Mr. Benington. I think it would be more fair to say that a number of agencies in the Government and private industry have been pushing a number of technologies. There is a common pool of technology that has been coming, and I think it would be unfair, in most cases, for any particular supporting agency to take credit for something in that particular pool of technology.

The management problem is one of deciding, as Dr. Tucker indicated in his testimony, when to precipitate out this technology and

deploy a system. Mr. Roback. You did have some rather specific defense programs in this area, is that right?

Mr. Benington. Yes.

Dr. Tucker. That is right.

## ANNOUNCEMENT OF PHASE 2 DECISION

Mr. Roback. You stated, and I take it in a sense announced, at this hearing that phase 2 programs are going to go ahead, Dr. Tucker. This was a matter of consideration over a period of time. Let us talk a bit about what the decision is. What were the alternatives?

Was one of them not to go ahead? That is, to defer—or perhaps to

Dr. Tucker. Well, Mr. Roback, we reviewed many alternatives and discontinue? seriously treated four. The first was to continue research and development, but to postpone any procurement until fiscal 1970. The second was the

Mr. Roback. This would have had some budget value in the sense

that you wouldn't have to spend procurement dollars, right?

Dr. Tucker. It would have had procurement value. It would have given us an opportunity to inaugurate further technology at a later

Mr. Roback. To some extent the directorate of R. & D. is always date. interested in looking to new technical possibilities, having thereby, perhaps, some tension with the operating area that General Klocko is concerned about. The R. & D. man wants to wait for the more promising potential. The operator is crying for communications. Has that difference been involved?

Dr. Tucker. I would say the directorate of R. & D. is very much concerned with delivering the products of R. & D. to an operational situation. That is our purpose in being. So we don't do research for the sake of research. We do research and development in order to intro-

duce things into operation which could make a difference.

Mr. Roback. Now, Dr. Tucker, you were discussing the first or

second alternative? Dr. Tucker. I am ready to define the second alternative, which is the one we have selected. The third alternative agreed with the second one in terms of the space segment, but programed a larger total of

The fourth alternative was also predicated on the same space segterminals. ment and the larger terminals, but shifted the terminal buy earlier into time, so it was initiated with fiscal 1969 funds. All of these last three alternatives assumed the same space segment because there is a very considerable conviction that we have now arrived at a capability or an