

Dr. MUELLER. Well, they had to do with the procedures and how they were being carried out. Some of the practices with respect to the testing itself, the rigor with which the inspection of the components were carried out, those kinds of things. The astronauts tend to be quite critical in their evaluation of the performance and do, in fact, serve a very effective role in causing the people that are working on the spacecraft to find solutions, and in this case they did better and Gus Grissom was pleased with the spacecraft when it was delivered. There is a second thing that the article referred which is our trainers. As I said yesterday, the trainers follow behind the spacecraft by several months in the development cycle and each one, of course, is enough different so that you have to get it into operation. Gus and his crew went through the development cycle of the trainer at Houston and then they were going through it again down at the Cape. In this particular case, Gus had a very good working relation and a very real appreciation of the work that the crew was doing. The occurrence, as I understand it, took place after about a period of some 12 successful runs of the trainer and was sort of an anticlimax in the sense that they had trouble earlier; they finally got the troubles fixed. It was working well and my understanding was that it was sort of a private joke between him and the test conductor on the trainer to highlight the fact that he had now solved the problems.

Mr. BELL. I am already starting to hear from my constituency on some of these things mentioned in this article. I also note that the article states that there was not any firefighting equipment or personnel for the specific purpose of handling an emergency, like a fire. Is that true?

Dr. MUELLER. There were people on deck.

Mr. BELL. I mean on the same level, the same location ready to help out in case of an emergency.

Dr. MUELLER. There were people who were ready to help out in case of an emergency. They were not, however, prepared for this particular emergency and that, of course, goes back to the fact that this test was not regarded as hazardous.

Mr. FULTON. When you go visit the field installations and talk to the people on the spot, have you uncovered how many change orders or engineering deficiencies were pasted on that particular equipment when it arrived at the test stand? What were these deficiencies? Will you put that in the record? I heard that on some equipment there have been as many as two or three hundred deficiencies by the contractor prior to acceptance. With the chairman's permission, we would like to have a general statement on that.

Dr. MUELLER. We will put a statement in the record. I also would say that we try to balance the workload in the various places that we carry out work. There is a certain amount of work that is always done after a stage arrives at the test stand.

(The information requested follows:)

S-IC-T was sent to the Mississippi Test Facility in November of 1966 to determine the readiness of the S-IC test stand to accept the S-IC-4 stage. Upon arrival at MTF 198 man-hours of open work was required: