



A Math and Science @ Work Special Series

CELEBRATING APOLLO

AP* US HISTORY Student Edition



*AP is a trademark owned by the College Board, which was not involved in the production of, and does not endorse, this product.

SUPPLEMENTAL DOCUMENTS FOR USE WITH TECHNOLOGICAL IMPACT OF THE APOLLO PROGRAM

Document 1

Source: "FAA Urged to Require Airlines to Improve Fire Safety Systems," article in *Wall Street Journal*, November 15, 1971

"A Transportation Department unit recommended that the Federal Aviation Administration requires airlines to install improved fire safety systems on planes to prevent and control fires and explosions...The safety board said evidence indicated that 27 of 28 people fatally injured in the crash of an Allegheny Airlines plane June 7 at New Haven, Conn., survived the initial crash impact but perished from fires and explosions."

Document 2

Source: "JSC Aircraft Flammability Program Presentation," 1972, Box 15, Aleck Bond Papers, Center Series. Johnson Space Center History Collection, University of Houston-Clear Lake.

"I believe that our regular suits would not have taken the punishment that was handed out to these NASA suits. These suits' ability to keep the heat off the body makes it possible to take that extra step that is so often needed."

**Document 3**

Source: NASA



Apollo 1 Prime Crew, Virgil I. Grissom, Edward H. White II, and Roger B. Chaffee, Complex 34, Kennedy Space Center, Florida

Source: Steve Garber. (January 18, 2007). Apollo 1 (204). *NASA History*. Retrieved August 13, 2009, from <http://history.nasa.gov/Apollo204/>.

On January 27, 1967, tragedy struck the Apollo program when a flash fire occurred in command module 012 during a launch pad test of the Apollo/Saturn space vehicle being prepared for the first piloted flight, the AS-204 mission. Three astronauts, Lt. Col. Virgil I. Grissom, a veteran of Mercury and Gemini missions; Lt. Col. Edward H. White, the astronaut who had performed the first United States extravehicular activity during the Gemini program; and Roger B. Chaffee, an astronaut preparing for his first space flight, died in this tragic accident.

A seven-member board, under the direction of the NASA Langley Research Center Director, Dr. Floyd L. Thompson, conducted a comprehensive investigation to pinpoint the cause of the fire. The final report, completed in April 1967 was subsequently submitted to the NASA Administrator. The report presented the results of the investigation and made specific recommendations that led to major design and engineering modifications, and revisions to test planning, test discipline, manufacturing processes and procedures, and quality control. With these changes, the overall safety of the command and service module and the lunar module was increased substantially. The AS-204 mission was redesignated Apollo I in honor of the crew.