

panels on the LM adapter vehicle that Mr. Myers referred to as the SLA. They would fold back, and then solar-cell panels would fold out to provide electrical power. The AAP-1 vehicle, which is in a different orbit, would transfer and rendezvous with the second AAP flight. It will dock the lunar mapping and survey system payload module to one of the side ports of the multiple-docking adapter. The command and service modules will back off and then dock to the top port of the multiple-docking adapter. That then becomes our 28-day mission configuration. The three astronauts will operate for 28 days, performing various experiments that were carried up on the unmanned launch. At the end of that period of time this vehicle (the CSM) would depart and carry the astronauts back to Earth. Approximately 6 months later, when AAP-3 is launched to start the second mission sequence, manned command and service modules would be launched into orbit. Approximately 1 day later, an unmanned lunar module, the LM built by Grumman, would be launched into Earth orbit carrying on the bottom, instead of the lunar descent stage, a rack with special solar observation equipment. These vehicles would rendezvous in Earth orbit and would then transfer to and rendezvous with this station. The lunar module would dock to one side port and the command and service modules to the end port. That would give us our 56-day manned mission configuration.

Now, that's where most of our present AAP contract study effort is focused.

Mr. TEAGUE. Bob, let me understand something: North American has this proposal, I assume other companies have proposals. What are the steps we go through to get this thing going?

Mr. FREITAG. This is not a North American proposal, per se; this is a plan worked out jointly by Marshall, by Houston, by all of the contractors who contribute parts. North American works on their parts, Grumman on their parts, and each of the other contractors, as well as a few potential new contractors, who are involved in some of the new equipment that's coming along, works on its parts.

Mr. TEAGUE. Is this within the \$400 million?

Mr. FREITAG. This is within the \$400 million.

Mr. TEAGUE. And if you get the \$400 million, then you would assume you would go ahead with this kind of a program?

Mr. FREITAG. That's right. With last year's \$41 million we got started on the definition. That's what we're doing, we're defining the program. And we also got started on some of the design work, not fabrication and building, but design work on some of the key parts. For example, that air lock you see on the end of it, we have given a contract to McDonnell to start designing it because that's one of the real long leadtime items we talked about, and that's out of the \$41 million you authorized last year.

With the money we are asking for on the \$450 million, we do three major things: One is to provide additional launch vehicles and spacecraft modified to do this work; two, we buy lots of experiments that go inside of this spacecraft and on the spacecraft; and three, we start continuing to define the following year's work so we are always 1 year ahead on the definition part. There is always a possibility that, if the Apollo program goes very well beyond this point now, some of