

Dr. TUCKER. Yes. Mr. Shelor, do you want to address the joint goals?

Mr. SHELOR. Primarily it is an exchange of measured data and performance on the satellite and terminals. Such things as propagation data, multipaths, scintillation.

Mr. ROBACK. Would all the terminals of the NATO, United States, and United Kingdom be compatible with all systems here; that is to say, with both the phase II satellites and the tactical satellites?

Dr. TUCKER. It is our goal to make the terminals interoperable so that they can work through the SKYNET satellite system or through our satellite systems. The way in which this is implemented is something we are still working out.

Mr. ROBACK. Is there going to be any design adaptation for that. You refer to an exchange of data on a tactical program. Will the United Kingdom ground stations be able to communicate over TacSatCom, or whatever it's called?

Mr. SHELOR. The agreement at the present time only concerns the LES-5 satellite. This, of course, I would remind you is a UHF satellite, so those terminals can only communicate on the LES-5 satellite. They can't interoperate with IDCSP, for example.

COMPATIBILITY OF U.S. SYSTEMS

Mr. ROBACK. What is the compatibility situation between phase 2 synchronous satellites and tactical satellites in this country?

Dr. TUCKER. This is a question which, as I indicated in my testimony, is still ahead of us. The question of the way in which we will provide the tactical applications which are justified as a result of our special study with the TacSatCom. As we have the results of that study in hand, part of the issue to be determined is how the systems to satisfy the tactical requirements and the systems to satisfy the requirements which DSCS are addressing, how these are to be handled in a most effective manner.

I think it is premature for me to take a position now on the optimum solution of that problem until we see more clearly what those tactical applications will be, and how they will best be handled. In particular, it depends—

Mr. ROBACK. Will the stations be operable that you have for phases 1 and 2? Will they be operable technically, or will they have to be improved, Dr. Tucker?

Dr. TUCKER. Insofar as the tactical terminals are in the UHF frequency range, Mr. Roback, they can't operate in the DSCS system. The satellite only handles SHF signals. Insofar as the terminals are communicating at SHF, the larger terminals could go through the space repeater in the DSCS system.

It would then be technically possible, and the question would be the network control or the allocation of power to these terminals. That is a matter we can work out.

NEEDS OF NATO

Mr. ROBACK. What is the NATO interest in the satellites, so far as capability goes? I don't want to get in a field you may not be directly concerned about. Perhaps General Klocko can address this question.

Why does NATO need a satellite as far as space is concerned? That is to say, they have a concentrated area. There is talk about NATO