

quite sophisticated, compared to that equipment, but the new ones, and one that is rapidly being installed in the fleets will give discreet identity, 4,096 codes, and it will also read an altimeter, and translate that altimeter reading back to the ground, so the controller can look on a radar scope and get both the identity and altitude associated with the radar targets. This is our so-called alpha numeric system.

Mr. ADAMS. I want to inquire on the alpha numeric system, too. I have seen the operation, which is used regionally in several of the areas, and I wanted to know whether or not this plane was still under — what is your regional center there, at Atlanta?

Mr. THOMAS. Yes, sir.

Mr. ADAMS. Was this still under Atlanta regional radar control in its carrier operation? I am talking now about the Piedmont carrier and the Cessna. I also don't know whether the Atlanta PPI scope would carry into the mountainous region there. Did it, or would it?

Mr. THOMAS. Yes, sir; under the air route traffic control center. I might explain for the benefit of others, we have 21 air route traffic control centers that cover almost the entire upper air space with radar. The centers are equipped with long-range radar, which are not located at the site of the center. We pipe radar signals in by telecommunications.

Mr. ADAMS. Pipe them in from the various locations and then plot them on your PPI scope?

Mr. THOMAS. Yes, sir; and that was a case here when he was under radar. But lest I leave a misimpression that the alpha numeric is with us, we have it and it is operating, but it will be the early 1970's before we will have the ground equipment in which will provide identity and altitude directly on the radar scope.

Mr. ADAMS. Now, I wanted to inquire about this regional radar because we have only talked about ground control radar. I don't want this particular accident to obscure from us the overall problem. Now do you contemplate in this to maintain a series of radio or radar beacons that would feed your regional centers and give you an overall traffic plot? Now, I know at the regional centers that I have been in, they can give you a plot of everything that is above the radar blank spots, in the entire 200-mile range. Now, was that being done in this area, or could it be done in this area?

In other words, did they pick up these planes on the Atlanta system?

Mr. THOMAS. It was being done, and can be done. We cover the entire United States with radar from our centers, and they give an indication of position, not altitude.

Mr. ADAMS. Not altitudes, I agree, but an indication of position.

Now, have you made any sort of an arrangement with, or should we be considering a tie into the military radar which, as I understand it, also covers the entire United States in a similar type operation. Do you feel that this would be helpful?

Mr. THOMAS. No, sir.

Yes, sir, we have, but I think one of the bright spots is that half of this radar is military. We use the same radar, sir.

Mr. ADAMS. That is what I was going to ask next.

Mr. THOMAS. Of the hundred we are using less than 50 are FAA, the rest are military, and they use our radar, so this is a joint use of these very heavy radar.