BIOGRAPHICAL SKETCH

for

Raymond D. "Ray" Jennings

Mr. Jennings is a senior engineer with the Institute for Telecommunication Sciences (ITS) in Boulder, CO. During the years 1981-1986, he was Chief of the Satellite Network Analysis Group at ITS. More recently, he was Chief of the Integrated Networks Analysis Group from mid-1994 until mid-1999. Present responsibilities in the ITS Satellite Program include leadership of the project to develop the Transportable Video Quality Measurement System – the work that will be described and discussed in his talk.

Mr. Jennings has more than thirty years experience in radio and telecommunications engineering, research, and development work. Eighteen years of his experience have been in satellite communications, with special interests in Earth station technology and issues pertaining to integrated satellite and terrestrial networks. He is a member of the ITU-R Study Group 4 (Fixed-Satellite Service) and was a member of the United States Delegation to WARC-ORB(2) in the fall of 1988.

At ITS, Mr. Jennings has had responsibility for many projects concerned with communications networks that included satellite systems. During the early 1990s, for example, Mr. Jennings was responsible for projects to identify satellite systems that could provide efficient, low-cost, non-commercial communications to developing nations throughout the Pacific Basin – the PEACESAT Program, a satellite-based network to provide educational and cultural-exchange communications – and to define the technical characteristics and requirements of Earth stations to operate with the selected satellite system. He participated actively in selection of the contractor to build the Earth stations, in technical evaluations of the contractor's performance, and in acceptance testing of the prototype hardware. Based on his contributions to the PEACESAT Program, Mr. Jennings was co-recipient in 1993 of the Department of Commerce Silver Medal for Meritorious Federal Service.

In 1992, Mr Jennings was an invited member of a 12-member panel of experts, commissioned by the National Aeronautics and Space Administration (NASA) and the National Science Foundation (NSF) to study the international status of satellite communications systems and technology. Mr. Jennings' responsibility was directed to the technology for interface between satellite and terrestrial networks. In 1987, Mr. Jennings was the technical representative for satellite telecommunications in a 4-member Definitional Team, organized by NTIA at the request of the U.S. Department of State, that visited Chile and Peru for the purpose of assessing the telecommunications capabilities and services in each country.

Mr. Jennings graduated With Distinction from Union College in Lincoln, Nebraska in 1963, receiving the Bachelor of Science Degree with majors in physics and mathematics. Subsequently, he has taken graduatelevel studies at the University of Colorado and the University of California at Los Angeles.