

T-12441

T 12441

12441

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Topographic
Project	
Field No. 21425	Office No. T-12441
LOCALITY	
State	California
General locality	Santa Cruz County
Locality	(Castle Rock Observatory) North of San Lorenzo Park
on the San Lorenzo River	
1964	
CHIEF OF PARTY	
J. E. Waugh	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

T-12441

PROJECT NO. (II):			
21425			
FIELD OFFICE (II):		CHIEF OF PARTY	
Portland, Oregon		R. B. Melby	
PHOTOGRAMMETRIC OFFICE (III):		OFFICER-IN-CHARGE	
Washington, D. C.		J. E. Waugh	
INSTRUCTIONS DATED (II) (III):			
November 30, 1964 (Field)			
April 12, 1965 (Office)			
METHOD OF COMPILATION (III):			
Wild B-8 Aviograph Stereoplotter			
MANUSCRIPT SCALE (III):		STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):	
1:2,400		1:4,800 and 1:6,000	
DATE RECEIVED IN WASHINGTON OFFICE (IV):		DATE REPORTED TO NAUTICAL CHART BRANCH (IV):	
APPLIED TO CHART NO.		DATE:	DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III):		VERTICAL DATUM (III):	
NA 1927		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):			
Castle Rock, 1964			
LAT.:	LONG.:	<input type="checkbox"/> ADJUSTED <input checked="" type="checkbox"/> UNADJUSTED	
37°14'26.7620"	122°07'44.9568"		
PLANE COORDINATES (IV):		STATE	ZONE
y = 273, 842.69 x = 1,525, 765.49		California	3
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.			

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (III): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): None		
PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree		DATE May 3, 1965
PROJECTION AND GRIDS CHECKED BY (IV): R. Glaser		DATE May 4, 1965
CONTROL PLOTTED BY (III): E. L. Rolle		DATE May 5, 1965
CONTROL CHECKED BY (III): R. Sugden		DATE May 5, 1965
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): None		DATE
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY E. L. Rolle	DATE June 9, 1965
	CONTOURS E. L. Rolle	DATE June 9, 1965
MANUSCRIPT DELINEATED BY (III): E. L. Rolle		DATE June 11, 1965
SCRIBING BY (III): Roseanne Carter		DATE June 17, 1965
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): K. L. Maki		DATE June 18, 1965
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

RC-8

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64-S(c)-401 thru 403	April 7, 1964	11:30	1:9,600	

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION:			
SUBORDINATE STATION:			
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

DATE:

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 10

RECOVERED:
10

IDENTIFIED: 4

NUMBER OF BM(S) SEARCHED FOR (III):

RECOVERED:
1

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): None

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): None

REMARKS:

UNITED STATES GOVERNMENT

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

TO : San Francisco Regional Officer

DATE: November 30, 1963

In reply refer to: 6314

FROM : Acting Director

SUBJECT: Horizontal and vertical control, Project 21425; Castle Rock-
Varian Magnetic Observatory

Field identification of horizontal and vertical control is needed for preparation of a large scale topographic map of the vicinity of subject observatory. Please arrange for the necessary field work to be accomplished while the Portland Photogrammetric Field Unit is in the San Francisco area for work on Project 21418. Color contact prints 64-S-401 through 64-S-403 are being forwarded under separate cover for this field work.

Field identification should conform with the requirements of Photogrammetry Instructions 22, Revised November 1, 1959. Two substitute stations are to be identified within the limits of each green-wax-pencil triangle shown on the color prints. An elevation shall be determined in each model point as indicated on the photographs by green-wax-pencil squares.

The accuracy of horizontal control shall not be less than three-order; the accuracy of vertical control shall be one foot.


James C. Tison, Jr.cc:
SRO
SRAO
PFO
6314
6320

FIELD REPORT

PROJECT 21,425

CASTLE ROCK - VARIAN MAGNETIC OBSERVATORY, CALIFORNIA

HORIZONTAL AND VERTICAL CONTROL

REF: MEMO TO SAN FRANCISCO REGIONAL OFFICER
FROM ACTING DIRECTOR; DATED 30 Nov. 1964

HORIZONTAL CONTROL WAS ESTABLISHED BY TRIANGULATION METHODS. IN ADDITION TO THE THREE REQUIRED HORIZONTAL CONTROL STATIONS, ONE ADDITIONAL STATION, NECESSARY TO CARRY THE CONTROL SCHEME, WAS ALSO PHOTO-IDENTIFIED.

VERTICAL CONTROL WAS ESTABLISHED BY OBSERVING RECIPROCAL, VERTICAL ANGLES DURING THE OCCUPATION OF THE HORIZONTAL STATIONS. THE ELEVATIONS OF THE REQUIRED PHOTO-VERTICAL POINTS WERE THEN DETERMINED BY CLOSED-LOOP TRIGONOMETRIC LEVELING METHODS.

APPROVED:

for Leo F. Beaguit
P. A. STARK, CDR, C&GS
PORTLAND FIELD OFFICER

SUBMITTED BY:

R.B. Melby
R. B. MELBY, UNIT CHIEF
SURVEY TECHNICIAN

FIELD REPORT

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APPROVED:

SUBMITTED BY:

**P. A. STARK, CDR, C&GS
PORTLAND FIELD OFFICER**

**R. B. MELBY, UNIT CHIEF
SURVEY TECHNICIAN**

Project 21425

- INSTRUCTIONS -

Chief, Photogrammetric Branch

April 12, 1965

6320

Chief, Photogrammetry Division

Compilation of Topographic Map of Castle Rock Observatory
Site PROJECT 21425

Compile a topographic map of the Castle Rock Observatory site at a scale of 1:2400 with a ~~5'~~^{10'} contour interval using 1:9600 scale "S" camera color photography on the Wild B-8 plotter.

Two models, 64-S-401 through 403, will be needed to cover the area. Limit compilation to the area as outlined on a color print mosaic which will be furnished.

Control, both horizontal and vertical, will be furnished.

No bridging is required. Sufficient control has been furnished for model orientation.

Delineate all planimetry and woodland. After B-8 plotter work is complete all detail shall be scribed. The map size will be approximately 16" x 20".

Order type as needed for a title block, interior notes, and marginal information.

After scribing and stick-up work is complete, process two .007 cronaflex positives, a negative and 24 double-weight ozalid copies.

A short report describing all phases of the compilation shall be compiled for our files.

(Signed) M. E. Natto

For J. E. Waugh

Compilation Report T-12441

31. Delineation

The Wild B-8 Aviograph Stereoplotter was used to compile the planimetry and the contours.

Because of the large vertical difference in stereo model 64-S(c)-402 and 403, two model scales were used. The area of the stereo model above the 1500 foot contour was compiled at a scale of 1:4,800 and the area below the 1,500 foot contour at a scale of 1:6,000.

The road east of VP-4 could not be compiled due to the heavy timber in the immediate area.

32. Control

The identification, density and placement of the horizontal control was adequate.

The density and identification of the vertical control was adequate. The placement of the vertical control was adequate with the exception of the area in the vicinity of VP-4. This elevation was difficult to take a reading on in model 64-S(c)-402 and 403. It is obvious that timber and heavy brush restricted the placement of this elevation to better advantage within the model overlap area.

33. Supplemental Data

Inapplicable

34. Contours and Drainage

The quality of the photographs and the photographic plates used on the stereo instrument were good.

Approximately 65% of the contoured area is covered by trees with heights ranging from 40 feet up to 150 feet. The remaining 35% of the area is covered by heavy brush. In the areas of timber, the contouring was difficult and the positions of contours could be considered questionable.

35 through 39

Inapplicable

40. Horizontal and Vertical Accuracy

Refer to paragraph 34

Trees ranging in heights from 40 feet up to 60 feet cover approximately 45% of the contoured area. In these areas, the accuracy is believed to be within one contour interval.

Trees with heights ranging between 60 feet and 150 feet cover approximately 20% of the area contoured. The contours in these areas could be out of position by as much as two contour intervals.

Heavy brush covers the remaining 35% of the area. The contours in these areas are believed to comply with the National Standards of Map Accuracy.

41 through 45

Inapplicable

46. Comparison with Existing Maps

USGS quadrangle of Big Basin, California; scale 1:24,000 and date of edition 1955.

USGS quadrangle of Castle Rock Ridge, California; scale 1:24,000 and date of edition 1955.

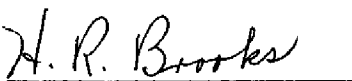
47. Comparison with Nautical Charts

Inapplicable

Respectfully submitted by:


E. L. Rolle
Cartographer

Approved by:


H. R. Brooks
Chief, Chart Maintenance Section

48. Geographic Name List