

My Last Year

THIS is my final editorial, after twenty-eight years as Editor-in-Chief of the *AIAA Journal*. My current appointment ends December 1996 and it is time for new blood and fresh ideas. I thoroughly enjoyed this appointment and I hope that our readers found the *Journal* contents useful. It is coincidental that several editors of prestigious journals have resigned in the past year, at *Science*, *Nature*, and *Chemical Engineering News*. This led to a concern by some as to how will the world get along without these old, wise, influential stalwarts of science and technology? Will the younger persons who have replaced them have the prescience, prestige, wisdom, influence, etc., of their predecessors? The answer is that no one is irreplaceable; but each succeeding generation can build upon the accomplishments of the past. So these changes are not a cause of concern but should be a cause for celebration. I look forward to the innovative changes that my successor, whoever that may be, will make.

Many prestigious leaders of science and technology have been bemoaning the forthcoming cuts in funding for science. Their rationale is that science and technology is an investment in the future, which should not be cut. Well, so is Headstart, education, health care, adequate defense, infrastructure, housing, and so forth. I remember when I was working in the Pentagon, and we had to tell someone in R&D that we had to decrease his budget request. So we would ask which item had the lowest priority for his organization. The standard answer was "none"; that is, they all had equal priority. So we had to do the cutting, even though the technologists in each area were far more knowledgeable about the prospects for success and utility than was the staff to which I was attached. So it will go in Congress. I don't mean that there are areas of science that are less worthy than others (because we cannot tell the future); I mean that within each area there are projects less worthy than others, and that it should be recognized that every proposal need not be funded by the Federal government. It is also not necessary that the U.S. should be the leader in every discipline. We should lead where we excel, and seek international cooperation in *all* programs. But perhaps parochially I do feel that the U.S. is the leader in commercial aircraft and space and launch hardware and should remain so. The greater the production of these by a producer, the lower the unit costs, and everyone benefits. Fractionation of effort among suppliers in other countries in the misplaced spirit of national self sufficiency is misguided and costly to all. But back to the *Journal*.

This journal is the product of its authors—and reviewers. I believe the majority of authors agree with our decisions on revisions and acceptances for publication. Our review process remains anonymous, for which there is no substitute, in spite of conflicts of interest in a few cases and some adversarial aspects. There is simply no better way. It is analogous to democracy, which is cumbersome, slow, inefficient, and contentious. But a better system has not been devised yet that has its stability and durability. So it is with anonymous peer review. As for the anonymity of reviewers, I have no difficulty in identifying myself as a reviewer. But reviewers should not be subject to phone calls, FAXes, E-mail, or harassment outside of the channel of communication through the Associate Editor, who acts as the judge in all such matters.

But I worry about the smallness of the incremental advances that are published. All results deserve independent checking, perhaps by using an alternate approach. But how important is a small change in computational or experimental technique, when the results are at

best a small improvement in the prior state of the art? Many claims are based on increased speed, but in many cases those speed increases are difficult to document. I hope that each publication will be a brick in building the edifice of progress in the design and construction of aerospace technology. A paper that is read and used by only one person who either builds on it or who has a consequent flash of inspiration for something new or different *will* make a difference in our world. But I believe in the future that the *AIAA Journal* should emphasize publishing experiment or computational results on new problems instead of just improving on previous analyses of problems or designs. In the meantime, our backlog of accepted papers not yet published continues to be a problem. Coming soon are CD-ROMs, with both back issues and papers that have been accepted but not yet published. In the future, perhaps we will be on the Internet with our papers, to which readers can add their comments and experiences.

The *AIAA Journal* has been criticized by a few readers as not having the prestige of some other journals, for example in fluid mechanics and combustion. However, most of the papers in those other journals have little relation to aerospace. The *AIAA Journal* should not be all things to all people; instead, each paper has to have some relevance to aerospace, either directly or by demonstrating a technique that could be useful in aerospace. The emphasis is on the practical for our industry, without which this journal would not exist; and our readers and contributors would all be working on something other than aerospace.

For my successor, I hope that a young person will be chosen. That person must have the proper background in the topics of the scope, and have the ability to make the right decisions rapidly, because delaying each step will lead to chaos and confusion. He (she) hopefully will use management by exception—if a wrong decision is made, he (she) will know about it soon enough. And there is no decision that cannot be changed or reversed. And may the Heavens grant him (her) and all of the Associate Editors good luck and good guidance in their decisions.

As for me, I plan to continue to work, but will devote more time to intellectual, cultural, recreational, and professional activities and of course, family, who have spent too many years seeing only the back of my head as I labored at my desk at home. My major battles have been fought, many lost but some won. There are many national and international technical problems that require attention and for which experience and knowledge can make a difference. So it is now the time for me to take a broader view of our world, technological and otherwise.

Many thanks to our excellent associate editors whose terms have just expired: Prof. Jud Baron, Dr. R. Grandhi, Dr. Robert Walters, and Prof. Ronald So. Welcome to the new associate editors, Dr. Curtis Mitchell, Prof. John Kallinderis, Prof. A. Belegundu, and Prof. Charles Speziale. A note of appreciation to Jacqueline Dupree, who was Journals Managing Editor and who is moving to Production, and welcome to Satoria Lake, who had been managing our production to TechBooks. Norma Brennan kept the entire machinery of journals on track. The many reviewers who helped our authors are listed below. With my warmest personal best wishes to all who have sustained this journal and kept it great.

George W. Sutton
Editor-in-Chief