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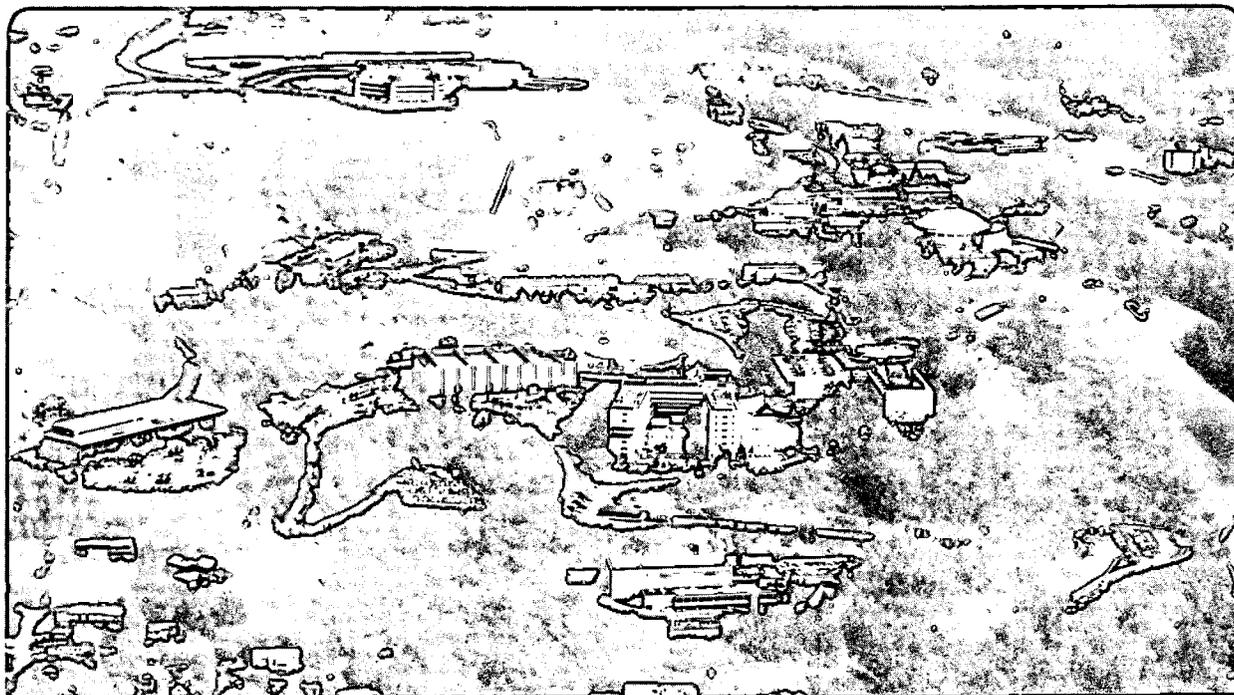
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ENGINEERING NOTE		PE01-07	M4881	1 of 2
AUTHOR	DEPARTMENT	LOCATION	DATE	
Jack Gunn	Mechanical Engineering	Berkeley	December 2, 1975	
PROGRAM - PROJECT - JOB				
PEP - INITIAL DESIGN				
ROUGH ALIGNMENT PROCEDURES				
TITLE				
REQUIRED STEPS FOR VARIOUS METHODS <i>JG</i>				
<p>Assumes:</p> <p style="padding-left: 40px;">Instrument Stations (I.S.) are already established. Magnets have been placed by others on stands to tolerances of ± 3 inches.</p> <p>Cases 2 and 4 (lasers, conventional supports, step or continuous adjustments).</p> <p>Major Step R-1 (adjust elevations with laser level)</p> <ol style="list-style-type: none"> a. Set up laser level. b. Attach servo rod to hook gage and backsight. c. Attach servo rods to tooling points and foresight. d. Adjust elevation adjustments. e. Repeat R-1 a thru d for each magnet. <p>Major Step R-2 (adjust downbeam and radial position of first magnet adjacent to I.S.)</p> <ol style="list-style-type: none"> a. Set up Plumb bob over I.S. b. Use pocket tape to measure distance from Plumb bob string to tooling point on magnet. c. Set up laser level on its side to generate vertical plane thru two I.S. d. Use servo rod to measure radial offsets of tooling points. e. Adjust radial position. f. Adjust downbeam position. <p>Major Step R-3 (adjust radial and downbeam position of second magnet)</p> <ol style="list-style-type: none"> a. Measure between tooling points of adjacent magnets using pocket tape. b. Same as R-2 d. c. Same as R-2 e and R-2 f. <p>Major Step R-4 (radial and downbeam of subsequent magnets)</p> <ol style="list-style-type: none"> a. Repeat R-3 for each magnet. <p>Case 3 (optical tooling, conventional support, step adjustment).</p> <p style="padding-left: 40px;">Same as cases 2 and 4 except:</p> <p style="padding-left: 40px;">Step R-1 a. use optical level. Step R-2 c. use jig transit.</p>				

ENGINEERING NOTE

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PAGE

2 OF 2

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Jack Gunn

DEPARTMENT

Mechanical Engineering

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Case 5 (optical tooling, 3 point support, step adjustment).

Same as case 3 except:

Add calculation for required adjustment after step R-2 d.

Case 6 (lasers, 3 point support, step adjustment)

Same as case 4 except:

Add calculation for required adjustment after Step R-2 d.

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