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By the time you receive this letter you will have already completed your (56 day?) mission. Thanks for your letter on the 50th day. I am glad the run did not create any serious crises. Pioneering in manned configuration is of course the most physically dangerous operational phase as that is when the unknowns are most apt to be encountered. It appears you have charted the course for most of the physiological problems to be solved for a successful operation of Skylab. Did you sleep standing up?

Last week Cliff and Fern and I toured the Skylab mockup as a party with American Ordnance Association Los Angeles Chapter at the Douglas Huntington Beach plant. We of course were shown the Public Relations films. In the mockup I note that the ergometer has a five phase programmer with automation of load keyed to heart rates which can be set from 100 to 190 beats per minute and times from 1 to 20 minutes per phase. Any more information available? How do you phase into the load problem at the start in such a way as to avoid heavy starting loads? Is there a warmup period first? What do you think of load input to the programming via heart rate? We are starting to work on our programmer module which we believe can be operational with the new large treadmill or with the hydraulic ergometer. The first phase of operation of the hydraulic loaded ergometer is now complete and we are ready to start to instrument it. The loading works very smoothly now that we have a completely contained package other than the automotive steering power package which gave us too much trouble. I hate to admit it but at the moment no one is working on the instrumentation of the hydraulic ergometer because of other design work loads.

Last Friday was the last day for Bill David. I could not support his continuing effort further now that we have a well packaged prototype of the exometer for your evaluation. Bill Parsons doubts the very immediate market for it in view of its lesser demand and familiarity to those doctors going into stress testing and until they get more sophisticated in their needs