



Mechanical Engineering
UNIVERSITY OF WISCONSIN-MADISON

**ME 903: GRADUATE
STUDENT LECTURE SERIES
*DISTINGUISHED ALUMNI***

THURSDAY | **TIME**
9 OCTOBER | **4:00 PM**

MECHANICAL ENGINEERING BUILDING
RM#1106

BREWSTER H. SHAW JR.
COL. USAF, RETIRED NASA ASTRONAUT



Abstract: A great many, if not most, UW-Madison engineering students start their first year not knowing where they are headed nor what they want to do with their lives. The ensuing process of self discovery can be daunting to say the least. For most, timing (ergo luck), is a huge factor in the ultimate degree of success. It can be a significant challenge for the student to realize that now their future, and the effort and responsibility to make that future what they want it to be, lies on their shoulders.

Brewster Shaw is a graduate of the UW-Madison engineering mechanics program (BS 1968, MS 1969) who was never a “practicing” engineer, but has always appreciated the value of his engineering education in all the aspects of his professional life. The abilities to understand the technical aspects of executing “high risk” technical programs, specifically human spaceflight programs, and to ask penetrating questions of the teams involved in those executions, proved to be invaluable throughout his career.

In his speech, Brewster Shaw will demonstrate the broad applicability of a quality engineering education to show students if one has a roadmap to help guide one through the unavoidable forks in the road, better choices can be made that will increase the probability of success greatly.



DISTINGUISHED ALUMNI: BREWSTER SHAW

Bio: Brewster Shaw has served The United States of America in aerospace with government and industry teams throughout a career spanning 43 years. During this time he was a member of The United States Air Force (USAF), The National Aeronautics and Space Administration (NASA), and The Boeing Company. He is a Vietnam combat veteran with tours in the F-100 and F-4 fighter aircraft in Vietnam and Thailand respectively.

During his USAF career, Shaw served as combat fighter pilot, test pilot, and instructor pilot. In 1978 he was selected by the USAF and NASA to the first group of Space Shuttle Astronauts. As an astronaut, Shaw flew three space shuttle missions – as pilot of STS-9 in November 1983, as commander of STS-61B in November 1985, and as commander of STS-28 in August 1989. After this mission he served at the Kennedy Space Center in Florida as Shuttle Operations Manager and the Johnson Space Center in Houston, Texas as Space Shuttle Program Manager. During this time Shaw retired from the USAF with rank of Colonel and joined NASA as a Senior Executive Service government employee.

Shaw retired from NASA and joined Rockwell Aerospace and Defense in Seal Beach, California in January 1996. In December that year Rockwell Aerospace and Defense was acquired by Boeing.

In his final career position Shaw served as vice president and general manager, Space Exploration, for Boeing Defense, Space & Security at The Boeing Company. In this role he was responsible for the strategic direction of Boeing's civil space programs and support of NASA programs such as Space Shuttle, International Space Station (ISS), Checkout, Assembly & Payload Processing Services (CAPPS), Commercial Crew Development (CCDev) and future Space Launch Systems. Prior to that, he was Boeing International Space Station vice president and general manager, responsible for leading the industry team in designing, developing, testing, launching, and operating NASA's international orbiting laboratory and Chief Operating Officer of United Space Alliance, re-sponsible for executing Space Shuttle Program operations under contract to NASA.

Over his twenty year flying career, Shaw logged 533 hours of spaceflight and more than 5,000 hours flying time in over 30 types of aircraft – including 644 hours of combat in the F-100 and F-4 aircraft. He is the recipient of many awards for serving his country in the U.S. Air Force and with NASA. He holds a Bachelor of Science degree and a Master of Science degree in engineering mechanics from the University of Wisconsin.

Shaw is married to Kathleen Anne Mueller of Madison, Wisconsin. They have three children (one deceased) and five grandchildren.