

October 2002

David Shapiro, Co-Editor

Dave Smith, Co-Editor

ASME Hudson-Mohawk Section



Newsletter

GREAT ASME TOUR EVENT

**Massachusetts College of Liberal Arts
(MCLA)**

Energy Efficient Modifications for Heating and
Electricity Generation

North Adams, Massachusetts

Saturday, November 2, 2002
8:30 AM to 2:30 PM

you are interested in touring the museum, please let the person know when you call to make reservations.

Contact: Please contact Frank Reed (385-4264 or frank.reed@ps.ge.com) by October 25 or Fred Willett (347-0271 or Fwillett@pti-gt.com) by October 29, 2002. After October 25th, contact Fred if you have any questions or want to sign up for the tour. Please let us know if you are willing to drive and how many others you can fit into your vehicle, whether you plan to stay for lunch, and whether you plan to tour the museum in the afternoon. If you leave a message and receive no response, please call to confirm the reservation.

2002-03 SEASON KICK-OFF EVENT

On Thursday, September 19, 2002, the Hudson-Mohawk Section of ASME held its annual social event at Pinhead Susan's Restaurant. Our guest speaker was Michael Davi, a member of the International Gas Turbine Institute division of ASME.

Approximately 25 members were present for an excellent dinner and an informative presentation by Mr.



Davi. Mr. Davi spoke to the gathering about how the ASME committees are organized and how you can get involved.

ASME members enjoying themselves at our Social

Michael Davi has held a variety of positions with GE over the past 26 years. His excellent presentation skills kept the audience both entertained and interested. Many of the gathering appeared very interested in how

ASME TOUR OF MCLA

The Massachusetts College of Liberal Arts (MCLA) has implemented several major energy conservation measures to reduce their energy consumption and save between \$2.5 million and \$3.0 million over the next ten years. These modifications include installation of a new central boiler, a 75-kW co-generation plant, and lighting and water conservation changes. Additional energy savings were achieved through the installation of energy efficient windows and sensors to detect room occupancy and vendor machine usage. With these changes, MCLA now uses 1.5 MW hr per year less electricity and 174,000 Ccf less natural gas per year. These changes have also caused a reduction in emissions of CO₂, SO₂, NO_x by more than 4.5 million pounds annually. The project was featured in the "Field Notes" section of the April 2002 issue of Power Engineering.

Logistics:

We will tour the facility on Saturday November 2, 2002. We will meet at the Latham Farms parking lot near the CompUSA store. We will leave from the parking lot at 8:30 AM and car pool to the MCLA campus. The tour will begin at 10:00 AM. After the tour we will stop for lunch in the North Adams area. Assuming a one hour lunch, the group should return to the parking lot around 2:30 PM. For those people interested, a tour of the Massachusetts Museum of Contemporary Art (Mass MOCA) can be included to complete the afternoon. If

they too can get involved with ASME committees. Mr. Davi is presently involved with organizing the IGTI annual conference to be held in Atlanta in 2003.



Michael Davi speaking to the audience

For more information on how you can get involved with ASME committees at the national level, you can contact Mr. Davi at michael.davi@ps.ge.com or contact ASME national through their website at www.asme.org.

ASME International Hudson-Mohawk Section Officers

Chair: Fred Willett (518) 347-0271 fwillett@pti-gt.com
Vice Chair: Frank Reed (518) 385-4264 frank.reed@ps.ge.com
Admin.Assoc.: Tom George (518) 395-4045
Treasurer: Mike Brilliant (518) 387-6558 brilliant@crd.ge.com

Section Newsletter

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

Fun Facts

- * Pearls melt in vinegar.
- * A duck's quack doesn't echo and nobody knows why.
- * $111,111,111$ squared = 12,345,678,987,654,321.
- * Clans of long ago that wanted to get rid of their unwanted people without killing them used to burn their houses down, hence the expression: "getting fired."
- * Hersey's Kisses are called that because the machine that makes them looks as if it is kissing the conveyor belt.
- * The HIGHEST point in Pennsylvania is LOWER than the lowest point in Colorado.
- * Only one person in two BILLION will live to be 116 or older.

- * The mask used by in the original "Halloween" was actually a Captain Kirk mask painted white.
- * If you put a raisin in a glass of champagne, it will keep floating to the top and sinking to the bottom.
- * The fingerprints of koala bears and humans are virtually indistinguishable; so much that they can be confused at a crime scene.
- * Months that begin on Sunday will always have a "Friday the 13th".

An Engineer, Doctor, and Lawyer were standing around talking about dying when the Engineer asked, "What would you like people to say about you as they come to pay their last respects?" The doctor said, "I hope they say I was a respected doctor in my field, a good family man, and had lots of friends." The lawyer said, "I hope they say I was a well spoken attorney, helped my fellow man, good citizen, and played a mean round of golf." The Engineer said, "That's probably what will be said of the two of you." My hope is that when they look down in my coffin they say, "Look...he's moving!"

Capitol District First Robotics Team

It is that time of year again when the Capitol Districts First Team is starting to organize for the 2003 competition. A meeting for engineers, mentors, and teachers has been scheduled for Tuesday, October 15, to discuss this year's activities, team structure and whatever else you want to bring to the table. This meeting is open to anyone who is interested in getting involved, so feel free to share this invitation. There are a number of newcomers to the FIRST Robotics experience this year. This meeting will be a perfect opportunity for you to help them to learn from veterans what FIRST is about. We will be meeting in the Library at Colonie Central High School, 1 Raider Blvd in Colonie at 7:00 PM. Please call Deb Salisbury if you will attend. Feel free to call me at 459-3403 if you have questions. For more about First, visit their website at: www.usfirst.org. or the team site at: www.team250.org. We will have at least 5 new mentors this year which is great. I hope more of you can make this meeting.

ASME National Congress

Visit <http://www.asme.org/congress> for the latest details...

2002 ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS & EXPOSITION

Access the latest information on more than 500 technical sessions, as well as R&D Expo and a wide range of special events including forums, workshops, exhibits, tours, and social gatherings. Network with thousands of engineers from hundreds of companies

around the globe. Learn how you can receive a special discount by registering by November 1 and reserving your hotel room by October 17. To plan your Congress schedule and to complete your registration and hotel registration, visit: www.asme.org/congress.

If you have trouble linking to the above URL, please type it into your browser's address line.

College Financial Aid

As we enter a new school year, many parents that have seniors in high school are thinking about funding for college. And those already attending college, would like to know if there are resources that might provide financial aid.

Here are some resource sites for ASME financial aid:

- www.asme.org/educate/aid
 - www.asme.org/educate/aid/loan.htm
 - www.asme.org/educate/aid/auxschol.htm
 - www.asme.org/educate/aid/fellow.htm
 - www.asme.org/educate
 - www.asme.org/educate/aid/scholar.htm
 - www.asme.org/foundation/fnd_grant_program.html
 - www.asme.org/bmw/dag.html
 - www.asme.org/gric/ibook_Superfund1.html
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Up-Coming Events (Tentative)

- **November:** Applied Mechanics Technical Chapter Meeting at RPI
- **December:** No meetig
- **January:** Topic-Parametric Design and Optimization of Disk Forging Process. Speaker-Ramesh Gambheera: joint meeting with Design Engineering Technical Chapter
- **February:** Topic- Pulsed Detonation. Speaker-Tony Dean of GE Global Research. Joint meeting with AIAA.
- **March:** Tour of Benet Labs at the Watervliet Arsenal.
- **April:** Distinguished Lecturer at Union College; Joint meeting with Union College Student Chapter.
- **May:** Honors & Awards Dinner-Union College Student Presentations. Tentative Site is the Edison Club in Rexford.

As noted, these are tentative events. If you have alternate suggestions for tours and events, this is a good way to get involved with section activities by helping to organize an event. We are not limited to just one event in a month.

IRAC

This year's IRAC (Interim Regional Administrative Conference) is scheduled for October 18-19 (Friday night and Saturday). We have budgeted for 2-3 people attending; travel is reimbursed by the section. Is anyone interested in attending?

For those who have never attended, IRAC is a day of meetings covering a wide range of ASME administrative topics. This is another great way to get involved at both the local and national levels of ASME. The proposed agenda can be found at: www.asme.org/regions/ero/pdf/IRAC2002.pdf.

Landmarks Around New York State

The next time you are traveling around New York State, consider visiting some of these engineering landmarks:

Blood Heat Exchanger (1957), Capen Hall at Amherst Campus, Amherst: first commercial human-blood heat exchanger for controlling hyperthermic temperatures during open-heart surgery

Link Flight Trainer (1930), Binghamton, New York: first effective simulator to replicate realistic movements of aircraft

Pratt Institute Power Plant (1887), Pratt Institute, Brooklyn: the oldest steam-generating plant of its kind in the Northeast United States

Q-R-S Marking Piano (1912), Q-R-S Music Rolls, Inc., Buffalo: one of the first machines to produce master rolls for player pianos by recording actual performances

Boyden Hydraulic Turbines, Harmony Mill No. 3 (1871), Cohoes Industrial Terminal, Inc., Cohoes: two of the oldest surviving water turbines, probably the largest and nearly the most powerful ever built in the United States for mechanical drive

Apollo Lunar Module LM-13 (1972), Cradle of Aviation Museum, Garden City, Long Island, New York: first piloted vehicle designed to operate solely in the vacuum of space

TV Emery Rice Engine (1873), American Merchant Marine Museum, US Merchant Marine Academy, Kings Point: mid-19th-century horizontal compound marine steam engine with return connecting rod

Holly Fire Protection and Water System (1863), Erie Canal Museum, Lockport: site of the first US integrated system to supply water for public safety

Holly System of District Heating (1877), Erie Canal Museum, Lockport: site of the first US district heating steam-heating system

Interborough Rapid Transit System, original line (1904), New York [note also the nearby Transit Museum, Brooklyn]: the first fully electrically signaled railroad in the United States and the first practical

subway in New York City

ASME Boiler and Pressure Vessel Code (1915), early book on loan to Henry Ford Museum, New York: the first comprehensive standard for the design,

construction, inspection, and testing of boilers and pressure vessels, greatly influencing public safety

Holland Tunnel Ventilation System (1920), Port Authority of New York & New Jersey, New York: the world's first long underwater tunnel designed for motor vehicles, with innovative ventilating system

Radio City Music Hall Hydraulically Actuated Staging (1932), New York City: one of the largest movable stages in the world, with innovative hydraulic equipment and controls, a forerunner of other stage designs as well as early aircraft carrier elevator systems

Belle Isle Gas Turbine (1949), General Electric Power Generation, Schenectady: first gas turbine used for electric utility power generation in the United States

5,000-kW Curtis Steam Turbine-Generator (1903),

General Electric, Schenectady: first Curtis vertical turbine, enabling power supply to grow at unprecedented rate during early 20th century

Ultra-high-pressure Diamond Apparatus (1953), General Electric, Schenectady: first apparatus to consistently produce industrial diamonds, demonstrating fundamentals of producing and containing very high pressures and becoming the basis for the industrial-diamond production that followed

Kinne Water Turbine Collection (ca. 1850 - ca. 1916), Watertown: world's largest known collection of 19th-century water turbines representing American developments for small power output

Westmoreland Malleable Iron Works*** (1850), Westmoreland: early and long-running malleable ironworks.

**THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
HUDSON MOHAWK SECTION**

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