Mr. Rumsfeld. Did you agree with Mr. Waggonner that this was not a function of the President's Scientific Advisory Committee?

Dr. MUELLER. It is not their function to review accidents per se. They reviewed the Apollo program including our failure history before arriving at a conclusion about both the management and prog-

Mr. Rumsfeld. How would you describe this failure or accident, as

a major one?

Dr. MUELLER. In terms of when it occurred, it would not have a major impact on the program, so I guess I would describe it as not of major significance. The reason I am not saying it is a minor accident is that I don't regard any accident or any failure in the program as minor and we treat each and every incident of this sort with a great deal of care, with a great deal of attention, so that we can understand the causes of the failure and be sure that it doesn't occur again.

I would like to say one word about independence of our accident review boards. Although they are composed of NASA personnel in large part, they, nevertheless, are carefully selected to bring new viewpoints, but also a good understanding of the actual problems

to the review.

In such complex systems as these, it is essential that people understand what the system is, how it should work, and be able to identify what was wrong in order that corrective actions can be taken.

Mr. Bell. Mr. Chairman?

Mr. WAGGONNER. Mr. Bell.

Mr. Bell. You say major or minor. How do you measure that?

Financewise or whether it slows the program?

Dr. Mueller. That was my point. I regard all accidents as major. Mr. Bell. When you say it is not of major proportion, do you mean because of the cost?

Dr. MUELLER. We did not have to add substantial cost to the program to compensate for this failure because it had completed the major part of the work we planned to do with it in the program.

Mr. Fuqua. Dr. Mueller, in the review of this accident, what recommendations did this review board make so that this type of thing does not happen again? What do you do about the personnel who continued with pressurizing, when it was obvious that the pressure gage was not working?

Is there any disciplinary action involved?

Dr. MUELLER. There are specific actions that are taken in each It depends on the circumstances as to whether or not there is disciplinary action taken. It is not always the best thing to do to just fire the individual because he isn't likely to pressurize the stage again without having a pressure gage working. Clearly, however, he is disciplined. In this particular case several actions were taken including a change in our own procedures to be sure that we did have proper supervision of all the operations in the test stands and to be sure that the responsible people were supervising the tests on the contractors side, so there are specific actions taken in every case.

In some cases the board recommends a set of actions. In every case the center involved carries on an independent review and takes

additional actions.