

same feeling of responsibility as the contractors. I don't believe any suggestion of a whitewash.

Colonel KIESSLING. It will establish a precedent, Mr. Congressman, if there is anything of that nature, and we've had a batch of accidents in this business, obviously this is what the testing procedure is for. The thoroughness of the procedures are pretty well known. The way you go about them, and the way you make sure there is no fooling with records, no possibility, even when it turns out to be personnel glitch. Boy, these guys get pretty traumatic results when they really realize they may have contributed to an accident. We even had some guys go nearly off their rocker. We have no evidence in the past of anything but just plain straight honesty.

It's embarrassing at times, but I don't think that there is any evidence to sustain the idea there has been a whitewash, or anything of this nature.

Mr. SMITH. In spite of the personal factors, our motivation is also that—you just would have no rock to hide behind if you ever let the same thing bite you twice. Then in my position, and Don's position, and Charlie's position, if we don't nail that to the mast and know what happened, if we ever have another one of these and didn't find it, we just couldn't live with ourselves.

Mr. GURNEY. Ted, is there any difference in welding techniques, using pure titanium wire and titanium alloy wire? Does the welder sense any difference in the work of the good wire?

Mr. SMITH. I'm not that much of a metallurgist to know, I don't believe so.

Mr. ROGAN. There is a divided opinion.

Mr. ABLE. Some of our welding people think the consistency of the weld is—some of our welding people claim a good welder can tell by the way it puddles. But there are some others that think you can't.

Mr. GURNEY. It's a gray area?

Mr. SMITH. It's a gray area, I'm sure.

Just to summarize (fig. 4). We feel that our documentation, our operational test and our emergency procedures and controls were good. I think the launch site crew is really to be commended on their performance. The automatic checkout equipment was not involved in any way and the cause has been determined and we are in the process of taking corrective measures on this and all other components that have a potential of destroying major hardware.

Now, to get into the Saturn program itself—we have looked at schedules, since the incidents at Sacramento and the cape, in relation to the need dates for our stages at the cape. These (fig. 5) are not even official yet, but only the initial planning since the two incidents. They are based on the idea that whatever comes out of the capsule accident investigation can be corrected within the current schedule.

The impact on our program is that we will have to fulfill the Apollo/Saturn 503 mission with our 504 stage, and likewise, the 504 mission with our 505 stage, and so on down the line.

We plan, if the decision is made to refurbish Beta 3, we will be operating with one stand down to this point (fig. 6). This stage is on the stand now. We will run about 7 weeks behind in meeting this stage, so we have an opportunity to bring this up.