

MD-D

Kennedy Space Center, FL 32899

30 January, 1995

William E. Thornton, M. D.  
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Friendswood, TX 77546

Dear Bill:

It was nice to hear from you last week (26 Jan 95). It appears that several of us old-timers have the same idea in mind. In the few somewhat lax times (e.g., waiting for receipt of proposals) while I was on the Source Evaluation Board last year, I entered almost all of the cardiovascular data from the three SkyLab missions into spread sheets. I had actually begun this in 1990 on less capable spread sheets, but never got very much completed. Also, in February of last year Bill Carpentier called me about access to the Skylab CV data and I sent him copies of what I have.

You will discover by purview of the spread sheets my design of data presentation. I have included a copy of my master template which shows the design scheme and provides for the equations which automatically calculate the means and standard deviations for designated subsets (i.e., individual crew members or summarized for all applicable crew members at sentinel points in the mission). Basically I wanted to get all pre-, in-, and postflight data for all nine crew members onto a single sheet of paper. Of course, only a single variable could be accommodated in this manner; this required five such sheets to record a give measurement for each of the five-minute periods of each LBNP test. Usually all three crew members of a given mission were tested on the same dates pre- and postflight. This was not the case inflight; usually only one LBNP test was done on a given day and each crew member had an LBNP test nominally every 3-4 days.

Notice that I have also put into the same format (albeit without any calculations) the dates and times for each LBNP test. On the sheet of test dates, the LBNP tests curtailed by presyncope are preceded with a lower case "p". Also, I have no post test record of calf circumferences. I think the best we can get is the initial circumference with the percentage changes at each stage/period of the LBNP test. The lag in return of blood (% change in calf volume) from the leg during the five-minute RECOVERY period of LBNP is the closest we can come to that final calf size. Leg volumes derived from multiple circumferences are also included, as well as body temperatures and weights (after the reconciled common values put together by Mike Whittle). I have finally included some maximal calf circumference raw data sheets which show the inch values taken inflight with their conversion to centimeter values. In addition, note that for SL-4 these three crew members had one additional preflight value on 10 Nov 73 and one or two early inflight values on 17 and 18 Nov 73, not associated with an LBNP test.

I hope these data will provide you most of what you wanted. If you have any questions about them, just give me a call on 407-867-2964 or FAX 407-867-2679.

My best regards.

Sincerely yours,



G. Wyckliffe Hoffler, M. D.