

WORK OTHER THAN NAS-8-4016

B. OPTICAL TECHNOLOGY STUDIES

I. IDENTIFY, DEFINE & PROVIDE REQUIREMENT JUSTIFICATION FOR MAXIMUM VALUE OPTICAL TECHNOLOGY EXPERIMENTS.

II. DEVELOP A PLAN FOR ACCOMPLISHMENT OF THE EXPERIMENTS OF PART I, DO PRELIMINARY EXPERIMENT INTEGRATION, SPACE CRAFT AND SUB-SYSTEM CONCEPTUAL DESIGN & RESOURCE ANALYSIS

CHART 36

Dr. VON BRAUN. We are doing it now and I would say the answer is "Yes." I think that it is probably much better over the 10-year haul to keep a limited production going, even though it is only four a year and keep that capability alive because that capability is people, really. It is not so much facilities or hardware, it is people and if that team is dissipated then we have to build up a new team. Not only is it very expensive to rebuild a new team, but we also go right back to the bottom of the learning curve. We start making mistakes again, things come apart, we may have mishaps in the launch, et cetera. Right now we are on top of the pole. I think the answer is "Yes." If we cannot identify all of our flight missions in the Apollo Applications area precisely for the next couple of years, I would say by all means let us keep a moderate production rate of these rockets going. Whatever few part-aging problems we have—and there are a few—O rings age and rubber gets a little brittle—these things can be taken care of. We can identify them and we can even assemble them without the O rings and stick the O rings in whenever we are down to T-minus 3 months.

Mr. LOWREY. Mr. von Braun, we are in agreement with that and would like to point out one thing that I feel is extremely important from the direction that you gave us on this job, and that was that we make full use of all the things that the Air Force had developed already. We did not begin something new or something different. We took full advantage in the uprated Saturn I-B's, of all the solid rockets that UTC was already building.

Dr. VON BRAUN. It might be interesting to compare these figures of payload with the figures of Titan. The Titan II, which is the non-boosted type and which was used for the Gemini launches, has an Earth