

HELEN REED, PH.D.

Regents Professor Edward 'Pete' Aldridge '60 Professor Department of Aerospace Engineering Texas A&M University

The increased capability and low cost of micro-satellites are fueling the way to easy access to space for a wide range of new space explorers. Dr. Reed will describe experiences in creating interdisciplinary teams of students, with industry and government partners, to engage in design-build-fly of operational small satellites that advance new technologies and feed into national initiatives. Combining industry practices with the learning environment of a university helps drive the next generation of space exploration. Involving more than 1,000 students over the years, Dr. Reed's teams have launched four small satellites with the U.S. Air Force and NASA and partnered on many other projects.

DR. HELEN REED, has been faculty member at Texas A&M University since 2004 within the Department of Aerospace Engineering. She founded and directs both the AggieSat Lab Small Satellite Program and the Computational Stability & Transition Laboratory. She is also Co-Founder, CTO, and Member of the Board of Directors for Chandah Space Technologies. Dr. Reed is a leader in micro- and nano- satellite design and operations and a world-reknowned expert in flow control for subsonic to hypersonic flight. Dr. Reed is a Fellow of the American Institute of Aeronautics and Astronautics (AIAA), American Physical Society, and American Society of Mechanical Engineers (ASME). She was selected for the 2018 AIAA/National Academy of Engineering 3rd Yvonne C. Brill Lectureship in Aerospace Engineering, the 2018 AIAA Fluid Dynamics Award, the 2016 ASME Kate Gleason Award, the 2007 AIAA/American Society for Engineering Education J. Leland "Lee Atwood Award, and the 2014 Minnie Stevens Piper Professor Award from the State of Texas.

> Thursday, January 31 Lecture: 7:00 pm Herring Hall 100 Reception: 6:30 pm

