

WILLIAM S. WIDNALL

Dr. Bill Widnall received his BS and MS degrees from the MIT Dept. of Electrical Engineering in 1959 and 1962 and his ScD degree from the MIT Dept. of Aeronautics and Astronautics in 1967.

During the Apollo Project years at the MIT Instrumentation Laboratory (now named the Draper Lab) Dr. Widnall was the director of the Apollo Control and Flight Dynamics Division with responsibility for the design, analysis, software implementation, and testing of the digital flight control systems for the command module and lunar module. Earlier he was the leader of the Apollo Digital Simulation Group that developed the simulation tool essential to testing the flight software being developed. From the American Institute of Aeronautics and Astronautics he received the 1971 Mechanics and Control of Flight Award for "pioneering in the development of digital control systems for space vehicles and the application of these techniques to the Apollo command and service modules and the lunar modules".

After the first lunar landing in 1969, Dr. Widnall joined others from the MIT Apollo team who had founded Intermetrics to exploit the new technologies for using digital computers for aerospace real time control problems. He led the group that concentrated on navigation applications, including developing navigation software for the GPS satellite navigation system.

Starting in 1978 and for seven years Dr. Widnall was an associate professor in the MIT Dept. of Aeronautics and Astronautics. He developed and taught graduate subject in modern estimation and control theory and in digital control systems. He also developed an undergraduate laboratory subject in the use of digital computers in real time control applications.