

APPENDIX A

HEARINGS OF THE SUBCOMMITTEE ON MANNED SPACE FLIGHT, GRUMMAN AIRCRAFT ENGINEERING CORP., BETHPAGE, L.I., JANUARY 20, 1967

Appearances: L. J. Evans, J. G. Gavin, G. F. Titterton, C. W. Rathke, Grumman Aircraft Engineering Corp.; Representative O. Teague, Chairman, Representative R. Giaimo, Representative J. Waggoner, Jr., Representative L. Wolff, Representative E. Cabell, House of Representatives; J. Wilson (staff), P. Gerardi (staff), J. Felton (staff), R. Freitag (NASA headquarters), R. Callaghan (NASA headquarters), J. Cramer (NASA headquarters).

Mr. EVANS. Gentlemen, we have Joe Gavin, our program director, here with us this morning. He will essentially lead the briefing. George Titterton, you have all met, senior vice president of the corporation. I have George now supervising the LM project from my area, to assure that project full corporate support.

We have our program manager, Bill Rathke. I am confident he can answer any questions you may have.

I make one observation that troubles us, and I am sure you have heard it before. As we look downstream, we have built up a capability that you have had a chance to observe here this morning. Gentlemen, there are some 7,000 people on the project. We are talking roughly on just round figures, 40 percent of the current workload at Grumman. We can look 2 years ahead and say to ourselves fairly confidently that over 3,000 people, that have been trained over approximately 4 years now on current funding that we look at, will not be employed in the space area. Just to make a point; and I am sure you have been hearing that from a lot of other places.

Let me comment very briefly about the other bird—orbiting astronomical observatory—because this ties in with the projection of the corporation. Dr. Tripp is our program director on that project. The first bird flew late last spring—April 8, 1966—and was not a successful flight because of a power failure. It orbited for 2 days and finally was deliberately put into a tumble mode.

Now, the power failure reflected itself in the battery—the battery cells were overheating. There has been a very detailed study made both by Grumman and by Goddard and by a joint committee, who, in turn, reported to the associate administrator. We, in turn, have reviewed it carefully and have reached agreement with NASA as to the modifications required. The second flight has been delayed to assure we don't run into problems as we did last time. Arcing of the star trackers was another problem which is being corrected. Fortunately, several things were proved about the spacecraft operation before the failure became catastrophic.