

MANNED SPACE FLIGHT CAPABILITIES
PROVIDED BY APOLLO PROGRAM

- Manned exploration of space as far as 250,000 miles from earth, including manned lunar landing and 36-hour stay time on lunar surface.
- Ability for three-man crews to carry out operations and experiments on earth-orbital flight missions up to two weeks in duration.
- Flight hardware:
 - Launch vehicles: Up-rated Saturn I and Saturn V
 - Spacecraft: Command and Service Module, and Lunar Module
- Unique resource base:
 - World-wide tracking and data acquisition
 - Facilities and logistics
 - Highly skilled manpower base
 - Management know-how

CHART 1

single resource that this program is producing. It has been said many times that in Apollo we are not spending our money on the Moon, we are not spending our money to pick up a handful of lunar dust and bring it back to earth. We are spending it right here on Earth, and by far the greatest single factor is the payroll.

People, who are learning how to do things in an unprecedented way by developing these systems for Apollo, are certainly our most vital resource as they apply their new-won skills to future programs.

Finally, to get this big job done, we have developed the management know-how: the know-how for keeping a large program, costing more than \$120 million a month, on track by providing sufficient visibility of the progress of all elements and subelements of the program in such a way that we can detect early enough where trouble can be expected. This, I would say, is really the gist of good management of such a program. If we wait until something caves in, it is then too late to take remedial action. So the eyes and ears of our management network must penetrate the contractors, Government agencies and universities participating in this program in such a way that we get seismic readings early enough to apply remedial action.

So management know-how is also a capability which is a direct product of our Apollo program, a capability, I might add, that can be applied not only for our future space programs, but for the management of other major private and government programs as well.