Shuttle system, even though military payloads are now backlogged.

In his May 15 testimony, Fletcher responded to a Washington Post article on eliminating commercial Shuttle payloads, by saying, "While I am administrator of NASA, that will not happen. Of course, they could let me go."

Under these circumstances, the idea of having "private industry" pay for the needed orbiter has once again surfaced. This would involve turning over the marketing of commercial payloads to fly on the replacement orbiter, to the company that built the vehicle. However, since the administration is trying to establish a commercial expendable rocket industry which would have to compete with the Shuttle, some have insisted that the Shuttle get entirely out of the commercial satellite launch market altogether! So much for the "commercial" fourth orbiter.

## New NASA leadership

Since November, NASA has suffered under the incompetent leadership of William Graham. On May 6, the Senate voted 89-9 to confirm the nomination of Dr. Fletcher to return to the job of NASA administrator, and on May 12, President Reagan conducted the swearing-in ceremonies.

Although Graham is now only deputy to the administrator, the Donald Regan faction in the White House that placed Graham in the sensitive NASA job in November, is continuing to sabotage the Shuttle program. On May 16, White House spokesman Larry Speakes reported that at a meeting of the National Security Council, Regan questioned whether the money for a fourth orbiter might not be better spent on a new-generation spacecraft—which would not be ready until the turn of the century.

Speakes reported that President Reagan has "asked for more information" on whether to build the orbiter, how many expendable launch vehicles to build, over what period of time. All of this information has come out in public congressional hearings since February!

In the week since he has taken over the reins at the space agency, Dr. Fletcher has taken an uncompromising stand on the space-station schedule, the need for a new orbiter, and has set July 1987 as the target date for the next Shuttle mission.

Fletcher has apparently decided to pre-empt any management recommendations by the Rogers Commission, when its report is given to President Reagan the first week in June. In a surprise move, Fletcher announced during hearings on May 13, that retired Gen. Samuel Phillips would be heading an independent panel to review "the way NASA manages its programs."

General Phillips was the project manager for the Apollo program from 1964 to the first successful lunar landing in July 1969. Dr. Fletcher estimates that the Phillips panel could complete its review in about eight months—enough time before the Shuttle is ready to fly again to make any recommended changes.

## NASA responds to the New York Times

On April 23 and 24, the New York Times published a series of articles by Stuart Diamond, accusing NASA of mismanagment, fraud, and lying to Congress over the past 15 years. On April 25, NASA issued a formal response to the charges. We excerpt:

The NASA-industry-university team has put together an unrivaled 28-year achievement record through the dedication and competence of proven professionals. It is in this context that the Challenger tragedy and the New York Times allegations, many of which are misleading and taken out of context, should be assessed. These allegations, many 10 and 15 years old, are primarily based on NASA's own self-audits, for which corrective action has been taken, or is in prog-

. . . The development of the Space Shuttle, a unique advance in technology, ran at an approximate 30% overrun rate from a budget estimate made in 1971, remarkable in view of the technical and economic uncertainties encountered in developing a totally new space transportation system.

At the same time, it should be acknowledged that the agency often operated under tight fiscal constraints. These constraints necessarily caused changes in both operational and management approaches.

The Space Shuttle flying today is not the configuration on which NASA based its budget estimates in 1971. Many of the features originally planned to reduce operational requirements had to be dropped due to cost or technical considerations and this, coupled with increased mission complexity and lower flight rates, has significantly affected the initial cost-per-flight targets.

The article alleges that NASA predicted that the cost of lifting Shuttle cargo into orbit would be \$100 a pound. ". . . The cost is now \$5,264 a pound for the total program and \$2,849 a pound for operations alone. Discounting for inflation, the corresponding rise is 9 to 19 times. . . . " This comparison is factually incorrect and misleading. Cost per pound is really only a partial indicator of the Shuttle's utility, since many payloads are volume and not weight limited and the figure does not consider the value of many of the Shuttle payloads which simply cannot be launched on any other vehicle. . . .