Advice for Reviewers

IS all that white space on our review form as formidable to you as the blank word processor screen when you begin to write a paper? If so, let me offer a few thoughts which may help you. We are publishing for the record in this issue our standard AIAA review form. Begin your review by filling out the bottom right corner; in particular, your bottom-line recommendation regarding publication. Most importantly, please use the white space. Use your own paper instead, if you wish, and feel free to go beyond the space limits of our form by adding additional pages.

In most cases, two people will read what you are writing. First will be the Associate Editor whose goal will be to decide whether or not to accept the paper. Second will be the author since, in most cases, we forward reviews to the author. The latter, of course, will have an intense interest in what you write and will use the review as a guide in preparing any necessary revisions. The Editor has three choices: he can accept the paper as it is, he can ask for a revision, either major or minor, or he can reject the paper. Most of our papers fall in the middle category. Reviews for papers in this category must be specific enough that the Associate Editor can use the review to instruct the author precisely what must be revised. If you think the paper should be rejected, please be very specific in your reason since we owe it to the author to state, in understandable terms, why his paper will not be published. Since the author will probably be basing his revision on what you write, please make your suggestions very specific and operable. He must be able to understand where in the paper your comment applies, what specific changes should be made, and what weaknesses should be addressed.

What type of information would we like to see find its way into this white space on our form? Here are some suggestions:

1) Is the paper a new or novel contribution? Why or why not?

2) Does the paper represent a new, significant, or very useful application of an existing or new idea? (We strongly encourage this type of paper in this Journal.)

3) If the paper is of a more analytical nature, does it include an example of some numerical calculations? If not, can you suggest one? (We would like to see all papers include examples to make the Journal applications-oriented.) Does the Introduction explain how any theoretical contribution can be used in practice? (We also encourage this.)

4) Is there sufficient information in the paper for you to use it as a basis for further work? If not, describe what is missing.

5) Does the Introduction place the paper in context with previous work? Is the reference list correct, fair, and complete? Be specific in addressing this issue.

6) Do the results substantiate the claims? If not, why? Are the data correct and complete? Again, why not?

7) Are there errors in the paper?

Feel free to mark the manuscript; it is a good way to communicate with both the Editor and the author. Even marking clerical errors is useful since the author will appreciate knowing of any that you find.

Hopefully, some of the above thoughts will be useful to you both as a reviewer and as an author. Many of you have consistently provided us excellent reviews over the years. We are very appreciative of the effort you have put in doing this for us. Indeed, without it we could not have a Journal. Those of you who have helped us by performing reviews between October 1, 1984 and September 30, 1985 are listed in this issue. My thanks to the 1984-85 reviewer team.

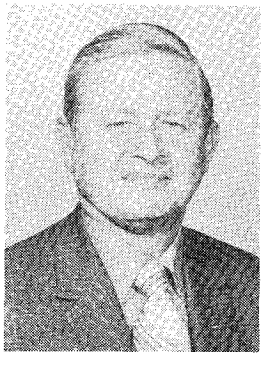
This first issue of 1986 brings some changes to the editorial team. Dr. Landis Markley and Dr. David Schaechter retire after serving their three-year terms as Associate Editors. I'll miss their thoughtful judgments and our close association. I wish them well in their future ventures. Joining the editorial team as Associate Editors, beginning with this issue, are Professor Bong Wie from the University of Texas, Professor John Junkins from Texas A & M University, and Professor Joseph Bossi from the University of Washington. I look forward to working with these new Editors. Many of you will be corresponding with them over the next several years. These three new appointees join the continuing four Editors and myself to make up your 1986 editorial team. Photographs and biographical sketches of the team follow.

Donald C. Fraser
Editor-in-Chief

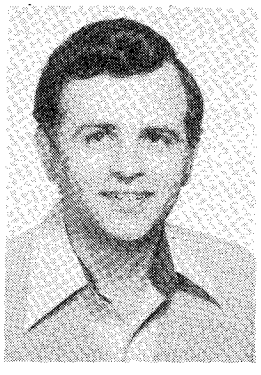
Editor-in-Chief

DONALD C. FRASER is Vice President for Technical Operations at The Charles Stark Draper Laboratory and as such is responsible for all programmatic and technical activities of the Laboratory. He holds the S.B. and S.M. degrees in Aeronautics and Astronautics and an Sc.D in Instrumentation, all from MIT, and is a Lecturer in the MIT Department of Aeronautics and Astronautics. He has been involved in the design and fabrication of control systems for a wide variety of applications from the Apollo spacecraft to fly-by-wire aircraft to power reactors. Prior to assuming has present editorship, Dr. Fraser served as Editor-in-Chief of the *Journal of Spacecraft and Rockets.* He is a Fellow of the AIAA and a member of the National Academy of Engineering.

Associate Editors

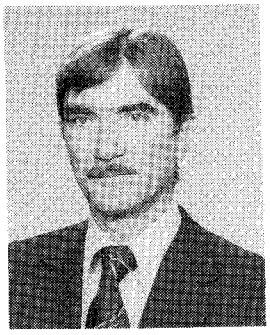


RICHARD H. BATTIN, Associate Department Head, Charles Stark Draper Laboratory, and Adjunct Professor in Aeronautics and Astronautics at MIT, is the author of three books: *Astronautical Guidance, Astrodynamics,* and *Random Processes in Automatic Control.* In 1972 he was a recipient of the Louis W. Hill Space Transportation Award for the navigation software for the Apollo 8 mission. He received the AIAA Mechanics and Control of Flight Award for 1978 and the Institute of Navigation Superior Achievement Award for 1980. Dr. Battin is a former *AIAA Journal* Associate Editor, is a Fellow of both the AIAA and AAS, and is a member of the National Academy of Engineering.



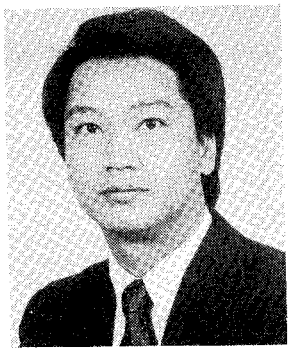
JOSEPH A. BOSSI, Assistant Professor in the Department of Aeronautics and Astronautics, University of Washington, Seattle, recieved a B.S degree in Physics from Seattle University, M.A. degree from the University of California, Berkeley, and both the M.S. and Ph.D. degrees from the Department of Aeronautics and Astronautics, Stanford University. He was employed for 10 years as an engineer at the Boeing Aerospace Company where he was involved with the analysis and design of inertial guidance systems and spacecraft attitude control systems. Since joining the University of Washington faculty, his research field has been the application of estimation theory to aircraft flight control and to the control of flexible spacecraft.

JOHN R. JUNKINS is a Professor of Aerospace Engineering at Texas A & M University. He was previously a member of the faculty at Virginia Polytechnic Institute and the University of Virginia. His industrial experience includes McDonnell Douglas Astronautics Company and NASA/MSFC, as well as ongoing consulting with a dozen agencies over the past decade. His Ph.D. is from UCLA. He has taught 18 short courses since 1967 and is the author of more than 100 publications, including two books; the most recent on optimal spacecraft maneuvers. He is a Fellow of AAS and an Associate Fellow of AIAA. He has been active in national/international AIAA meetings and has played an active editorial/review role in support of several journals during the past decade. His main research interests are analytical/numerical methods for dynamics, control, and estimation.



J. VICTOR LEBACQZ is Chief of the Flight Dynamics and Controls Branch at the NASA Ames Research Center, Moffett Field, California and lecturer in VSTOL stability and control in the Department of Aeronautics and Astronautics at Stanford University. He holds B.S.E., M.A., and Ph.D. degrees from Princeton University. He is author of more than 50 technical reports, papers, and articles, and a recipient of the NASA Special Achievement Award. In addition to his duties as Associate Editor for the AIAA, he has been a member of the Handling Qualities Technical Committee as well as a Section Technical Director for the American Helicopter Society.

STEPHEN S. OSDER is presently Chief Scientist, Flight Controls and Avionics for McDonnell Douglas Helicopter Company. He was previously Director of Research and Development at Sperry Flight Systems. He received the BEE degree at the City College of New York and the MSEE degree from John Hopkins University. His background is in the design and development of automatic flight control systems, digital avionics systems, radio and inertial sensors, and computers. The vehicle applications include bombers, transports, VTOL and STOL vehicles, helicopters, fighters, missiles, re-entry vehicles, and spacecraft. His contributions have been in the technologies and applications of fly-by-wire, redundancy management, guidance and trajectory control, adaptive control, digital flight control, fault tolerant computers, automatic landing, navigation system design, and avionic system architectures. He holds 14 patents in these areas and has written many papers on these subjects. He is an Associate Fellow of the AIAA and a member of both the IEEE and the American Helicopter Society.



BONG WIE, Assistant Professor of Aerospace Engineering at the University of Texas at Austin, received the B.S. degree in Aerospace Engineering from Seoul National University of Korea and the M.S. and Ph.D. degrees in Aeronautics and Astronautics from Stanford University. Previously Dr. Wie was a dynamics and control analyst with the Ford Aerospace & Communications Corporation. He has been involved in the design, analysis, and digital simulation of attitude control systems for various spacecraft, including the ARABSAT. His current research activities include developing practical control system design approaches for the Space Station and large flexible space structures.

LINCOLN J. WOOD is Technical Group Supervisor of the Future Mission Studies Group at the Jet Propulsion Laboratory, California Institute of Technology. He received the B.S. degree in Engineering Physics from Cornell University and the M.S. and Ph.D degrees in Aeronautics and Astronautics from Stanford University. He was previously Staff Engineer with the Hughes Aircraft Company and was Bechtel Instructor in Engineering at the California Institute of Technology. He is the author of 50 publications in the areas of space navigation, trajectory optimization, and control theory. He was an Associate Editor of *The Journal of the Astronautical Sciences,* is an Associate Fellow of the AIAA and a Senior Member of the American Astronautical Society and the IEEE.