



## AIAA Section Meeting

Wednesday, October 21, 2015

**Dr. Jan Swider**  
**Managing Director, Cogoto, Inc.**

### **“A Human-Rated Reusable Rocket Engine That Never Failed Its Missions”**

**Location:** Bethpage Public Library  
47 Powell Avenue  
Bethpage, NY 11714

**RESERVATIONS REQUESTED**  
**RSVP BY Oct. 20, 2015**  
**to: Dave Paris at**  
**davidsparis@twc.com**  
**or (718) 819-8293**

**Time:** 6:00 PM Social Time  
6:30 PM Pizza  
7:00 PM Presentation

**Cost for Pizza: \$5, Members and Guests**  
**Free, for Students**

Development of a rocket engine provides tremendous challenges to engineers and scientists. Especially, if it is a human-rated, liquid-propellant rocket engine operating on the cutting edge of the material, performance, and structural integrity limits. Dr. Swider will provide an overview of the key science, engineering, and technology features of the Space Shuttle Main Engine; the engineering challenges encountered in its design, analysis, and test; and conclude with some lessons learned and perspectives on future propulsion system developments.

Dr. Jan Swider is responsible for business operations and execution of programs focused on solving challenging problems in Aerospace, Defense, and the Oil & Gas industries at Cogoto, an engineering consulting company. He was previously the Manager of Reliability, Maintainability, and Specialty (RMS) Engineering for Pratt & Whitney Rocketdyne (PWR), responsible for the RMS activities for rocket engines and energy systems. He supported the J-2X engine development, advanced propulsion development, Space Launch Initiative, and Next Generation Launch Technology programs. Dr. Swider held increasingly responsible positions in engineering and management on engine programs for the Space Shuttle, Delta and Atlas launch vehicles. He also held positions as Program Manager of the PWR Extreme Engineering Services and PWR Energy Systems. Earlier, Dr. Swider was the project engineer on many advanced programs such as X-33 Linear Aerospike and RS-68, and lead engineer for the Space Shuttle Main Engine (SSME) mission assurance in his 17-year career with Pratt & Whitney Rocketdyne.

He is a registered Professional Engineer in Mechanical Engineering in California and a member of the Society for Risk Analysis, Society of Reliability Engineers, American Society for Quality and serves as a Vice-Chair of the Reliability and Maintainability Symposium (RAMS). He was a recipient of the International Atomic Energy Agency Fellowship and NASA Team Award.

**Directions:** The library is west of Route 135 in Bethpage. Take Route 135 to Exit 8, then West on Powell Ave. for about 0.25 miles. The library is on the south side of the street. Park across Powell Ave., opposite the library.