

Aboard Skylab 3: Time to be human

Astronauts are certainly people, but they're also machines—scientific instruments packed with data and designed to observe and function in alien environments. The result is that in a busy mission their humanity often seems to be suppressed, resulting in terse comments when earthlings want emotion. The Skylab 3 crew, however, have repeatedly demanded time for their humanity. Gerald Carr, Edward Gibson and William Pogue want to rest more, think more and rap more than their predecessors had time for. Man and Spaceman are converging.

Pogue: "I think [the flight has] had a really great impact on me. I feel much more inclined toward humanistic feeling toward other people, other crewmen. I think the other two men on this crew were very solicitous toward me when I had a bit of difficulty there, and I regret that I was personally responsible for probably somewhat of an embarrassment to them.

"In reflecting on this, I tried then to do a very good job. I proceeded then to make errors, berate myself, and finally come to the . . . realization that I'm a fallible human being. That I cannot operate at 100 percent efficiency, that I'm going to make mistakes, but that I have to accept myself for what I am, in that I now have a new orientation, as far as I'm personally concerned, of almost a spiritual nature. . . . My attitude toward life . . . and toward my family is going to change. I think that I see myself in a much more realistic fashion, and when I see other people, I try to see them as operating human entities and to put myself into the human situation, instead of trying to operate like a machine.

"I tried to operate like a machine and I was a gross failure. Now I'm trying to operate as a human being within the limitations I possess."

Carr: "For my own part, I feel somewhat the same way that Bill does. And that is that people in our line of work—very technical type work—are inclined to move along with . . . blinders on. You begin to get so involved with the details of what you're doing—the details of your life—that I think that you forget to look around you and see what's really going on outside. . . . I think this mission is going to do me a lot of good in that I think it's going to increase my awareness—my awareness of what else is going on besides what I'm doing. . . ."

Carr: "I think that a crew, or any man who is working long hours, needs some period of time at the end of the day where he can be quiet and wind down in order to get a good night's sleep. . . . You make less mistakes . . . you are much more creative, I think, when you're healthy and alert. And for all these reasons, I think it's just necessary that a guy have an opportunity sometime during the day . . . to just sit down and relax, and either read or write or



NASA

Taking time for a headstand may be good for the soul.

listen to music or just stare out the window, and gather your thoughts. You've got to get your mind in order—and get back in peace with yourself, really—in order to get yourself ready for the next day's activities."

Gibson: "[The view from here] makes you speculate perhaps a little bit more in your own mind, because you're much more conscious of the many different star systems that there are out there. When you're looking out here you see the earth as one unit, you see the sun as a star . . . you can see all the other stars out there, and you realize that the universe is quite big. And just the number of possible combinations that you could have out there which could create life—all this enters your mind and makes it seem very much more likely.

"I don't think that that is any different than people have thought down on the ground. It's just that being up here and being able to see the stars as you can, and look back at the earth and see your own sun as a star, makes you much more conscious of that."

Carr: "I've always thought of the earth as a very green and verdant planet, [but] . . . going over some of the desolate areas we've seen, I suddenly have . . . become aware of all the desolate areas there are around the earth, and it's become apparent to me that man is kind of huddled in just a few corners of the earth—that the earth is really a whole lot bigger than we thought. . . . The fact that man has to stay in the temperate areas and really work in his environment kind of makes me feel that we're going to have to spur on our efforts to really get in tune with our environment."

Another drill site that produced unexpected results was at the north end of the Tuamotu island chain, which some scientists had believed was formed during a change in the direction of movement of the Pacific crustal plate over the same hot spot that had previously produced the Line Islands and caused a bend in the Hawaiian Island-Emperor Seamount chain northwest of Midway Island. Drill cores from the site revealed Tuamotu sediments deposited at least 50 million years ago, before volcanism had even finished forming a supposedly equivalent point in the Hawaiian-Emperor chain. □

Happy leap second!

The inevitable penalty of buying one of the new super-accurate watches on the market is the continual reminder of just how late you *really* are. The world's official time keepers are no different; no sooner did they start using atomic clocks than they found the old earth just couldn't keep up. At present, the rotation is slowing about three milliseconds a day, probably because of sloshing of the semi-liquid material in earth's core.

Long ago, calendar makers faced a similar problem when they discovered

the earth didn't quite get around the sun in an even number of days; so they invented leap year, with an extra day, to compensate. Now, by international agreement, a "leap second" has been invented, occurring about once a year, to keep the time signals used by navigators in step with the actual motion of the earth. The latest leap second was celebrated New Year's Eve at the stroke of midnight Greenwich Mean Time, when around the world (except for mainland China, which jiggers its clocks a different way) radio stations added an extra "beep" to their hourly time signals. □