Another area holding great promise for man in space is exploration of the moon and the planets. I do not have to say very much about this. Man has always been curious, and he has learned through history that it has paid off very handsomely to continue to satisfy his innate curiosity. It is hard to predict what the direct payoff of exploratory ventures will be. After all, curiosity was a primary motive compelling Columbus to sail westward, and look what he found. Who knows the bonanza awaiting us through exploration of the moon and the planets.

The final item on this chart is technological support to other national programs. This includes the application of the new knowledge, new technologies, and new management techniques provided from our space program to other national endeavors, running the gamut from military to industrial and medical programs.

Thus, we can see that man in space holds out simply tremendous possibilities for the future. But, after all, this is what I have been doing for these past minutes: Attempting to describing what can be in store for us in a future space program.

Today, in manned space flight, we stand on a plateau of technology provided by the Apollo program. This technology provides much of the platform for doing many of the things I have been describing, but it certainly does not satisfy all of our technology requirement for such a future program. We cannot stop now. We must continue to grow technologically if we are to realize the real promise of man in space.

If we want to utilize fully man's capability in space, we shall need a space station. We shall need a capability for man to stay in orbit for long periods of time so that he can work and rest and sleep and eat under conditions as similar as possible to what he's used to here on earth. You saw today our humble beginnings in this area in our orbital workshop, and we feel that this is really a bargain basement deal to come to grips with the habitation problems in outer space. We don't propose to have all our future space stations built into empty tanks of rockets, but we feel since these Saturn IB's are going up there anyway, this is the cheapest and easiest way to learn. Techniques on how to build space stations can very well be based on this learning, too.

Long stay time in space involves not only building a space station but also the provision of a logistics supply system. We can have a space station that is good for several years, but nobody would like to stay there for the life of the station. So we have to rotate crews; we have to fly new supplies up there; we have to bring data back to the ground; we have to update equipment; we have to support this entire system with logistic supply systems.

It was actually this interrelationship between the logistic supply system and the conduct of science at the far end of this logistic supply system that motivated Robert Gilruth and Max Faget of the Houston Center and Ernst Stuhlinger and myself from the Marshall Center to take a trip to Antarctica a few weeks ago. We had long felt that there was a great deal of similarity between some aspects of the space program and the Antarctic program. Of course, we knew they don't wear space suits in Antarctica, and you can't wear a parka on the Moon. Also, they don't fly in rockets to the South Pole, but in turboprops. But other than that, we found our belief fully confirmed that