

QUALIFICATION PROGRAM STATUS

1. ALL STAGE FLIGHT CRITICAL HARDWARE HAS BEEN QUALIFIED FOR FIRST MANNED FLIGHT.
2. 96 ITEMS QUALIFIED BY ANALYSIS
118 ITEMS QUALIFIED BY TEST
214 TOTAL
3. 153 INTERIM TEST FAILURE REPORTS ON THE 118 ITEMS
4. DESIGN CHANGES HAVE BEEN DEVELOPED, PROCESSED AND TESTED ON 26 OF THE 118 ITEMS

CHART 6

people are in a separate blockhouse at a safe distance. Here we had two shakers, 10,000-pounds force each, and the sphere was mounted on the exact mounting flanges that are used in flight. This is subjected to vibration in this horizontal plane through the sine wave and the random vibration called for by the specifications. This has been fully qualified on the first try. Next slide, please.

This is the same thing in the vertical direction. We have two 10,000-pound-force shakers, side by side, operating "in phase" and again we were able to get through with this with no failure and no difficulties. This is particularly interesting, Dr. von Braun, because of the great interest in titanium spheres since the Douglas incident. This will give you a feel for the kind of qualification work and reliability test work that go into development programs.

We are going to touch very briefly on where we stand on our quality program. The first thing to say is that the test results that have