

Editorial

Operations

In 1969, the *AIAA Journal* published 2400 pages, as compared to 2464 in 1968. About 6% fewer papers were submitted during 1969 than 1968, so it appears that we may be past the peak caused by the intense research programs associated with Apollo, the supersonic transport, and the second generation ballistic missiles. There also has been a slight decline in the number of subscriptions to the *AIAA Journal*, but this may be the result of increased use of office copying machines, so that its significance cannot be accurately ascertained. With the complication of rising printing costs, the Board of Directors has increased both membership dues and page charges. Unfortunately, the voluntary payment of page charges also has been decreasing because of changes in policy of various institutions and companies, so we are now authorized to assign higher priority for publication to those papers for which page charges are authorized. This step has not yet actually been taken, since we wish to evaluate the impact of both the change in page charges and company authorization policies. If it does become necessary to invoke such a priority system in order to balance the *AIAA Journal* budget, the mechanics probably will be in a form such that a certain fixed percentage of each issue is devoted to papers for which page charges are authorized and the remainder of the pages to papers for which page charges are not authorized. In each category, publication will be based on date of receipt (pending, of course, review and acceptance procedures).

We also have tackled the problem of judging each paper more promptly. To achieve this, we are revising the review form; this is now in the final stages. Quality factors have been added, but the entire form has been simplified. In addition, we have been formulating a plan by which delinquent reviewers are requested to return the manuscript so that it can be sent to another reviewer. We are hopeful that these two changes will lead to less irritation to authors, reviewers, and editors.

Outlook

One of the most interesting aspects of the year 1969 has been the increase in what may be called the antitechnology sentiment. This appears to be based primarily on three arguments: first, technology has not solved many domestic problems, for example, urban decay and adequate jobs for blacks. Second, technology has not solved the problem of prevention of war nor even the winning of wars on the side of the participant who has supported technology. Third, technology and its by-products are actually ruining the environment and even the health of man without regard for human ecology. The argument then proceeds to advocate a technological stalemate enforced by an over-all reduction in both research and innovation. This extremely vocal attitude has left some of the members of the technical community bewildered, for, although we generally believe that we are work-

ing toward the betterment of man, we fully appreciate the indictment. Where did we go wrong?

In all likelihood this area—like that of the muckraking era of yesteryear—will be remembered as one in which the aforementioned were the result of misapplication of technology rather than the direct result of technology itself. It is self-evident that technology *itself* is neither good nor bad, but its application leads to both effects. It is relatively easy to recognize the good; this is held out in the promises which lead to its acceptance. Only rarely is there a simultaneous research and test program which foretells the possible deleterious effects. These we have found out only later. Fortunately there has been a recent change begun, at least for major programs. For example, the sonic boom and ABM have had efforts which examined their deleterious effects. On the other hand, many changes occur which are not the result of a single large program, but of a thousand or more small independent decisions. The lack of coordination and investigation of the over-all effects must be blamed on those organizations which are specifically commissioned to determine and report these, and, where these are lacking, on the legislative and executive bodies which can create and direct such organizations.

We are all dedicated to that which improves the total environment of man, and in a manner which is the least disruptive to the natural environment. That is, we advocate not the preservation of the natural environment but that of man. We list a few items that constitute this environment:

- 1) Ability to work constructively,
- 2) Housing and its associated air, water, and earth.
- 3) Nutritious and appealing food.
- 4) Education, both for child and adult.
- 5) Recreation.
- 6) Convenience.

These come from the ability to provide at reasonable costs: energy, transportation, communication, mobility, and peace. It is interesting to note that we have had 24 years without a major war, which some of us believe is due to the correct application of nuclear weapons, namely, the doctrine of assured destruction. On the other hand, there have been over 50 small wars. Some of these were settled quickly and perhaps equitably, in which advanced military technology played an important role. However, there are several wars which appear to be merely the product of political adventurism. These wars—crippling to the economy, population, and political virtue of the participants—have left us with major questions; for example to what extent has our ability to pursue such wars led to their pursuit? And to what extent did the available technology influence these decisions?

I contend that the latter is not the correct question, for in these matters technology in its broad sense usually has supported rather than precipitated such political decisions. It is the *making* of these decisions that is important. It is the

responsibility of the political institutions to insist that the consequences of such decision be objectively examined and studied prior to the decision. The converse applies equally well: where problems exist, it is again up to the body politic to propose alternative solutions, with each being examined for its consequences. It is easy to blame technology for our present ills. In practice, it is the decisions made by our political bodies that determines whether these effects will, on the balance, improve or degrade the environment of man.

Appreciations

Once again it is my privilege to extend the warmest appreciation, on behalf of the AIAA and the readers and authors of this journal, to the following retiring associate editors:

Dr. Maurice L. Anthony
Dr. R. Kenneth Lobb

Prof. Jean Mayers

Each of them has added something personal to this journal, and their insights and judgments have aided us in improving both its standards and utility. We thank each one with greatest sincerity.

Professor Roberto Vaglio-Laurin has graciously accepted our invitation to extend his term of office for one more year. We also wish to welcome our new associate editors; Mr. Leif Potter, Professor Joseph Kempner, and Dr. Herbert Rauch; and we are looking forward to their association with us for the next three years. Last but hardly least, we wish to acknowledge the AIAA editorial staff, particularly Ruth Bryans and Anne Huth, who have kept the journal in print in spite of a long strike earlier this year.

George W. Sutton
Editor-in-Chief

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* Because it is difficult to include the reviewers for October, November, and December 1969 in this issue of the Journal, they will be listed with the reviewers for 1970 in the January 1971 issue.