Newsletter

May 2005

Honors and Awards Banquet

Where: Edison Club - Rexford, NY

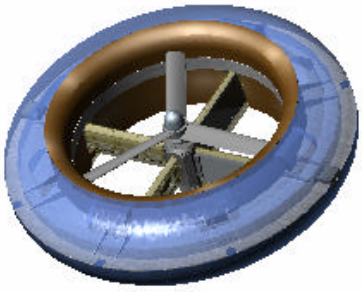
Topic: Unmanned Aerial Vehicles

When: Thursday, May 19, 2005
Reception 6 PM
Dinner 7 PM
Awards and Lecture 8 PM

To reserve your seat, contact Fred Willett
willettf1@asme.org or (518) 347-2130, ext. 5306 (no prompt) by 6 PM Wednesday, May 18th

Unmanned Aerial Vehicles

Active flow control holds tremendous promise for expanding the performance of current vehicles and enabling revolutionary concepts for advanced vehicle designs. It has enabled the development of a new class of mini Unmanned Aerial Vehicles (UAV). These vehicles are based on the flying ducted fan concept and use a mechanically simplified control approach where synthetic jet technology is used in lieu of moving control surfaces or articulated rotor blades. A novel flow control technique that involves modification of the aerodynamic performance of the vehicle via embedded miniature synthetic (zero-net-mass-flux) jet actuators will be shown. As a result, the UAV's propulsion and control systems are simplified to a single moving part, a fixed pitch propeller. Active flow control holds tremendous promise for expanding the performance of current vehicles and enabling revolutionary concepts for advanced vehicle designs.



Mini Unmanned Aerial Vehicle (a.k.a "The Flying Bagel")

About the Speaker

Michael Amitay received his B.Sc. (1987), M.Sc. (1990) and D.Sc. (1994) from the Technion - Israel Institute of Technology in Haifa, Israel. He was a post-doctoral fellow at the University of Arizona (1994-1996) working on active control of heat transfer from heated/cooled surfaces. From 1996-2003 he held several positions at Georgia Tech. He joined RPI on June 2003 where he holds an Assistant Professor position. He is a member of both ASME and AIAA. Prof. Amitay has authored numerous journal and conference publications, one book chapter; three of his conference papers were awarded "best technical paper". He holds two U.S. patents. His current research interests are in the fields of active flow control with applications in aerodynamics, mini and micro Unmanned Aerial Vehicles, control of particle-laden jets with application in micro-dentistry, and electronic cooling.

Honorees:

Section members elected to fellow grade during the 2004-2005 year:

Aleksander K. Ostrogorsjy
Kurt S. Anderson

50 Year Members: Alphonse Angelino Karol, Louis F. Champlin, Pilarczyk

25 Year Members: Steven M. Bederian, Donald J. Bentley, John B. Brunski, John A. Corey, Daniel J. Fitzmorris, John T. Hockenbury, Michael K. Jensen, Martin J. King, Robert D. Lillquist, Mark M. Little, John A. Neun, Robert L. Spilker, Dipak C. Talapatra, Willian J. Volk

In addition, we will announce the winners of three student awards: the Sayre Prize (Union College), the Davies Award (RPI), and the Scheper Scholarship (Hudson Valley Community College)

The reception includes crudités with assorted dips, assorted domestic cheeses & crackers, bruschetta & French bread, and fresh fruits. Beverages may be purchased from a cash bar.

Dinner is a buffet featuring:

- Pasta Primavera
- Stuffed Fillet of Sole
- Chicken Marsala
- Roast Sirloin of Beef

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
HUDSON MOHAWK SECTION
PO BOX 206
Schenectady, NY 12301

and includes tossed or Caesar salad, fresh bread basket, garlic smashed potatoes, fresh vegetable medley, dessert, and coffee or tea.

Cost: Cost for the dinner is

$20 for ASME members (and their guests)
$25 for non-members
$15 for full-time students

Reservations: Please respond to Fred Willett with the number of people and dinner selections. Checks payable to ASME and cash will be accepted at the door.

Directions to the Edison Club: **From I-87**: exit 9 Clifton Park: 146 West to Rexford bearing left @ traffic light. Left @ 1st light onto Riverview Road. Edison Club on left. **From Rt. 7**: Turn onto 146 (Balltown Rd. going north). Cross Rexford Bridge. Right @ 2nd light onto Riverview.

Employment Opportunity

Principal Engineer, Chatsworth, CA
BSME required; MS preferred. Seeking 10 to 15 years experience generating design solutions for turbomachinery and related components. Significant understanding of turbomachinery design and all aspects of related aerothermal, mechanical, secondary flow, dynamics and production required. Experience with Catia (v.4 or 5) highly desired. Relocation assistance on a case-by-case basis.
Contact: Margaret Base 817/722-8507

Executive Committee Nominations

Election of officers has been postponed to June due to the shortage of nominees. Nominations are sought for a number of executive committee positions, including chair and newsletter editor. While there's no pay, the positions offer the chance to make contacts and gain managerial experience outside of the workplace.

Contact Fred Willett for further information.

Distribution of Section Newsletter

The Hudson Mohawk newsletter is posted at: www.asme.org/sections/hudson-mohawk.

Once each newsletter is posted on the Section's web page, an e-mail notification and link to the above website is sent to members who have e-mail addresses in the ASME member database. If you are an active member of ASME and did not receive an e-mail notification, please go to the ASME web site and update your membership information. http://members.asme.org/myasme/login/myasme.cfm