

Donald M. Dix



Lars E. Ericsson



Gerald Gregorek



Ronald A. Hess



Barnes W. McCormick



Jean A. McGrew



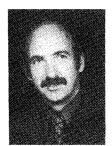
Amedeo R. Odoni



John L. Porter



Craig D. Simcox



Thomas M. Weeks

The 1980 Team

SSOCIATE Editors for the Journal of Aircraft share a common responsibility for timely review and editing of papers. As Editor-in-Chief, I am committed to continued emphasis on cutting the review cycle to an absolute minimum while preserving technical integrity. A number of improved operating procedures recently introduced are beginning to pay off resulting in earlier decisions on papers, with publication in some cases in less than a year from submittal, and a measurable improvement in coverage of areas of major technical interest.

The results may be directly attributed to the dedication of our highly talented 1980 Editorial Team. You will see that they are well balanced among industry, government, and university sectors. We also have achieved a good geographic balance, and obviously we have attained the degree of balance within the science and technology of airborne flight to meet the scope of JA. Following are brief biographies of the 1980 Team:

Donald M. Dix

Donald M. Dix received his BSME, MSME, and Sc.D. degrees from M.I.T. He is currently a member of the staff of the Institute for Defense Analyses, where his activities include the assessment of potential technological advances, particularly in the propulsion area, and their payoffs in future military systems. Prior to joining IDA in 1973, Dr. Dix was Vice-President and Technical Director of Northern Research and Engineering Corporation, where he directed a wide range of R&D efforts in civilian and military energy conversion systems and equipment. From 1961 to 1966, he was engaged in high-temperature gasdynamics research at the Aerospace Corporation.

Dr. Dix is a member of AIAA, Sigma Xi, Combustion Institute, and the Combustion and Fuels Committee of the ASME.

Lars E. Ericsson

Lars E. Ericsson is a Consulting Engineer in the Engineering Technology Organization of Lockheed Missiles and Space Corporation, Inc., Sunnyvale, California, where

he acts as a consultant to Satellite and Missile Systems Divisions on problems associated with aeroelasticity and vehicle dynamics. Before joining Lockheed Aircraft Corporation in 1956, and LMSC in 1959, he was with the Aeronautical Research Institute of Sweden and the Swedish Aircraft Company, SAAB. Dr. Ericsson received his M.S. degree from the Royal Institute of Technology (KTH), Stockholm, in 1949, and his Ph.D. in 1972. He is an Associate Fellow of the American Institute of Aeronautics and Astronautics and is a member of the American Helicopter Society. Dr. Ericsson has published numerous papers in his related fields.

Gerald Gregorek

Dr. Gregorek is a full professor at Ohio State University where he earned his PhD in hypersonics in 1967. He is currently Associate Director of the Aero and Astro Laboratory.

Primarily an experimentalist, Dr. Gregorek has made several contributions in wind tunnel test techniques and aerodynamics over a wide range of speeds. His current interest is in the low and transonic speed regime. Based on his efforts in the airfoil test and analysis area he secured the NASA General Aviation Airfoil Design and Analysis Service in 1976. He has also developed a data base for the Department of Transportation in the area of high speed tube train vehicle aerodynamics.

As an educator, Dr. Gregorek has served as past AIAA National Chairman of the Student Activities Committee. In this capacity he instituted several innovations including a National and International Student Conference. He is current faculty advisor of the OSU AIAA student chapter. He serves on the International Board on Safety of Youth Rocket Experiments (an IAF committee).

Ronald A. Hess

Ronald A. Hess received the B.S., M.S. and Ph.D. degress in Aerospace Engineering from the University of Cincinnati in 1965, 1967 and 1970, respectively. After completing his

doctoral work, he joined the faculty of the Department of Aeronautics at the Naval Postgraduate School in Monterey, California. While on the faculty, Dr. Hess taught and conducted research in the areas of flight mechanics and automatic and manual control. In 1976, he joined the staff at NASA Ames Research Center where he is currently working in advanced V/STOL development in the Flight Systems Research Division.

Dr. Hess's specific research activity at Ames Research Center is directed toward the development of instrument landing capabilities for V/STOL aircraft. This includes the development of analytical techniques for modeling the human pilot in multi-axis flight tasks and the utilization of these techniques in the analysis and design of cockpit displays and stability and control augmentation systems. Dr. Hess is a member of AIAA and Sigma Xi.

Barnes W. McCormick

Dr. McCormick received his B.S. degree in 1948, his M.S. in 1949, and his Ph.D. in 1954, all from the Department of Aeronautical Engineering at The Pennsylvania State University. After serving as an Associate Professor of Engineering Research at Penn State for one year, he joined the Vertol Aircraft Corporation (later a division of Boeing) in 1955, as Chief of Aerodynamics. In 1957 he was named head of the Department of Aeronautical Engineering at the University of Wichita. Dr. McCormick returned to The Pennsylvania State University in 1959, where he is presently a Professor of Aerospace Engineering and Head of the Department of Aerospace Engineering. He has served as consultant to many industrial firms, including Boeing/Wichita, Boeing/Vertol, HRB-Singer, Outboard Marine Corp., North American Aviation, Vitro Laboratories, Martin-Marietta, the U.S. Army Aeronautical Research Laboratory, the U.S. Army Aviation Systems Command, Ling-Temco-Vought, Lockheed-California-Helicopter Division, the Federal Aviation Administration, and Melpar.

Dr. McCormick is a member of the American Helicopter Society, and has served as that Society's Technical Director. He is past Editor of the Journal of the American Helicopter Society. He is a member of the American Society of Engineering Education. He is a member and past president of the National Association for Aerospace Engineering Department Heads, an Associate Fellow of the American Institute of Aeronautics and Astronautics, and a member of Sigma Xi, the Society of Sigma Gamma Tau, and Tau Beta Pi.

His areas of particular interest and experience include lowspeed aerodynamics in general, aerodynamics of vertical flight, propeller design (including marine propellers), hydrodynamics, aerodynamic noise, and the behavior of vortex systems including their interaction with aircraft and lifting surfaces generally.

Dr. McCormick received the 1976 ASEE Aerospace Division-AIAA Educational Achievement Award for his innovative contributions to aerospace engineering education.

Jean A. McGrew

Jean A. McGrew is an engineering graduate of the University of Washington, Seattle, Washington, with a B.S. in Aeronautical Engineering in 1962 and a M.S. in Applied Mechanics in 1963. He is a member of the AIAA, the Aerospace Flutter and Dynamics Council and the AIAA Structural Dynamics Technical Committee.

Mr. McGrew has recently been appointed Section Chief of Methods and Computing Support of the Structures Subdivision at the Douglas Aircraft Company. For the preceding eight years he has been supervisor of the Douglas Flutter Group which is reasonable for all analytic determination of aircraft vibration, unsteady aerodynamic and flutter characteristics of Douglas aircraft, including the DC-10 and

DC-9 series and the YC-15. This experience included method development for the application to high gain active control systems such as the fly by wire Douglas Advanced Aerial Refueling Boom. He has also been responsible for and directly involved in aircraft and component ground vibration testing and flight flutter testing.

Prior to his Douglas employment, he worked as a flutter analyst and test engineer for the flutter group of the Northrop Company, Norair Division and in the R&D department of that company.

Mr. McGrew is the author of several technical papers and has been the principal investigator of several Air Force sponsored analytic method development contracts.

Amedeo R. Odoni

Amedeo R. Odoni received his B.S., M.S. and Ph.D in electrical engineering at MIT in 1965, 1967, and 1969 respectively. He is now an Associate Professor in the Department of Aeronautics and Astronautics of MIT and is also a member of the staff of the Operations Research Center and of the Center for Advanced Engineering Study there.

His main interests are in the application of the methodology of operations research to problems in transportation networks, airports and air traffic control. In recent years he has developed computer-based mathematical and simulation models to assist in planning and design in these areas. He is currently conducting a research project under FAA sponsorship aimed at comparing and evaluating several available large-scale simulation packages aimed at estimating airside capacities and delays at major airports.

Dr. Odoni has acted as a consultant to several private or government organizations, including the FAA and the Board of Civil Aviation of Sweden, mostly in relation to airport and air traffic control problems.

John L. Porter

John L. Porter received his B.S. in Aeronautical Engineering with distinction from the University of Kansas, an M.S. in Aeronautics from the California Institute of Technology, and a D.Sc. in Applied Mechanics from Washington University, where he also taught. He is a member of Sigma Gamma Tau and Tau Beta Pi honorary fraternities.

Dr. Porter is presently with the Vought Advanced Technology Center as a Senior Scientist with responsibility for advanced propulsion research and development. Prior to joining the Advanced Technology Center in 1976, he was Manager, Systems Engineering for Redifon Simulations, Inc., where he directed research and development activities in the area of computer generated image visual systems.

From 1963 to 1974, Dr. Porter held various technical and managerial positions with the McDonnell Aircraft Corporation, where he contributed to a variety of V/STOL programs including: (1) USFRG, (2) Brequet Model 188, (3) Harrier, and (4) Navy Type A & B. In addition, he made key contributions to an Engine Cycle Evaluation Procedure, conceived the Modified Rutowski method of flight path optimization with variable throttle, and directed an Inlet/Aircraft Drag Investigation program connected with the F-15 Eagle, which received the Air Force's Outstanding Program award.

Dr. Porter is a past recipient of the SAE Wright Brothers' Award for the paper he co-authored on the integration of flight and propulsion controls. He is currently a member of the AIAA V/STOL Aircraft Systems Technical Committee.

Craig D. Simcox

Dr. Simcox received his B.S.A.E. from Iowa State University in 1962; his M.S.A.E. from Stanford University in 1965; and his Ph.D. from Purdue University in 1969. He joined NASA Ames Research Center, 1962 to 1965. Studies

there included aerodynamics of preliminary SST designs, gasdynamic effects of planetary atmospheres, and development of low temperature ablators for model testing.

In 1965 he was admitted to Purdue University where he conducted research on shock wave attenuation and acoustic-turbulent interactions with application to free jet spreading.

Since joining The Boeing Company, Dr. Simcox has worked in research and management in the Noise Technology Staff. His first research was to study the noise generated by hot and cold choked jets with emphasis on shock-related noise fields. Research included jet noise prediction, noise source distribution studies, low velocity jet noise characteristics, and noise characteristics of coannular (bypass) jets, in-flight effects, and suppressor systems. He served as program manager on several proposal teams and contracts including manager for Task III of the DOT/SST Follow-On contract to develop efficient means of noise suppression. He is currently Noise Technology Laboratory Chief.

Dr. Simcox is an Associate Fellow of the AIAA and a past member of the Acoustical Society of America.

Thomas M. Weeks

Dr. Weeks completed his degree work at Syracuse University, Department of Mechanical and Aerospace Engineering in 1965. He entered active commissioned service that year assigned to the Air Force Flight Dynamics Lab at Wright Patterson AFB, Ohio. He selected to work in the area of electrogasdynamics at the nearly completed 50 megawatt facility. In 1968, he separated from the Air Force but chose to remain at the same location working as a civilian.

He was assigned to the Analysis Group attached to the Aeromechanics Staff in 1972 working on transonic wind tunnel wall intereference. Then, in 1976, he became Tech Manager of the External Aerodynamics Group of the Aerodynamics and Airframe Branch where he currently supervises eight engineers responsible for advanced aeroprediction methodology and new concept formulation and development.

Dr. Weeks is an Associate Fellow of the AIAA.

Now a word of appreciation for a retiring AE. The AIAA, JA, and the community of aircraft professionals are indebted to Allen Ormsbee, Professor of Aeronautical and Astronautical Engineering and of Aviation at the University of Illinois, for his excellent efforts on behalf of JA.

Dr. Ormsbee's successor in the General Aviation area will be Dr. Gerald Gregorek of Ohio State University. You can read all about him in his biographical sketch. I'll just add that Gerry is a true innovator in both the educational and flight experiment arenas and has managed to successfully integrate these areas. In 1969 he put together a comprehensive "hands on" instrumented flight test program beginning at the sophomore level. In many cases, highly novel instrumentation, developed in wind tunnel test programs, was transitioned to flight test. We all heartily welcome Dr. Gregorek to the 1980 team.

This is also the place for me to say thanks to the fine team assembled by my predecessor, Dr. Allen E. Fuhs, now AIAA Vice President—Publications. As an AE, I was encouraged and guided skillfully by Dr. Fuhs and will try to follow suit.

But what about the rest of the groups of individuals who contribute to the high quality of JA? Let's start with the authors. Their contributions are mandatory for JA to exist, and the editorial team thanks them for considering JA. The second group required to produce this journal is the editorial staff. This includes the personnel at the New York headquarters office of AIAA. My special thanks go to Ruth Bryans, Dave Staiger, Marie D'Amico, and Dottie Hombach.

I have already told you about the AE staff, but within the past year you probably have noticed on the masthead a list of International Editors. This was an idea conceived by Dr. Fuhs and provides an opportunity for authors in other countries to obtain ready access to someone well versed in AIAA editorial policies. As an experiment, JA will publish an International Issue in April which will carry a selection of papers received from several countries. I hope to encourage even more international participation during the coming year.

Finally I have come to the reviewers. I have been especially pleased with their performance during the past year. Promptness and thoroughness have been outstanding. Without their demonstrated dedication to our profession and their concern for quality in this major technical journal, we would not survive. The entire staff asks reviewers to continue their exceptionally fine performance during the coming year as we continue to show progress in quality and timeliness.

Thomas M. Weeks *Editor-in-Chief*

Reviewers for Journal of Aircraft, September 1, 1978-August 31, 1979*

Abell, Eric E. Aiken, E.W. Allison, H. Bard Amiet, Roy Anderson, Gerald, M. Anderson, John D. Ardema, Mark D. Arndt, R. E. A. Arthurs, T. Desmond Ashkenas, Irving L. Ashley, Holt Ausrotas, Raymond Back, Lloyd H. Baird, Eugene F. Ball, Robert E. Barton, C. Kearney Beatty, Tom D.

Beckemeyer, Roy J. Bennett, A. G. Jr. Berger, Stanley A. Bevilaqua, Paul M. Bhat, W. V. Bhateley, I. C. Binz, Walter E. Birkler, J. L. Blake, Bruce Bohn, A. J. Boison, Chris Borgman, Dean Borland, C. J. Brown, Eugene Bushnell, Dennis M. Butzel, Leo M. Byers, James L.

Calkins, Robert B. Campbell, David H. Campbell, G. S. Campbell, J. F. Campbell, Janet W. Campbell, John P. Capone, Francis J. Carlson, Leland A. Carmichael, Ralph L. Casper, D. R. Catalano, G. Caughey, D. A. Chadwick, W. R. Chamis, Christos C. Chaplin, Harvey R. Chapman, Gary T. Chen, L. T.

Cheng, Hsien K.
Chesser, Paul
Clement, Warren F.
Cooksey, James M.
Cooper, Thomas
Corning, Gerald
Corsiglia, Victor
Cortright, Edgar M.
Covert, E. E.
Cowie, William D.
Cowles, B. A.
Crimi, Peter
Cunningham, Atlee M. Jr.
Cunran, Edward T.

Curry, Carlton E.

Curtiss, H. C. Jr.

Dahlem, Valentine Dalton, Charles Danforth, M. A. Davis, Sanford S. Dejongh, J. E. Delaney, Robert A. Delurgio, Phillip R. Dickinson, George J. Dietrich, Donald A. Dietz, C. G. Dobbs, Michael Dotson, B. F. Dowell, Earl H. Drake, Douglas E. Drake, John W. Drees, Jan M. Duffy, Michael A.

^{*}Because it is difficult to include the reviewers from September, October, November, and December 1979 in this issue of the Journal, they will be listed with the reviewers for 1980, in the January 1981 issue.