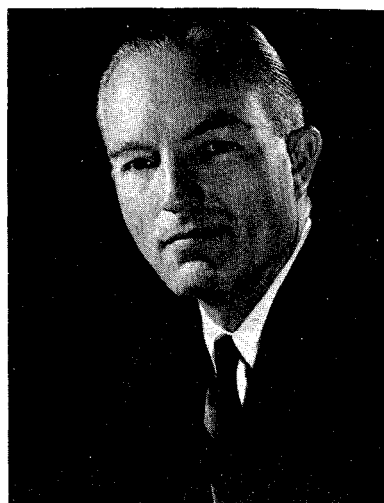


## In Memorium

### Carl F. Schmidt



Carl F. Schmidt, who was Editor-in-Chief of this *Journal* from its inception in 1964, died of a heart attack on July 12, 1973. Much of his professional biography, which reveals his impact on the development of safe air transportation, and various tributes to his many admirable qualities, were recounted in "Carl F. Schmidt—A Tribute" in *Astronautics & Aeronautics*, August 1973. In this *Journal*, to which he gave so much, it is fitting to report again some of the highlights of his career and to quote from some of his editorials, which revealed his great social conscience and love for his fellowman.

Carl's career paralleled the rise of air transportation. Following a B.S. degree in Physics from the University of Illinois, he received a Masters degree in Aeronautical Engineering from New York University in 1938. His thesis was on air-traffic control in the New York area. After a year with TWA as a junior meteorologist, he helped to transform American Export Airlines from an idea to an operating company, the third North Atlantic carrier after Pan Am and BOAC.

From 1941 to 1959 he was with Lockheed Aircraft Corporation. As a Flight Test Engineer during World War II, he not only supervised tests of fighters and bombers but also was involved in the first flight test of the Constellation. From that point on, his primary interest and career goals were associated with civil air transportation, particularly with matters related to safety and the optimal use of aircraft. In his final position with Lockheed he developed and managed the Operations Engineering Department. As his worldwide contacts grew, so did the demands for his services as a private consultant, from 1955 onward.

From 1959 to 1966 he served with the Flight Safety Foundation, where he wore two hats as Director of Administration and Director of Engineering, in charge of a multitude of safety projects. From 1966 to 1970 he was Senior Vice-President and Manager of the New York office of Systems Analysis and Research Corporation, responsible for technical, economic, management, and marketing studies. Thereafter he chose to apply his full time (almost) to the personal role of Aviation Consultant.

The "(almost)" was needed because Carl had been involved for many years in various projects on the side for professional societies, government agencies, and industrial organizations. He served on two technical committees for the Society of Automotive Engineers and was Vice-President for Air Transport of the Metropolitan Section. He was instrumental in founding the National Aircraft Accident Investigation School and was the "Public Member" of its Committee of Trustees. In 1971 he directed the AIAA-FAA Air Transportation and Society Conference, and just this Spring he organized American contributions to (and was slated to co-chair in July) the session on Air-

port Systems at the USSR/US Aeronautical Technology Symposium in Moscow.

From his position as Editor-in-Chief of this *Journal* for nearly a decade, Carl played a large role in binding together an AIAA formed from a relatively conservative Institute of Aerospace Sciences and a rapidly growing American Rocket Society. In the early days of the AIAA in 1963, Members who were in the aircraft field had felt uneasy about their place in the new Institute, which appeared to them to lean too heavily toward space activities. When the decision was reached to begin the *Journal of Aircraft* in 1964, the AIAA was indeed fortunate to obtain his services. The fine journal that he and a few Associate Editors established soon set the aircraft community at ease and rapidly gained its respect and pride. Under Carl's discerning and beautifully balanced leadership, the *Journal* grew from a bimonthly to a monthly as it recorded the wide-ranging technical achievements in this great field. One has but to glance through a few randomly selected issues to appreciate the lasting value of this *Journal* for future generations of students and workers in aerodynamics, control, aircraft design, handling, operations, safety, planning, and so on.

Carl's annual editorials in the January issues of this *Journal* clearly enunciated the roles of editors, reviewers, and authors and indicated his growing concern with the peaceful uses of technology and responsibilities of aerospace engineers to society. In 1967 he wrote:

"Aviation progress has been marked by significant events or developments which opened the way to new applications of the technology of flight. Some of these milestones are easily recognized—the Wright brothers' successful powered flight; design of the DC-3, bringing air transport within the reach of a substantial portion of the public; invention of the turbojet engine; and achievement of supersonic flight. We are now witnessing the beginning of a vast expansion in passenger and cargo air transportation made possible by the development of massive subsonic aircraft, the SST, and vertical takeoff and landing capability.

"The implications of this "transportation explosion" permeate the very fabric of our civilization. Time and distance are no longer barriers to the interchange of people, ideas, and goods. Limitless opportunities exist for improvement of understanding among men and elevation of the human condition through the medium of air transport. Indeed, the social and political patterns of the world could be influenced mightily by the availability of this means of social intercourse.

"The aeronautical engineer is thus confronted with a sociological challenge. The new frontiers are no less exciting than those of the past ... [they include the] applica-

tion of aviation disciplines in solution of related problems on the surface of the earth.

"The *Journal of Aircraft* seeks to record the milestones of aviation and the progress made toward meeting these challenges. Through dissemination of new knowledge in aviation technology, we hope to stimulate development of advanced concepts and new approaches to problems encountered on the frontiers. Our success in achieving these goals depends on continued and expanded participation by the engineering community through contributions to the literature and constructive criticism of our efforts."

In 1969 Carl picked up the "relevancy" theme of the day as follows:

"It is the purpose of this Journal to provide a moving base from which communication of ideas and knowledge related to the technology of the air can progress . . . Our problem is to keep relevant at a time when the rate of change is increasing rapidly—an age of technological acceleration . . .

"Editors are constantly challenged to maintain perspective—both historical and current. The complaint about the irrelevance of history is based at least partially on the bias, inaccuracy, or incompleteness frequently exhibited in accounts of historical events. Reporters of the contemporary scene are subjected to the same criticism. In the technical field, we must strive to provide the members of our community with broad coverage and interpretation of the most significant occurrences and developments, keeping a proper balance among the various disciplines and assuring the highest possible degree of accuracy without unduly sacrificing timeliness."

In 1972 he urged us to "join the revolution:"

"There can no longer be serious doubt that we are in the midst of a revolution . . . in life style, in sets of values, in changing moral standards, and in personal and social priorities. In large part, these movements are the result of increased social awareness by the populations of the world, made possible by technological innovation in the sciences of communication, distribution, and agricultural production.

"Technology *almost* inherently contributes to progress for mankind, and therefore should, in times like these, be an instrument of revolution. *Almost*, but not quite. While technical development is basically designed to improve existing functions which serve society, it can have side ef-

fects which cause more havoc than the good achieved by the main thrust. Witness: the increased cleansing power of detergents vs their polluting effects; . . . the enormous benefits of air transport to society vs the use of aircraft to destroy people and property.

" . . . the time has come when the technical community—including aviation—must recognize that not only its responsibility, but its survival lies in applying its knowledge and capability to the solution of basic human problems. This does not mean abandonment of research, development, and production in the traditional areas of transportation, communication and, to the extent necessary, in defense. Continued advances in these fields are required to correct imbalances in wealth and resources and to eliminate the *causes*, rather than the *symptoms*, of unrest and human misery.

"At the same time, the vast reservoir of talent and facilities which now exists in the engineering community can be tapped to provide fresh approaches to problems related to the quality of life . . .

"Our objectives now can have added to them the cleaning of the atmosphere, the greening of the land, the pollution free automobile, the recycling factory, urban renewal, and all other like desiderata. Do we not still need the same disciplines in science, engineering, and physics that took us to the moon? May we not need the same people?

"Engineers—seize the time! We have the power—and the opportunity—to make the revolution a success, for the betterment of all mankind."

Who could have said it better? Indeed, we remember Carl as a fine and gentle man with sound judgment, great patience, and an uncommon ability to say the right thing at the right time and draw the best from people.

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