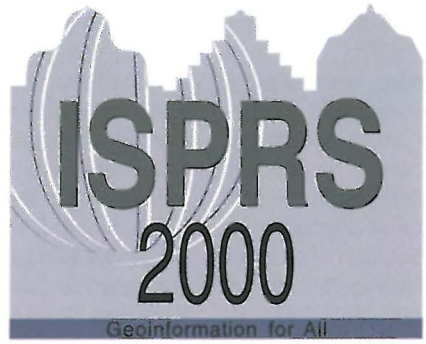

Obituaries

Roberto da Cunha (1950-1997)

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Obituaries

Roberto da Cunha (1950-1997)

Dr. Roberto Pereira da Cunha was prematurely taken from us by a malignant disease on 19th November 1997.

He was a person no one can easily forget, even after a short acquaintance. His outspoken manners and picturesque speech left a mark wherever he acted. He had a special attachment to Remote Sensing, which he used to say has a 'sex appeal' of its own, and dedicated most of his professional life to matters related to that discipline.

Roberto was born in Passo Fundo, a southern Brazilian town, graduated in Geology in 1973 at the Rio Grande do Sul Federal University, obtained his Master's degree in Remote Sensing at INPE in 1977, and a Ph.D. in Geology in 1983 at the University of Kansas, USA.

Back in Brazil, with INPE as a Remote Sensing Researcher, he occupied several positions of leadership in the years to follow, not only at INPE, but also as President of SELPER, the Society of Latin American Remote Sensing Specialists, from 1986 to 1989, and as President of ISPRS Commission VII in the 1992-1996 term.

He was not stopped by his illness, which struck him shortly after his return from the 1996 Vienna Congress. He served as INPE's Institutional Relations Co-ordinator, a position he occupied from 1990 until a very few days before his death. In his honour, INPE's Visitor Center in São José dos Campos was named after him.

Professor Ing. Dr.techn.h.c. Karl Neumaier (1898-1999)

When we all met in Vienna in 1996 on the occasion of the XVIIth Congress, Karl Neumaier was still with us. He visited the Opening ceremony, came to see his former students and the exhibition, and he took part also in the Banquet in the Ceremonial Hall of the Vienna Municipality. He was then 98 years of age. Karl Neumaier was born on 12th January 1898 near Waidhofen/Thaya in Lower Austria's 'Woodquarter'. In 1916 he finished the Gymnasium and became a soldier for the time in the First World War. He returned home ill from malaria. His studies at the then Technische Hochschule Wien he could nevertheless finish early in 1925, qualifying as an „Engineer for Surveying'. He became Assistant to Professor Dokulil and an enthusiastic follower of Professor Dolezal, the founder of ISP. In 1928 he went as a consultant of the Chekiang provincial government to China. In 1931 he accepted a call of the Chinese central government to act as a consultant expert for the reformation of the Chinese land surveying system and for the introduction of photogrammetry. From 1934 onwards he was also professor at the Tung-Chi University in Woosong and at the Chiao-Tung University in Shanghai. In 1936 he went back to Chekiang and took over the expert consulting for the cadastral office in Hangchow. The reorganisation was made possible by means of enlargements of aerial photos. The people had to indicate their plots. Those who did not show up would have lost their property. The result was a complete cadastre within a short time. In 1938 he returned to Europe and followed summons by Willem Schermerhorn, the later founder of ITC, the beginning of a life-long friendship. Neumaier taught Photogrammetry and Cadastral Surveying in Delft. In 1941 Neumaier returned to Vienna where he founded the photogrammetric institute of the South-East-Europe Society. After World War II Neumaier started an excellent further career in the Federal Office of Standards and Surveying (BEV): Head of the Photogrammetric Department, Head of the whole Group of the Austrian Topographic Survey, Vice-President and President of the BEV. In parallel he taught photogrammetry at the Technische Hochschule Wien. In both functions he was the protector of many later to become well known teaching photogrammetrists: Ebner, Fischer, K. Gruber, Jerie, Hoschtitzky, Kellner, Kölbl, Kröll, Kubik, Leberl, H. Schmid, Schneider, Tempfli, Waldhäusl, and certainly of many others who served in different 'photogrammetric' functions.

In the BEV, and from there on in international organisations, Neumaier was again the great reorganiser and manager. He was the father of the new Austrian map series 1: 50,000; he installed the first computer in 1955 (IBM 604/2); he bought the first survey-aeroplane after WW II; he bought and tested many new instruments with and for WILD Heerbrugg; he was the reformer of the Austrian Cadastre; the co-founder and President of OEEPE and of OEEPE Commissions; President of FIG; President of the Board of the WILD School for Operators and President of ISP Commission VI (1952–1956). In 1960 Neumaier became a Honorary Doctor of the Technical University in Graz and he received several other high public distinctions. Neumaier retired in 1964, but not really. From 1964 to 1978 he was a Chartered Surveyor. In 1968 he married for the first time (his wife died in 1993). In 1964 he ensured that Photogrammetry got its own Ordinariat at the TH Vienna and he was then its first head as Honorary Professor, with full rights to a seat and vote in the faculty. (He could not accept full professorship, because he had a higher position and pension as President of the BEV). As lecturer at the TH, and later TU (1945-1973), he built up the new institute together with myself (since 1956) and just a handful of colleagues so that his successor and first real full professor for photogrammetry at the TU Vienna, Karl Kraus, could start in 1974 from an already sound basis. Neumaier was also active as an international expert consultant with contacts in many countries in the Middle East and Africa. The biggest task he solved with several other top experts for Saudi Arabia: the geodetic basic network for the topographic survey of 2 million square kilometres. He subsequently gave me leave for 18 months to go as UNDP-Expert to Riyadh for the development and start of the photogrammetric-cartographic part, in co-operation with Hans Jerie and Jan Visser of the ITC. I have Professor Neumaier to thank for this great experience.

Since 1974, the Club of Seniors (Seniorenrunde) 'Neumaier and his friends' have met every Thursday from 11 to 12 at the Institute of Photogrammetry in order to discuss both important and unimportant things. And whenever possible the members have helped the Institute or vice versa. The very centre of this activity was Karl Neumaier. We really miss him. On 21th May 1999 Neumaier died after a domestic accident in his nursing home where he lived for his last year. His goal to have lived in three centuries could no longer be fulfilled.

In his testament he dedicated the biggest part of his property to the Institute of Photogrammetry as a grant for the Neumaier-Prize in order to forward young scientists in photogrammetry, remote sensing and related fields. A life for Photogrammetry! Let us never forget him.

Peter Waldhäusl

F. Blaschitz, M. Eckharter, A. Hochwartner, E. Hynst, K. Kraus: Altpräsident Prof. Ing. Dr.techn.h.c. Karl Neumaier zum 100. Geburtstag. Austrian Journal of Surveying and Geoinformation 85/1997, pp.246-251

Karl Kraus: In memoriam Altpräsident Prof. Ing. Dr.techn.h.c. Karl Neumaier (1898 – 1999). Austrian Journal of Surveying and Geoinformation 87/1999, p. 176.

Professor Dr. h.c. Hellmut H. Schmid (1914 – 1998)

On April 27th, 1998, the scientific and engineering community lost one of its foremost leaders in geodesy and photogrammetry with the death of Dr. Hellmut H. Schmid in Spokane, Washington.

He was born in Dresden, Germany, on September 12th, 1914, and attended the Technischen Hochschule there, earning his undergraduate degree in 1938. In graduate school, he studied under the tutelage of Professor R. Hugershoff, a noted photogrammetrist, and received his doctorate in 1941. His dissertation was entitled "Arbeit über Modellverbiegungen durch Restfehler der relativen Orientierung."

In 1940, Schmid joined Wernher von Braun's Group in Peenemünde, Germany, where he was put in charge of determining ballistic trajectories for the V1 and V2 rockets by photogrammetric means. At the close of World War II, he went with von Braun and his group to the U. S. Army's White Sands Proving Ground in New Mexico, where they continued work on the further development of the V2 rocket and its successors. Schmid transferred to the U. S. Army's Ballistic Research Laboratory, Aberdeen Proving Ground, in Aberdeen, Maryland in 1950, where he remained until accepting a position at the Engineer Research and Development Laboratory in Fort Belvoir, Virginia, in 1962. In 1963 he moved to the U. S. Coast and Geodetic Survey in Washington, D. C., where he remained until his retirement from the U. S. Government in 1974. From 1974 to 1984, Schmid held the position of Professor für Photogrammetrie at the Institut für Geodäsie und Photogrammetrie, ETH Zürich.

Schmid authored more than 100 professional publications, along with numerous other uncatalogued treatises. Among his many outstanding contributions to the fields of photogrammetry and geodesy, the following one is a typical example. In 1965 he and his colleague Erwin Schmid prepared "A Generalised Least Squares Solution for Hybrid Measuring Systems" (The Canadian Surveyor, Vol. XIX, No. 1, pp. 27-41). At the time of its publication, least squares techniques, as practised by most geodesists, were compartmentalised into a number of discrete, apparently unrelated methods. People spoke of the method of condition equations and the method of observation equations as an either/or proposition. Schmid demonstrated that all such seemingly different methods could be derived from a single, generalised approach wherein the traditional methods became merely special cases of the generalised approach when certain groups of unknowns in the solution were or were not present. All of the traditional equations could be transformed into observation equation form with all variables treated as weighted observations. Observations with zero weight became pure unknowns and those with infinite weight became constants. All others were allowed to vary according to the magnitude of their corresponding weights.

The generalised approach greatly simplified the derivation and application of constraint equations and the merging of dissimilar data types into hybrid least squares systems which are today so common in analytical photogrammetry.

Perhaps his greatest accomplishment was the part he played in the design, execution and analysis of the Worldwide Geometric Satellite Triangulation Program, a ten-year (64 - 74) co-operative venture involving the U. S. Coast and Geodetic Survey, U. S. Department of Defense, NASA, and a number of participating countries from around the world. The goal of this programme was to determine the relative three-dimensional positions of 45 stations evenly distributed around the Earth, using images of sun-reflecting satellites photographed simultaneously from two or more ground-based camera stations against a star background. As Technical Director of this programme, Dr. Schmid was personally involved with, and supervised, every technical aspect from the formulation of the mathematical models to acquisition of photography and through to photo plate measurements, measurement reductions and final triangulation computations. The final results showed an rms accuracy of less than ±5 meters for the 45-station world-wide network, an accuracy unprecedented at the start of the programme.

During his forty-year career, Dr. Schmid received more than 18 awards and assignments to chair and serve on prestigious international committees and consulting panels. Among the awards were the Robert H. Kent Award (1962) from the U. S. Army Ordnance Corps; the Fairchild Photogrammetric Award (1958) and the Talbot Abrams Award (1963, 1966) from the American Society of Photogrammetry; the Colbert Medal (1965) from the Society of American Military Engineers; the U. S. Department of Commerce Gold Medal Award (1966); and the Brock Award (1968) from the International Society of Photogrammetry.

Much has been written by and about Dr. Schmid, and many awards and honorary degrees have been bestowed upon him, but none of this fully describes the kind of man and

scientist he was. He approached every problem with an enthusiasm, intensity and dedication rarely seen. Nothing was ever just "good enough." Things had to be done right and redone, if necessary, until they were right. No problems were left unsolved and he strived for perfection in every operation under his command. He inspired fierce loyalty in all who worked for and with him. He was a patient teacher who spent hours explaining in great detail the intricacies of analytical photogrammetry to anyone who showed an interest. He richly deserves a hallowed place in the archives of the greats of geodesy and photogrammetry.

G. Carper Tewinkel (1909 – 1999)

The wellknown American photogrammetrist and editor, Garrett Carper Tewinkel, passed away on 18th November 1999 in Wenatchee, Washington, USA, at the age of 90 years. To his friends and colleagues in the profession, "Carper" will always be remembered for his dedication and service as ISPRS Council Member during 1968-1976 and as the Editor-in-Chief of the ASP Journal of Photogrammetric Engineering, during 1965-1974.

Carper was born on 20th January 1909 near Spokane, Washington and received his early education in the public schools of that area. In 1932 he earned a Bachelor's Degree in Mechanical Engineering at Washington State University. After graduation he was employed by the U.S. Forest Service in northern Idaho, and in 1935 he went to work for the Soil Conservation Service in Spokane. In 1939 he began graduate study in photogrammetry at Syracuse University under the tutelage of Professor Earl Church and earned a Master's Degree in Civil Engineering in 1940. After returning to the Soil Conservation Service for a year, he transferred to the U.S. Coast and Geodetic Survey (C&GS) in Washington, D.C., where he served as Chief of the Research Branch of the Photogrammetry Division. In 1959 he attended a one-year graduate study programme in mathematics at the Massachusetts Institute of Technology.

In 1943 Carper joined the American Society of Photogrammetry (ASP) and in 1944 the first of his career's many peer-reviewed articles on photogrammetry was published. He was one of the editors of the Manual of Photogrammetry, 1st ed. and was chapter editor of the 'Basic Mathematics of Photogrammetry' in the 2nd and 3rd editions of the Manual. After serving the ASP for several years on numerous committees, including Publications, Education, the Manual, Nomenclature, and Finance, Carper took on the assignment of Assistant Editor of the Photogrammetric Engineering Journal and then became Editor-in-Chief. Under his very competent guidance the Journal expanded its scope, enhanced its review process and, by 1967, increased its annual issues from eight to twelve to become a monthly publication. He served eight years on the ASP Board of Direction, three of which were on the Executive Committee, and in 1960 he was elected President of ASP. In 1966 he was awarded the Fairchild Photogrammetric Award and in 1972 he was named an Honorary Member of ASP.

Carper was an ardent advocate of education in the photogrammetric community and it was this drive that led him to not only write many practical articles, but to teach basic photogrammetry for fellow employees, as well as for foreign trainees, through a US AID programme. From 1948 to 1965 he taught photogrammetry at the US Department of Agriculture Graduate School and at the George Washington University.

His first position in ISP was in 1948 as USA secretary to Commission VI on "Bibliography." At the 1952 ISP Congress he presented a paper on the calibration of the nine-lens aerial camera developed at C&GS by his supervisor, Captain O. S. Reading, who was ISP President at that time. At C&GS in 1957 he began development of a practical system of analytic aerotriangulation and, with the programming support of his research colleague Morton Keller, developed the routines and data flow for producing the first operational Fortran programs in the world for aerial triangulation. The system was published in a series of C&GS technical reports on Coordinate Refinement, Resection, Strip Adjustment and Block Adjustment. In 1966 he was awarded the Department of Commerce Gold Medal "For exceptional technical contributions to the science of photogrammetry, resulting in lasting improvements to the surveying and charting programs of the Coast & Geodetic Survey."

His leadership in this field led to his selection as President of ISP Commission III "Aerial Triangulation" for the 1964-1968 term. He then went on to serve ISP as Secretary General during 1968-1972 and as First Vice President during 1972-1976.

Upon his retirement, Carper returned to the western USA states where he resided until his death. He is survived by his wife, Dorothy Tewinkel of Wenatchee, Washington; a brother, Maurice Tewinkel, and a sister, May Scaroni.