One easy way of course is simply to move these out. I think perhaps the most remarkable thing you might do sometime as you drive the Interstate System is to look at the signs that could be moved. We attempted to do this, and in a 30-mile section, out of 150 signs that were observed, it appeared that more than 100 of them could be moved 20 to 30 feet off the edge of the pavement without any loss of effectiveness.

There were quite a number of others, 20 or 25 others that did not

need to be moved because they were already in a protected place.

So with some planning I am sure our sign installations can be put

in safer locations.

Mr. Constandy. Mr. Prisk, in the view you showed of the breakaway sign installation in Utah there was a guardrail in front of the sign at the gore. Might the removal of that guardrail be an additional safety feature?

Mr. Prisk. I am sure it would be, and I think this is the judgment of the Utah authorities, after seeing this performance, that it would be entirely adequate to delineate that gore with reflectorized units,

so vehicles would be guided through there at night.

You would have a visual definition of the gore area, but not neces-

sarily any physical outlining of the gore.

Mr. CONSTANDY. I wonder if the members of the panel would comment now on the sign photographs which we have seen on the nine projects. Perhaps we could begin at the other end this time. Mr. Ricker, would you care to comment?

Mr. RICKER. After seeing the last few slides of the steel breakaway posts, I am happy with our wooden ones we use in Pennsylvania, because they break much easier and without so much debris left afterward.

Mr. Constands. But the important thing is that the use of either of them is going to lessen the violence of the impact of automobiles.

Mr. RICKER. Yes. I think we all realize there is much to be done in proper location of signs, both longitudinally and laterally, to keep them

from being struck.

The real point of concern, of course, is the gore area. There are more people apt to go off there, so that one should certainly have breakaway posts. There are some gores, particularly on elevated structures, where there has to be a parapet rail anyway, and in those cases we need protection by means of something other than breakaway posts.

Mr. Constandy. Overall, are you satisfied or not, relative to the slides

you saw on the nine projects?

Mr. Ricker. I have to say no.

Mr. Constand. Mr. Wilkes?
Mr. Wilkes. I believe I have commented on the more obvious features before. I do not know that I can add anything, except the committee may be interested to know that the Committee on Bridges and Structures of the American Association of State Highway Officials is currently reviewing their standards for design of signs, and they are considering methods of reducing the windloads, or methods that will reduce the mass of the sign supports as a means of reducing the hazard to vehicles hitting the post support.

Mr. Constandy. Overall, are you satisfied, Mr. Wilkes?

Mr. WILKES. From a structural engineer's viewpoint, I believe it would be safe to say most of the structures I saw were structurally adequate.