



Dr. Ed Smith has been a member of the Aerospace Engineering faculty at Penn State University since 1992. He was promoted to the rank of Professor in 2004. He also completed his Bachelor of Science degree in Aerospace Engineering from Penn State, where he also worked as a George F. Wislicenus Undergraduate Research Assistant in the Applied research laboratory (ARL). He attended graduate school at the University of Maryland Center for Rotorcraft Education and Research, earning MS and PhD degrees in Aerospace Engineering. Working under the supervision of Prof. Inderjit Chopra, Ed became engaged in research in helicopter dynamics and composite rotor blades. While at Maryland, he was awarded 3 Vertical Flight Foundation

Scholarships from the American Helicopter Society and was an Army Research Office Graduate Rotorcraft Fellow. After arriving back at Penn State, Dr. Smith built an active research program in helicopter dynamics. He has secured research sponsorship from the US Army (Army Research Office (1994 Young Investigator Award), AATD, AED, AFDD), US Navy (ONR, NAVAIR), NASA, Boeing Rotorcraft, Sikorsky Aircraft, Bell Helicopters, LORD Corp., Goodrich, Timken, and a number of small technology businesses.

In the summer of 1995, Prof. Smith led a team of Penn State faculty members and established the Penn State Rotorcraft Center, funded by the newly formed National Rotorcraft Technology Center (NRTC). This Center, competitively renewed for five year terms in 2001, 2006, and 2011, has sparked a wide array of educational activities, new facilities, and research programs and is helping to train the next generation of rotorcraft engineers.

Dr. Smith has been active in the American Helicopter Society (AHS International), and the AIAA. He is a recipient of the 1994 AHS Director's Award for Outstanding contributions to vertical flight technology by an AHS Member under the age of 30. He has also received the AHS Membership Sponsor Award four times, and served as a faculty co-advisor to 4 winning AHS student design competition teams (undergraduate level). He is served as Chairman of the AHS Education Committee from 1997-2012, and has also served as Chairman of the AHS Dynamics Technical Committee. He continues to serve on both the AHS Education and AHS Dynamics Technical Committees. In 2008, he was named a Technical Fellow of AHS International. He served on the AIAA Structural Dynamics technical committee and has participated in the AIAA SDM Conference for 25 years. In 2002, Dr. Smith was awarded the Lawrence Sperry Award from the AIAA, citing his extraordinary leadership of the Rotorcraft Center, pioneering research in composite tailored rotor blades, and dedication to aerospace engineering education. He was awarded the 2002 Penn State Engineering Society Outstanding Research Award, the 2007 Penn State Engineering Society Outstanding Advising Award, and the 2013 Penn State University President's Award for Engagement with Students. Dr. Smith has co-authored several winning research papers, such as the Best Paper at the 2013 Asian Rotorcraft Forum, and the 2009 DSCD Rudolf Kalman Best Paper Award.

Dr. Smith's research and teaching interests are in all aspects of helicopter dynamics, including tailored composite rotor blades, active vibration control, rotor lag damping and aeromechanical stability, shipboard helicopter operations, driveline dynamics, and anti-icing systems. He has published with his students in the AIAA Journal, AIAA Journal of Aircraft, Journal of the American Helicopter Society, Journal of Intelligent Material Systems and Structures, Journal of Sound and Vibration, and International Journal of Solids and Structures. Dr. Smith is an avid collector of helicopter models and hardware which can be used for teaching aides. He has organized and led over forty field trips and sixty on-campus seminars during the past twenty-two years.

Ed was born and raised in Brooklyn, NY. He enjoys exercise, music, travel, and socializing. He serves as Captain of the Vikings in the Nittany Hockey League.