Mr. DAHLIN. In that respect, how about digital communications itself? Is the Defense Department supporting that kind of research with its own funds or are you just taking advantage of other technology?

Dr. TUCKER. We are supporting that research ourselves.

Mr. SHELOR. For example, the common joint mode of operation in the TacSatCom advanced development program will be a digital mode of communications for both data and voice.

Mr. DAHLIN. Could you supply a supplementary statement of the amounts of money and the types of contracts that you are presently putting into both compression and digital types of development?

Dr. TUCKER. We will be happy to provide you with a statement.

(The information is classified and furnished for committee files.)

CHANNEL CAPACITY OF AN/TSC–54 TERMINALS

Mr. LUMAN. One question about TSC–54.

In your statement you point out you upgraded the MSC–46 to accommodate a much greater number of channels. Are you going to give the 54 any greater capacity?

Mr. BENINGTON. We do not plan to at this time.

Dr. TUCKER. No plan at this time to do so.

Mr. BENINGTON. When operating with the IDCSP, that is an important qualification. When operating with the phase 2 system, we had some proposals to go to several hundred channels per 20-foot antenna.

Mr. DAHLIN. You at the present time are not buying any equipment that is called multiplex, I take it, where you get many channels out of present equipment. Is it mainly in that area that this multiplex development takes place or——

Mr. BENINGTON. We had been doing preliminary developments of equipment here that can be used for phase 2 and now that we know more precisely what phase 2 system we are proceeding with, those engineering developments will accelerate so by the time the advance space system is available we will have suitably modified terminals available to take advantage of it. These would be modifications primarily in the electronics, not in the power, antennas, or the drives.

Mr. DAHLIN. But you have to start now to develop that sort of terminal equipment, is that the point, Mr. Benington?

Mr. BENINGTON. That is correct. It is well within the state of the art. We have to make sure we engineer the proper multiplex equipment to operate with the new system, Mr. Dahlin.

AIRCRAFT CNI COMMUNICATIONS

Mr. DAHLIN. What is the present relationship of the Air Force-managed programs in communication, navigation, et cetera, multipurpose systems to the tactical and strategic communications that are now being worked out? In other words, there are some proposed nets for CNI satellites or others in air traffic control.

Are there areas of coordination where you have to have development work going in now in these fields to work out future problems?

Mr. SHELOR. That effort is in the early stages of exploration. The requirements, the general concepts are just being developed. It lags—