OBITUARIES

Enrico Clerici

Laurie Pentecost Adams

Ákos Detreköi

Jüri Talts

Frederick F. Doyle

Dieter Klaus Zeuner

John William Charles Gates

Kimberly A. Tilley

Carolyn Merry

Maurice Carbonnell

Alef Ahmed El Sayed Elassal

Kennert Torlegård

OBITUARIES

Enrico Clerici (1939-2012)

Dr.-Ing. Enrico Clerici (73) passed away on October 26, 2012 in his new home in Rivergaro / Italy after a long and serious illness. Only a close family circle attended the funeral at the family grave in the hills of the Northern Apennine Mountains. Born in Milan on the 20th of January 1939 he started his career in Uganda before serving in the merchant navy and in parallel studying land surveying by correspondence. In 1967, he started studying at the ITC and was awarded M.Sc. degree from ITC in 1972. In the Netherlands, he married his wife Jet and applied successfully for Dutch nationality. Between 1971 and 1975 he headed a project group for developing surveying and mapping software within the Department of Information Processing at Rijkswaterstaat in The Hague. During this time, he consolidated his experience with sonar scanning which resulted, in 1976, with his PhD-thesis at the University of Hannover, Germany on the use of side scan sonar for mapping the sea bottom.

In 1975 Enrico Clerici became Senior Lecturer at the Department of Surveying at the University of Queensland. After an intermezzo in Germany from 1981 to 1983 he became Head of the Department of Surveying at the Queensland University of Technology, as well as Director of the Australian Key Centre for Geographic Information Systems. At the same time, he started his involvement with CARL ZEISS and in 1986 he became the Regional Director (SEA) of the Geodetic and Photogrammetric Divison. In 2000, he became Managing Director of K2-PhotogrammEtry Pte. Ltd., Singapore for marketing, consulting and technical service of photogrammetric and mapping systems in Asia.

Enrico was a self-educated person and his strength was the interaction of his ongoing theoretical interest in mathematics and physics with his broad practical experience. He was in particular demand for the complex integration of the various components into robust airborne systems. This combination of his curiosity in theoretical aspects coupled with his enjoyment of practical skills also showed in his hobbies as the picture illustrates.

Enrico Clerici was a good friend to international colleagues and an esteemed and respected expert in eastern Asia, Japan and Australia. Together with his family we mourn his too early passing and we will always have good memories of him.

Dierk Hobbie, Königsbronn, 2012

Laurie Pentecost Adams (1925-2012)

BSc (Eng.), PhD, FRICS, Laurence Pentecost Adams died in a nursing home in Sherborne, Dorset on 10th December 2012 at the age of 87, just six weeks after his wife's death. They had been married for 56 years. Adams had a long and varied career in both photogrammetry and surveying. He was held in high regard by colleagues, students and professionals from many disciplines.

Adams was born in Nairobi, Kenya on 16th March 1925. He was educated at home on his father's farm, Koru Farm, until the age of 10 and then went as a boarder to school in Nakuru, some 100 miles away. Aged 14, he moved to the Prince of Wales School in Nairobi. He left school at the end of 1942 at the age of 17 and volunteered for army service, joining the Kenya Regiment. After training, he went into the Artillery and was posted overseas to join the 11th East African Division of the 14th Army in Burma. He was sent back to Kenya for officer training just before the end of the Second World War and left the Army in 1947 as a Second Lieutenant.

His army duties involved the survey of gun positions and this led to an interest in land surveying. Being eligible for a university course paid for by the Colonial Government of Kenya, Adams decided to read the subject at the University of Witwatersrand, South Africa where he graduated B.Sc.(Eng.) in Land Surveying in 1951. He then joined the Survey of Kenya as a Staff Surveyor and rose to the position of Provincial Surveyor before leaving in 1963. During this period, he undertook surveys in many parts of the country with great care and attention to detail. These were the days of the last “real” land surveyors with month long field campaigns in the African bush living under canvas and hunting for the pot along the way. There was also the Mau Mau uprising and the resulting state of emergency to contend with and for a time he was recalled to the Army for map making work. On a brighter note, he did meet Kath during this time. She was an English nurse working at a hospital in Nyeri and they married in 1956.

In 1963, Adams went to the UK to study for the graduate Diploma in Photogrammetry at University College London which he gained in 1964. This was to be the start of a career change to academe. After a brief spell as Lecturer in Surveying at Nottingham Regional College of Technology (now Nottingham Trent University), he returned to an independent Kenya as Lecturer in the Department of Land Surveying at University College, Nairobi (a constituent college of the University of East Africa which became the independent University of Nairobi in 1970) to teach mainly photogrammetry and astronomy. He was promoted to Senior Lecturer in 1966, Professor in 1970 and served as Head of Department from 1966 to 1972. The academic staff at this time was mainly expatriate and included a young Paul Cross, the late Bill Barnes and the late Robin Fursdon. As well as running the department, Adams found time to complete a doctoral thesis on *The computation of aerial triangulation for the control of cadastral mapping in a high density agricultural area*. The degree of Ph.D. was awarded by the University of East Africa in 1969.

Adams left Kenya for South Africa in 1972 on his appointment as Professor of Photogrammetry and Surveying at the University of Cape Town (UCT). This was an established Department producing graduate land surveyors and, whilst he contributed to the teaching of land surveying, he never wanted to join survey camps as he had had enough of life under canvas. He set about expanding the teaching of photogrammetry and developing research interests. He served two periods as Head of Department and retired in 1990. An excellent teacher, Adams could always hold the interest of his students. This was most likely because, when you spoke with him about photogrammetry, you knew you were with a real professor, someone whose depth of knowledge of the subject was such that he could make the difficult concepts easy to understand. His knowledge of stereoscopy, and its history, was second to none. He could pick up any stereopair of photographs, whether aerial or close range, hold them apart and his trained eyes could, unaided, see the image stereoscopically. Only someone very skilled and dedicated to his science can do that readily.

Adams's main research interests now were in close range photogrammetry and particularly its application in medicine (biostereometrics). Very soon he made contact with members of the medical profession inside and outside the university and he started interdisciplinary research projects with them. He continued to work in retirement on such projects and was appointed Head of the Biostereometrics Unit in the Department of Biomedical Engineering at UCT. He was always working on new ideas to apply his knowledge and measuring talents to unsolved problems and to new areas in medicine. Applications included the measurement of palatal casts using non-metric imagery, the wear and tear and movement of hip replacement joints, and body surface motion during the breathing cycle of babies. Perhaps his greatest achievement involved his application of two dimensional and three-dimensional surveying transformations to medical images such as brain scans. He devised some ingenious equipment which allowed neurosurgeons to accurately position and orient drilling and operating equipment into the heads of patients. His calculations allowed for the correspondence between brain scans which showed reference targets placed around the heads of patients and the surveyed positions of those targets. The device was then fitted to the head of the patient and aligned such that the position and direction required for the surgeons to enter the skull could be accurately determined. The surgeons had confidence in his techniques and Adams had automated the process, giving the surgeons further confidence. The fact that his techniques were widely accepted by the medical profession was a personal triumph for someone with what he himself would call “a humble surveying background”. The device, known as the Cape Town Stereotactic Pointer (*Photogrammetric Record*, 16(92): 259–270 (October 1998)) which won a South African Bureau of Standards/Design Institute Award in 1997, has been patented and is manufactured by a commercial firm. It is currently used in hospitals in Africa, India and Colombia. There are not many photogrammetrists or surveyors who can truly claim that their ideas and the application of basic principles have led to the saving of lives. Many of those operated on for brain tumours using these techniques have been children and he was very proud that his concept had reached fruition in the intense and life-saving atmosphere of the operating theatre.

The life and work of Dr. H.G. Fourcade (1865–1948) was another of his great interests. On his death, Fourcade bequeathed his estate to the University of Cape Town and his collection of photographs, photogrammetric equipment, technical papers and correspondence went to the Department of Surveying. Adams discovered this treasure trove in the survey store and subsequently spent many long hours sifting through it. As a result, he became a strong advocate for the relatively unknown Fourcade to be recognised as one of the giants in the history and development of photogrammetry, alongside Pulfrich and others. The encouragement of Adams led C. D. Storrar to publish his biography, *The Four Faces of Fourcade* (Maskew Miller Longman, 1990).

Adams was active in several professional organisations and learned societies. He was a member of the Surveying Board in Kenya for many years and President of the Kenya Branch of the Royal Institution of Chartered Surveyors in 1970. He was a member of the Photogrammetric Society (and subsequently of the Remote Sensing and Photogrammetry Society) for 44 years from 1964, and served as President of the South Afri-

can Society for Photogrammetry, Remote Sensing and Cartography in 1980. He was a regular participant in International Society for Photogrammetry and Remote Sensing Congresses and Symposia and he chaired the Commission V WG V/4 (Photogrammetry for industrial construction and mensuration) from 1982 to 1984. It was always a pleasure to meet at these events and to hear about his latest developments.

He and his wife, Kath, were marvelous hosts, whether at their own home or at the University. Many who read this tribute will have enjoyed their generous hospitality. He had a keen interest in sport, especially golf, cricket and rugby; he loved to travel and to solve the cryptic crossword every day until a few days before his death! Keeping in touch with a family spread around the world was also very important to him. He was very disappointed when he had to leave his native Africa, late in life, to re-settle in England in 1999, initially in Nettleham, Lincolnshire but later in Yeovil, Somerset to be closer to family. He used to say how he missed the sunshine and the wonderful scenery of the Cape.

Laurie Adams had a life well lived, full of rich experiences and justified rewards. He will be sadly missed by all who knew him and all who share a love of the magic of photography and the science of using photogrammetry to extract useful information and turn it into knowledge. He is survived by his daughter, two sons and six grandchildren.

Photogrammetric Record

Ákos Detreköi (1939-2012)

Prof. Dr.-Ing., Dr. sc. techn. Ákos Detreköi, a prominent Hungarian photogrammetrist, had passed away on December 18, 2012.

He was born at 27.11.1939 in Budapest (Hungary), studied at Technical University Budapest, Surveying Engineering from 1958 till 1963 and he stayed at the same university all his life. He was first assistant at the Institute of Geodesy at the same University. After obtaining a PhD degree in geodesy he was docent and later professor at the Institute of Theoretical Geodesy. From 1979 onwards he was the director of the Institute of Photogrammetry (from 1999 Institute of Photogrammetry and Geoinformatics).

He was Dean of the Faculty of Civil Engineering and later Rector of the University. He received several awards, among others; Member of the Hungarian Academy of Science , Corresponding Member of the German Geodetic Commission at the Bavarian Academy of Sciences, FIG bronze medal, Szent-Györgyi Albert Award, German Bundesverdienstkreuz 1. Klasse.

He was an active member of ISPRS and participated in several Conferences, where he represented Hungary at the General Assemblies.

Ákos was an exceptional individual. ISPRS owes him thanks for his contributions and respect for his lifetime achievement as a true professional of our discipline.

Orhan Altan, Istanbul, January 2013

Jüri Talts (1936-2013)

Jüri Talts, who worked for the National Land Survey of Sweden (Lantmäteriet) as a photogrammetrist until his retirement in 2001 and represented Sweden to ISPRS in several capacities, passed away on February 1st, 2013 after a short illness.

Jüri was awarded an MSc in 1962 in Surveying and Geodesy at the Royal Institute of Technology in Stockholm (KTH). He was a Research Assistant under Professor Hallert for a few years and then moved to the National Land Survey. He was appointed Professor of Forestry Photogrammetry at the Agricultural University, between 1970 and 1976 and then returned to the National Land Survey.

Jüri represented Sweden in OEEPE, for many years along with Kennert Torlegård from KTH. Jüri was president of Commission A, Aerotriangulation from 1977 - 1984; was Swedish delegate to OEEPE from1987 - 2001 and President from 1988- 1990. Jüri made a significant contribution to photogrammetry in Sweden, and to OEEPE; his direct opinion was valued in many discussions and activities. Jüri is survived by his wife, Else-Britt, and two sons.

Author unknown

Frederick F. Doyle (1920 –2013)

ISPRS Past President and Honorary Member Frederick J. Doyle passed peacefully on 17 April 2013 from congestive heart failure at his home in McLean, Virginia. He was an active leader in all facets of our photogrammetric, remote sensing and mapping community. He had a very illustrious professional career in our sciences and technologies as a professor, research scientist, and scientific advisor. In addition to his scientific prowess, he also exhibited great masterful leadership and diplomacy in the national and international scientific arena. He served as ASPRS President in 1969. As 1976-80 ISPRS Secretary General and 1980-84 ISPRS President he was most instrumental in leading the International Society for Photogrammetry to embrace Remote Sensing in its name. Similarly, he artfully and tactfully led the ISPRS to become the first international Society to resolve and welcome Ordinary Membership to both Beijing and Taipei, which became the model for the International Council for Scientific Unions (ICSU). His command of the English language was excellent and served well in the complete rewrite of the Society's Statutes & Bylaws as well as his representation of ISP(RS) to the United Nations and international scientific community.

He was born on 3 April 1920 in Oak Park, Illinois and graduated from High School there in 1937. He joined the US Army in 1943 and served until 1948. His career began during World WarII with an Army Air Forces unit on Guam, where he prepared target approach and damage assessment charts for B-29 bombing raids. He then attended Engineer Officer Candidate School and was assigned as the first junior officer in the founding cadre for the Inter-American Geodetic Survey in Panama tasked with extending the North American Datum through Central and South America. That assignment ended with a disastrous plane crash in 1946 in the Andes Mountains between Chile and Argentina. As one of two survivors of the crash, he waited for 12 hours on a mountaintop before a rescue party could reach him, and he was carried down the mountain, having suffered a broken femur and other injuries.

After being hospitalized for 18 months, he entered Syracuse University, where he graduated summa cum laude with a Civil Engineering BS degree in 1951. He then studied for a year on a Fulbright fellowship at the International Training Centre for Aerial Survey (ITC) in Delft, Netherlands where he was the first student under Rector Willem Schermerhorn. During that year, he had the opportunity to visit the national mapping organizations in Belgium, France, Germany, Switzerland, Italy and Austria, as well as the principal makers of photogrammetric instruments at SOM in France, Zeiss in Germany, OMI Nistri and Galileo in Italy, Kern and Wild in Switzerland. At the Wild factory, he developed the calibration procedure for the new Wild A-8 stereoplotting instrument. He then went on to the Mapping & 'Charting Research Laboratory at Ohio State conducting research projects and classes for the Reconnaissance Laboratory at Wright Patterson Air Force Base. He was leader of US Air Force expeditions to observe solar eclipses in Labrador in 1954 and Vietnam in 1955. In 1954, he was appointed Associate Professor of Photogrammetry of the faculty at Ohio State University and later became the first chairman of a new department of Geodetic Sciences.

In 1960, he moved his family to the Washington, D.C. area and became Chief Scientist for Raytheon Autometric Company performing research on classified satellite reconnaissance systems for government agencies. In 1967, Fred joined the US Geological Survey (USGS) where he served as senior advisor for cartography at the National Mapping Division, planning, directing and performing research on aircraft and space sensors and ground processing systems for the US National Mapping Program. In 1969, he was asked to serve as chairperson of the Apollo Orbital Science Photographic Team, which developed, planned, and directed all the orbital mapping cameras used to photograph and map the lunar surface for the Apollo missions 13 through 17. Fred was principal investigator on the Landsat Satellites and Skylab. In 1971, he was recipient of a NASA Exceptional Scientific Achievement Medal for development of the Apollo Orbital Photographic System. He also directed photographic projects on Mariner and Viking missions to Mars, Venus and Mercury. He was the primary advocate and lead scientist in promoting the development and fielding by NASA of the Large Format Camera which was flown October 1984 space shuttle Challenger.

Throughout his career he trained many of the individuals who have become leaders in academic, military, government and civil Mapping organizations. While at the USGS, he served as adjunct professor of photogrammetry at George Washington University and Virginia Polytechnic Institute. Under contract to the National Photo Interpretation Center he prepared lecture notes for a course in Numerical Photogrammetry which he presented to NPIC, Army Map Service, Engineer Topographic Laboratory, Department of Agriculture Graduate School, VPI, George Washington and George Mason Universities. He was a prominent author of photogrammetric professional papers and texts and served on the Mapping Science Committee of the Board on Earth Sciences and Resources of the National Academy of Engineering.

Fred Doyle's scientific accomplishments and leadership qualities have been recognized nationally and

internationally. Heholds an Honorary Doctorate in Engineering from the Technical University of Hannover, Germany; an Honorary Doctorate of Science from Ohio State University; Honorary Doctorates of Technology from the Royal Institute of Technology (KTH), Sweden and from the University of Bordeaux, France; is an Honorary Fellow at ITC, The Netherlands; and elected an Honorary Member of ASPRS and ISPRS. He received the Fairchild Photogrammetric Award (ASPRS-1968); Brock Gold Medal Award (ISPRS-1984); Meritorious and Distinguished Service Awards (US Department of Interior); and elected to the National Academy of Engineering (1989). In 2010, George Mason University established the "ASPRS Student Chapter and Forum Dr. Frederick Doyle at GMU". The first quadrennial "Frederick J. Doyle Award" was presented, through the auspices of The ISPRS Foundation at the 2012 ISPRS Congress, to "Honor the exemplary career of Frederick J. Doyle as a role model to inspire followers and newcomers in the photogrammetry, remote sensing and spatial information sciences and technologies."

Fred is survived by his wife Mary, whom he married in 1955; four children, Fred Jr., Margaret Grant, Mary Ellen Slattery, and George; two brothers; a sister; and 10 grand-children.

Lawrence Fritz, May 2013

Dieter Klaus Zeuner (1937 – 2013)

Dieter Klaus Zeuner was born in 1939 in Sachsen, Germany. He obtained his engineering degree at the Technical University of Dresden on February 1963. From March 1963 to August 1970, he worked for Carl Zeiss Jena in East Germany. From September 1970 to March 1972, he worked in a managerial capacity at Jena Instruments Ltd. in Toronto, ON. Thereafter, he joined Leica Canada Inc. in April of 1972 as the first manager of the Geodesy and Photogrammetry department. Later in his career he was named Vice President of Leica's Surveying Division. On December 10, 1991, Deieter became a member of the Association of Ontario Land Surveyors. On July 13, 1995 Dieter became a member of the AOLS Council. In 1999, he worked for Applanix Corporation. He retired in 2001, and passed away peacefully at the age of 74 on Sunday, March 17, 2013 after a short illness.

Association of Ontario Land Surveyors, 2013

John William Charles Gates (1922 – 2013)

There will be many readers for whom the name John Gates will be associated with an extensive knowledge of both optics and photographic science. He died in hospital at the age of 90 on 10th July 2013.Born in London on the 11th December 1922, John William Charles Gates, BSc, MSc, DSc, DIC, CPhys, HonFRPS, received his initial education at the Coopers' Company School. He then attended the Sir John Cass Institute in the City of London until the outbreak of the Second World War in 1939. On leaving school in 1939, Gates worked briefly in the design office of an engineering company, John Dore & Co. Ltd., London. This was followed by two years of work in the physical laboratory of the sensitized materials manufacturer Ilford Limited, experience which gave him a scientific insight into how photographic materials responded to light and how their micro-image quality could be evaluated and improved. By dint of private study and some tuition during the war, Gates achieved a BSc degree in General Mathematics in 1942.

In the same year, he started work in the Royal Aircraft Establishment (RAE) at Farnborough, Hampshire. There he participated in the further development and application of photographic sensitometry for aerial reconnaissance and survey photography, this being regarded as a subject of high priority in the effort to gain maximum intelligence value from reconnaissance flights over enemy held areas. These activities at RAE required him to take some part in photographic trials among his other duties, flying as a member of the aircrew. While at RAE, Gates worked alongside G. C. Brock and F. J. Worton and had contact with R. W. Fish who worked in another division of RAE. Along with other scientific staff of the time at RAE, he became involved in photogrammetric matters. The work of this group further contributed significantly to a deeper understanding of the physical principles that are at the core of the image quality achievable in aerial photography. The benefits of the fundamental work undertaken by this group were to influence photographic science for many decades to come. As well as John Gates, the distinguished scientists named here were to become notable members and

contributors to the work of the Photogrammetric Society, with all four eventually becoming holders of the President's Medal. It is of some historical interest to note that the building in which this group worked was later to become the National Remote Sensing Centre.

In 1946, Gates commenced further studies at Imperial College of Science and Technology, where he was to gain a BSc degree in Physics, an MSc degree in Technical Optics and the Diploma of Imperial College. On leaving the College in 1949, he started work in the Light Division of the National Physical Laboratory (NPL) at Teddington, Middlesex where he continued to work until retirement on his sixtieth birthday in 1982. Initially, he was concerned with problems associated with direct measurement systems. The course of this work led him to a more detailed knowledge of fundamental physics. Among the tasks which he was given was the further development of aerial survey camera calibration, which led him into contact with many people established in photogrammetry for mapping and intelligence applications. In the course of his work at NPL, Gates produced more than 50 papers, mostly optical, which included 13 papers on basic optical processes, and 23 papers on other coherent optical processes. In addition, he wrote some 60 reviews and he is listed as producing six patents. The range of topics which his writing covered was extensive and included length measurement, optical fabrication, interferometry, dispersion, aplanatic zone plates, holography, laser systems and close range photogrammetry.

In addition to this published work, he was generous in his support for students on BSc degree courses at the Polytechnic of Central London (PCL) (later to become the University of Westminster). Industrial and scientific work experience was a pre-requisite for an honours degree there. The cross-fertilization established between academe and industry was positively supported by John Gates, to such an extent that Charles Horton, a lecturer in applied photographic science and photogrammetry at PCL, summarized the students' reaction to Gates's sessions at NPL as "if you want to learn, go to Teddington".

Gates was always keen to express the primacy of the lens in any camera system and he employed the graphic description of the role played by aperture size with a lens as its "light grasp", to indicate the relationship that exists between this feature of a lens and the image quality to be expected. Put simply, this means more detail in an image requires a larger size diameter for the aperture of a lens. This kind of direct approach to describing the more technical aspects of photography was appreciated by both students and colleagues.

During the 1960s Gates had gained wider recognition, with his name appearing in the *Directory of British Scientists* (*Directory of British Scientists*, 1966-67, Vol. 1 A – L, Ernest Benn Limited, London). However before this appeared, a significant recognition of John Gates's knowledge and abilities had occurred in the early 1960s when Dr. Dow Smith, of the then major American reconnaissance satellite builder Itek Corporation, endeavoured to recruit him to their ranks of eminent scientists, together with G. C. Brock. Significantly at that time, Itek was engaged in the design and construction of the Corona photo-reconnaissance satellite programme. For his own reasons, Gates decided to continue his work in the UK.

In 1971, Gates was appointed a Senior Principal Scientific Officer at NPL, on what is considered individual merit. In British Civil Service terms, individual merit can be regarded as disturbing original thought, and to be listed in a separate section. His colleagues gratefully acknowledged that many of the activities initiated by Gates in the Mechanical and Optical Metrology Division at NPL had a bearing on the Division's work over many years. Dr. Richard Stevens, a colleague at NPL, recalls that in 1971 Gates was awarded the C.V. Boys Prize of the Institute of Physics, an award customarily made to younger physicists who had contributed to an innovative and practical solution to a given problem. This award was regarded at the time as recognition of particular merit by a mature physicist. The degree of Doctor of Science of the University of London was conferred on Gates in 1974.

In 1978, the work done by Gates at NPL and in photogrammetry led to him becoming Chairman of the Working Group of Commission V of the International Society for Photogrammetry and Remote Sensing (ISPRS) which was concerned with non-conventional imaging systems. This was a position that, given his very wide experience in applied physics, enabled him to appreciate the new opportunities then opening up.

When, in 1980, the United Kingdom assumed responsibility for ISPRS Commission V for a four-year period, it was a logical choice for John Gates to then become President of that Commission. Gates presided over a most successful technical symposium of Commission V held at the University of York in 1982. The symposium had the theme "Precision and Speed in Close Range Photogammetry".

Always an original thinker, Gates's impatience with bureaucratic procedures was legendary. Rather less well known was his special technique for training scientific assistants. On the occasion of his retirement from NPL in 1982, it was observed retrospectively that "Having spent some years beating one assistant (Jean Dolphin) into shape, he decided the only way to ensure her continuing service was to marry her." (*NPL News*, No. 357, Spring 1983).

Following retirement from NPL, Gates was recruited by the United Nations Industrial Development

Organization to spread his expertise in optical instrumentation by a working visit to Chandigarh, India. This was followed in 1984 by his presiding over Commission V at the International Congress of Photogrammetry and Remote Sensing, held in Rio de Janeiro, Brazil. Further recognition of his abilities occurred in 1985 when he was appointed Visiting Professor in the Department of Photogrammetry and Surveying, University College London.

John Gates leaves his wife Jean and three children, Diane, Ruth, and Simon. He will be widely remembered as an engaging colleague and good friend.

First published in *The Photogrammeric Record* and reproduced with permission of the editor kindly offered for publication in eBulletin by Ian Dowman.

Kimberly A. Tilley (1953 - 2013)

It is with very deep sorrow and a tremendous sense of loss that we must inform you that Kimberly A. Tilley, Associate Executive Director and Director of Communications, passed away suddenly Friday evening, December 27, 2013 at her home in Bethesda, Maryland.

Kim was a very critical resource to ASPRS, not only to her fellow staff members but to the Society's leadership and the membership at large. As a colleague, she was an indispensable confidant and advisor to me, and I could not imagine how I would have effectively functioned as the Executive Director these past 16 years without her help. Her contributions to the health of the Society have been numerous. Kim's unending commitment and devotion to students in general, and specifically to the ASPRS student members, are well known. She was also the Executive Editor of PE&RS, where she was very instrumental in making the front part of the Journal of interest to the broadest audience possible.

However, many of her other most significant contributions have occurred well below the radar screen and thus were mostly invisible to the membership. Nevertheless, ASPRS would not be where it is without Kim's untiring devotion; she truly cared for the Society, its members and its mission.

ASPRS Press Release, January, 2014

Carolyn Merry (1950 - 2014)

Merry Carolyn J. Merry, died unexpectedly on June 3, 2014. Carolyn was born in Union City, PA on September 18, 1950. She was preceded in death by her parents Mildred and Arthur Merry and brother Michael Merry. She is survived by her husband, Robert (Bob) Redfield of Hilliard; sister, Patricia Merry; brothers, James Merry (Kim) and Donald Merry (Amber); nieces, Katie Kuhns Hughes (Kevin), Sara Kuhns Strong (Patrick), Rebecca and Rachel Merry; nephews, Michael and Read Merry and Cole and Ian Zink, and several great-nieces. Carolyn recently retired from her position as Professor and Chair of the Department of Civil, Environmental and Geodetic Engineering at The Ohio State University. She received a Ph.D. in Engineering, from the University of Maryland, College Park, Maryland in 1988, an M.A. in Geology, from Dartmouth College, Hanover, New Hampshire in 1977, and a B.S. in Geology, Edinboro State College, Edinboro, Pennsylvania in 1972. She was the Valedictorian of her graduating class at Wattsburg (PA) High School. She was a professor of Civil Engineering at The Ohio State University beginning in 1988 and taught several courses primarily in her specialty areas of remote sensing and geographic information science. She began her career as a Research Physical Scientist and Geologist at the U.S. Army Cold Regions Research and Engineering Laboratory (USACRREL), Hanover, New Hampshire, from 1973 - 1988. She published over 160 papers in various forums and contributed four chapters in textbooks. She was active in several professional organizations including the American Geophysical Union, American Society of Civil Engineers, American Society of Engineering Education, American Society of Photogrammetry and Remote Sensing, International Association for Great Lakes Research, and the International Glaciological Society. She served in many elected and appointed positions in professional organizations including President of the American Society of Photogrammetry and Remote Sensing, President of the University Consortium for Geographic Information Science, and President of the Central Ohio Section of the American Society of Civil Engineers (ASCE). She was currently a member and Committee

Chair of the National Geospatial Advisory Committee of the US Department of the Interior. She served on many committees at The Ohio State University. Her numerous honors included being named Outstanding Section Member, ASCE Central Ohio Section (2003-2004); Group Achievement Award - Landsat-7 Project Science Office Team, NASA Goddard Space Flight Center; Eminent Engineer, Tau Beta Pi (Ohio Gamma Chapter); Charles E. MacQuigg Student Award for Outstanding Teaching for 1995; and the Texnikoi Honorary Award, outstanding contribution to engineering profession, The Ohio State University, 1993. Carolyn's greatest joy was teaching and working with undergraduate and graduate students. She served as advisor to 28 masters and doctoral candidates and taught hundreds of undergraduate students over her 25-year teaching career. Many of her students have had successful careers in central Ohio engineering firms and remained involved in the Department during her tenure as Chair (2004-2013). She was an avid and generous supporter of the performing arts in Central Ohio. She was an expert skier and enjoyed tennis, golf, and bicycling. In addition to her many professional and charitable activities, Carolyn made it a point to be fully involved in her family's lives, interests and aspirations. She was a great listener and mentor to each of them.

www.legacy.com/obituaries/dispatch/obituary.aspx

Maurice Carbonnell (1923 – 2015)

Maurice Carbonnell was born on 20 September 1923 in Paris. With two baccalaureates (mathematics and philosophy), he passed the examination to become a student engineer for cartographic work in 1945 and entered the French *Institut géographique national* (IGN). Appointed to the IGN photogrammetry department in 1947, he took part in many field surveys between 1952 and 1955 (Morocco, Madagascar). In 1954, he was promoted to the highest engineer rank in IGN (*ingénieur géographe*). From 1955 to 1962, he was at the same time head of the overseas photogrammetric works department and photogrammetry professor at the IGN school, *Ecole nationale des sciences géographiques* (ENSG).

During that time, he was on a temporary assignment to the French Ministry of Foreign Affairs as a photogrammetry expert for the Vietnamese government, for 14 months beginning in October 1957. From November 1959 to February 1960, he supervised training courses at the “training centre for experts in international technical cooperation”.

In 1961, at IGN France, he was involved in various studies concerned with glaciology, photo-interpretation and non-topographic applications. Between 1962 and 1972, he kept on pushing for the use of modern photogrammetric techniques and he attended many congresses, conferences and international symposia (in Moscow, Venice, Brussels, Vienna, Prague, Athens, Rome, Brno, Ottawa, Zurich, Teheran, Helsinki…).

In 1964, during the Venice congress, which brought together architects involved in heritage restoration work, Maurice Carbonnell, already famous for his participation in campaigns to save the Nubian monuments in Egypt, together with his Austrian friend and colleague Hans Foramitti, presented interesting projects involving photogrammetry. The Venice charter was signed immediately after that congress, and a new international organisation, the International Council on Monuments and Sites (**ICOMOS**) was founded.

In 1968, immediately after the international colloquium on “the applications of photogrammetry to architecture” which was organised in Paris by Carbonnell, *the Comité international de photogrammétrie architecturale* (**CIPA**), a new scientific committee of ICOMOS established in collaboration with the International Society for Photogrammetry (ISP), was created in order to improve the links between photogrammetry experts and architects. Maurice Carbonnell was elected as first president of CIPA, and he remained president for 20 more years. Some days later, during the ISP Congress in Lausanne (July 1968), the Congress elected Maurice Carbonnell as President of ISP Technical Commission V dealing with non-topographic applications of photogrammetry.

Maurice Carbonnell also contributed to the creation of the French Society for Photogrammetry and Remote Sensing (SFPT) in 1959. He was the SFPT president from 1973 to 1977, and was Editor of its journal for 28 years.

Meanwhile, in IGN France, he was the head of the photogrammetry department in 1968, deputy head of the IGN production department in 1975, deputy head of the aerial activities department in 1976, and head of the aerial activities department in 1977. In 1979, he worked for the managing director as the main contact between IGN and various public or private national services or international scientific societies. Very much involved in teaching from the beginning of his career, Maurice Carbonnell became the head of the *Ecole nationale des sciences géographiques* (ENSG) in January 1981. He retired in 1984.

Maurice Carbonnell was an excellent engineer and communicator. He worked successfully in a number of positions. He was responsible for technical production in the field as well as in the office, in charge of studies and research related to photogrammetry, expert for a foreign government, head of a strategic IGN department, and president of national and international specialised scientific societies. He also wrote many high quality papers.

Finally, it is worthy of note that Maurice Carbonnell was officer of the French order of academic palms (1973) and *chevalier* (knight) of the French national order of merit (since 1969). He was also awarded the medal of research and technique of the French Academy of Architecture (1976).

Raphaële Héno, Keith Atkinson, 2015

Alef Ahmed El Sayed Elassal (1934 - 2015)

Alef Ahmed El Sayed Elassal, 81, passed away on August 17, 2015 in Fort Myers, Florida. He was born in Egypt and completed his engineering degree at the University of Cairo. He received his MS and PhD degrees in Photogrammetry from the University of Illinois in 1961 and 1963 respectively. Atef's dissertation was some of the earliest work in analytical aerial triangulation through simultaneous relative orientation of multiple cameras.

Dr. Elassal began his career in private industry with Autometric Inc., a part of Raytheon Corporation, then entered government service with the U.S. Geological Survey (USGS). During the 1970's he worked at the USGS headquarters in the Office of Research and Technical Standard's Branch of Photogrammetry and, using his skills in photogrammetry and computer science, he introduced analytical photogrammetry techniques into the USGS's topographic mapping process. In 1979, Dr. Elassal was assigned to the Digital Applications Team that was responsible for transforming the USGS analog mapping process to digital techniques. Dr. Elassal was responsible for establishing the initial data structures for both planimetric data and elevation data through the Digital Line Graph (DLG) and Digital Elevation Model (DEM) formats and established the National Digital Cartographic Database for storing and distributing digital data.

Dr. Elassal was active in ASPRS and was among the early pioneers in developing analytical aerotriangulation systems; notably the Multiple Station Analytical Triangulation (MUSAT) method. He was a member of the Birdeye Club through his donations to the ASPRS Foundation. Dr. Elassal was also active in ISPRS and served as Chair of Working Group II/5, Integrated Production Systems. He was responsible for developing the General Integrated Analytical Triangulation Program (GIANT)

used by USGS. In 1980, Dr. Elassal developed the General Cartographic Transformation Package (GCTP) which was an integrated set of programs to handle map projection computations for digital mapping applications. GCTP was used by several government agencies as well as by private industry. Dr. Elassal received ASPRS's Photogrammetric Award (Fairchild) in 1977.

A Google search will indicate that Dr. Elassal was the author of numerous papers and agency publications and he is referenced by many others. As the senior photogrammetrist at USGS, he provided technical assistance to many other federal agencies and private companies for both aerial and satellite applications. Many of these requests were new and novel tasks that required the expert application of analytical methods. One interesting project was his work in 1978 when the U.S. House of Representatives Select Committee on Assassinations requested USGS assistance in their investigation of the assassination of President John F. Kennedy. The assistance involved photogrammetric analyses of movie film and several snapshots. The snapshots were of Lee Harvey Oswald in the backyard of his home in Dallas in 1963, and the movie films were taken during the assassination by two separate bystanders.

In the mid-1980's, Dr. Elassal was selected as the Chief of Photogrammetric Research at NOAA's National Ocean Service (NOS). While at NOAA he was responsible for developing the Integrated Digital Photogrammetric Facility (IDPF) which was the underlying system that drove a network of photogrammetric devices using a common database. Dr. Elassal received the Department of Commerce's Silver Medal Award for scientific/engineering achievement in developing the IDPF system for the agency in 1989. He also received the Washington Academy of Sciences Mathematics and Computer Science award in 1989.

Dr. Elassal retired from NOAA in 1995. He is survived by his wife Randi and their daughter, and also by two sons and a daughter from previous marriages and five grandchildren.

Photogrammetric Engineering & Remote Sensing, January 2016

Kennert Torlegård (1937-2016)

The global photogrammetric community is saddened by the sudden passing of Kennert Torlegård who was one of the pillars of the international photogrammetry and remote sensing community.

Anders Kennert Ingemar Torlegård was born on 21 January 1937. He undertook military service from 1956-57 as photo interpreter, and then studied for an engineering diploma (MSc) at the School of Surveying, the Royal Institute of Technology, (KTH) Stockholm Sweden from 1957-61. He then undertook PhD studies as a research fellow at the Department of Photogrammetry under the guidance of Professor Bertil Hallert at KTH from 1961-67. He was subsequently chief photogrammetrist at VIAK AB Consulting Engineers and Surveyors, in Gothenburg from 1967-74.

Kennert was the successor to Professor Bertil Hallert as Professor of Photogrammetry at the Royal Institute of Technology (KTH) in Stockholm. Professor Hallert had been a well-respected international photogrammetrist in the 1950´s and 1960´s, and was instrumental in shaping the 1956 ISP (International Society of Photogrammetry) Congress in Stockholm. Following the death of Professor Bertil Hallert in 1971 a government search committee for his successor was formed in 1972, consisting of several prominent photogrammetrists from Europe and Scandinavia, which recommended the appointment of Kennert Torlegård in 1974. Kennert held the position of full professor for photogrammetry at the Royal Institute of Technology in Stockholm from 1974-2001 until his retirement.

During his term at KTH, Kennert was appointed Provost (equivalent to 2nd vice president) and chairman of the Faculty, responsible for research program planning from 1987-90 and a member of the Board of KTH from 1991-97. From 1993-95 he was Chairman of the Local Organizing Committee for the 1995 summer session of the International Space University, ISU that was held at KTH in 1995.

In 2001, Kennert retired from his responsible post at KTH and became “Emeritus Professor“. Unfortunately the Swedish system of support for an Emeritus Professor did not permit him to continue his international activities, but he devoted his time to learning French, playing classical music and also enjoying his summer house outside Simrishamn in the south of Sweden. He started playing the trumpet as a teenager at home in Vetlanda, but after moving to Stockholm the trumpet was soon replaced by a French horn. He said that the technology of the French horn is similar to the trumpet, but the horn has a softer, rounder and more beautiful tone and it is better suited to the music he wanted to play. Kennert played in two symphony orchestras, St. Erik's Society Orchestra and St. Thomas Orchestra Society in Vällingby. The repertoire consisted of both classical and popular music. His favourite music was Alpensymfonie by Richard Strauss, but he thought Gustav Mahler very good as well. Following his appointment at KTH, he soon impressed the photogrammetric community as a leader in the development of the discipline of photogrammetry, which led to his participation as the Swedish delegate to the European Research Organization of Photogrammetry OEEPE (now renamed EuroSDR) from 1977-2001. When, in 1976 Sweden was elected to host ISPRS Technical Commission V covering Close Range Photogrammetry from 1976-1980, Kennert became Commission President and thus established himself as a leader in ISP. After the Hamburg Congress in 1980 Kennert was chair of the working group on photogrammetric data capture for digital elevation models for ISPRS (renamed the International Society for Photogrammetry and Remote Sensing). Following the ISPRS Congress in Rio de Janeiro 1984 Kennert became Secretary General of ISPRS. Preparations for the 1988 ISPRS Congress in Kyoto, Japan, involved an intensive period of cooperation between Kennert Torlegård as Secretary General, Shunji Murai as Congress Director and Gottfried Konecny as ISPRS President since it was a period of change in the orientation of ISPRS from its former Euro-American orientation into a global society. Such discussions also laid the foundations for the ISPRS “White Elephants Club“ of senior photogrammetrists, which was established in 2004 and of which Kennert was an inaugural member.

When Kennert became President of ISPRS in Kyoto in 1988 ISPRS seemed ready for the hosting of an ISPRS Technical Commission in Africa by Nigeria. Unfortunately the Nigerian Government withdrew support for the Commission President Olayinka Adekoya so Kennert invited her to the ISPRS Council meeting in Stockholm and led several important discussions at the Nigerian Embassy in Stockholm, which confirmed that governments have responsibilities to their scientific community. This activity was typical of Kennert´s convictions as a scientist and as a global citizen.

He continued to influence ISPRS Council with his convictions as First Vice President from 1992-1996 and Chairman of the ISPRS working group on geometric modelling and object reconstruction during the same period. As well, he was President of the Science Committee of OEEPE from 1996 to 2000. In 2010 Kennert was awarded the rank of an ISPRS Fellow at the 100 year ISPRS Celebrations in Vienna. Kennert has made a fundamental contribution to ISPRS, which is appreciated by his contemporaries and the ISPRS community. From 1964, Kennert actively participated in 10 ISPRS

Congresses, more than 30 ISPRS Symposia, seminars and workshops, 8 FIG Surveyors' Congresses and 5 ICA Cartographic Conferences. He will be missed at future ISPRS Congresses.

Asked why he became involved in ISPRS Kennert replied: “As a PhD student and a young photogrammetrist in the 1960s and 70s I visited congresses and symposia so as to meet colleagues who worked with the same or similar problems and applications as I did, for discussions and exchange of experience and information. The way to contact them was to present a paper. It was also very interesting to visit the exhibition and see new instruments and products from manufacturers and vendors. Later when I became Professor there were other reasons for my involvement in ISPRS affairs; I wanted to find colleagues for joint projects in R&D; I used my international relations when supervising my PhD students, i.e. through my contacts I knew who was doing what and where in R&D, or I could it find out. Then the students could make their own contacts.”

To the question on why he committed himself to a management role in ISPRS, he said the President of the Society Dr Fred Doyle had invited him to become Secretary General of ISPRS because he believed that I would be able to do the job, and he also said the he thought that it would be good for my career. Kennert replied “And so it was. My reward has been a lot of wonderful experiences and many good friends from all over the world”.

Kennert Torlegård was indeed a gentleman and an excellent scientist. While Secretary General, President and First Vice President of ISPRS he was totally committed to the cause of ISPRS and did an outstanding job in advancing its future. His work for ISPRS is celebrated by the whole community of ISPRS. His passing is a sad loss to his lovely wife Margaret, family, friends, colleagues, the ISPRS community and beyond.

John Trinder, Gottfried Konecny, February 2016