

ABSTRACT

EMP: WHERE WE'VE COME FROM, WHERE WE'RE GOING

WILLIAM R. GRAHAM

The Keynote Address will trace the history of nuclear explosion-generated electromagnetic phenomena (EMP) and recognize many of the people involved: from TRINITY – the first nuclear test, through the last atmospheric and exo-atmospheric test series, underground nuclear effects tests, the development of the analytical basis for understanding EMP, and the design and use of simulators. How comprehending the response of rapidly developing electrical and electronic systems to EMP will also be reviewed, beginning with military systems during the Cold War and continuing through increasing dependence on electrical and electronic systems today and the future. The problems inherent with relying on intelligence communities to understand and predict EMP threats will be discussed, and a proposal for an alternate approach for anticipating EMP threats will be presented.