

In Memoriam  
Alef Ahmed El Sayed Ellassal  
1933-2015

Alef Ahmed El Sayed Ellassal, 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. Ellassal 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. Ellassal was assigned to the Digital Applications Team that was responsible for transforming the USGS analog mapping process to digital techniques. Dr. Ellassal 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. Ellassal 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. Ellassal 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. Ellassal 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. Ellassal received ASPRS's Photogrammetric Award (Fairchild) in 1977.

A Google search will indicate that Dr. Ellassal 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. Ellassal 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. Ellassal 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. Ellassal 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.

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