122 53	830.9 (630.0)
ED target on fence	38 09	693.9 (1156.0)	122 53	703.2 (757.7)
FOR target on fence	38 09	486.2 (1363.7)	122 53	577.0 (883.9)
GUN target on fence	38 09	405.3 (1444.6)	122 53	496.5 (964.4)
HAS W. peak dock house	38 09	219.4 (1630.9)	122 53	340.0 (1120.9)
IB target	38 08	1826.8 (23.1)	122 53	311.8 (1149.5)
JEN cable crossing sign	38 08	1755.9 (94.0)	122 53	282.1 (1179.3)
KAB wireless mast	38 08	1771.1 (78.8)	122 52	1381.3 (80.0)
LET green chimney	38 08	1653.4 (196.5)	122 52	1351.3. (110.0)
MIN wireless mast	38 08	1599.9 (250.0)	122 52	1290.0 (171.3)
NAB white rock	38 08	1487.5 (362.4)	122 52	1371.3 (90.0)
OK wireless mast	38 08	1424.3 (425.6)	122 52	1192.7 (268.6)
PIG w.w. rock	38 08	1309.9 (540.0)	122 52	1296.7 (191.6)
RAP wireless mast	38 08	1281.0 (568.9)	122 52	1124.4 (336.9)
ROW chim. NW cor. ho.	38 08	1127.7 (722.2)	122 52	1077.1 (384.2)
TOP SW gable hotel	38 08	1246.9 (603.0)	122 52	908.2 (553.1)
TIN wireless mast	38 08	1136.8 (713.1)	122 52	1048.6 (412.7)
ACT cloth ban'r tel pole	38 08	1072.2 (777.7)	122 52	788.3 (673.0)

PLANE TABLE POSITIONS : (cont.)

SHEET B (cont.) 4638

Name & Description	LAT.	D.M.	LONG.	D.P.
BOT w.w. on shack	38 08	930.8 (919.1)	122 52	638.4 (822.9)
CAD w.w. rock	38 08	830.0 (1019.9)	122 52	423.5 (1037.8)
DIP w.w. pole	38 08	677.1 (1172.8)	122 52	364.0 (1097.3)
EG w.w. rock	38 08	466.7 (1383.2)	122 52	439.1 (1022.2)
FOE w.w. pole	38 08	259.8 (1590.1)	122 52	323.6 (1137.7)
GOT w.w. rock	38 08	40.0 (1809.9)	122 52	303.5 (1157.8)
HUP w.w. rock	38 07	1745.9 (104.0)	122 52	191.1 (1270.2)
INK w.w. rock	38 07	1520.1 (329.8)	122 51	1459.9 (1.7)
JEB w.w. pole	38 07	1467.6 (382.3)	122 51	1337.7 (123.9)
KIP w.w. pole	38 07	1361.7 (488.2)	122 51	1172.4 (289.2)
LOW w.w. pole	38 07	1209.2 (640.7)	122 51	1054.7 (406.9)
MOB w.w. pole	38 07	1010.0 (839.9)	122 51	1035.9 (425.7)
NEB w.w. on breakwtr.	38 07	800.5 (1049.4)	122 51	1040.5 (421.1)
OZ w.w. on breakwtr.	38 07	736.5 (1113.4)	122 51	1065.8 (395.8)
PEG w.w. on bluff	38 07	512.0 (1337.9)	122 51	1179.6 (282.0)
RAG target	38 07	420.9 (1429.0)	122 51	1224.8 (236.8)
SIB w.w. log	38 07	247.5 (1602.4)	122 51	1093.4 (368.2)
TAM w.w. on shack	38 07	81.9 (1768.0)	122 51	774.0 (687.6)
VIC w.w. log	38 07	29.3 (1820.6)	122 51	484.7 (976.9)
UNO w.w. box	38 06	1809.0 (40.9)	122 51	698.6 (763.3)
WET chim. on yellow ho.	38 06	1791.3 (58.6)	122 51	258.4 (1203.5)
APE w.w. tel. pole	38 06	1731.9 (118.0)	122 51	129.3 (1332.6)
BUN w.w. tel. pole	38 06	1575.0 (274.9)	122 51	2.1 (1459.8)
CUR w.w. stakes	38 06	1459.3 (390.6)	122 50	1452.7 (9.2)
DID ban'r on tree	38 06	1244.7 (605.2)	122 51	81.7 (1380.2)
EDNA target	38 06	931.5 (918.4)	122 51	104.2 (1357.7)

PLANE TABLE POSITIONS : (cont.)

SHEET B (cont.) 4638

Name & Description	LAT.	D.M.	LONG.	D.P.
FAN red chimney	38 06	827.6 (1022.3)	122 50	1154.8 (307.1)
GIN w.w. fence post	38 06	909.0 (940.9)	122 50	909.0 (552.9)
HUT w.w. tel. pole	38 06	875.5 (974.4)	122 50	698.6 (763.3)
IKE w.w. tel. pole	38 06	686.1 (1163.8)	122 50	591.5 (870.4)
KIS w.w. rock	38 06	572.4 (1277.5)	122 50	540.0 (921.9)
LEO w.w. pole	38 06	343.2 (1506.7)	122 50	343.2 (1118.7)
MUD w.w. pole	38 06	168.8 (1681.1)	122 50	240.2 (1221.7)
NES w.w. pole	38 06	29.3 (1820.6)	122 50	105.2 (1356.7)
ON w.w. pole	38 05	1742.8 (107.1)	122 49	1421.6 (40.7)
PIN w.w. pole	38 05	1609.4 (240.5)	122 49	1292.3 (170.0)
BY cupola of house	38 05	997.5 (852.4)	122 49	801.0 (661.3)
RAIL target	38 04	1702.0 (147.9)	122 49	659.2 (803.4)
TANK black water tank	38 04	609.9 (1240.0)	122 48	292.0 (1170.6)
POST target	38 03	1492.9 (357.0)	122 48	1032.9 (430.0)
HI target	38 03	208.3 (1641.6)	122 49	1031.7 (431.2)
HAM w.w. pole	38 04	1063.5 (786.4)	122 49	1137.2 (324.4)
SHACK w.w. shack	38 04	1843.7 (6.2)	122 50	146.5 (1315.1)
TUM stump	38 05	1121.4 (728.5)	122 50	797.3 (665.0)
JOY w.w. tel. pole	38 05	904.0 (945.9)	122 50	995.8 (466.5)
LMP w.w. tel. pole	38 05	1106.9 (743.0)	122 50	1114.9 (347.4)
HEN gable of black ho.	38 05	1174.4 (675.5)	122 50	1207.3 (255.0)
GUS w.w. on fence	38 05	1248.3 (601.6)	122 50	1304.4 (157.9)
FID w.w. tel. pole	38 05	1313.5 (536.4)	122 50	1373.2 (89.1)
ETA w.w. tel. pole	38 05	1415.2 (434.7)	122 51	27.3 (1435.0)
DAN signboard	38 05	1600.4 (249.5)	122 51	116.0 (1346.3)
CAL w.w. tel. pole	38 05	1749.5 (100.4)	122 51	200.0 (1262.3)

PLANE TABLE POSITIONS : (cont.)

SHEET B (cont.) 4638

Name & Description	LAT.	D.M.	LONG.	D.P.
BAN w.w. end of dock	38 06	212.3 (1637.6)	122 51	254.5 (1207.5)
ASA w.w. on shack	38 06	205.0 (1644.9)	122 51	455.8 (1006.1)
YA flag pole on yt.cb.	38 06	395.2 (1454.7)	122 51	578.1 (883.8)
YEG w.w. pile of rocks	38 06	591.0 (1258.9)	122 51	837.3 (624.6)
WAS w.w. stump	38 06	707.5 (1142.4)	122 51	951.9 (510.0)
VIX w.w. tel. pole	38 06	815.7 (1034.2)	122 51	1062.7 (399.2)
UM w.w. tel. pole	38 06	979.0 (870.9)	122 51	1177.3 (284.6)
TAG w.w. tel. pole	38 06	1073.8 (776.1)	122 51	1275.7 (186.2)
SOT pole on end dock	38 06	1238.2 (611.7)	122 51	1275.1 (186.8)
RAM w.w. rock	38 06	1293.3 (556.6)	122 51	1333.2 (128.7)
PAT w.w. rock	38 06	1376.7 (473.3)	122 51	1435.9 (26.0)
ORT w.w. tree	38 06	1438.5 (411.4)	122 52	84.8 (1376.8)
NUM w.w. rock	38 06	1489.9 (360.0)	122 52	123.9 (1338.0)
MAL w.w. rock	38 06	1665.4 (184.5)	122 52	202.1 (1259.8)
LES w.w. stump	38 06	1722.3 (127.6)	122 52	298.4 (1163.5)
KIM w.w. rock	38 06	1769.2 (80.7)	122 52	307.0 (1154.9)
JO w.w. rock	38 06	1839.6 (10.3)	122 52	370.0 (1091.9)
IS w.w. log	38 07	8.5 (1841.4)	122 52	554.0 (907.6)
HER w.w. rock	38 07	88.1 (1761.8)-	122 52	555.9 (905.7)
GAS w.w. rock	38 07	193.1 (1656.8)	122 52	626.2 (835.4)
PAG w.w. on rock	38 07	266.8 (1583.1)	122 52	668.2 (793.4)
EMA w.w. on rock	38 07	366.1 (1483.8)	122 52	774.1 (1075.8)
DOG w.w. on rock	38 07	426.5 (1423.4)	122 52	832.3 (629.3)
CAN w.w. on rock	38 07	432.9 (1417.0)	122 52	880.6 (581.0)
BUT w.w. on rock	38 07	609.1 (1240.8)	122 52	985.4 (476.2)
ABE w.w. on rock	38 07	690.0 (1159.9)	122 52	1060.9 (400.7)

PLANE TABLE POSITIONS : (cont.)

SHEET B (cont.) 4638

Name & Description	LAT.	D.M.	LONG.	D.P.
YID w.w. on rock	38 07	952.7 (897.2)	122 52	1313.6 (148.0)
WAM w.w. on rock	38 07	1026.9 (823.0)	122 52	1358.2 (103.4)
VEX w.w. on rock	38 07	1095.2 (754.7)	122 52	1367.5 (94.1)
UN w.w. on rock	38 07	1163.3 (686.6)	122 52	1417.1 (44.5)
TAB w.w. on rock	38 07	1185.2 (664.7)	122 53	13.4 (1448.2)
SIT w.w. on rock	38 07	1223.7 (626.2)	122 53	178.5 (1283.1)
ROT cloth banner	38 07	1287.4 (562.5)	122 53	207.3 (1254.3)
PUG w.w. pole	38 07	1349.9 (500.0)	122 53	274.0 (1187.6)
OUT cloth target	38 07	1522.9 (327.4)	122 53	268.0 (1193.6)
NO w.w. on rock	38 07	1755.6 (94.3)	122 53	456.2 (1005.4)
MY w.w. on rock	38 07	1808.7 (41.2)	122 53	515.6 (946.0)
LIP w.w. on rock	38 07	1789.9 (60.0)	122 53	706.8 (754.8)
KUM w.w. on rock	38 08	50.6 (1799.3)	122 53	876.7 (584.6)
JET cloth ban'r on tree	38 08	225.6 (1624.3)	122 53	960.5 (500.8)
ISM w.w. on rock	38 08	316.7 (1533.2)	122 53	993.1 (468.2)
HUN cloth target	38 08	474.1 (1375.8)	122 53	1114.0 (347.3)
GAB cloth target	38 08	653.9 (1196.0)	122 53	1016.1 (445.2)
FIG w.w. on rock	38 08	835.8 (1014.1)	122 53	1096.3 (365.0)
EZ corn. crossing sign	38 08	939.7 (910.2)	122 53	1245.1 (216.2)
DOT w.w. on rock	38 08	1085.1 (764.8)	122 53	1351.3 (110.0)
CAP w.w. on rock	38 08	1126.5 (723.4)	122 53	1441.0 (20.3)
BIG pole and banner	38 08	1157.6 (692.3)	122 54	60.8 (1400.5)
AX w.w. on rock	38 08	1261.0 (588.9)	122 54	44.6 (1461.7)
WOP w.w. on rock	38 08	1387.6 (462.3)	122 54	189.5 (1271.8)
*YET cloth ban. on tree	38 08	1475.7 (374.2)	122 54	292.5 (1168.8)

PLANE TABLE POSITIONS : (cont.)

SHEET B (cont.) 4638

Name & Description	LAT.	D.M.	LONG.	D.P.
UTE w.w. on rock	38 08	1604.9 (245.0)	122 54	259.8 (1201.5)
TOT w.w. endflag	38 08	1821.1 (28.8)	122 54	278.0 (1183.3)
SOB w.w. on rock	38 09	162.8 (1687.1)	122 54	449.0 (1021.9)
WAP w.w. on rock	38 05	1286.7 (563.2)	122 49	1078.3 (383.3)

PLANE TABLE POSITIONS

Project No. 20.

Sheet C 4639

L. C. Johnson, Chief of Party.

Name & Description	LAT.	D.M.	LONG.	D.P.
GOO w.w. pk rocky pt.	38 10	1830.4 (19.5)	122 58	20.0 (1440.6)
HAD target	38 10	1800.2 (49.8)	122 57	1110.1 (350.5)
JO target	38 10	1560.5 (289.5)	122 57	706.2 (754.4)
KIS target	38 10	1304.2 (545.8)	122 57	316.3 (1144.3)
MY w.w. on ridge	38 10	472.5 (1377.5)	122 57	181.1 (1279.5)
ON w.w. rock	38 10	24.6 (1825.4)	122 57	77.0 (1383.6)
PEN w.w. on bluff	38 09	1745.7 (104.3)	122 57	9.3 (1451.6)
RIP w.w. on bluff	38 09	1487.0 (363.0)	122 56	1333.7 (127.2)
SAL w.w. on rock	38 09	1311.3 (539.7)	122 56	1350.9 (110.0)
TIM w.w. on rock	38 09	1221.0 (629.0)	122 56	1333.5 (127.4)
WEB target	38 09	988.2 (861.8)	122 56	953.2 (507.7)
US w.w. on bluff	38 09	949.3 (900.7)	122 56	1340.7 (120.2)
VIM w.w. on bluff	38 09	881.6 (968.4)	122 56	1320.3 (140.6)
YID target & tripod	38 09	447.1 (1402.9)	122 56	1236.0 (224.9)
ZIG target & tripod	38 08	1809.7 (40.2)	122 56	1303.5 (157.8)
AMY target & tripod	38 08	1191.7 (658.2)	122 56	1404.3 (57.0)
BET target & tripod	38 08	576.5 (1273.4)	122 57	^{44.3 (1417.0)} 137.3 (1324.3)
CAL target & tripod	38 07	1848.4 (1.5)	122 57	137.3 (1324.3)
DON target & tripod	38 07	1392.8 (457.1)	122 57	328.4 (1133.2)
EBA target & tripod	38 07	948.6 (901.3)	122 57	365.9 (1095.7)
FAY target & tripod	38 07	450.5 (1399.4)	122 57	517.5 (944.1)
GIB target & tripod	38 07	21.5 (1828.4)	122 57	628.8 (832.8)

PLANE TABLE POSITIONS : (cont.)

SHEET C (cont.) 4639

Name & Description	LAT.	D.M.	LONG.	D.P.
HAM target on wreck	38 06	1512.6 (337.3)	122 57	829.2 (632.7)
IKE target & tripod	38 06	1033.5 (816.4)	122 57	948.6 (513.3)
JAN target & tripod	38 06	617.3 (1232.6)	122 57	1070.1 (391.8)
KEN target & tripod	38 06	83.4 (1766.5)	122 57	1269.2 (192.7)
LEN target & tripod	38 05	⁴ 1551.9 (398.0)	122 57	1422.3 (40.0)
MAT target & tripod	38 05	993.2 (856.7)	122 58	124.6 (1337.7)
NED target & tripod	38 05	517.9 (1332.0)	122 58	288.2 (1174.1)
ORB target & tripod	38 05	66.4 (1773.5)	122 58	434.8 (1027.5)
PET target & tripod	38 04	1452.0 (397.9)	122 58	598.7 (863.9)
REG target & tripod	38 04	1101.2 (748.7)	122 58	741.4 (721.2)
SOL target & tripod	38 04	681.4 (1168.5)	122 58	867.6 (595.0)
TOM target & tripod	38 04	261.4 (1588.5)	122 58	1022.0 (440.6)
VAP target & tripod	38 03	1614.6 (235.3)	122 58	1197.2 (265.7)
WED target & tripod	38 03	1210.8 (739.1)	122 58	1372.6 (90.3)
ACE w.w. on shack	38 03	878.2 (971.7)	122 59	3.7 (1459.2)
BAN w.w. tar. tri. fen.	38 03	351.7 (1498.2)	122 59	202.0 (1260.9)
CUP w.w. target & tri.	38 02	1748.3 (101.6)	122 59	377.1 (1086.1)
DIG w.w. tar. & tripod	38 02	1289.7 (560.2)	122 59	557.5 (905.7)
ELA w.w. tar. & tripod	38 02	857.2 (992.7)	122 59	722.1 (741.1)
TAN high wh. tank	38 02	^{255-0 (27 datum)} 289.6 (1560.3)	122 59	^{691.9 (27 datum)} 722.6 (740.6)
RED red cup. on boat ho	38 02	276.2 (1573.7)	122 59	905.1 (558.1)
FOB w.w. tri & tar	38 01	1819.3 (30.6)	122 59	998.9 (464.7)
GUS w.w. tar. & tripod	38 01	1455.5 (394.4)	122 59	1200.0 (263.6)
HIT w.w. tar. & tripod	38 01	1071.5 (778.4)	122 59	1351.4 (112.2)
ISM w.w. tar. & tripod	38 01	612.5 (1237.4)	123 00	73.6 (1390.0)
JEF w.w. tar. & tripod	38 01	240.2 (1609.7)	123 00	210.0 (1253.6)

PLANE TABLE POSITIONS : (cont.)

SHEET C (cont.) 4639

Name & Description	LAT.	D.M.	LONG.	D.P.
KEG w.w. tar. & tripod	38 00	1569.9 (280.0)	123 00	419.0 (1044.9)
LIP w.w. tar. & tripod	38 00	1173.7 (676.2)	123 00	580.3 (883.6)
MEK w.w. tar. & tripod	38 00	829.1 (1020.8)	123 00	722.4 (741.5)
NAG w.w. tar. & tripod	38 00	389.8 (1460.1)	123 00	909.9 (554.0)
OUT w.w. at end beach	38 00	138.4 (1711.5)	123 00	1078.6 (385.3)
PAT sharp pin. rk.	38 00	172.1 (1677.8)	123 00	1244.7 (219.2)
TUD w.w. rk. on bluff	37 59	1837.9 (12.0)	123 01	218.7 (1245.2)
REP rock	38 00	49.9 (1800.0)	123 01	372.2 (1091.8)
SAP peak of W. rock	37 59	1753.6 (96.3)	123 01	460.1 (1004.1)

BEACH - ON BODEGA HEAD

Stations located by plane table to replace stations on sheet D, 1930.

ART w.w. tar. & tripod	38 20	1819 (31)	123 04	06 (1451)
JUNK w.w. tripod	38 20	1524 (326)	123 04	14 (1443)
SEM w.w. pole & target	38 20	1125 (725)	123 04	10 (1447)
HEX w.w. pole & target	38 20	105 (1745)	123 04	80 (1377)

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REG. NO.

4637

TOPOGRAPHIC TITLE SHEET

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

Field Letter AREGISTER NO. 4637State CaliforniaGeneral locality Northern Coast CaliforniaLocality Tomales Bluff to Marshall
~~Tomales Point and Northern End of Tomales Bay~~Scale 1 - 10000 Date of survey June - November, 19 31Vessel Shore Party, Northern Coast CaliforniaChief of Party L.C. JohnsonSurveyed by Karl B. JeffersInked by Karl B. JeffersHeights in feet above M.H.W. to ground ~~XXXXXXXXXXXX~~

Contour Approximate contour Form line interval _____ feet

Instructions dated April 29, 1930.Remarks: This Sheet joins Sheet No. 4597

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

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REG. NO.

4638

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

Field Letter B

REGISTER NO. 4638

State California

General locality Northern Coast ~~California~~

Portion
Locality Southern ~~End~~ of Tomales Bay

Scale 1 - 10000 Date of survey July - November, 1931

Vessel Shore Party, Northern Coast California

Chief of Party L.C. Johnson

Surveyed by Karl B. Jeffers

Inked by Karl B. Jeffers

Heights in feet above M.H.W. to ground ~~tops of trees~~

Contour Approximate contour Form line interval _____ feet

Instructions dated April 29, 19 30

Remarks: _____

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

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FEB 19 1932

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REG. NO.

4639

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

Field Letter C

REGISTER NO. **4639**

State California

General locality Northern Coast California

Locality Point Reyes to ~~Pomales Point~~ Abbott's Lagoon

Scale 1 - 20000 Date of survey Sept. - Nov., 1931

Vessel Shore Party, Northern Coast California

Chief of Party L.C. Johnson

Surveyed by Karl B. Jeffers

Inked by Karl B. Jeffers

Heights in feet above M.H.W. to ground ~~xxxxxxx~~

Contour Approximate contour Form line interval _____ feet

Instructions dated April 29, 1930.

Remarks: This sheet joins Sheet No. 4495

For later description of coast see descriptive reports of control sheets accompanying H-6250 (1937) W.D. and H-6289 (1937) W.D.