

Title: Return-to-Flight Electromagnetic Measurements - The NASA Shuttle Ascent Debris Radar System

Speaker:

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Dr. Brian M. Kent is a member of the US Air Force scientific and professional cadre of senior executives, and currently serves as the Acting Chief Technology Officer for the Air Force Research Laboratory, Wright-Patterson Air Force Base, Ohio. He serves as AFRL's principal scientific and technical adviser and primary authority for the technical content of its science and technology portfolio. AFRL is the Air Force's only organization wholly dedicated to leading the discovery, development, and integration of science and technologies for our air, space and cyberspace forces. Dr Kent is responsible to advise the AFRL Commander and Senior Staff on the adequacy and efficiency in meeting Air Force objectives in core Science and Technology competency areas. He identifies research gaps and analyzes advancements in a broad variety of scientific fields and provides advice on their impact on laboratory programs and objectives. He also recommends new initiatives and adjustments to current programs required to meet current and future Air Force needs. He is responsible for leading collaboration on numerous interdisciplinary research problems that encompass multiple AFRL directorates, as well as customers from other DOD components, and the manned space program managed by NASA.

Dr Kent joined the US Air Force in 1976. In 1979, he was awarded a National Science Foundation Fellowship as he completed his Bachelor of Science degree in electrical engineering, highest honors, from Michigan State University. He pursued his graduate studies at The Ohio State University where he completed his Master of Science and Doctor of Philosophy degrees in electrical engineering in 1981 and 1984 respectively. Dr Kent spent about 25 years of his career working in Low Observable Measurement Technology, where he contributed critical experimental data to multiple Defense Programs while simultaneously developing many pioneering standards and processes for high-quality signature measurements involving indoor compact RCS ranges. In 2001, he was detailed to the Columbia Accident Investigation Board (CAIB) and then remained co-located with NASA from 2002-2006 working the NASA Debris Radar and return to flight, having worked 4 Shuttle "return-to-flight" missions. In 2006, he was promoted to Chief Scientist of AFRL's Sensors Directorate, and more recently began serving as Acting AFRL CTO since August of 2013. He has authored more than 100 publications and conference proceedings, and currently serves as an IEEE Distinguished Lecturer. Dr Kent has numerous awards including Fellow of IEEE, AMTA, and AFRL. He received the Meritorious Presidential Rank Award in 2009.