

## The Dawn of a New Era

1993 is certainly the dawn of a new era for the aerospace industry. It has already begun to affect the *AIAA Journal*. Although the number of papers submitted has not changed (about 650/year), the renewing subscriptions are beginning to slide. This is due, of course, to declining employment in this industry because of the decreasing defense budget and decreasing commercial aircraft orders. Many firms have offered early retirement programs, and many employees have accepted those, to start new careers in other fields such as finance, real estate, etc.

I have personally taken part in an amazing era. It started with a madman with a little mustache, who had dreams of European and perhaps world conquest. After I had contributed my share as a sailor, soldier, and airman I and everyone else all went about our peacetime pursuits. But scarcely two years later another madman started his quest: this time seriously bent on world conquest through ideology, subversion, and military force. The Berlin blockade was the first serious sign that we would be plunged into a cold war that would last 45 years dotted with some very serious hot wars. The U.S. rebuilt its military and accelerated its technology. The birth of NASA and the Apollo moon project were a part of this technological buildup.

It is amazing to me that the former USSR spent 20–25% of its GNP (while we stayed ahead in most areas with about 7%). A few years ago when visiting the USSR I was most struck by its many dichotomies: It claimed to be the world's largest producer of steel, but there were no metal products of any kind in any of the stores I visited. A citizen claimed to me that all the steel was going into the Moscow subway, a patent absurdity. Most men on the street carried attache cases and most women carried shopping bags (to buy *anything* that happened to be in stock in a store or at a street vendor). This was not always for personal consumption, but more often for bartering. And soldiers were everywhere. In addition, I could not walk 10 steps on the street without someone trying to sell me rubles at 10% of the official rate. It was so common that I think these were paid agents of the state trying any ruse to gain hard currency. The Gorbachev era was unstable: GNP was dropping at 10–15% per year. People were not working. The standard joke (perhaps Western in origin) was "The government pretends to pay me and I pretend to work." There was no infrastructure (and still isn't) for moving farm products to market. My one ride in a passenger train was at a breath-taking 20 mph.

And so the USSR collapsed as the main threat to western security, while other conflicts around the world seldom threaten our vital interest—and hence the decline in the U.S. defense budget. On the other hand, aerospace technology is accelerating. New defense capabilities are on the horizon,

including superior fighter aircraft and ballistic missile kinetic kill interceptors. New sensors are being developed for air, ground, and naval combat, which are taking advantage of rapid detector progress. Progress in material properties has been steady, allowing payloads to be greater. The dichotomy is that we will have fewer of better defense hardware. Commercial aerospace is setting record production rates (although it is now below its peak). Spacecraft continue to be launched, and there is an urgent need for more, such as weather and environmental monitoring satellites. The NASA space exploration satellites are searching the skies and making discoveries by using an ever-increasing number of wavelengths.

How does that affect the *AIAA Journal*? We are still a verbal and hard-copy society. We attend meetings and write and distribute preprints, journals, and books. The age of electronic distribution, except for retrieval of references by topic or author, continues to elude us. And judging by the citation index, our papers are not used in sufficient quantity to justify placing entire volumes of the *AIAA Journal* on CD-ROMs. But there are some reference materials that I would relish on CD-ROMs, namely, handbooks: for example, the Purdue thermal properties set or the Engineering Index. Perhaps this must be left for the future, as I am still mastering my computer-based paper tracking system, which, among other things, shows me which authors have not shared in the review process or have been grossly tardy.

I wish to express my sincere thanks to Norma Brennan, who, together with our managing editor Heather Brennan, solved a horrendous problem when for various reasons we had an exceptional turnover in editorial help. We now have Richard Babione as our production editor; he has helped decrease our backlog enormously. I wish also to thank our retiring Associate Editors who have helped to maintain our high standards of publication: Drs. Prabhat Hajela, David Wilcox, and George Inger. Finally, our sincerest appreciation to those who took the time to actually review submitted manuscripts, as indicated by my computerized paper tracking system. Their names follow below.



George W. Sutton  
*Editor-in-Chief*

Please note new address:

Dr. George W. Sutton  
*AIAA Journal*  
P.O. Box 15627  
Arlington, VA 22215-0627