a loaded vehicle was crashed to measure what happens and see how

these containers behave.

Transportation is an important factor and in general I would indicate that I think our cognizance or recognition of it as a factor has been quite extensive. What has been done, and the experience record, logically leads to the conclusion that we have this factor in hand.

Mr. Mosher. Mr. Daddario, this is a practical example of the advance assessment of technology you have been talking about.

Mr. Daddario. It does fall into that area.

You have not had necessarily to simulate accidents. We have a chart here which shows there have been 171 incidents during transportation on road, rail, air, sea, et cetera. You have actually had

practical ways to learn about the problems.

Dr. Lieberman. Except most of these have been relatively minor. Dr. Tape also pointed out to me, and I failed to say this, that the Interstate Commerce Commission, Bureau of Explosives, has had a vital role to play in this whole transport business. This should be stated for the record.

Yes, we have had that experience but in these accidents there was not the kind of instrumentation to enable us to understand what kinds of forces were involved, how the energy distributed through the whole transport system, and things of that sort. As part of our safety program we think it is essential that we get a good clear understanding of the phenomena which are associated with these accidents even though the likelihood of their ever occurring might be extremely small. This is part of the philosophy, if you will, which in large measure has contributed to the success I think our record indicates we have achieved.

Dr. TAPE. The point is that one takes advantage when there are acci-

dents to learn as much as one can.

On the other hand you do not wait for the accidents to provide the information needed for the future. You take advantage when you are in the unfortunate situation of an accident. You do not wait for it in order to get on top of the problem, however.

Mr. Daddario. I understand that. I brought out the 171 accidents just to show you have been able to handle it, and the fact that these

have been relatively minor.

At the same time the possibility exists, and it is important for us to

develop the best techniques possible.

We could probably keep you at the beginning of your statement for the rest of the morning, but I do think we had better move along.

Any points we miss we can come back to you later. Dr. Tape. We will be happy to supplement in any way you would like, Mr. Chairman.

Mr. Daddario. Proceed.

Dr. LIEBERMAN. Let me, then, just wrap up what I think might be useful for the committee and perhaps will provide basis for further

First I would like to emphasize the point that Dr. Tape has made. regarding the preventive rather than curative approach. This has been

a vital factor in our setup.

While I recognize that the industry and its development is unique, and it has been under Federal control, the fact remains that the prob-