

THE HONORARY MEMBERSHIP AWARDS

1987 Recipients: Duane C. Brown and Frederick O. Diercks

Mr. Charles H. Andregg, recipient of the award last year, made the following introduction:

"President Graham, distinguished guests, ladies and gentlemen, I am pleased to present to you our two newly-elected Honorary Members. An Honorary Member is an individual who has rendered distinguished service to the Society or who has attained distinction in photogrammetry and remote sensing or the related sciences, deserving of recognition by the Society.

In accordance with the new Society bylaws, enacted at Reno in October, 1987, the total number of living Honorary Members shall not exceed 25 at any time and no more than two shall be elected in any year. During the past year we have lost one of our Honorary Members, General George Goddard, reducing our rolls to 20. We were therefore permitted to elect two Honorary Members at this time. By letter of December 17, 1987, President Graham appointed as the Honorary Member Nominating Committee Edmond S. Massie Jr., Francis H. Moffitt, William A. Radlinski, Revere G. Sanders and Charles H. Andregg. The committee solicited nominations from the other Honorary Members and members of the Board of Directors. The 15 candidates proposed were all found by the committee to be outstandingly qualified and deserving of the honor. After careful consideration the committee nominated Mr. Duane C. Brown and Colonel Frederick O. Diercks, who have subsequently been elected by the Board of Directors."



Duane Brown at age 8 in Grand Forks, North Dakota, where he grew up and graduated from high school.



Charles Andregg (right), recipient of the award last year, with Duane Brown, one of the two new Honorary Members.

Citation for Duane C. Brown

Duane C. Brown was born August 20, 1929 and grew up in Grand Forks, North Dakota. After graduating with honors in 1951 from Yale University with a Bachelor of Science degree in mathematics, he began his professional career at the Ballistic Research Laboratories, Aberdeen Proving Ground, Maryland. Under the direction of Dr. Helmut Schmidt, he performed research in photogrammetry, geodesy and statistical error theory in the application of ballistic cameras to determining rocket trajectories. This was the beginning of his brilliant work that has

earned him international recognition as a leader in the development of photogrammetric theory.

In late 1955 Duane joined the RCA Missile Test Project at Cape Canaveral, Florida where work on the problems of calibration of cameras led to his developing the "bundle method" of photogrammetric triangulation. His algorithm for first-order partitioned regression used in this work has wide application in the solution of other problems in photogrammetry, geodesy, trajectory analysis and satellite tracking. His many published papers on these and related subject areas provide definitive reference works.

Duane moved to Instrument Corporation of Florida in 1961, serving as Director of its Research and Analysis Division. In 1963 he purchased this division to form DBA Systems, Inc., leading a talented team in effecting a practical application of the "bundle adjustment" for large blocks of aerial photography. He also worked extensively in close-range photogrammetry and satellite doppler positioning, leading to the efficient reduction of extensive blocks of imagery generated by the Lunar Orbiter and other systems employing satellite photogrammetry.

His work in close-range photogrammetry has included the development of large-format plate cameras, including those specially designed for use in environmental test chambers.

His application of the "bundle adjustment" with self-calibration to large-scale densification of geodetic networks is becoming a major factor in the use of the Global Positioning System (GPS) to establishing economical control networks through the use of photogrammetry.

Duane resigned from DBA Systems in 1977 to found a new company, Geodetic Services, Inc. (GSI) in Melbourne, Florida, formed through the purchase from DBA of its Photogrammetric and Geodetic Services Division. He serves as President of GSI and is assisted by several family members including son John, the Executive Vice President. A primary interest has been fur-



In 1949 at Yale University as a member of the Yale diving team.



At the ISP Congress in Helsinki in 1976 with Joe Garek, Urho Rauhala, and Joe Strahle.

ther advancement of close-range photogrammetry, particularly in industrial applications. The réseau platen, for which he received a 1979 patent, is now incorporated in the CRC-1 micro-processor-controlled camera, which, with a comparator and software, is the basis for a turnkey system for industrial photogrammetry referred to as "STARS." This includes a new Brown-designed computer-controlled monocomparator (AUTOSSET-1) using digital image techniques for high-speed automatic image targeting at great accuracies. "STARS" systems are in use in the aerospace industry for quality control of large tooling fixtures. This is an example of the notable success he has achieved in commercial application of his research in photogrammetry and geodesy.



Duane and wife Terry travel to many international meetings. This is Israel, 1968.

Duane and Theresa (Terry) Phelps were married in Grand Forks in 1950 and have raised seven children in their home in Indialantic, Florida. They are also doting grandparents of Laura 9 and Kenny 4. Duane's many activities in international organizations and work on projects of worldwide interest have taken Duane and Terry to many parts of the world.

We congratulate Duane on his election to honorary membership.

Mr. Brown was escorted to the dais to accept the award, by other honorary members present for the ceremony. In accepting the award he thanked the Society for its support and for this honor.



Atop NASA's 85-foot radio telescope at Rosman, North Carolina, 1965.

Duane is an active member of ASPRS, ACSM, AGU, and has been elected a fellow in SPIE. He has served in the Committee on Geodesy of the National Research Council and as an Adjunct Professor of Geodetic Sciences at The Ohio State University. A two-time winner of the ASPRS Fairchild Photogrammetric Award, his many other honors include the Society's Talbert Abrams Award, SPIE's Robert Gordon Memorial Award and the David Sarnoff Award for Outstanding Achievement in Engineering. In 1985 the Annual Duane C. Brown Award for Photogrammetry was initiated at Ohio State University.



On the Orient Express between symposia in England and Greece.



GSI facility in Melbourne, Florida designed by Duane Brown.



In Capetown, South Africa with his father John Brown and Dr. Reuther, 1985.



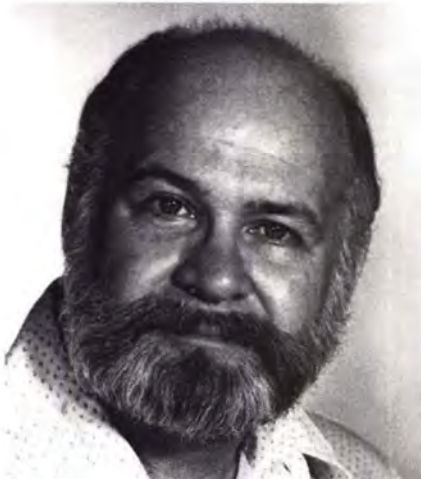
Disembarking from helicopter on the flight deck of the Navy's aircraft carrier, USS Ranger, during orientation conference for distinguished civilians.



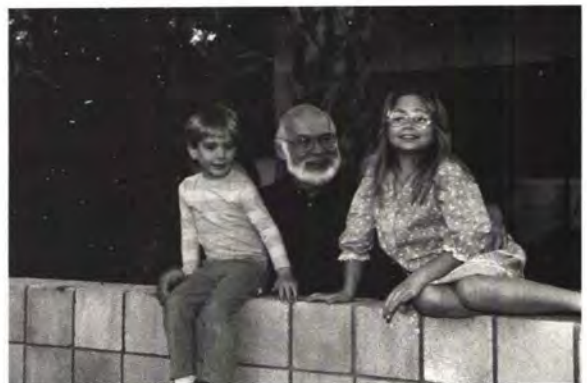
With Terry and his parents, 1980.



With the CRC-1 camera, part of the "STARS" system developed by GSI.



In 1978 as President of Geodetic Services Inc. (GSI).



Duane with grandchildren Kenny and Laura, Indialantic, Florida, 1988.

Citation for Frederick O. Diercks

Frederick O. Diercks was born in Rainy River, Ontario, but grew up in Minnesota, leaving at age 17 to enlist in the Army Calvary at Fort Riley, Kansas. He was appointed to the US Military Academy at West Point. There his horsemanship made him a member of the polo team and led to an off-season job with a riding academy in Pennsylvania, where he married the boss's daughter, Kate. (Sadly, the lovely Kate passed away about a year ago. We all miss her very much.)

Fred was graduated from the Military Academy in 1937 and was commissioned in the Army Corps of Engineers. He was retired from the Army in 1967 after more than 33 years of active service.

A major part of his distinguished military career was in mapping, charting and geodesy assignments, beginning with the Engineer Detachment, Wright Field, Ohio, experimenting with aerial mapping systems and photogrammetric plotting instruments. During World War II he commanded the 656th Engineer Topographic Battalion in the European Theater of Operations and in 1947-48 was Commander of the 29th Engineer Topographic Battalion in the Philippines, surveying in support of the Far East Post-Hostilities Mapping Program. Colonel Diercks was Chief Topographic Engineer of the Far East Command in Tokyo (1948-49) and of the European Command in Heidelberg (1953-56). He headed the Department of Topography, Engineer School at Fort Belvoir in 1950-52.



West Point Cadet 1937.



Lieutenant Diercks on his first assignment at Wright Field, 1938 -- a brand new ASP member.



Shooting on the rifle range, Geiger Field, Washington, 1943.



Big game hunting in South Africa, a gemsbuck in Great Karoo, Cape Province, Republic of South Africa, 1978.

Colonel Diercks was Commanding Officer of the Army Map Service (1957-61), guiding the agency through some of its most significant growth in photogrammetric/remote sensing technology. In 1961 he was selected to establish the Defense Intelligence Agency's Directorate for Mapping, Charting and Geodesy (DIA MC) directing the preparation of the Management Plan for Defense Mapping Charting and Geodesy, which led to the later creation of the Defense Mapping Agency. After service as the Deputy Engineer for the Eighth Army in Korea (1964-67), he retired from active military duty and in June 1967 was appointed Associate Director, US Coast and Geodetic Survey for Aeronautical Charting and Cartography, serving with distinction in that position until June, 1974.



Headquarters, 29th Engineer Topographic Battalion in the Philippines, 1948.

Colonel Diercks received a Master of Science degree in civil engineering from Massachusetts Institute of Technology and a Master of Science degree in photogrammetry from Syracuse University. He is a graduate of The Command and Staff College, The Armed Forces Staff College and The Infantry Airborne School. He has been active in many scientific and professional societies, serving as President (1970-71) of the American Society of Photogrammetry (ASP). He is a fellow in the American Society of Civil Engineers, a Colbert Medal Awardee in the Society of American Military Engineers, and a member of ACSM, Sigma XI and The Cosmos Club. Among his many awards and decorations are the Army Legion of Merit, the Luis Struck Award of ASPRS and medals from the governments of Greece and Thailand.

Colonel Diercks, as an internationally recognized leader in the surveying and mapping profession, represented the United States in many international organizations, including serving as delegate or delegation head to United Nations conferences, Pan American Institute of Geography and History, (PAIGH) assem-



Madrid, Spain, 1955 meeting with Spanish Government officials on cooperative mapping program. Col. Diercks, Topographic Officer, European Command is shown with Yates Dameron, Joe Albright, and Col. Abell, Army Map Service Commander.



Commanding Officer, Army Map Service (his favorite assignment), 1959.

blies, and NATO mapping conferences. Fred continues to be active as the Executive Secretary for the US Section, PAIGH.

We congratulate Fred on his election to honorary membership.



Korea, 1964, Deputy Engineer, Eighth Army, Diercks at a mountain top Hawk missile site prepared by his troops.

Colonel Diercks was unable to be present for the awards ceremony but asked that the following statement of appreciation be read:

"Ladies and Gentleman, especially my old friends in ASP since 1938 at Wright Field when I first joined the Society at the urging of General Louis J. Rumaggi, my first and finest Commanding Officer:

As with most of my predecessors, I imagine, I look at the list of Honorary Members who have preceded me and feel humble and undeserving, but honored, nevertheless, as they did; and



On the golf course in Seoul, Korea with cute girl caddies.

I wish to thank you all. I am reminded today of my Class of 1950 in photogrammetry at Syracuse University and realize that three of us, Fred Doyle, Frank Moffitt, and myself, have all served you as President of ASP and, as of today, as Honorary Members.

We all owe this privilege and honor to our professors at that time, the great Earl Church and his able colleague, Al Quinn, who grounded us so capably in our art and science. (Now we still need to elevate Bob McGivern and Pete Warneck.) The Class of '50 at Syracuse, the last taught there by Dr. Church and Al Quinn, was indeed special. With that let me close by thanking you all once again for this much appreciated if undeserved honor. May God bless this Society, its members, and its principles."



At Thailand Embassy in Washington, receiving Order of the White Elephant, 1965, flanked by Col. Herb Milwit and Col. John Ladd.



At Lake Atitlan, Guatemala at PAIGH Congress, 1965 with IAGS Director Col. Conard, Andregg, and Fuller (Army Map Service).



Antigua, Guatemala, 1965, PAIGH Congress (Fred, as usual, charming our Latin American friends).



Chief of Engineers General Cassidy awarding the Legion of Merit at Col. Diercks' military retirement, 1967. Daughter Lucy and Mrs. Kate Diercks at left.



ASP President Diercks greets Keynote speaker, Secretary of Interior Morton, at 1971 Annual Convention in Washington Hilton Hotel with Past President Radlinski and Convention Director Mullen.



Turning over the ASP Presidency to incoming President Joe Burns, 1971.



One of his several United Nations Conferences -- Teheran, 1971, with Admiral Jones, NOAA, and Harry Burchett, DMA.



At the banquet on the occasion of his retirement from Federal Service as Associate Director, US Coast and Geodetic Survey, 1974.

Past Award Recipients

(The names of Honorary Members who are deceased are in italics.)

1937	<i>Harry Blee</i>	1968	<i>W. Sidney Park</i>
1938	<i>O.S. Reading</i>	1970	<i>Harry T. Kelsh</i>
1942	<i>Leon T. Eiel</i>	1971	Heinz Gruner
1942	<i>Marshall S. Wright, Sr.</i>	1972	G. Carper Tweinkel
1945	<i>Virgil Kauffman</i>	1974	Lawrence W. Swanson
1947	<i>Thomas P. Pendleton</i>	1974	Frederick J. Doyle
1948	<i>Robert B. McKay</i>	1974	<i>Kenneth E. Reynolds</i>
1949	<i>Earl Church</i>	1975	<i>Gomer T. McNeil</i>
1950	<i>Ralph O. Anderson</i>	1975	Alfred O. Quinn
1951	<i>Irvine C. Gardner</i>	1977	<i>Lawrence P. Jacobs</i>
1951	<i>George W. Goddard</i>	1978	<i>Hugh B. Loving</i>
1952	<i>Ir. W. Schermerhorn</i>	1978	Morris M. Thompson
1953	<i>Guillermo Medina</i>	1979	Clarice L. Norton
1954	<i>Sherman M. Fairchild</i>	1980	John I. Davidson
1955	<i>George D. Whitmore</i>	1981	John T. Smith, Jr.
1955	<i>Philip G. McCurdy</i>	1982	Clifford J. Crandall
1956	<i>Gerald FitzGerald</i>	1982	<i>Arthur J. McNair</i>
1957	<i>Robert H. Randall</i>	1983	Rex R. McHail
1959	<i>Theodore W. Norcross</i>	1985	Edmond S. Massie, Jr.
1962	Talbert Abrams	1985	Francis H. Moffitt
1963	Arthur C. Lundahl	1986	<i>Claude H. Birdseye</i>
1964	Robert N. Colwell	1986	William A. Radlinski
1966	<i>William A. Fischer</i>	1986	Revere G. Sanders
1967	<i>Russell K. Bean</i>	1987	Charles H. Andregg



President John Graham's table at the Banquet and Dinner Dance.