It is a problem very similar to the one the controller has when he tries to ferret out which of the many targets he sees is the one he should pay attention to where he has no altitude information.

I believe that gives you a current summation of where we stand. Mr. Friedel. Thank you.

Mr. Tipton. Thank you, Mr. Chairman.

We will be of course glad to try to answer any questions that are put. Mr. FRIEDEL. It was a lengthy statement but a very, very informative statement, and I like your charts.

You have made a lot of recommendations. Have you given any thought as to what the cost will be for these recommendations?

Mr. Tipton. In our recommendation for the current fiscal year which includes a large number of ILS as I have described, a large amount of radar, our total recommendation comes to an increase in the appropriation for the FAA for equipment of a little bit over a hundred million dollars. Now to move forward on that same program will cost at least that much every year for a number of years.

Mr. Friedel. One of the witnesses this morning I think said around \$2 billion. I wanted to know whether your recommendations were

included in that or not.

Mr. Tipton. I am told that was a comment made with respect to airport improvement. The FAA idea as to the need for airport improvement stated over in the other side in a hearing was \$3 billion in the next 5 years. That was airport improvement.

I think that the airways improvement will not rise to nearly the bill that the airport improvement contemplated in future years will rise.

Can we give a better answer to the chairman on cost, Mr. Von Kann? General Von Kann. I think the \$101.5 million we have used with the Senate Appropriations Committee, sir, is for basic hardware procurement. We would have to say offhand that there would be siting and installation costs, and operation and maintenance costs; so there would be some inflation in the FAA budget in addition to the hardware procurement that we have discussed. I think probably it might be well to consider this a program of about \$150 million a year for a period of about 4 years. But this, too, is well within the amount of money that the passengers are contributing right now through the ticket tax.

Mr. FRIEDEL. You mentioned something about glide slopes. How many of the airports have glide slopes?

Mr. Tipton. Can you answer that offhand?

General Von Kann. Yes; we have glide slopes or ILS's at 189 of the 526 airports used by the airlines. Now, some of these airports have two ILS's and there are actually about 216 in service. So this leaves a requirement

Mr. Tipton. Shown on page 7 of my statement. (See fig. 4, p. 226.) A total of 337 ILS installations are required to cover the scheduled

airline airports.

Mr. Friedel. 337 are required?

Mr .Tipton. Yes.

Mr. FRIEDEL. That do not have it today?

Mr. Tipton. We have at the present time 189. This is also on page 7 of the statement. And 337 are required.