

That is to say, whereas 10 years ago an air traffic controller was more of an adviser who received reports from pilots and then advised other pilots as to the reports he was receiving, he is now a man who accomplishes positive control through electronic aids and is in control of the airplane most of the time.

The pilot must accomplish the landing and spend hours in between those events cruising at an altitude where there is relatively little to do. In that circumstance, he is not under continuing pressure.

I might say, in addition to representing these gentlemen, I will speak with one hat for general aviation, since I own a flight operation, including a school and a charter service, and with one hat for the professional pilots point of view, including the airlines and business jets and larger business planes since I own one of those and I am rated to fly it.

The controller being under continuous pressure as he is often called upon to perform tasks which we think are beyond his capability because of constant overload of the system which promises to go up as rapidly as it has in the past few years in the next few years.

The controller is very often handling more traffic on his scope than he can safely handle, and he is fearful this will not come to general attention except by such events as the Grand Canyon incident and other events which immediately commanded a great deal of attention.

First of all, there is a lack of adequate and competent personnel. Air traffic control work is no longer attractive to young men. This is a special breed of young men, we feel. He is a man whose decisions must be very very rapid, much of the time more rapid than the pilots in the cockpits.

He must not make any mistakes. He must carry a tremendous amount of information in his head because the radar that we have at many of our facilities is not adequate and it is not as good as could be provided.

I notice from earlier hearings that no requests, or substantial requests, for improvement in the radar systems have been made.

There is equipment which can take a tremendous load off the controller. As it is now, he may have to remember the identities, airspeed, general headings, and altitudes of 30 or 40 targets.

I rather doubt that a human being can do this for a long period of time, as controllers are now required to do, without suffering some impairment in efficiency.

There is equipment which can print out this information so he can direct his attention to other matters. It is operating in some areas, as you know. We think it could be installed on a much wider basis and at least those airplanes which are in the professional category could be required to have the equipment which would report in as I have described.

In addition to that, because of the vast shortage of personnel and I think that this is critical and that the agency will probably concur, the controllers are now working mandatory 6-day weeks in some areas, while pilots are limited by law to 100 hours a month.

That being the limit, the agency feels, at which one can maintain top-level efficiency to manage an airplane. Controllers are working three and four times that amount. I rather think that the exigencies of