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My Remembrances of David S. Johnson

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I first got to know Dave Johnson when I went to work for him in 1966 just after I received my PhD degree at the University of Wisconsin. At the University of Wisconsin, Professor Verner Suomi was one of my Thesis advisors, although Prof. Lyle Horn[1] being my major Professor. Professor Suomi was a very close colleague and friend of Dave Johnson's, who worked together closely in the early days to implement new weather satellite systems and make their data available for research and operational use. The Suomi – Johnson partnership was a monumental force in the rapid development of this nation's satellite program. Professor Suomi was at the University of Wisconsin and Dave Johnson in Suitland MD running the National Environmental Satellite Center (NESC). Suomi, known as the "Father of Meteorological Satellites" was a genius scientist/engineer experimentalist who had developed and experimentally demonstrated many of his ideas on how to make atmospheric measurements from space. Dave Johnson, also having a scientific and engineering background, was a master administrator who knew how to rapidly navigate through the government bureaucracy to get new ideas developed and implemented on operational satellites. In any case, I worked on the problem of temperature and moisture sounding the atmosphere from a satellite for my PhD thesis. Professor Suomi told me when I was about to finish that I should go to Washington for one year to work under Dave Johnson and with Dave Wark[2] to get practical experience and then return to the UW to work with him on new satellite systems.

[1] Lyle H. Horn
[2] David Q. Wark

I went to NESC just after my 24th birthday and receiving my PhD degree from the UW. I remember how Dave Johnson welcomed me and even included me, even as a new young scientist, in fairly high-level meetings concerning satellite system development planning. He took me under his wing, so to speak. As a mentor he opened the door for many opportunities. I remember how Dave's office door was always open and how comfortable I felt about just walking in and discussing my work and getting suggestions from him on how to proceed. Dave Johnson, along with Sig Fritz[3], Jay Winston[4], Dave Wark[5], Don Hilleary[6], and Harold Yates[7] enabled me to lead the development of the first operational processing system for the Nimbus 3 and 4 SIRS instruments as well as PI three of my own satellite experiments, the Nimbus-5 Infrared Temperature profile Radiometer (ITPR) and the Nimbus-6 High resolution Infrared Sounder (HIRS) and the Earth Radiation Budget (ERB) experiments. Dave Johnson helped make the first years working at NESC a most exciting time of my professional life. Dave also made it possible for me to spend much of my time at the Goddard Space Flight Center working closely with NASA pioneers such as Bill Nordberg[8] and Bill Bandeen[9]. I was so very fortunate to have gone to work for Dave Johnson's organization at that time because it provided a career path that has been truly phenomenal in the sense of being given the opportunity to do exciting things in the rapidly evolving space program. Work was, and remains for me, to be fun and exciting. I remember how I could not wait to get to "work" in the morning. It was unbelievable to me to be getting paid for something I enjoyed so much. Dave Johnson was also responsible for getting me connected, as a young scientist, with international groups through my attendance at

[3] Sigmund Fritz
[4] Jay S. Winston
[5] David Q. Wark
[6] Donald T. Hilleary
[7] Harold W. Yates
[8] William Nordberg
[9] William R. Bandeen

international meetings. He enabled me to go to Russia, Norway, Germany, Japan, France, Australia, China and many other countries. He gave me the opportunity to establish professional relationships and friendships with other young scientists working around the globe. Dave was most personable and gracious, I can remember him and his wife Betty coming to my home for a dinner party of young colleagues and their families. Even though he was internationally recognized as one of the world's great leaders, he would never put himself above the common person and always make himself available to help others. He was an excellent role model for me when I was just starting my career as a young scientist.

In 1976, Dave Johnson made it possible for me to spend a year's sabbatical in Australia working with scientists at the Bureau of Meteorology and the Commonwealth Scientific Industrial Organization (CSIRO). That was a wonderful year for my young family and me. This visit established a visiting scientist exchange program that remains today between Australia and NESDIS/CIMSS. In 1977, Dave Johnson enabled myself and five other NESS scientists to relocate at the University of Wisconsin to work with Professor Suomi's Space Science and Engineering Center to develop a ground based processing system for the GOES-D VISSR Atmospheric Sounder (VAS) launched during September 1980. Thus, as Vern Suomi had asked back in 1966, I did return to the UW, but not in one year but instead after 11 years of an exciting tenure with Dave Johnson's Satellite group near Washington. Vern Suomi and Dave Johnson established the Cooperative Institute for Meteorological Satellite Studies (CIMSS) in 1980 to provide permanency to the cooperative federal government/university. This group has since been a very important element of the NESDIS and led the way to the establishment of other cooperative groups at Colorado State University, University of Maryland, and Oregon State University dealing with Environmental Satellite Applications.

As everyone knows, the most rapid growth of the US environmental satellite program took place under the leadership of David Johnson. He is recognized as the most knowledgeable and skillful leader that the US environmental satellite program has had thus far. He retired from federal Service in 1982, soon after the completion of the highly successful Global Weather Experiment, in which he played a major leadership role in the satellite component. Unfortunately, since that time little change has taken place in the evolution of the operational satellite sensors, the sensors on the NOAA and GOES satellites today being largely the same as they were when he retired some 28 years ago. Although major improvements will take place with the NPOESS and GOES-R to be placed into orbit over the next several years, many of us attribute the rapid evolution of the operational satellite program during its first two decades to be due in large part to the high caliber leadership exhibited by Dave Johnson. Unlike administrators to follow, Dave Johnson was not afraid to take risks to advance our capability through the implementation of new measurement concepts and approaches. He was knowledgeable and he knew when to trust and follow the guidance provided by his scientists and engineers. His pioneering spirit was responsible for the rapid advancement of the US satellite program under his leadership. I consider myself most fortunate to have known and to have worked for this "Giant of the US Environmental Satellite Program". I owe much of my own happiness and success in this profession to the caring mentorship that he provided to me.