

COMMENTARY

THE AUGUSTINE COMMITTEE REPORT*

In the last days of 1990 a report was issued by the special committee organized by the Space Council of the White House in which radical changes in the Mission of NASA were proposed. I suspect that this was not the holiday greetings that the NASA hierarchy wanted after having a particularly difficult year. They had to deal with the hydrogen leak problems on the Shuttles and the well publicized problems with the Astro Mission on the Shuttle, and the Hubble, Magellan and Ulysses Missions in 1990.

The Augustine Report reflects a growing concern that NASA has ceased to be effective in directing the U.S. space program. Its problems go back to the post Apollo era when the agency was looking for a reason to continue to fly humans in space. The decision was made to designate the Space Shuttle as the exclusive way to bring humans and freight into space for NASA and the military. After this decision was made NASA came to the scientific community for ideas on how to use the Shuttle for research. The implication was if you aren't doing research on the Shuttle you shouldn't have NASA support. Once the Shuttle was operational NASA needed reasons to do more flights so they sold the Reagan Administration on the Space Station. NASA again came to the scientific community for flight experiments which would provide scientific justification for the Space Station. Life sciences studies and materials processing were designated as the principal scientific rationales but a host of attached payloads were also proposed. Most scientists felt that the scientific rationale for the Space Station was weak.

The NASA approach of building a mode of transportation and then looking for ways to use it did not work. The Shuttle has never lived up to its proposed launch schedule and it already appears to be wearing out. In addition, each launch is extremely expensive. The attached payloads have been cut from the Space Station and it has been so extensively reduced in size and electrical power that it is of little or no use for either materials processing or life sciences research. In addition, the Shuttle does not fly frequently enough to service the Space Station let alone respond to emergencies there.

The Augustine Committee Report essentially says NASA must do what it can do best – research. The resounding success of the Voyager Mission shows that NASA can do outstanding research. NASA's function should be that of space research and its other functions should be supportive of this goal. This research is to be one dedicated to exploration of space and investigation of our own planet Earth. Basically the Augustine

* "The Report of the Advisory Committee on the Future of the U.S. Space Program", December 1990. N. R. Augustine, Chairman. Obtainable from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Committee infers that NASA set the goal of just flying humans in space without providing a justifiable basis for the flights. They suggest that the Agency needs to go back to a program of research in which human exploration is to be used when it benefits the research objectives of the program.

This is an impressive report – one which most of us in the research community can endorse. I am not as sanguine concerning the implementation of this report by the leaders of NASA or those members of the Congress who deal with NASA funding. Hopefully, the Augustine Committee Report will inspire them to re-evaluate NASA's goals. I'm convinced that if they take the time to go through this exercise, they will realize that research is the only legitimate driver for NASA programs.

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