Institute earns public trust each day

Robert Nesmith
Communications & Marketing

With the start of the spring semester, the Institute is working to complete the approval process for adopting a universally comprehensive Institute Code of Ethics. This endeavor serves to add to enhanced business practices adopted in 2008, and will ensure the highest standards of conduct are observed in all facets of employee activity at Tech. Students attending Tech are required to follow an honor code, and those in the research realm long have followed an established standard in academia. This latest initiative, similar to a corporate ethics standard, will bring the business and customer service sides of Tech into similar alignment.

Interim President Gary B. Schuster and Executive Vice President for Administration and Finance Steven Swant, in cooperation with Institute administrators, faculty and staff, are working to complete the code in addition to updating guidelines for “risk areas,” such as purchasing, leave reporting, data security, travel authorization and disbursements.

During his town hall meetings last fall, Schuster introduced this initiative and spoke of the Institute’s need to be “above reproach.” Committees have studied business and institutional ethics practices for the past six months, concentrating both on peer institutions and the Georgia code of ethics to develop the Institute’s code of ethics and values statement.

“A clearly defined and well understood code of ethics is an essential tool for a well-run and successful organization,” Swant said. “It gives the community of Georgia Tech a foundation for day-to-day activities and a focus for the institution’s future.”

Enhanced training on sound business practices, identifying the legitimacy of transactions, and the institutional code of ethics and value statement will be rolled out to the campus this year, aimed at maintaining and increasing Tech’s position of trust. The Department of Internal Auditing has added new tools to analyze transactions institute-wide for signs of misuse or abuse. During departmental audits, Internal Auditing and FinanceSteven Swant, President for Administration Schuster and Executive Vice President for Administration and Finance, are working to complete the approval process for adopting a universally comprehensive Institute Code of Ethics.

Continuous descent
Changes save fuel, reduce airliner noise

John Toon
Research News

Airlines passengers arriving in Atlanta on early morning red-eye flights during the past few months may have noticed something different during their descent to the runway. Instead of the typical sound of engine power rising and falling as the aircraft descended in a series of level flight steps, they may have noticed a quieter arrival—without the steps.

The changes were part of Tech’s flight-testing of “continuous descent arrivals,” a procedure that allows the aircraft engines to throttle back to idle power at the point of initial descent and to remain at idle power along the flight path to the runway as long as possible.

“The goal is to design a procedure that allows the aircraft engines to throttle back to idle power at the point of initial descent and to remain at idle power along the flight path to the runway as long as possible.”

—John-Paul Clarke
Director, Air Transportation Laboratory

GTRI names McGarrah ITL director

Abby Vogel
Research News

For James McGarrah, his new position as director of the Georgia Tech Research Institute’s Information Technology and Telecommunications Laboratory (ITL) is a homecoming of sorts—he earned his master’s degree in mechanical engineering from Georgia Tech in 1979.

He returns with more than 30 years of military and telecommunications industry experience to lead a laboratory that conducts applied research in computer science and information technology, communications and networking.

“I am excited to join GTRI and believe my leadership experience in large complex organizations, both in the military and in the commercial sector, will be a strength in my new position.” McGarrah

Campus construction update

Robert Nesmith
Communications & Marketing

As the spring semester gets under way, construction continues throughout campus. Established projects, such as the Marcus Nanotechnology Building and the women’s softball facility, near completion as others—the Clough Undergraduate Learning Commons and Zelnak Basketball Center—are set to begin.

G. Wayne Clough Undergraduate Learning Commons: Slated for west of the Library and Information Center and the Information Technology Building (the former parking lot and part of the green space), the Clough Undergraduate Learning Commons (CULC) has entered its initial phase of construction. Access to the area via Fourth Street and Atlantic Drive

The new women’s softball facility, located across from Alexander Memorial Coliseum in the O’Keefe building’s former parking lot, is slated to be open for the team’s home opener March 10.

WWW.WHISTLE.GATECH.EDU
Construction, cont’d from page 1

has been restricted, as contractors are engaged in the relocation of underground utilities.

“Once contractors start this work, it won’t be safe for the area to have a mix of vehicles,” said Senior Capital Project Manager Fred Dolder. “Once finished with the initial work, we intend to proceed with building construction, which probably will take us into 2011.”

Utilities being identified for relocation include steam, water, power, chilled water and gas lines. Design is still under way, Dolder says, but the building’s footprint has been established. “While it’s inconvenient, we have made accommodations for pedestrians, and have coordinated with Parking and Transportation and campus police so that emergency services have access to the area.”

■ Women’s softball facility. Located in the O’Keefe building’s former parking lot, the new softball stadium is slated to be ready for the team’s home opener March 10. The last major project for the facility is replacement of the timber retaining walls with granite blocks on Eighth, Fowler and Sixth streets.

“We expect to be finished with this by mid-March,” said Facilities Construction Program Administrator Frank Lamia. “We are also replacing the sidewalks to match those on Fifth Street.”

■ Marcus Nanotechnology Building. The base building and contract were completed Jan. 23. Dolder said. “Offices and labs are not completely built out, but they will be over time.” Contractors are preparing the first floor for furniture, to be moved into the building in February. Landscaping and hardscaping are under way, scheduled to continue until mid-February. Grand opening of the building, which houses the Nanotechnology Research Center, is planned for April 24.

■ Atlantic Promenade: Prior to the Marcus Nanotechnology Building’s grand opening, Facilities will start converting 225 feet of Atlantic Drive into a pedestrian streetscape. Brick pavers will replace the road between the Marcus building and the Petit Institute for Bioengineering and Bioscience.

“This is the first phase of the planned Atlantic Drive Promenade,” Lamia said. “We’ll maintain the sidewalk as long as is possible. There may be some pedestrian interruption, but the aim is to keep it to a minimum.” Lamia said he expects the project to start on or about Feb. 15, with an estimated completion date of June 1.

“I plan to use my background to stimulate ways that this laboratory can expand the application of its technical skills and competencies to bring more value to more sponsors and generate more business for GTRI,” McGarrah will spend his first few months on the job familiarizing himself with ITTL’s broad array of research activities, which includes broadband telecommunications, wireless access systems, network security, telecommunications and communications surveillance and disruption.

“While I’ve learned so far is that ITTL researchers are focused on sponsor needs, focused on doing quality work and excited to come to work every day,” McGarrah said. “I’m thrilled to be a part of a group of researchers that exhibits such a strong combination of talent and energy.” McGarrah served as an active duty naval officer from 1973 to 1978 and 2003 to 2006 and in the Navy Reserve from 1978 to 2003. His reserve time included a deployment to Operation Desert Storm. After retiring from the U.S. Navy in 2006 as a rear admiral, he was selected to serve in the civilian position of special assistant to the deputy secretary of defense.

After working more than 20 years for BellSouth (now AT&T), McGarrah served as executive director of national networks for Cingular Wireless from 2000 to 2003.

New month brings new look

Haut week’s Whistle marks the first issue of our new design. Our intent behind the new look is to update the publication and allow for more content in the same amount of space. Send your thoughts and comments to editor@comm.gatech.edu.
can also assist departments in determining their most at-risk practices. These new tools and resources reflect an emerging statewide climate, coming on the heels of criminal fraud cases originating in the University System of Georgia. As of last July 1, any discovery of state purchasing card (P-Card) misuse must be turned over to the attorney general for prosecution. In addition, if it is determined that fraud has occurred under lax supervisory oversight, managers—both faculty and staff—are held accountable.

Director of Internal Auditing Phillip Hurd said his office was refocusing on risk-assessment to any departments seeking assistance. “Units and departments can come to us for our services, because consulting is part of our mission,” Hurd said in a September 2008 Whistle article.

“We’re not a ‘gotcha’ audit group.” In addition to conducting Institute-wide audits, Internal Auditing considers self-investigation in seven areas: general, financial, human resources, legal and regulatory, sexual harassment, health and safety, and information systems. By working with the Office of Organizational Development (OOD) and on collaborative appraisals for risk assessment and management within individual departments, the necessary resources are made more widely available for Institute units to conduct their own assessments.

The Division of Administration and Finance has identified five business processes that are defined as “high risk” for misuse or mistakes: P-Card transactions and approvals; check requests; travel authorizations, arrangements and expenses; reimbursements; vacation and sick leave reporting; and personal information. Detailed information, links to key resources, and important policies and procedures are easily accessible online at the “How Do I Go Georgia Tech Business the Right Way” Web site. Proper P-Card procedures are already available via online courses at the site. “It’s just the right thing to do,” said OOD Acting Executive Director Julie-Anne Williamson. “We’ve always had a culture of values and strong ethics here at Tech, but we’ve just never written them down. You can’t train your community or build a culture around ethics until you identify them.”

According to Williamson, the Institute-wide statement of values and code of Ethics is nearing completion and will be presented to the Institute community in the spring. This past November, the Office of the President invited the campus community to comment on a proposed statement and code via a Web site. While the majority of respondents accepted the statements as they stood, Williamson said several suggestions were made for refining the wording. She added that the final statement presented to the campus community will reflect that feedback.

Tech also has established an ethics hotline maintained by a third party. Any faculty or staff member concerned about violations can call the hotline at 1-866-284-5565 or visit www.ethicpoint.com. “The calls are completely anonymous,” Williamson said.

For more information...

How to do Georgia Tech Business the Right Way www.admin-fin.gatech.edu/howto/

Ethics Hotline www.ethicpoint.com

Internal Auditing www.audit.gatech.edu

Office of Organizational Development www.orgdev.gatech.edu

Descent... designed to save fuel and time while producing environmental benefits by reducing both noise and emissions. Involving more than 600 flights, the Atlanta study was done in collaboration with the Federal Aviation Administration (FAA), FedEx and Atlanta’s two dominant air carriers: Delta Air Lines and AirTran Airways.

The continuous descent arrival procedure has already been studied at the Louisville and Los Angeles airports. Proponents hope the 90-day test at Hartsfield-Jackson Atlanta International Airport—currently the nation’s busiest airport—will move the concept one step closer to nationwide implementation. Estimates suggest that continuous descent arrivals could save a large airline as much as $80 million per year in fuel costs alone.

“In commercial aircraft, we see anywhere between 500 and 1,000 pounds of fuel saved for each arrival,” said John-Parl Clarke, director of the Air Transportation Laboratory at Georgia Tech and an associate professor in the Guggenheim School of Aerospace Engineering. Because aircraft engines don’t throttle up and down during a continuous descent arrival, there are also significant reductions in noise and emissions. And the technique could cut two minutes off the approach and landing portion of a flight. While that doesn’t sound like much, it could result in more efficient utilization of aircraft and reductions in flight times for crews.

Continuous descent arrival is one in a series of improvements aimed at creating the next generation of air transportation technologies. The goal is to redesign the airspace to allow future airliners to travel the most efficient paths to their destinations.

Though the final numbers from the Atlanta evaluation won’t be known for several months, the potential savings have been demonstrated by more than 60,000 landings at Los Angeles with a continuous descent arrival technique developed by Tech. But adopting the procedure throughout the airspace system won’t be easy. Safety considerations must be paramount, and there are a number of optimization challenges caused by widely varying aircraft types, wind conditions and airport configurations.

The goal is to design a procedure that allows the aircraft engines to throttle back to idle power at initial descent and to remain at idle power along the flight path to the runway as long as possible,” Clarke added. “We have figured out how to put altitude and speed constraints along the flight path so they can stay at idle power as long as possible while achieving the required minimal spacing at the runway threshold.”

CARNEGIE NEWS BRIEFS

COUGHL UNDERGRADUATE LEARNING COMMONS BECOMING A REALITY:

Those walking through the center of campus have no doubt seen the green fence surrounding the area where preparations for the G. Wayne Clough Undergraduate Learning Commons (CULC) are under way.

Utility work has begun at the site and a committee of representatives from the faculty, staff and administration are meeting weekly with architects to finish the building’s schematic design. A detailed design is expected to be ready in early spring.

Gov. Sonny Perdue has included $43 million in bonds package for the construction of the CULC. His recommendations must be approved by the Georgia House of Representatives and Senate before the bonds are authorized. The 2009 General Assembly session began Jan. 12 and is expected to continue through March. The Fiscal Year 2010 budget, in which the bonds are included, will be finalized by the end of the legislative session.

TECH PROMISE EXCELS: Jerry T. McTie, project director for the Georgia Tech Promise Scholarship Programs, announced that during the fall semester, 197 students were enrolled in the G. Wayne Clough Georgia Tech Promise Program. Initiated in 2007, the program helps Tech students in good academic standing from families earning less than $33,300 complete their undergraduate education debt-free. Nearly 60 percent of these students have a cumulative grade point average of 3.0 or better, and fewer than 2 percent lost the grant due to grades.

Nearly 200 students from more than 50 Georgia counties are benefitting from the program this semester.

MARCUS NANO TECHNOLOGY BUILDING WILL LEAD THE FIELD: The Marcus Nanotechnology AeroSpace Engineering Associate Professor John-Paul Clarke, who leads efforts to evaluate the continuous descent arrival technique, with a model Boeing 767 Building is nearing completion and a ribbon cutting ceremony is being planned for late April.

When complete, the building will house researchers dedicated to the application of nanoscience and nanotechnology in the fields of biological and semiconductor research.

It will contain more than 15,000 square feet of clean room space, making it one of the nation’s largest facilities of its kind.

A MORE ROBUST SUMMER SEMESTER: The availability of summer semester courses is being enhanced this year for both the short and full summer sessions. The Institute’s six colleges have made more classes available during the usually slow summer months, which will more fully utilize campus facilities as well as provide additional opportunities for students who have entered Georgia Tech as part of the “Fixed-for-Four” tuition plan to finish their studies within four years. —LYNN DURHAM

As part of an ongoing effort for enhanced communication by the Office of the President, the Office of the Provost and Office of the Executive Vice President for Administration and Finance, this feature provides a brief snapshot of issues and projects of interest to the campus community. Carnegie News Briefs will be included in the last publication date of each month. Questions can be directed to Lynn Durham at lynn.durham@gatech.edu.
**C A M P U S  E V E N T S**

**Arts & Culture**

**January 29**

“The Motherhood Manifesto,” a documentary based on the book by Joan Blader and Kristin Rowe-Finkbeiner, will screen from 7 to 8 p.m. in room 300 of the College of Management. The film is part of the Race and Difference Initiative. For more information, visit www.rdi.emory.edu.

**February 2**

Tech’s music ensemble-in-residence Sonic Generator will perform at the Georgia Tech Alumni House from 8 to 10 p.m. For more information visit www.gtcm.caatech.edu.

**February 5**

Poetry at Tech presents the Seventh Annual McEver Poetry Reading, featuring Karen Head, alumna Bruce McEver, Chelsea Rathburn and John Skyoles, starting at 7 p.m. in the Clary Theater of the Bill Nye Student Success Center. For more information, visit www.poetry.caatech.edu.

**February 13**

DramaTech Theater presents the comedy “Keeping Up with the Joneses,” starting at 8 p.m. with varying show dates through Feb. 21. For more information, visit www.dramatech.org.

**February 22**

The fourth annual “Pocket Protectors and Other Fashion Statements,” a student art show sponsored by the NIT Alumni Club of Atlanta, starts at 7:30 p.m. Tickets are $10 in advance, $15 at the door. For more information, visit www.drepetcomedy.com/mit.

**Through February 13**

The Robert C. Williams Paper Museum displays the works of a renowned paper engineer and book artist with “The Paper Engineer: The Art of Carol Barton.” Museum hours are 9 a.m. to 5 p.m. weekdays. For more information, visit www.ispt.caatech.edu.

**Through February**

The College of Architecture and the Library and Information Center present the exhibition “Documenting Design: The Work of Alan Buchsbaum.” For more information, visit www.library.caatech.edu/archives.

**Conferences & Lectures**

**January 28**

Nilton J. Linha Jr., president of the United Way of Metropolitan Atlanta, will present an IMPACT Speaker Series Lecture, at 4:30 p.m. in the College of Management’s LeCraw Auditorium. For more information, visit www.ile.caatech.edu.

**January 29**

College of Architecture Professor Robert Craig presents the COA Research Forum “A Scholar’s Response to the ‘Centennial,’” from 11 a.m. to noon, in the Architecture Library. For more information, visit www.coa.caatech.edu.

**February 2**

Olivia A. Serves from Spelman College presents “Disrupting Gender Scripts: Educating African American Women Chemists,” from 3 to 4:30 p.m. in room 104A of the Civil Engineering building. For more information, visit www.bts.caatech.edu.

**February 3**

Department of biomedical Engineering Assistant Professor Melissa Kemp presents “Cellular Oxidation and Its Role in Disease,” from noon to 1:30 p.m. in the Wilby Room of the Georgia Tech Library, as part of the Library’s Tuesday Talks Faculty Speaker Series. For more information, visit www.library.caatech.edu.

**February 5**

School of Chemistry and Biochemistry Assistant Professor Facundo Fernandez presents “Enabling Mass Spectrometry Technologies for High-Throughput Direct Analysis, Molecular Imaging and Metabolomics,” at 3 p.m. in room G011 of the Molecular Science and Engineering building. For more information, visit www.chemistry.caatech.edu.

**February 9**

School of Literature, Communication and Culture Assistant Professor Michael Nitsche will sign copies of his book, “Video Game Spaces: Image, Play and Structure in 3 Worlds,” starting at noon in the Georgia Tech Bookstore. For more information, visit www.gatech.uncollege.com.

**Faculty/Staff Development**

**January 29**

The Office of Organizational Development presents the brown bag lunch “Career Campus Event Basics—What Every Planner Needs to Know,” from 11:30 a.m. to 1 p.m. in the Gordy Room of the Warlaw Building. For more information, visit www.ordgdev.caatech.edu.

**January 30**

Nominations are due for the Outstanding Staff Performance Award, recognizing classified staff members who deliver outstanding performance. Five $1,000 awards will be presented April 15 at the Faculty and Staff Awards Luncheon. Nominations should be sent to Deborah C. Respiratory, Office of Organizational Development, Savant Building, B206.

**February 3**

The Office of Sponsored Programs hosts its “New Faculty Orientation to Sponsored Programs,” from noon to 1:30 p.m. in the seminar room of the Research Administration Building. For more information, visit www.asp.caatech.edu.

**Ongoing**

Georgia Tech Training Services offers a Web-based tutorial on using a state purchasing card. For more information, visit www.training.caatech.edu.

Georgia Tech Training Services offers the Emergency Preparedness Certificate, which consists of several smaller courses. For more information, visit www.training.caatech.edu.

**Miscellaneous**

**January 28**

The Institute’s inaugural InVenture Prize Competition, an invention competition open to Tech undergraduates, will be held in the Ferst Center for the Arts from 6 to 9 p.m. For more information visit www.inventureprize.caatech.edu.

**January 31**

State Business Transaction Disclosure Reports must be disclosed to the Georgia Secretary of State’s office prior to the end of the month. Forms and information are available at www.usg.edu/legal/documents/bus_transact.pdf.

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**March 5**

“A Round of Music,” an informal jam session, hosted by the Georgia Tech Music Ensemble and currently under the direction of Professor Michael Hall, will be held from 6 to 9 p.m. in the Ferst Center for the Arts. For more information visit www.mse.caatech.edu.