WHITMORE INTERPRISES

DESIGNING AND UFACTURING

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

17 August 1977
Monthly Progress Report
Contract No. NAS 9-14858
Development of Treadmill

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

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

RT. 5 BOX 369

SAN ANTONIO, TEXAS 78211

17 August 1977
Monthly Progress Report
Contract No. NAS 9-14858
Development of Treadmill

During this reporting period we have installed the hydraulic speed control in Prototype No. 2 and began testing. Our preliminary findings are as follows:

- 1) The hydraulic speed control compared to the previous used centrifugal mechanical type, increased the weight of Prototype No. 2 by 17 (seventeen) pounds.
- 2) Preliminary tests proved even with the additional inertia of the pulleys in the drive train, the hydraulic unit needed a larger fly wheel to dampen the pulsen action of a subject running or walking on the treadmill.
- 3) With the additional inertia the hydraulic speed control may be comparable to the centrifugal type previously used in regards to reducing the pulsing action.

We made some needed changes on the speed control linkage to give a finer control and speed changes. Tests are now being made to see how this unit compares to previous unit in this aspect.

We submitted a modification proposal on 11 July 1977 stating the design changes needed to complete Flight Prototype Treadmill listed in MODIFICATION PROPOSAL 9-BC-73-27-7-129P. Previous work accomplished under Contract No. NAS 9-14858.