The Air Line Pilots Association has endorsed the use of arresting gear. However, the association, in commenting on the use of emergency arresting gears, is quite positive in stating that their adoption should, in no way, affect runway length criteria, and I wholeheartedly agree.

The advancement in aircraft design, including supersonic transports and air buses, does not point to a decrease in the incidence of overruns, but with higher performance and heavier aircraft we can expect more overruns.

The points to be remembered out of this short presentation are:

1. Overruns are a problem.
2. There are arresting gears in existence today capable of stopping civil air transports.
3. No positive action is being taken, except by the French Government, to place arresting gears on civil airfields.

I predict that within the next 2 years you will see a net arresting gear installed on Orly Airfield in Paris, France.

Mr. FRIEDEL. Thank you, Mr. Weatherly for your very precise statement.

When you speak of the arresting gear system, are you speaking of the system that we see on aircraft carriers?

Mr. WEATHERLY. It is a modification of such a system, yes. It is an energy absorber placed on either side of the runway and an engaging means placed on the runway. The aircraft will engage this engaging means and in further moving down the runway the plane will have its energy absorbed and brought to a safe controlled stop.

Mr. FRIEDEL. You say on page 3 in your statement: "A net capable of engaging a Boeing 707, has been designed and built."

Can you tell us by whom it was built and whether it was tested?

Mr. WEATHERLY. An arresting gear to stop a 707 was designed by American Engineering under contract with the Federal Aviation Agency. It was built first with a hook being put on a FAA 720. That hook was first evaluated at the naval test facility at Lakehurst, N.J. The arresting gear was then installed and tested at our test base in Georgetown, Del., with dead loads and then tested with a Boeing 720. This work was done in 1962. That was the finish of the test program.

To support this, Mr. Chairman, I would like to show you a very short movie clip.

Mr. FRIEDEL. I would like to ask you a few more questions before we see the movie.

How would the arresting gear be operated? Would it be controlled by the pilot in the cockpit and how many different nets would have to be up for the system that you speak of on the runway?

Mr. WEATHERLY. For a net system which is the system currently under test and under consideration, particularly the one by the French Civil Air Ministry can be used in either of two operational modes.

You may either have a rapid erection system which is capable of being erected at the command of the pilot or the tower, or you may have a net at the end of the runway within the allowable minimums erected on the upwind end so that any aircraft landing or taking off will have protection at the upwind end of the runway.

With a net already erected, you then would have no choice to be made by either the pilot or the tower as to when the net would be called for. Both systems are in use by the military. Some have rapid erecting