

Mr. BLATNIK. The gentleman from New York, Mr. McCarthy.

Mr. McCARTHY. Thank you, Mr. Chairman.

This looks familiar. Is that Staten Island?

Mr. LINKO. Yes; this is the Staten Island Expressway.

Mr. McCARTHY. Do you have information on fatal accidents at this location?

Mr. LINKO. Well, it is hard for me to get. In New York City, a big city, we do not even bother to put these accidents in the paper because there is so much going on, and nobody ever hears about these things. People die and they do not even bother to print this in the paper. That particular picture is really a shame because these hazards are not necessary. It does not cost any more money to eliminate these. It would cost less money if some of these hazards had been eliminated at the start. You already have one guardrail protecting the overhead sign. That guardrail could have been put in front of the bridge abutment.

Mr. McCARTHY. On the sign, I would like to ask Mr. Prisk, what would you estimate the cost of those sign supports?

Mr. PRISK. This type of sign, "Bradley Avenue exit one-fourth mile," mounted on a mast arm, and in that type of location, I would suggest that is in the range of \$6,000 to \$8,000.

Mr. McCARTHY. \$6,000 to \$8,000. Just before I left private industry to come down here to Congress, the company I was with and other companies were beginning to utilize certain concepts made by a famous Italian engineer—the name escapes me at the moment. Some of the vast, new, very interesting buildings have been erected with concrete without supporting structures. Vast expansions of heavy concrete structure without supporting pillars, so that it is conceivable—I mean it is feasible to construct that bridge without the median pillars, too.

Now, I am just wondering if any of these people have been using the latest modern technology in building bridges without pillars. Do you know of any?

Mr. PRISK. I would have to say, sir, that I am not a structural engineer. To the best of my knowledge, the bridge engineers in the State highway departments are using advanced concepts of design and materials. They certainly spend a great deal of time in discussion of improvements of design.

On the extent to which this principle that you mentioned has been recognized, I am quite unable to comment.

Mr. McCARTHY. Just for the record, Mr. D'Amico gave me the name, the gentleman I alluded to is Mr. Nervi, whose concepts have been utilized. I believe Dulles Airport is one where they have this vast expanse of heavy concrete without supporting pillars.

Mr. PRISK. Yes, sir. I think you must recognize, however, that there are vehicle loads to be accommodated on that structure over a considerable span, and just what is going to hold that up, I do not know. You do not have any vehicle on top of the roof at Dulles Airport.

Mr. McCARTHY. No, but you have a very wide expansive area, plus the weight of the material itself, plus the normal stress. I am not a structural engineer, either, but I think that the idea has been shown that you can erect a structure without supporting members. My recollection of it is that these can be made very strong with added reinforcing steel. I am sure we would encounter some difficulties in view of the load of trucks and cars and so forth, but it seems to me it is worth