

are contractors who are new to the operation. For example, we have two contracts, one with the Martin Co., and one with the Lockheed Co., which studied the very questions Mr. Winn brought up. For example: Is it better to do it with one contractor who has an extension of a program, like North American, or to do it in a modification center where several contractors can work into the program. This is a part of the definition program supported with the \$41 million to define the best way of doing it. And during the hearings of the Manned Space Flight Subcommittee, we will report on all of these, how they work in detail.

Mr. GURNEY. My question was not to indicate that NASA's ideas were not good. I mean I was just curious, since we're here at North American, what ideas are we talking about? There's not much use in the subcommittee coming out if we don't ask questions.

Mr. TEAGUE. Ed, we had a bunch of proposals. At Douglas, we had a bunch of proposals last time. It's obvious from seeing this that all of you have been working together.

Mr. TINNAN. I think we're all working together on the same basic project applications.

Mr. TEAGUE. Even in the Senate's Budget Committee, they definitely came out with generally the same thing.

Mr. TINNAN. The point we make here, just as we suggest that the multiple docking adapter be built out of parts of the Apollo command module, this item (on the model) uses the LM ascent stage and the same rack which is used to support the lunar mapping and survey system payload module. There is commonality of modules, so we don't have to redesign and qualify a new piece for every use. The Marshall Space Flight Center builds this; another associate builds this; Grumman builds this. So we're all involved in the process.

Mr. CARROLL. Mr. Chairman, recognizing the time situation, let's quickly go through the material we have in summary. There are several charts I'd like the opportunity to include in the record rather than take the time during the session here.

Quickly, in summary, I'd like to review for you a little of the manpower status, the facility status, the Government fiscal year 1968 funding requirements, and a list of time-phased critical events, in order to refresh your minds (slide 82).

You may recall during this past year, we were asked, when Mr. Wilson was out here, to present not merely an S. & I.D. level of participation in the Apollo program, but that of the corporation. This gives you some idea of the total North American personnel participating in the program (slide 83).

The two lines on the chart represent the fact that, at the time we made our forecast a year ago, we were forecasting manpower drop as shown by the dotted line. Based on a concerted effort by the corporation, we have actually been able to achieve a manpower savings, and we are now at the beginning of the solid line, and here is the current forecast for the total North American work force on the Apollo program.

In this next chart we have S. & I.D.-only manpower status and forecast (slide 84). It shows that approximately 33,000 personnel are now in the division, and the vast majority of those are working on