

and I have tried to summarize some of these in these first slides. (figs. 4 and 5).

We can look here at the space flight environment, and you see on the left side the things that were predicted to be severe problems as far as environment was concerned, and then you can see on the right what we actually have observed.

For instance, the meteorite density has not been a particular problem, as far as man has been concerned, thus far.

We have been able to maintain pressure within the spacecraft and have not inadvertently lost any spacecraft pressure except when we wanted to do it for EVA operations, and things of that sort, nor have we inadvertently lost any suit pressure.

There were predictions that the 100 percent oxygen environment would be a toxic one for us, in that we would have problems develop from exposing man for the periods of time we are talking about. We have not seen anything of significance here. We will mention a few of what we call nuisance effects as we go along.

The cabin temperatures have been maintained with some minimal variation around the comfort zone, an occasional cold time or a hot time, depending on whether they were wearing the EVA suits, in particular, but this has been, in general, comfortable.

We have not seen any significant radiation levels as yet, realizing that we haven't really gotten into the Van Allen Belt areas, with the exception of just one flight where we just brushed this area.

Isolation was predicted as a real problem. We have seen none of that.

NASA-S-66-12112

SPACE FLIGHT ENVIRONMENT

TABLE I

<u>PREDICTED</u>	<u>OBSERVED</u>
○ MICROMETEORITE DENSITY -----	● LOW MICROMETEORITE DENSITY
○ LOSS OF CABIN PRESSURE - VACUUM -----	● 5 PSI EXCEPT DURING EVA
○ LOSS OF SUIT PRESSURE - VACUUM -----	● SPACE SUIT WEAR UNPRESSURIZED (PRESSURISED ON EVA FLTS)
○ TOXIC ATMOSPHERE -----	● 100% OXYGEN
○ CABIN AND SUIT TEMPERATURE -----	● MINIMAL VARIATION ABOUT COMFORT ZONE
○ RADIATION LEVELS -----	● INSIGNIFICANT RADIATION LEVELS

FIGURE 4