3. Check and record weight, braking surface smoothness (Profilometer reading) and general condition of drum. Check and record drum diameter in two places one inch from the open end, 90° apart, and six inches from the open end, 90° apart, for a total of four readings. If runout is more than .010, total indicator reading, attempt to adjust the condition by shifting drum around on its mounting bolts in combination with shifting of drum adaptor on its bolts if necessary. If runout condition cannot be corrected in this manner, drum is to be discarded or ground to secure concentricity. If taper is more than .005 across the braking surface, drum is to be discarded or ground.

4. THERMOCOUPLES FOR TEMPERATURE WORK ARE TO BE INSTALLED AS FOLLOWS:

   Number 1 - In drum ring midway of braking surface and .090" from rubbing surface.

   Number 2 - In brake lining at maximum pressure point recessed .040".

5. Take feeler gauge readings at cam end, center and anchor end of shoe.

6. Take initial lining measurements and feeler gauge readings.

7. Adjustments - Slack adjuster stroke should be as short as possible without the brakes dragging (approximately 3/4" at 20 psi). In the off position with the brake at rest, a .010 feeler gauge should pass between the rubbing surfaces. Record slack adjuster stroke before adjustment and after adjustment (measure at the clevis pin). Check the adjustment periodically throughout the test and maintain the above specifications.

PROCEDURE

Brake cooling - Air at ambient temperature is directed uniformly and continuously over the brake drum at a velocity of 2,200 feet per minute. Fan on throughout the entire test except during static break-away tests.

1. Measurement - Measure, weight and record drum dimensions. Adjust shoe clearance to .010" at center of shoes.

III. FIRST STATIC BREAK-AWAY TEST

1. Install a large lever arm to dynamometer flywheel.

2. Apply air pressure to brake in 10 PSI increments from 20 to 100 psi.

3. While the proper line pressure is on move the arm by means of a chain hoist or hydraulic ram until peak torque at that pressure is obtained. Repeat until all line pressures have been run.