

## **Kenneth R. “Dick” Yenni Williamsburg, Virginia**



Inducted in 2011, Kenneth R. “Dick” Yenni’s 32 year career as an engineer pilot was significant for his outstanding contributions to the aeronautic, atmospheric science and space flight research programs at the NASA Langley Research Center in Hampton, Virginia. Dick’s early career at Langley centered on rotor wing research where he tested stability and handling qualities of rigid rotor and heavy lift helicopters and performed V/STOL tests in HelioCourier fixed wing aircraft. Most significantly he made the first flight of NASA’s CH-47 variable stability helicopter as well as the first in flight engagement of the helicopter’s experimental Variable Stability System. Yenni’s space research work included flying prototype lunar landing simulations in NASA’s Lunar Landing Research facility. His work demonstrated the precise control required for landing on the moon’s cratered surface and he developed the stand up piloting mode allowing for steeper approach paths with their attendant fuel savings. A pitch reference bar and improved throttle system developed by Dick during these test were incorporated into the LEM design. Yenni was the primary research subject proving humans could work in weightlessness. Yenni served as the safety and research pilot on Langley’s B-737 Transport Systems Research Vehicle. Using this aircraft Dick participated in the Terminal Configured Vehicle and Advanced Transport Operating Systems leading to great advancements in transport system flight displays and through his leadership, worldwide acceptance of the Micro-wave landing system (MLS). Yenni’s research work in the Runway Friction program and, most significantly, the NASA-FAA-Industry windshear program resulted in significant and lasting contributions to air carrier safety. The flight management concepts and systems developed from 1986 through 1992 has provided pilots the information needed to effectively respond to the windshear threat that had claimed over 500 lives from 1964 to 1985.