

Neil Armstrong and Sally Ride: Their Safety Legacy

By Merryl Azriel

This summer, two icons of space-flight died: Neil Armstrong, the first man to set foot on the Moon, and Sally Ride, the first American woman in space and the first person to snag an orbiting satellite using a robotic arm. Among the less celebrated achievements of these remarkable individuals is their contribution to space safety. Armstrong and Ride were the only astronauts to serve on the presidential commission that investigated the explosion of the Space Shuttle Challenger on January 28, 1986. Armstrong was vice chairman of the proceedings and co-wrote its final report. This was Armstrong's second experience on an accident review board; he served as the only astronaut on the 1970 NASA investigation into the explosion of an oxygen tank aboard Apollo 13. With no casualties, Apollo 13 did not receive an independent investigation, although there were clear cultural as well as technological contributors to the incident.

The participation of two individuals who could themselves have been affected by a similar accident was a poignant reminder to everyone involved of what was at stake. "The two astronauts on the commission were terribly concerned about the lack of sensitivity at the Marshall Space Center to the risk," David Acheson, who was the commission's other report author, recently told the *Daily Beast*. "It was the shock of the two astronauts on the commission that really made us focus on the extraordinary obtuseness of the Marshall Space Center." At the time, Armstrong was already retired from the corps and had left NASA for business pursuits, but Ride was still an active astronaut. In a May 1986 interview she famously reported that neither she nor most other astronauts in the corps were willing to fly aboard the shuttle given their new-found insights into its manufacture. "I think that there are very few astronauts who are ready to fly again now," Ride told ABC at the time. By October, however, she appeared satisfied that appropriate steps were being taken and headlines across the coun-

"The problem is, people forget,"

try read *Sally Ride Willing to Fly Again*. "I think NASA has done a real good job studying the solid rockets, studying the redesigns and doing the testing that would be necessary to get the space program back," she told NBC's Today program.

Ride went on to be the only member to serve on both the Challenger and the Columbia commissions. As she memorably put it in a 2003 New York Times interview: "The problem is, people forget." The Columbia commission identified many of the same cultural problems at NASA as were found following the Challenger accident. Ride particularly criticized the attitude of managers in demanding proof of a risk before allocating resources to investigate it. The "Faster, Better, Cheaper"

philosophy which had been introduced under NASA administrator Dan Goldin in the 1990's also came under her fire: "With human space flight, you'd better add the word 'safety' in there too."

When Sally Ride died of pancreatic cancer on July 23, 2012 at age 61 and Neil Armstrong died of complications following heart surgery on August 25, 2012 at age 82, in addition to their legacies as space pioneers, they left what will hopefully be a lasting impact on space safety. As Ride reminded us in 1986, space is still a risky business. "I think that we may have been misleading people into thinking that this is a routine operation," she said, "that it's just like getting on an airliner and going across the country and that it's that safe. And it's not."



Sally Ride (second from left) examines a solid rocket booster segment with other commission members at the Kennedy Space Center. - Credits: NASA