

welded it again. We have gone back through and we have found techniques for detecting the use of the wrong welding rod. We replaced all the pressure vessels that had the basic problem and we are proceeding with the testing of the next stage in line.

There is a monetary impact on the program because of this failure. It is, however, in a stage that has been ahead of its basic schedule over the past several months, so that the stage, the third stage for AS-504 which is now in test on Beta 1 at Sacramento is able to maintain the schedule (fig. 19, MC 67-6002).

I think this is an illustration of the fact that we have tried, throughout the program, to provide some flexibility by establishing our contract structure in a way that provides stages early, spacecraft early, where it is possible because of the development cycle to do so.

In this particular case we were sufficiently far ahead of schedule in this third stage delivery so that we are able to maintain the basic Saturn V schedule without an impact.

Our status on the launch vehicles can be summarized by looking at these next two charts (fig. 20, MA66-9694A). The gray area represents the amount of the stage that is completed and as you can see, we have begun working and are about a fourth of the way through the last stage of manufacturing on AS-212, the last of the present Apollo Saturn ones.

In the case of the Saturn V (fig. 21, MA66-9694B), we have the first two vehicles completely manufactured and as you can see, the

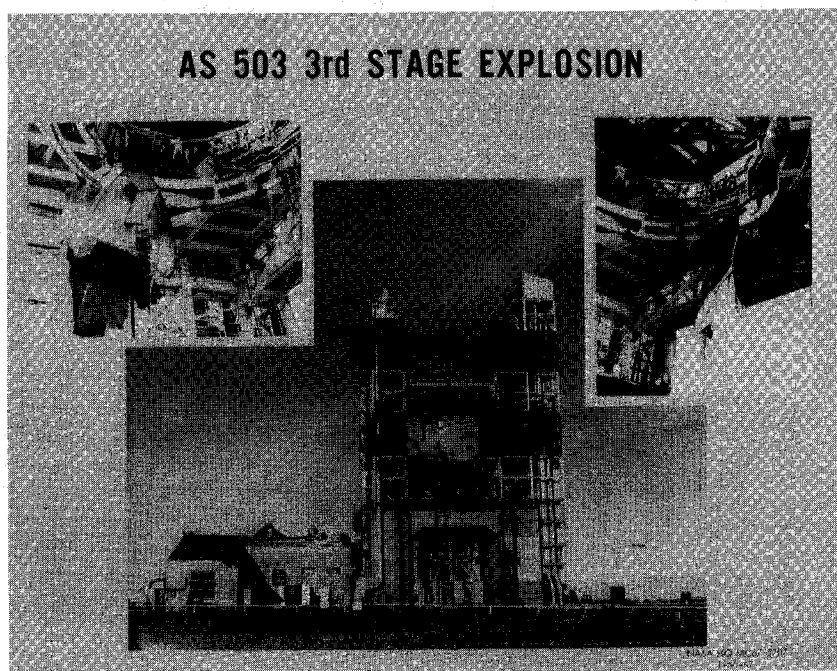


FIGURE 18