

WHITMORE ENTERPRISES

DESIGNING AND MANUFACTURING

BLOOD PRESSURE MONITORING & RECORDING DEVICES • HYPOBARIC & HYPERBARIC CHAMBER CONTROLS
RESEARCH TREADMILLS, ERGOMETERS, & HUMAN BODY VOLUMETERS
AND SPECIALIZED MEDICAL & AEROSPACE RESEARCH DEVICES

RT. 5 BOX 369

SAN ANTONIO, TEXAS 78211

Henry B. Whitmore
(512) 624 - 2121
or 532 - 3344

18 March 1976
Report, Monthly Progress
Contract No. NAS 9-14858
Development of Treadmill

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During this reporting period some additional tests were run on Prototype No. 2 to determine the best mounting position and location to assure the minimum slippage between the treads and the constant speed device. This was accomplished by re-designing the mounting bracket, so that less contact force would be generated when the braking requirement is low and automatically the contact force would be increased when the braking demand is greater.

The speedometer configuration was also modified and a new system incorporated and tested on Prototype No. 2. The speedometer formerly was driven thru the constant speed device in turn slippage developed in the constant speed device would generate an error in the speedometer. The new configuration separates the speedometer drive from the constant speed device drive. In doing this eliminates the possible slippage in the speedometer and assures a more accurate read-out, plus providing a means to monitor any error or variation in the constant speed device. The speedometer instrument itself was also relocated and modified to give a wider range with a more readable presentation.

The information gathered in these two modifications and tests will be valuable in determining the configuration of these two instruments in the flight Prototype.

A number of the light weight tread links were fitted with hinge pins and shafts with bushings and spacer assemblies and were tested during this reporting period to determine if any design changes were necessary before fabricating additional components. Preliminary tests proved these components to be satisfactory.

In summary we feel that we have over come some of the difficult phases of this development and are satisfied with the progress made during this reporting period.