



Colloquium

Col. Prof. Dr.

Bradford W. Parkinson

Stanford University



Location: Theresianum Room 0602

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Prof. Bradford W Parkinson (emeritus), Stanford University Department of Aeronautics and Astronautics, Chief Architect, original program director, and lead champion for GPS from 1972 to 1979. He is the recipient of the Eduard Rhein Price 2012, which is awarded every year for outstanding achievements in research and/or development in the areas of radio, television, and information technology.

GPS for Humanity - The Stealth Utility

GPS is a global service, provided by the United States, that has created innumerable improvements in safety, productivity, and convenience. It has crept into the fabric of our society in many ways that are totally invisible to the average citizen. For this reason GPS has been called the stealth utility. This talk will cover three aspects.

History and Foundation: the initial studies will be highlighted including the GPS design meeting in 1973 that defined the system as we know it today. In addition the key design innovations and engineering challenges will be discussed.

Applications for Humanity: with hundreds of millions of users, the applications of GPS have proliferated to the point that nobody understands all the uses. This portion of the talk will focus on the surprises and innovations that have occurred since the GPS system was fielded. It will emphasize the benefits of GPS for humanity.

GNSS Future and Threats: as additional Global Navigation Satellite Systems become operational the user will see improvements in availability and accuracy. There will be new opportunities for position navigation and timing systems. The talk will highlight one of these opportunities. At the same time there are threats to GPS availability. These threats will be described and corrective action recommended.