

If you take off, as I did the night before last, with thunderstorms and potential turbulence facing you immediately after takeoff, it could be a hazard because of the speed.

Mr. FRIEDEL. Mr. Kuykendall.

Mr. KUYKENDALL. For the sake of the record—and this is to Miss Peterson—may I suggest that the recorder check carefully her use of the word “possibility” throughout her testimony when the transcript said “probability.” You interchanged these two words throughout your testimony. This can make considerable difference in our reading the testimony. There is a lot of difference between possibility and probability. I believe you interchanged the two words throughout your testimony.

So, will you and the reporter check this out to be sure that your meaning is clear here?

Miss PETERSON. Yes.

Mr. KUYKENDALL. Following up on the radar, Mr. Ruby, what is the timing of a revolution of a typical radar weather cone?

Mr. RUBY. At the moment I have forgotten.

Mr. KUYKENDALL. Approximately?

Mr. RUBY. If I remember right, it is somewhere in the order of 15 to 18 revolutions per minutes for the entire rotation and, of course, the insulation blanket on the bulkhead blocks off a portion of it, so there is nothing happening.

Mr. KUYKENDALL. So we are saying now at a closing speed of two head-on aircraft at 1,200 miles per hour, which is about $1\frac{1}{2}$ miles in 5 seconds, it means these airplanes from the time you left him on the sweep until you got back to him on the sweep, you could very well have gone 3 miles toward each other?

Mr. RUBY. Yes, because in the first place the weather radar is not a continuous energy flow; No. 1, it is pulsed at the rate of 400 pulses per second in order to get high-energy output. This is a constant 400 pulses per second flow out of the antenna, but it is in a rotational sweep at the same time.

Mr. KUYKENDALL. The point I am making here is to show, by taking your testimony, that the typical old-fashioned-type radar simply would not serve at all at the rate of closure and time, and that is one typical reason it will not serve.

Mr. RUBY. It will not.

Mr. KUYKENDALL. The typical old-fashioned radar operation will not serve this purpose?

Mr. RUBY. No.

Mr. KUYKENDALL. Second—I have called it profile radar which would give the elevation—what is your term for the new gadget that will give not only the location but the altitude? What is your descriptive term for this system? Alphanumeric system?

Mr. RUBY. The alphanumeric by itself is not technically what we are talking about today because the altitude encoder is taking a transmitted signal from the airplane that is read off the altimeter and it is printing that on the videoscope in terms of altitude that that airplane is flying.

Mr. KUYKENDALL. You said something a while ago that really leads us here to take a new look at a lot of the testimony that we have had. We have been led to believe by a lot of the former testimony that this system of the altitude on the radarscope was an answer to a lot of questions.