

DEPARTMENT OF MECHANICAL ENGINEERING

COLLOQUIUM SEMINAR SERIES



NASA technology investments: building our future in space

Dr. Mason Peck
Chief Technologist
NASA

Investments in technology and innovation enable new space missions, stimulate the global economy, and inspire the next generation of scientists, engineers and astronauts. Chief Technologist Mason Peck will provide an overview of NASA's ambitious program of space exploration that builds on new technologies, as well as proven capabilities, as it expands humanity's reach into the solar system while providing broadly-applicable benefits here on Earth.

Peck also will discuss efforts of the Office of the Chief Technologist to coordinate the agency's overall technology portfolio, identifying development needs, ensuring synergy and reducing duplication, while furthering the national initiatives as outlined by President Obama's Office of Science and Technology Policy. By coordinating technology programs within NASA, Peck's office facilitates integration of available and new technology into operational systems that support specific human-exploration missions, science missions, and aeronautics. The office also engages other government agencies and the larger aerospace community to develop partnerships in areas of mutual interest that could lead to new breakthrough capabilities. NASA technology transfer translates national air and space missions into societal benefits for people everywhere. Peck will highlight NASA's use of technology transfer and commercialization to help American entrepreneurs and innovators develop technological solutions that stimulate the growth of the global economy by creating new products and services, new business and industries and high quality, sustainable jobs.

Dr. Mason Peck serves as NASA's chief technologist through an intergovernmental personnel agreement with Cornell, where he is on the faculty as an associate professor in the School of Mechanical and Aerospace Engineering and teaches in Cornell's Systems Engineering Program. Peck has a broad background in aerospace technology, which comes from nearly 20 years in industry and academia. He has worked with NASA as an engineer on a variety of technology programs, including the Tracking and Data Relay Satellite System and Geostationary Operational Environmental Satellites. The NASA Institute for Advanced Concepts sponsored his academic research in modular spacecraft architectures and propellant-less propulsion, and the International Space Station currently hosts his research group's flight experiment in microchip-size spacecraft. Prior to his NASA appointment, Peck also worked as an engineer and consultant with industry and organizations including Boeing, Honeywell, Northrop Grumman, Goodrich and Lockheed Martin. He has authored 90 academic articles and holds 17 patents in the U.S. and European Union. Peck spent some of his early career at Bell Helicopter, where he worked on the V-22 Osprey and a smaller tilt-rotor aircraft that later would become the BA609. He also has experience with commercial communications satellites and military spacecraft as a guidance and control engineer and in mission operations at Boeing Defense, Space and Security. He was a principal fellow at Honeywell Defense and Space Electronic Systems, where he led advanced-technology programs, helped direct patent and intellectual-property investments and worked in business development.

DATE: Wednesday, March 13th 2013
TIME: 2:00 - 3:00pm
LOCATION: Trottier Bldg, RM 2110



McGill