Dual-Use and Defense Conversion: The Aircraft Technology Role

A S I begin this year's editorial on the topic of how aircraft technology will respond to the national mandate for dual-use and defense conversion, my attention was drawn to some congressional action initiated last spring in the form of Senate Act S.419, which provides for "enhanced cooperation between the Federal Government and the United States commercial aircraft industry in aeronautical technology research, development and commercialization and for other purposes." This Act supports President Clinton's broader initiative on commercialization of advanced technologies. It bears the short title, "Aeronautical Technology Consortium Act of 1993."

The Congress prepared a list of findings that served as a substantially new way of conducting commercial aircraft business in the future. Among these findings are

- 1) Aircraft production in the U.S. affects nearly 80% of the economy.
- 2) The European Community, with U.S. agreement, can continue to subsidize up to 33% of the development costs of large commercial aircraft by application of European government funds.
- 3) Defense drawdown, coupled with increased competitive pressures on the commercial aircraft market, mandates coordination and federal resource redirection to assist the commercial aircraft industry.
- 4) Precedence for this can be found in the federal assistance to the semiconductor consortium known as Sematech.

The Act would 1) provide for an interagency aeronautical technology program to coordinate and expand federal R&D programs related to aeronautical technologies and 2) assist the U.S. commercial aircraft industry in developing an Aeronautical Technology Consortium for the purpose of providing federal assistance to industry-led joint ventures established for R&D and commercialization of aeronautical technologies and related manufacturing technologies applicable to large civil aircraft.

Of interest to readers of this journal is some specific language in the bill establishing an Aeronautical Technology Program providing a mechanism for private industry "comment and guidance regarding cost-effectiveness and commercial practicability of existing and proposed federal R&D programs relating to aeronautical technologies and related manufacturing technologies." Other program objectives include promotion of transfer and conversion to commercial application of aeronautical technologies developed for national security purposes and coordination and expansion of existing federal R&D programs relating to subsonic and supersonic aeronautics. The principle focus would be on large commercial aircraft.

I would welcome and feature articles addressing the technical and economic issues embraced by this bold initiative by the Senate. Articles addressing the broader issues of dual-use and defense conversion, such as those being addressed by the ARPA-led joint agency Technology Reinvestment Project, are also most welcome. As I see it, the future of aeronautical technology development in the U.S. certainly, and internationally by association, hinges on success in these initiatives between the Federal Government and private sector. Leaders in its implementation are encouraged to publish their solutions in this journal.

Last year at the Aerospace Sciences Meeting, the Publications Committee took a step closer, in my view, to the requirement of mandatory journal publication charges. After much spirited debate, it was left up to each journal to decide whether or not to take this step. Driving the issue is the depressed state of the aerospace economy and the ever-increasing cost of publication. Publication charges and subscription fees traditionally support the journals.

Two of our journals have gone to a two-track system (paid vs unpaid publication charges). Issues will contain a majority of "Track A" papers, with a small percentage of "Track B" included. I have resisted taking this step. The reason is that we have authors of good papers that are not funded (retirees, small universities, and a few foreign authors). But I expect that authors who are supported will pay these charges. Most contracts/grants require archival preservation of the funded work (if it was worth doing, it is worth preserving, following peer review) and provide funds for this. In my letter acknowledging receipt of paper submittals, I ask authors whether or not they will request publication charge funding if their paper is accepted. Most check yes. I ask those who check no, Why not? Answers such as "my grant money ran out" or "my school doesn't pay" (where my records show they do) are not acceptable. In such cases, it will require some of my time to track down the specific issues involved, and this might delay getting the paper into review. I would hope to keep JA open to all, but I must insist that publication charges be met unless there is sufficient reason that they cannot. Let's hope this avoids a future mandatory publication charge requirement.

At this time of year it is appropriate to pause and recognize the effort that has gone into your *Journal of Aircraft* over the past year. Beginning with the volunteers, I first come to my dedicated staff of Associate Editors. Please look over their biographies and photographs and then look them up at our technical meetings. They are always willing to help authors and potential authors get their material published. Work with them; they can help add great value to your already valuable contributions.

My International Board of Editors helps keep track of important material developing in their respective countries; each IE is asked to provide an occasional editorial on recent developments. (In this issue an editorial on aeronautical activities in Japan has been included by Hirotoshi Kubota.) Each IE serves as an AIAA publications representative to help authors in each country. IE names appear on the inside front cover.

I initiated an Editorial Advisory Board last year at this time to represent the interests of several Technical Committees in archival preservation of their meetings papers. These names also appear on the inside front cover, and their initial work in identifying good papers and assuring that the scope of this journal is timely is sincerely appreciated.

The names of this past year's reviewers appear in this issue. They provide the critical reviews that result in maximum time value of the papers that are accepted and help authors of declined papers to prepare future submittals. JA could not exist without the dedicated, insightful work of these reviewers.

Our professional staff at AIAA Headquarters in Washington, D.C., continues to provide excellent support to all the various needs of the journal. Norma Brennan is our highly capable Division Director for Journals. She provides my inspiration and keeps me on the right editorial track. Her Managing Editor, Jacqueline Dupree, and Production Editor, Christine E. Williams, handle much of the day-to-day tasks at Headquarters and are the principal reasons why JA remains of highest quality. Editorial Assistants Jason Peak and Everett Johnson, Art Director Sara Bluestone, and Graphic Designers Reginald Clay Sr. and Jacquelin Razavi apply their expert skills to produce an easy-to-read product with format and graphics that command attention. See especially their September-October '93 issue, a work of art!