

AUG 5 1987

Mr. Henry B. Whitmore Whitmore Enterprises Rt. 5, Box 369 San Antonio, TX 78221

**Technology** Life Sciences Division P.O. Box 58827 Houston, Texas 77258

713-488-5970 Telex: 9103807625 Dear Mr. Whitmore:

Your proposal for modification to the Second Generation Treadmill (SGT) has been referred to this office for incorporation into the existing contract (P.O.#HO3-08). The modifications as detailed in the proposal include the following: (1) Modification of the side panels of the treadmill with provisions for mounting eight (8) load cells, and (2) Fabrication of linen filled phenolic wheels to be used as replacement for the original rubber wheels. It is also our understanding that you will, at no additional cost, reconfigure the SGT with the phenolic wheels.

This modification will be funded at \$15,000, with the first \$10,000 payable upon delivery of the treadmill as specified in the original contract. Your final invoice for the original contract may include the first payment of the modification; however, this should be clearly indicated on the invoice. The final \$5,000 will be payable upon completion of the modification (installation of the phenolic wheels). This does not constitute, nor is it authority for, extension of the original delivery date of November 5, 1987. Performance of this modification to the contract will be in accordance with your proposal dated June 5, 1987, and as specified below.

The Second Generation Treadmill will be delivered initially, as stipulated in the original contract, to Johnson Space Center, Houston, Texas, with rubber wheels installed. The phenolic wheels will be manufactured and retained in your facility in San Antonio while the SGT is undergoing study and initial evaluation at the Johnson Space Center. Upon completion of initial evaluation at the Johnson Space Center, (approximately 60 days) the SGT will be returned to your San Antonio facility, at government expense, whereupon the rubber wheels will be replaced with the phenolic wheels. Arrangements for return of the SGT to your facility will be coordinated in advance by the

TRCO. Installation of the new phenolic wheels will be accomplished within thirty (30) days of receipt of the SGT in your facility.

Upon replacement of the rubber wheels with phenolic wheels, the rubber wheels will be returned to the Medical Operations Branch at the Johnson Space Center and the modified SGT will be shipped at government expense to Penn State University, University Park, Pennsylvania, for further evaluation an experimentation. Detailed instructions for this shipment will be provided by this office when the SGT is returned to Whitmore Enterprises for installation of the phenolic wheels.

You are again reminded that your contract is with KRUG International, not with NASA. All correspondence concerning the contract should be addressed accordingly, and the TRCO or ACO should be involved in all proposed changes, revisions, or modifications.

If you agree with these stipulations, please sign the acceptance below and return the original of this document in the enclosed, self-addressed envelope.

Sincerely,

Robert M. Ellis

Manager, Houston Operations

JRW/hmq

Enclosure: Proposal

Accepted: 15/ Herry whitmore Date: 3/9/87

## PROPOSAL FOR SECOND GENERATION TREATMILL ADD ON

DESIGNED BY;

Henry B. Whitmore
President, Whitmore Enterprises, Inc.
Route 5, Box 369
San Antonio, Texas 78221
(512) 624-2121

Date: June 5, 1987

## WHITMORE ENTERPRISES, INC.

Designing and Manufacturing

Specialized Equipment in Support of NASA Space Program

Hypobaric & Hyperbaric Chamber Controls Research Treadmills, Ergometers
Human Body Volumeters

Specialized Medical & Aerospace Research Devices

Henry B. Whitmore

Route 5, Box 369 San Antonio, Texas 78211

(512) 624-2121

June 5, 1987

The information and concept disclosed in this and all of our proposals is to be treated as confidential and proprietary information for our use and to be used in a contract or purchase order with Whitmore Enterprises, Inc. only. This material is to convey our thoughts and approach to specific problems and not be used by NASA and/or other contractors.

This proposal is for an "add on" to the Second Generation Treadmill. This "add on" would include manufacturing a complete set of two hundred forty-four wheels (244). These wheels will be machined from the best grade of linen filled phenolic and will be used to replace rubber wheels that are normally used on the treadmill. The harder phenolic wheels are to be used during testing to determine the forces the treads undergo during exercise. the hard wheels will transfer the force more direct to the side panel of the treadmill than the rubber wheels. The force transferred to the side panel of the treadmill will be monitored by the use of the eight load cells that will be mounted

between the side panels of the treadmill and the test frame. Whitmore Enterprises, Inc. will make the mounts for the load cells, but we are not furnishing the load cells or any of the recording equipment. We will also change out the treadmill wheels at our shop if the transportation is government furnished.

The cost of this "add on" will be \$15,000.00.