

transports and finished it successfully 1980.

Still at the same institute as post doctoral scientist and assistant professor he changed his work from large atmospheric scale to the mesoscale especially to phenomena in the atmospheric boundary layer. The mesoscale experiments DISKUS, BONEX, PUKK and MERKUR saw him

as designing and leading scientist, mission scientist as well as aircraft observer mainly in motorgliders together with the cooperating Institute of Atmospheric Physics of the DFVLR at Oberpfaffenhofen.

Since 1982 is Dr. Hacker a Research Fellow at Flinders Institute for Atmospheric and Marine Sciences at Flinders Univer-

sity at Adelaide/South Australia.

As a glider pilot Dr. Hacker is a member of the 'AKAFLIEG KÖLN' and also now of the Adelaide Soaring Club; he has gliding, motorgliding and aircraft pilot experience with far more than 1000 hours experience.

Special reference to a technical paper

A special reference is made by the Technical Section of OSTIV to the technical paper presented at the Congress by L.M.M. Boermans and H.J.W. Selen.

"We specially commend L.M.M. Boermans and H.J.W. Selen for their paper 'The Design of Some Aerofoils for Sailplane Application'.

The paper reports investigations into sailplane aerofoils. They commenced with

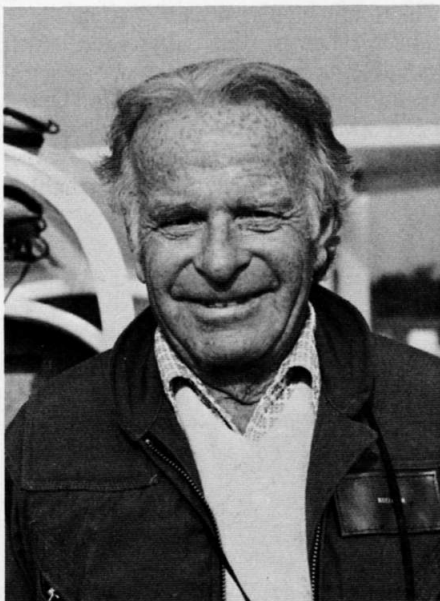
wind-tunnel tests on part-span segments of an actual sailplane wing, including the effect of insect contamination. New aerofoils were designed for the example sailplane, aimed at greater extent of laminar flow and lower sensitivity to insects, within the quite severe constraints of not under-cutting the original wing and not altering the aileron.

Pneumatic turbulators, as originated by

Pfenniger, were used on the lower surface to eliminate the laminar separation revealed by the tunnel tests. Performance measurements, in conjunction with other investigators of the sailplane with original and modified wings, showed the expected improvement. The entire work was well planned and painstakingly carried out."

Dr. JOACHIM P. KUETTNER

30 Years Chairman of the Scientific Section of OSTIV - New Honorary Member of OSTIV.



In appreciation of his outstanding scientific contributions to OSTIV, being also Chairman of the Scientific Section since 1952, never missing any OSTIV-Congress since that time, Dr. Joachim P. KUETTNER was appointed to be *Honorary Member of OSTIV* on occasion of the Closing Ceremony at the Paderborn Congress. He decided to give the chairmanship in younger hands.

Joachim P. Kuettner, born in Breslau, Germany, received his doctorate in law at the University of Breslau and his doctorate in physics at the University of Hamburg with a dissertation on the discovery of the mountain leewave and its first theoretical

treatment (1939). During the time of his studies he worked as gliding instructor in the Scandinavian countries and spent one year at the Ilmala Aerological Observatory in Finland with Professor Vaisala. From 1940 to 1945 he was test flight engineer and pilot at various aircraft companies.

In 1945 he became Chief of the Zugspitze Mountain Observatory in the Alps and in 1948 made his Dr. habil in meteorology at the University of Munich.

In 1949 he went to the United States and worked at the Air Force Cambridge Research Center on problems of the air flow over mountains, the jetstream and atmospheric electricity using instrumented sailplanes and jet aircraft. During this time he was also Scientific Director of the Mt. Washington Observatory.

From 1952-1955 he was field director of the "Sierra Wave Project" (University of California) which studied the airflow over the Rocky Mountains.

In 1958 he joined NASA's Marshall Space Flight Center at Huntsville, Alabama, and became the Center's Director of the Mercury Project, which resulted in the first manned spaceflights of the USA (Alan Shepard and Virgil Grissom). From 1962 to 1965, Fr. Kuettner worked with the Apollo Project as Deputy-Director of the Saturn-Apollo Systems Office, responsible for the integration of the Apollo spacecraft and the Saturn-V rocket vehicle for the lunar landing.

In 1965 he became Chief Scientist at the National Satellite Center in Washington

where he headed a national ad-hoc task force resulting in the monograph "Man's Environment - It's Study from Space".

In 1967 Dr. Kuettner joined the Research Laboratories of the National Oceanic and Atmospheric Administration (NOAA) in Boulder, Colorado, as Director of Advanced Research Projects. Among his responsibilities were the weather modification programme and the research flight facility of NOAA.

In 1969 Dr. Kuettner became Director of the BOMEX project (Barbados Oceanographic and Meteorological Experiment), the first large experiment of the Global Atmospheric Research Program (GARP), which explored the sea-air interaction over the tropical western Atlantic.

In 1970, Dr. Kuettner joined the World Meteorological Organization (WMO) in Geneva, Switzerland, and Bracknell, Great Britain, as International Director of the GARP Atlantic Tropical Experiment (GATE) conducted in 1974 over the Atlantic and adjacent continents with base in Dakar, Senegal. GATE was a cooperative research effort of 75 nations to explore the tropical heat engine driving the world's weather.

In 1976, he joined the National Center for Atmospheric Research (NCAR) in Boulder, Colorado, USA.

In 1977 he became Director of the American effort in the GARP monsoon project, "MONEX", which studied the Asian winter and summer monsoons. During the MONEX field phases - conducted in 1978 over the South China Sea and in 1979

over Saudi Arabia, India and the Indian Ocean - he acted as international Scientific Director for WMO.

During 1981 he was guest scientist of the German Institute for Physics of the Atmosphere (DFVLR) in Munich - Oberpfaffenhofen and later joined the World Meteorological Organization in Geneva as Scientific Director of the GARP Alpine Experiment "ALPEX" conducted in 1982 over Central Europe and the Mediterranean Sea. It studied the airflow over and around mountains. In 1983 he returned to NCAR at Boulder. Dr. Kuettner has published over 100 papers in the fields of atmospheric physics, aeronautics and astronautics. His main scientific work in meteorology has been concerned with the airflow over

mountains, organized convection, atmospheric electricity, tropical and satellite meteorology, while his astronautical work concerned primarily manned space flight. He is a fellow of the American Meteorological Society, the American Institute of Aeronautics and Astronautics (AIAA), the Royal Meteorological Society, the Royal Geographical Society, and Corresponding Member of the International Academy of Astronautics. He was Scientific Chairman of the international gliding organization "OSTIV" from 1952-1981, past Chairman of the AIAA Atmospheric Environment Committee, its UFO Subcommittee and a number of other national and international committees.

Dr. Kuettner has flown sailplanes to altitudes of over 13 km and established seve-

ral national and world records for gliding. He holds a Gold Badge and one Diamond and is a member of the American Soaring Hall of Fame.

Among his awards are the Lilienthal Medal of the FAI (Fédération Aéronautique Internationale, 1955), the Tuntland Research Award of the Soaring Society of America (1952 and 1956), the Plaque of the Organisation Scientifique et Technique du Vol à Voile (OSTIV, 1958), the Gold Medal of the U.S. Department of Commerce (NOAA, 1970), the Gold Medal of the Royal Geographical Society (1976) and the Cleveland-Abbe Award of the American Meteorological Society (1982).

Prof. C. E. WALLINGTON - New Chairman of the Scientific Section of OSTIV



Prof. C. E. Wallington was appointed new Chairman of the Scientific Section of OSTIV during the XVII. OSTIV-Congress.

He follows Dr. Joachim P. Kuettner, who acted in this position from 1952 to 1982.

Prof. C. E. Wallington was born 1921. He received his education in Mathematics and Physics mainly at the University of London and the Imperial College, London, and combined it very early with his special interest in meteorology, hydrodynamics and aerodynamics. 1947 he started gliding and has accumulated since that time world-wide experience of gliding weather, both as a pilot and organiser of gliding affairs.

His special capability of combining theory and experiment in the atmospheric sciences and using it in the field of gliding and also use gliding in the field of atmospheric research enabled him to write numerous papers mainly covering wave motions in the atmosphere, convection, sea breeze

effects, dispersion problems, forecasting for aviation especially for gliding etc.

Prof. Wallington has officiated at six world gliding championships and many national and regional competitions in the U. K. and Australia. He was also the Director of the 1974 World Gliding Championships at Waikerie, Australia. Since 1960 he has presented most valuable papers in the meteorological sessions at OSTIV-Congresses and he has been awarded with the OSTIV-Plaque 1965 for the most noteworthy contribution to the science of soaring flight.