

Dr. TUCKER. We take part in the consolidated review of the communications program so we are taking part in it. However, at this stage they become procurement decisions rather than—

Mr. ROBACK. General Klocko, do you have the responsibility for determining what the economical and efficient mix of communications systems is?

General KLOCKO. We will certainly study that. As I mentioned yesterday, we are already drawing up plans in some of these areas for submittal to the Joint Chiefs to see if they are acceptable and whether they satisfy the military requirements. We will have several. We already have started some and will undoubtedly get into other areas such as the ones Dr. Tucker mentioned.

Mr. ROBACK. The Joint Chiefs lay down requirements, and it is your responsibility to determine how best to meet them in a most economical and efficient way; is that correct?

General KLOCKO. That is right. We draw up the plans to satisfy the requirements and submit them to the Joint Chiefs for approval.

NAVY TERMINAL DEFICIENCIES

Mr. ROBACK. What is the problem with the Navy? What is the problem with the Navy shipboard stations?

Mr. BENINGTON. There are a variety of problems we expect to iron out. This terminal was a very ambitious terminal. It is operating in a somewhat hostile environment of sea water and the ship is pitching and rolling. We had a variety of problems.

For example, some in the control mechanism. Unlike a fixed platform the terminal must keep tracking the satellite and the platform is moving so you are constantly moving the terminal antenna. There have been some problems in that system. We believe these will be licked.

Mr. ROBACK. Is that in the direction of stabilizing the platform or adjusting the tracking mechanism?

Mr. BENINGTON. Adjusting the control mechanism so it can very reliably, given the ship's attitude which is known for other reasons—for example, controlling guns—it can take the known ship's attitude and known position of the satellite and constantly keep the antenna pointing at the satellite.

Mr. ROBACK. What else were you going to say?

Mr. BENINGTON. Other problems in the electronics. Problems of sea water getting in and hurting some of the equipment.

Mr. ROBACK. In what sense is the program ambitious? In the sense of the smallness of the terminal?

Mr. BENINGTON. That coupled with the fact that we wanted to get a terminal that could operate with the IDCSP where we could start doing operational evaluation. We have an R. & D. program underway now which is looking at alternative ways of doing this, given roughly the same terminal configuration and size but making sure we have a terminal that this time has been engineered for very high reliability.