

I would say, sir, this is almost entirely air traffic control procedures and I think that the Federal Aviation Administration several months ago started rather strenuous steps to change this and correct it.

Mr. KUYKENDALL. Will the gentleman yield at this point?

Mr. DEVINE. Yes.

Mr. KUYKENDALL. Mr. Chairman, may we take that line of thought on for just a couple of minutes because it is the same line of thought that Mr. Devine and I have both been on this particular point with practically every witness.

That is the matter of the long, low approach which actually seems to be the one area of noise abatement that has not only not improved, but has gotten worse.

There seems to be great improvement in the takeoff procedures and the fan jet has lowered the noise on takeoff. This is the one area, Mr. Chairman, where there has been no improvement and, in fact, it has gotten worse and everybody agrees.

But there is an area of great disagreement here. You are the first witness who has said that this was nothing but a traffic or approach problem, but the other technical people who have been here say that the present air form configuration without retro changes will not allow a rather different increase in the glide angle which would mean higher altitudes, say, at 4 miles out or 3 miles or 2 miles out.

We have been told very specifically that it is not within the state of the art to raise this glide angle without retro fitting or new design. Do you agree with this?

Mr. Woods. Yes, sir; and it is my fault. I didn't make myself clear.

Mr. KUYKENDALL. So that it is not a traffic problem. It is a design problem; is this correct?

Mr. Woods. No, sir. We are talking two different segments. If this page is the airport and the final approach is coming in, here we are talking about a design problem and the inability to change the glide angle in the larger aircraft is that part here.

I am talking about the approach out here where they drag them in on the downwind leg and on the base leg at altitudes sometimes below 2,500 feet.

Mr. KUYKENDALL. I misunderstood you and I think Mr. Devine did, too.

Mr. DEVINE. I am only talking about the final approach.

Mr. Woods. No, sir. I touched on that briefly and didn't make myself clear enough. I apologize. In that area is where we felt that there was the possibility of a technological breakthrough and that we were hopeful that something could be achieved.

It is not yet possible to our knowledge with the larger aircraft. We in our smaller aircraft have more flexibility than the larger aircraft and can do some things really due to our lesser mass and inertia that the large ones can't, but across the board for all jet aircraft, we do not believe that a step or two segment approach under instrument conditions is feasible at the moment.

Mr. DEVINE. That is all, Mr. Chairman.

Mr. FRIEDEL. Mr. Adams?

Mr. ADAMS. I am interested in the differing factors that cause noise and I find that most witnesses tend to lump them all together in the