

Dr. KEESE. We are working on this cooperative research with the Texas Highway Department and with this other group through these advisory committees, which bring together these representatives of these discipline groups, from the highway profession along with the research group. Through their advice and counsel, by keeping our heads out of the clouds and our feet on the ground, and through our exchange of conversation and technology with them, I think both parties benefit a great deal.

Now they pick these up, and implement them quite often; in the 29 projects that I mentioned we have done, I would say that practically everyone of those have been implemented before we were able to write a research report.

Mr. W. MAY. You must be disappointed when you leave Texas and ride some of the new highways around the country, especially on the Interstate System, and find rigid sign supports close by the shoulder of the road.

Dr. KEESE. I just wish we could find a way to disseminate this technology.

Mr. BLATNIK. You must be disappointed, you must be alarmed—your level of anxiety must be quite high as you flash by this lethal situation at 60 miles an hour.

Dr. KEESE. I think rather than disappointment, sir, you would call it challenge, challenge to find an answer.

Mr. BLATNIK. Mr. May.

Mr. W. MAY. What do we have next?

Dr. HIRSCH. Mr. Keese will come back a little later and give a little experience report from Texas on the breakaway signs.

At this time, I would like to turn the presentation over to Dr. Rowan, who is associate research engineer, associate professor of the driving research department.

Mr. BLATNIK. Dr. Rowan.

Dr. ROWAN. Thank you. Mr. Chairman, I would like to talk this morning on a specific research project dealing with highway illumination and lighting.

This research has been conducted in three specific areas. The first is concerned with the impact behavior of lighting poles.

This project was begun in 1964 as a cooperative project with the Texas Highway Department and the Bureau of Public Roads. And at this time I would like to restate or reemphasize something that Mr. Keese mentioned; that is, that research is most beneficial whenever it is conducted in a cooperative effort. In other words, an equally cooperative effort between the researcher and the people who will put the research to work in application.

In 1965, I suppose it was, the highway department was very much concerned about the hazards of lighting poles along our Interstate highways. At that time they were beginning to install lighting in the urban areas along these Interstate highways, and some very serious accidents had occurred and they were very much concerned over this. We included at that time—it was not an objective of the research, but there was included at that time a study of the state of the art of lighting poles.

In other words, what is the impact behavior of the poles that we can buy and put along our highways?