people trained on the electronics of the equipment but not on the prime power equipment.

Mr. ROBACK. What is your program for satellites in the Atlantic? Are you negotiating for Atlantic circuits?

General KLOCKO. I think we have six——

Mr. ROBACK. Are you buying any satellite circuits in the Atlantic?

General KLOCKO. Yes. We started in January.

Mr. ROBACK. Who is supplying circuits?

General KLOCKO. Comsat—the number six is correct. Comsat.

Mr. ROBACK. That you have under lease?

General KLOCKO. Right.

Mr. ROBACK. Dealing directly with Comsat?

General KLOCKO. Through international carriers.

Mr. ROBACK. Give us a little statement on the situation.

General KLOCKO. We will get you a statement.

(The information referred to follows:)

As of late June 1968, six leased circuits (3 from ITTW, 2 A.T. & T. and 1 WUI) between the United States and Europe, and four (ITTW) between the United States and the Ascension Island, were being provided by satellite. In addition, seven more circuits are on order to be provided by satellite on or before 1 September 1968, and at least three more are programed for service prior to the end of the year. These are not all new services—in several instances, service is presently being provided through the trans-Atlantic cables. The activation of several new earth stations in Europe, however, has permitted the DOD to take a significant step toward achieving the desired mix of services between cables and satellites.

Mr. HOLIFIELD. I still can't understand why a standard basic power plant is not effective. I would have thought we had such a variety of those for all purposes. I have seen them in all sizes and dimensions and used by the Navy and Air Force and everyone else. It is hard for me to believe.

It seems to me that in the area where you might be expected to have trouble you are not having any, and then in the less sophisticated area you are having this trouble.

General KLOCKO. I understand your surprise, sir. However if I remember the figure correctly, and this is close, about 40 percent of our outages in the communications system are a direct result of power failure and not the electronics gear associated with it. Power is one of our major problems today.

Mr. HOLIFIELD. That is an amazing statement to me, but when we think of the long history of development of all types of cycles and phases and types of turbines and——

General KLOCKO. One of the things is that the power requirements for communications gear is so much more delicate because it has to be within certain parameters which are different from say to light the room or a refrigerator or anything else you use. Any slight transients in the power supply will throw the communications gear out completely in a very short time. Like when the lights flicker——

Mr. HOLIFIELD. In other words the fluctations you can stand for in ordinary usages you can't stand here?

General KLOCKO. When you see the lights flicker in this room it doesn't make any difference to us here in using the light. This would put out a station and particularly it's cryptographic gear which is