

Delta explosion: another accident?

by Carol White

The explosion of a Delta rocket, on May 3, was the fourth in the series of highly improbable disasters which have occurred to U.S. launches into space this year.

Of the 177 Deltas launched before the May 3 failure, the previous 43 in a row were successful. The program in all had only 11 previous failures, which meant that the program had a proven reliability, with a 95% launch success rate. Indeed, the odds against the sequence of four explosions are calculated at greater than 10,000:1.

Under the circumstances, the hypothesis that sabotage has played a part in these accidents is now being investigated. Even so, without firm evidence about how the rockets were destroyed, whether by accident or plan, NASA is considering postponing the next NASA launch of an Atlas Centaur rocket, planned to occur on May 22.

The April 18 failure of a Titan 3D rocket was reportedly caused by an explosion of one of its two solid fuel booster rockets. The first Titan accident, last August, was presumably caused by a turbo-pump failure. NASA reports that the Delta failure may have been triggered by an electrical short-circuit. The rocket's first-stage engine shut off two and one-half minutes early, throwing the rocket out of control. It was then exploded by NASA.

According to William Russell, Delta project manager at NASA's Goddard Space Flight Center, data beamed down from the speeding rocket indicated a sharp drop of voltage from the engine's battery, which took place 71 seconds after launch. Just before the shutdown, another spike of about the same amplitude was observed, which occurred for about 14 or 15 milliseconds. Russell told reporters that sabotage has not been ruled out.

On May 4, White House Chief of Staff Donald Regan told the press the possibility of sabotage is being officially considered, and, according to one NASA source, described the failure as "if someone had thrown a switch."

NASA disclaims any evidence of radio interference with the Delta. Any inadvertent activation of the Titan range safety system on the failed booster has also been ruled out.

The nation's space program is now seriously threatened. Only three Deltas are left in NASA's inventory, along with three Atlas Centaurs. Even before this latest accident, *Aviation Week* was warning that, without a crash program to build a fourth Space Shuttle orbiter, at least 45 Defense Department Shuttle loads would be backed up for launch by 1992. This

estimate depended upon the shifting of certain Shuttle loads to expendable-launch vehicles.

After the Titan accident, it was announced that the Titan is expected to be grounded for from 6 to 12 months. The earliest date being given for another Shuttle flight is July 1987. At the time of the Titan crash, the Air Force was not characterizing the situation as a crisis. But, with the Delta accident, the situation has clearly developed into one of national emergency.

There are plans in the works for upgrading the nation's space program. The Air Force plans to procure 13 additional Tital 34D-7 boosters. The field launch capability of Vandenberg Air Force Base in California is to be expanded. And NASA is requesting a replacement Shuttle orbiter, which could be ready as early as 1989.

According to estimates made before the latest accident by Air Force spokesman Maj. Gen. Donald J. Kutyna, who directs the USAF Space Systems, and Command, Control and Communications, the defense program could be back on line no earlier than 1995. Now, the situation has changed for the worse.

Whether or not there was direct sabotage to some or all of the four rockets, the space program itself has been consistently sabotaged by the cost-cutting policies which have been imposed upon NASA. Were the program operating as it should, the likelihood of four such accidents would be discounted. But, of course, under present circumstances, with the attrition of trained personnel (not least the forced resignation of former NASA head James Beggs), it is possible that the accidents reflect the destruction of U.S. capabilities to mount an effective space program. More to the point, the budget constraints mean that there is no redundancy. By making cost-reduction a priority, we have eliminated the redundancies and backup systems which would have allowed us flexibility, even in the face of deliberate sabotage.

Under present circumstances, it is overdue that acting head of NASA, William Graham, is finally to be replaced. James Fletcher has been approved by the Senate to resume the position which he held in NASA during the '70s. What is outrageous is the role of the *New York Times*, and the media which followed their lead, in lying that Fletcher mismanaged NASA's funds by deliberately under-representing costs. This is part of a more general campaign to demoralize the American population about the nation's future in space. Some TV commentators have even gone so far as to denounce NASA as a mere public relations sham since the days of the Apollo program.

What is needed now is firm leadership to put the NASA program back on track. This can only be accomplished if it is understood that the presently reduced NASA inventory is a national emergency. Whether or not the recent spate of accidents are the result of Soviet sabotage, any attempt to spread demoralization about the space program is sabotage of the nation's defense effort.