Mr. Prisk. The specifications call for loadings up to 100 miles per hour, 100-mile-per-hour velocity. I don't know what the pound loading is on that. Perhaps Mr. Wilkes does.

Mr. Constandy. Mr. Prisk, before Mr. Wilkes answers that, is that

100 miles an hour directly on the face of the sign, 90° angle?

Mr. Prisk. Yes.

Mr. Wilkes. The wind velocities for design purposes do go up to 100 miles an hour.

Mr. Constands. The wind does not but the sign design does.
Mr. Wilkes. And also this is a type identified as a butterfiy—one wing on each side of the roadway. In the design assumptions, you would apply the wind on one side to develop a tortion effect and that gives an unbalanced load which is greater than you would have in some cases to a balanced wind load on the two sides.

Mr. Constandy. I realize it may be unfair in that you have no dimensions other than those Mr. Prisk gave you, but could you con-

ceive the necessity for something this massive any place?

Mr. Wilkes. Those were substantial cantilevers; they extended out

over the roadway.

Mr. Constandy. You know, in the nine States plus traveling considerably around the United States, that is the largest thing I have ever seen. And it may be they have very strong winds up in that part of the country. But the peculiar thing to me is Van Buren Street is perhaps the major street. Missoula has three interchanges into the city. Orange Street does go deep to the heart of downtown Missoula. But I just wondered why the sign in this gore is mounted on such massive support while Van Buren Street, at the preceding interchange, had more modest signs.

Mr. WILKES. I would not want to pass judgment on the size until

I could review design calculation.

Mr. Constandy. I appreciate that and I did not mean to put you in such a position. If I had to choose the most impressive thing we saw

on the whole trip it would be this sign. Mr. Huff?

Mr. Huff. I might add we have done a limited amount of wind tunnel testing to support sign post design. Now we found, through our limited research, that you could safely cut those loadings down to I believe about 80 percent, 75 or 80 percent. And as a result of that, we have begun cutting down on the sizes of our sign support.

Mr. Constandy. Are you meeting the standard?
Mr. Huff. Well, we are building them and getting paid for them. Mr. Constandy. That is one test. Actually, though, the standard, as you found it, is too high and results in more massive sign supports than are necessary; is that true?

Mr. Huff. In our opinion, a 100-percent allowance for the 100-mile-per hour wind load is too high, yes, that is our opinion. Mr. Constandy. If they ever had the kind of a wind in Missoula which this is intended to withstand, it would be the only thing left standing in the city.

Mr. Huff. I agree with you. Mr. Constandy. Mr. Wilkes?