

Les Lemon has had a 45-year career with the US Government, a number of private sector corporations, and the University of Oklahoma. He has been doing severe storms and weather radar research since 1968 when he joined the National Severe Storms Laboratory (NSSL) in their radar program. Virtually all his research has been oriented toward understanding convective storms, the phenomena, its radar detection, and the operational application of this understanding. Lemon developed a number of radar warning applications including "The Lemon Technique" and criteria, and among others, the mesocyclone signature, the Tornadic Vortex Signature, the Three-body Scatter Spike, the current supercell model, and the Deep Convergence Zone. He joined the private sector as an industrial meteorologist in 1981 in order to help develop Doppler radar as an operational warning tool. In 1997 he received from the American Meteorological Society, the **Award for Outstanding Contribution to the Advancement of Applied Meteorology** "for pioneering work including design and development of the WSR-88D Doppler weather radar system". As the lead meteorologist and system design engineer, Les also was part of a team that modernized and upgraded Romania's weather services. Similarly he assisted in modernizing the Croatian and Uganda weather Services.

He is well known globally for his operational weather radar research, weather radar design and development, the current conceptual supercell storm model, and national and international teaching/training Doppler radar operational applications to severe convective storms. Lemon began doing related radar and severe storms training in 1976 teaching radar and severe convective storms for the NWS, the private sector, and international weather services. The Lemon Technique forms the backbone for conventional and Doppler radar severe storm warnings throughout much of the world. Les updated FMH-11, the US Government handbook on Doppler Radar Meteorological Observations for the Radar Operations Center. He has published extensively.

Les Lemon has taken lead roles in design and development of several weather radar systems including surveillance radars such as the WSR-88D and wind profiler and microburst detection radars. He participated in weather radar algorithm development for Israel. Les recently has been consultant to several companies working on Doppler weather radar algorithms and products and design of integrated and modernized weather services internationally, and as a National Science Foundation principal investigator. In 2002 he conducted the first ever ground storm-damage survey in Romania and documented the first recorded tornado in Romanian history. Recently he has been working on Dual Polarization radar, its applications, and training as well as forensic and consulting meteorology.

Les was selected in 2001 to serve on a National Academy of Sciences/National Research Council committee concerning "Weather Radar Technology Beyond NEXRAD". He has been a visiting professor for the China Meteorological Administration since 2000 teaching their advanced course in Doppler radar and severe convective storms. He also received a 1976 Department of Commerce/NOAA Special Achievement Award for the co-discovery of the Doppler weather radar Tornadic Vortex Signature (TVS) and a NOAA Environmental Research Laboratories' Outstanding Authorship Award. In 2010 Les received the National Weather Association **Life Time Achievement Award** for "a multitude of scientific contributions including storm structure, radar warning techniques, radar design, teaching and training, and contributions to professional organizations". He is listed in American Men and Women of Science, in Who's Who in Science and Engineering, and Who's Who in America.