

Now, this should allay fears that I have heard expressed by highway engineers that this pole may fall in the traffic stream and create another hazard.

But our experience has been that the pole stays in the same region and goes in the same direction as the automobile.

So the only time that you would have a pole falling back into the roadway is when a vehicle has left the roadway and is coming back on and strikes the lighting pole.

Another thing that I would like to point out, Which is the lesser of two evils, when you have a pole tumbling about that a vehicle can strike or have a vehicle strike a fixed object? If it strikes a fixed object, there is no doubt as to what is going to happen. When a pole is loose, there may not even be a vehicle there. If there is, at least he is hitting an object that is movable.

Now, this is a test of remedial design. I guess that is the best way to describe it. This is the steel transformer base we saw earlier. And the highway department was interested in something that would improve the safety aspects of this design.

They designed a cast aluminum insert to go under this steel base. Now this particular base weight is about 120 pounds. The cast aluminum insert here is 6 inches in height. It is placed under a pole which is 30 feet in height. And as I will show, these have been installed in two installations in Texas.

This is to modify existing installations. Due to the mass of the base, we get more penetration in front of the automobile, but it is not really too serious. We have had three accidents with this design, and all of them have been satisfactory.

(At this point Mr. Wright assumed the chair.)

Dr. ROWAN. Now, this is an aluminum pole and is in what we call a flange mounting. The flange on the bottom of the pole is bolted directly to the concrete foundation.

Now, I would like to express an opinion, my opinion. I was led to believe and many other engineers have been led to believe that an aluminum pole, because of its flexible characteristic, is safe. But I would not personally volunteer to ride in this vehicle that is about to strike the pole. Now, that is my opinion. There is too much rigidity. The action depends on one tearing the pole loose from the flange or breaking the flange. This requires an excessive amount of impact energy and this energy can be transmitted to the driver and in such a case it could be fairly serious.

We have by no means shown all of our tests in this film. We have conducted tests of the steel pole in a flange mounting which is serious. It is not quite as serious as the steel transformer base, yet it does pose a problem, a serious problem.

We have also conducted both the steel pole and the aluminum pole on cast aluminum bases. Both of them perform satisfactorily. The difference in them is merely cost. The aluminum pole will cost more than a steel pole.

That was an aerial shot of the aluminum pole we saw just a moment ago, but back to the comparison of these the most desirable design that we have found is the cast aluminum base, and it is incidental as to whether you put a steel pole on it or aluminum pole on it, from an impact standpoint.

Mr. W. MAY. It is a transformer base, is it?