

The WHISTLE

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Barnes unveils Yamacraw initiative as blueprint for state's economy

Georgia Tech among eight universities participating

Victor Rogers
 Institute Communications and Public Affairs

Just a few days before taking the oath of office to become Georgia's governor, Roy Barnes announced a major initiative designed to position the state as a world leader in high-technology industries. Over the next five to seven years, the Yamacraw Mission is expected to create several thousand new jobs in the lucrative fields of software engineering and electronic design, and will have a major impact on Georgia Tech.

Named for the Yamacraw bluff on the Savannah River where Georgia founder James Oglethorpe established a settlement in 1733, the Yamacraw Mission is a combined effort by the University System of Georgia, the Georgia Department of Industry, Trade and Tourism, and the Georgia Research Alliance to foster development of a cluster of businesses involved in high-bandwidth communications—a high volume of information sent at fast speeds.

The birth of Yamacraw follows nine months of work by a special interagency steering committee which concluded that Georgia enjoys certain distinct advantages in key sectors of the high-bandwidth industry, including optical networks, high-speed access devices and content processing.

"The Yamacraw Mission will establish a new industry cluster of business involved generally in high-bandwidth technologies and specifically in the design and engineering of systems and software to support those technologies," said Barnes.

"Georgia is uniquely positioned—thanks to a powerful combination of private sector, public sector and academic assets—to pursue such a strategy."

Georgia Tech is well represented throughout Yamacraw: President Wayne Clough serves on the steering committee; Michael Cummins, director and CEO of the Georgia Center for Advanced Telecommunications Technology (GCATT), will lead the Electronic Design Center; Wayne Hodges, director of the Economic Development Institute, serves on the project management team; Roger Webb, professor and chair of the School of Electrical and Computer Engineering (ECE), and Herb Lehman, ECE's director of operations, serve on the R&D/education task force; and Jim Cannady, research scientist, Georgia Tech Research Institute, serves on the data and network security task force.

The steering committee that developed Yamacraw predicts that in the next five to seven years the initiative could recruit as many as 10 new companies involved specifically in high-bandwidth communications, quadruple the level of venture capital funding available to technology start-up companies in the state, and create as many as 2,000 new electronic design and software engineering jobs.

"As important as these goals are," Barnes said, "it's far more important to view the Yamacraw Mission as a strategic initiative and a process designed to take us into the next century. I have every confidence it will succeed admirably."

Barnes is asking the General Assembly to support the Yamacraw Mission with \$13.625 million in FY2000 funds; this is in addition to the \$42.7 million he included in his GRA budget request. The funding will be used to add key faculty positions at the eight universities involved in the initiative, augment research already under way in several areas of high-bandwidth communications, and implement the first stages of this economic development initiative.

The Yamacraw Mission has a three-part strategy to make the state the global leader in the electronic design of high-bandwidth communications systems. Part one is the Yamacraw Industry Cluster strategy, spearheaded by the Georgia Department of Industry, Trade and Tourism. The goal is to create a cluster of companies—designers, manufacturing plants and software companies—that support this activity.

The second part of the strategy is the Education Cluster—organized by the University System of Georgia and spearheaded by Georgia Tech—which will

build the base of talent in the state and attract existing state of Georgia graduates back to the state.

Yamacraw's first year budget will call for adding a number of doctorate-level professors specializing in electronic design, software engineering and related fields. The professorships will be divided among eight state universities: Armstrong Atlantic State University, Georgia Tech, Georgia Southern University, Georgia State University, Kennesaw State University, Savannah State University, Southern Polytechnic State University and University of Georgia.

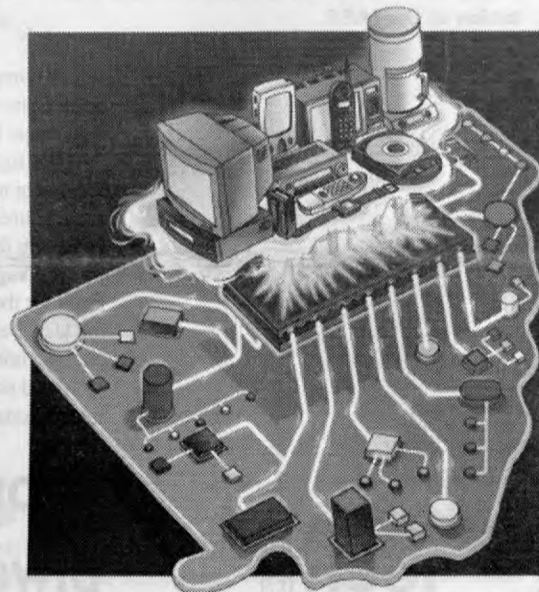
The third part of the strategy is the Yamacraw Electronic Design Center, which will partner with companies to conduct and commercialize advanced research. The center will be located at GCATT and led by Cummins, who will be responsible for organizing and overseeing new research projects and, in concert with the Georgia Department of Industry, Trade and Tourism, recruiting corporate partners for the center. He said he thinks Georgia has an advantage over other states.

"Every state is trying to find an avenue into high-tech; everybody has a program," Cummins said. "But I don't think there's another state with the components we have. We are really strong in the public-private partnerships. We learned to do that very well through the Georgia Research Alliance—harnessing state government, academic institutions and private industry to work together on a high-tech strategic mission. We know how to do that very well, probably better than any other state."

(Editor's note: See page 3 for a list of key scholars from Tech who are involved in the initiative. For more information on the Yamacraw Mission, see www.gcatt.gatech.edu/yamacraw.)



Gov. Roy Barnes announces a major initiative called the Yamacraw Mission, designed to position Georgia as a world leader in high-tech industries.



Georgia as motherboard for high-tech industries: Over the next five to seven years, the Yamacraw Mission is expected to create several thousand new jobs in Georgia in software engineering and electronic design.

Initial elements of the Yamacraw Mission

- Providing \$13.6 million in the project's first year for seed money, marketing aimed at attracting companies and engineers, and facilities planning.
- Creating and recruiting companies engaged in high-bandwidth communications and electronic system design and recruiting the highly qualified technologists needed to create and attract these companies.
- Targeting research in high-bandwidth communications to attract the engineers, entrepreneurs and companies necessary to make Georgia a world leader in this area.
- Adding faculty and creating curricula at eight state universities in order to increase the number of graduates required to meet workforce demands of this new high-tech industry sector.
- Attracting the venture capital and providing the support necessary to incubate the new companies expected to emerge as a result of the focused research in this high-tech industry.
- Establishing an electronic design center as the focal point for this multi-agency economic development effort. The center would serve as a point of contact for offering private-sector corporations with a stake in the design of high-bandwidth technologies the opportunity to share in leading-edge research under way at Georgia Tech. The center will be located at GCATT.

College of Architecture leads international educational exchange

Ski Hilenski
College of Architecture

In the context of a global economy and increasing urban growth, questions of sustainability and international practice are becoming matters of global importance. Design professionals, who traditionally have operated at the local level, are increasingly called upon to practice at a global level and design in foreign countries. Inasmuch as the roles and responsibilities of architects vary from country to country, strategies for meaningful architectural intervention vary as well.



Pictured at the consortium meeting in November are (l-r): Professors Marc Bourdier, Etablissement Public d'Architecture a Paris-la Villette (EPALV), director of the European portion of the IAEE; Dominique Bonnamour-Lloyd, Georgia Tech, director of the IAEE; and Brooks Cavin III of California Polytechnic at Pomona, a U.S. member institution of the IAEE.

To address these issues, representatives of a consortium of leading American and European universities led by Georgia Tech met in November to investigate strategies for building sustainable environments within the context of international practice. The consortium, called the International Architectural Education Exchange (IAEE), is directed by Dominique Bonnamour-Lloyd, assistant professor in the College of Architecture. Working with her consortium partners, Bonnamour-Lloyd is developing a unique exchange program involving six architectural programs—three in the United States and three in Europe.

Tech's primary partner in this effort is the Etablissement Public d'Architecture a Paris-la Villette (EPALV). In addition to Tech and La Villette, the IAEE members include the Catholic University of America, California State Polytechnic at Pomona, Escuela Tecnica Superior de Arquitectura de Barcelona, and Innsbruck Universität Institut für Hochbau und Entworfen—all schools located in rapidly growing international cities.

The IAEE is one of 32 transatlantic academic projects which comprise the "European Union/United States of America Joint Consortia For Cooperation In Higher Education and Vocational Education." The consortium is a result of a Transatlantic Agenda signed by the United States and the EU in 1995, aimed at achieving more effective leadership and cooperation between the two continents in areas from trade to security to humanitarian assistance. On the U.S. side, the federal agency charged with tightening these linkages between European and American universities is the Fund for the Improvement of Postsecondary Education (FIPSE) in the U.S. Department of Education. Likewise, the EU has similarly charged one of its bureaus in Brussels.

Based on the highly successful "Atelier Franco-Americain," an international design studio format that has been the basis of educa-

tional interactions between Georgia Tech and La Villette students over the past six years, the IAEE plans to recruit graduate or professional degree students from member schools in their next-to-last year of study, as well as select students in post-professional degree programs.

"Including additional partners in the exchange and offering this educational opportunity to graduate-level students will both enhance and refine the complexity and nature of inquiry within the atelier," Bonnamour-Lloyd said.

During each of the three years of the grant, participating IAEE faculty will define a particular architectural problem related to sustainability placed within the constraints of professional practice in the participating countries. Then, beginning this spring, students wishing to participate in the exchange program will take a semester-long preparatory class featuring virtual communication between the member universities.

"The preparatory class is designed to sensitize students to the issues of international practice and communication as well as to the global/local scales of sustainability," said Bonnamour-Lloyd.

Upon completion of the preparatory class, five students from each consortium school will be selected to participate in a three-week summer Euro American Atelier/Workshop. The site of this atelier will rotate annually, with the first being at Georgia Tech, the second in Paris at EPALV, and the third at California Polytechnic Institute at Pomona.

After returning to their home universities, students will take a follow-up semester in the fall, during which they will compile and assess the findings made during the previous phases. Students will also have opportunities to intern in international architectural offices and spend a semester at another member institution.

In addition to teaching, participating faculty will work jointly on curriculum development, with each consortium school offering its expertise on the given subject. At the conclusion of the grant period, "the project will be disseminated throughout Europe and the United States," Bonnamour-Lloyd said, "and even to universities in China and South America with whom member schools have ongoing working relationships."

"By strengthening the existing connections of each partner school, we intend for the program to become self-sustaining within three years," said College of Architecture Dean Thomas D. Galloway. He also said that funds to continue the program after the grant period will be sought through student financial aid and institutional assistance, as well as from sponsors in the building industry and related fields.



The Whistle

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Georgia Tech is a unit of the University System of Georgia.

PeopleSoft/System 2000 News: Student and staff biweekly payrolls combined

Starting with the last pay period in January, there will be a change in how biweekly payrolls are processed for students. Instead of being processed in a separate biweekly cycle, students will be added to the existing biweekly staff cycle.

For biweekly staff, there is no change to the normal pay cycle. On Feb. 5, biweekly student employees will receive an extra paycheck that represents work during the week of Jan. 21 - 27. On Jan. 28, students will begin a normal two-week pay period that coincides with the biweekly staff pay period. Students will receive three paychecks instead of two over this four-week period, in order to avoid any delays in receiving their normal pay.

For business officers, the combined pay cycle will simplify payroll processing. In addition, since payrolls will post to the General Ledger after each pay date, the payroll system will provide updated, timely information on payroll transactions.

Following is the calendar for biweekly payroll changes:

- Jan. 15—Normal student pay date on student-only biweekly pay cycle.
- Jan. 29—Last normally scheduled student pay date on the student-only biweekly pay cycle. Students are paid for the work period Jan. 7-20.

- Feb. 5—First student/staff pay date on the new combined biweekly student/staff pay cycle. Students are paid for the work period Jan. 21-27.

- Feb. 19—Normal combined biweekly student/staff pay date. Students and staff will continue to be paid every other Friday on this schedule.

Biweekly students will continue to be paid every other Friday on the same dates as biweekly staff. Biweekly staff will not experience any changes in their pay dates or earnings amounts because of the move to combined pay cycles.

For more information, contact Beverly Edwards at 894-5571 or Pat Brook at 894-4614.

Corrections

In last week's issue of *The Whistle*, the photo caption on the cover contained a misidentification. In the photo with headline entitled "Tech receives a piece of its own history," pictured on the far left is Firooz Israel, Georgia Tech alumus (MS CE '65) and vice president of the engineering firm Lockwood Greene.

In the Gator Bowl story also in last week's issue, it was incorrectly stated that Georgia Tech has won more bowl games than any other college football team. Tech has the nation's highest winning percentage in bowl games over its history, but Alabama boasts the most victories.



Spotlight

Meet David Finkelstein

Full Name: David Ritz Finkelstein

Age: 69

Occupation: Physicist

Current projects and/or research: Chronon hunting, extending relativity, writing.

Years at Tech: 19

Education: Stuyvesant High School (NYC), City University of New York, MIT

Marital status: Divorced, then remarried to Shlomit Ritz Finkelstein.

Children: Dan, 44; Beth, 41; Eve, 38; Aria, 16

The last book I read, and enjoyed, was: *In the Beauty of the Lilies*, by John Updike.

One CD in my stereo is: Schubert, Piano Sonatas, Marta Deyanova.

My ideal weekend would include: Monday.

What brought you to Georgia Tech? Good people at Tech, and Atlanta itself.

One thing I would like to improve about Georgia Tech is: parking.

One job I had that is not on my resume: Dishwasher at the bus-stop lunch counter in Woodstock, N.Y., 1945.

If I won the lottery I would: ... Didn't I?

When I was younger I wanted to be: a physicist. And I won't give up.

Most people don't know that I: exist.

My most important achievement is: participating in the formulation of the concept of the black hole, so far.

If I could do it all over again, I would: do it slowly, and with feeling.

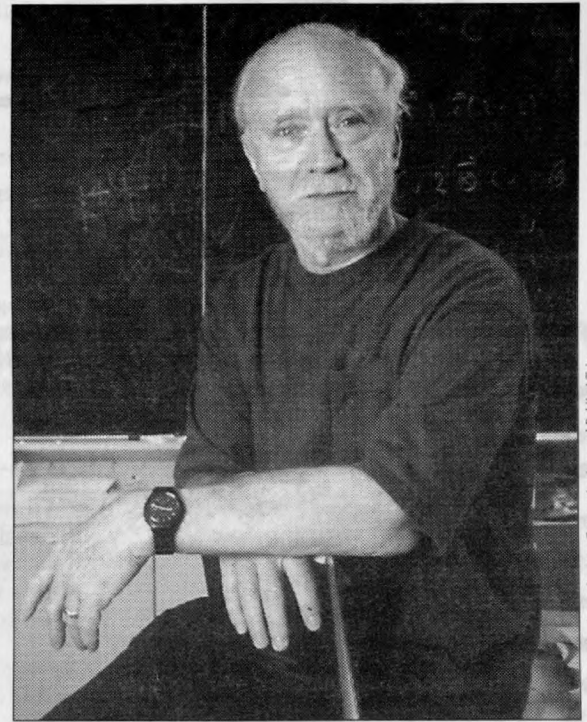


Photo by Stanley Leary, Institute Communications and Public Affairs

(Continued from page 1)

Tech scholars of the Yamacraw Mission

GCATT and Georgia Tech have eminent scholars in the field of high-bandwidth communications, and their work will focus on three subsegments of that marketplace. The first is optical networking, or the use of fiber optic cables and light to transmit information. The second is broadband access technology—the “on-and off-ramps” to the high-bandwidth communications highway. The third is content processing, or the manipulation of all information sent across a digital network—speech, pictures, music—which must be converted into digital information, as bits and bytes.

The scholars listed below are a sampling of the state's research strengths already in place for the Yamacraw Mission.

Optical Networks:

- **John A. Copeland**, professor, School of Electrical and Computer Engineering, GCATT/Georgia Research Alliance Eminent Scholar in Technology Transfer
- **John O. Limb**, professor, College of Computing, GCATT/Georgia Research Alliance Eminent Scholar in Advanced Telecommunications
- **Carl M. Verber**, professor, School of Electrical and Computer Engineering

High-Speed Access Devices:

- **David R. Hertling**, professor, School of Electrical and Computer Engineering
- **Nikil Jayant**, professor, School of Electrical and Computer Engineering, GCATT/Georgia Research Alliance Eminent Scholar in Wireless Technology
- **James D. Meindl**, professor, School of Electrical and Computer Engineering
- **Rao R. Tummala**, professor, School of Electrical and Computer Engineering, GCATT/Georgia Research Alliance Eminent Scholar in Multichip Packaging

Content Processing:

- **Ronald Schafer**, professor, School of Electrical and Computer Engineering

1999 (GT)² Club Scholarship applications

The (GT)² Club announces its third annual scholarship competition. The scholarship, which is funded by donations from past and present Tech employees through the Faculty-Staff Fund and supplemented by the Georgia Tech Alumni Association, will award two \$3,000 one-year scholarships to sons or daughters of current Georgia Tech employees. To qualify for the competition, students must:

- ✓ Be the son or daughter of a current permanent employee of Georgia Tech.
- ✓ Have been accepted for admission to the 1999 freshman class of Georgia Tech.
- ✓ Submit the (GT)² Scholarship application by Feb. 12.

Selection will be based on leadership and academic performance and potential as determined through the application elements and a personal interview. Financial need will only be considered among top finalists having similar qualifications.

Candidates must complete the one-page (GT)² Scholarship application and submit it by Feb. 12. The scholarship application may be downloaded from the (GT)² Club Web page at www.enrollment.gatech.edu/gt2. Applications may also be obtained from Meredith Youngblood, (GT)² scholarship coordinator, at 894-8778.

Campus EVENTS

Arts/Culture

Jan. 30

Moiseyev Dance Company. Russian folk dance group features dances from Spain, Japan, China, Bulgaria, Argentina, Mexico, Poland, Hungary and American rock and roll. 8 p.m., Robert Ferst Center for the Arts. Tickets are \$42. For reservations, call 894-9600.

Brown Bags/Lectures

Jan. 22

"Perceptual Symbol Systems," by Lawrence W. Barsalou, Emory University. Noon - 1:30 p.m., Student Center Theater. Contact: Sandra Key, 894-7865, or sakey@cc.gatech.edu.

"Nitrogen Controls on Evapotranspiration in Climate Models," by Robert Dickinson, University of Arizona. 3 - 4 p.m., Student Success Center Clary Theatre. Contact: Susan Ryan, 894-3893 or see <http://seismo.eas.gatech.edu/seminar.html>.

Jan. 28

"Access to Compressed Images and Multiresolution Triangulations in GIS," by Renato Pajarola, Gvu Post-doctoral Fellow. Noon, Pettit Building (MiRC), Rm. 102. For more information, call 894-4488 or see www.cc.gatech.edu/gvu/events/brownbag/.

Jan. 29

"Formation of Non-Volcanic Rifted Continental Margins: Insights from Numerical Modeling Experiments," by Harry, University of Alabama. 3 - 4 p.m., Student Success Center Clary Theatre. Contact: Susan Ryan, 894-3893 or see <http://seismo.eas.gatech.edu/seminar.html>.

Courses/Workshops

Jan. 30

Criminal Countermeasures for Women. Instructor: Rajiv Saigal. 2 - 6 p.m., SAC Auxiliary Gym, \$20. Proceeds donated to a rape prevention and treatment center. Contact: 894-2805.

Feb. 2, 6

Diversity Training Workshops. 8 a.m. - 5 p.m., Student Center, Rm. 343. Presented by the Office of Diversity Issues and Programs and the Office of Equal Opportunity/Diversity Programs. Contact: Stephanie Ray, 894-6367.

Share your knowledge and talents by teaching a Spring Quarter **Options class.** Applications can be picked up in the Student Center Programs Office, Student Center, 3rd floor. Deadline is Jan. 22. Contact: Sora Cin or Kim Lovelace, 894-2805.

Faculty Governance

Feb. 2

General Faculty Assembly meeting. 3 - 5 p.m., Student Center Theater.

Sports

Jan. 28

Women's Basketball. Lady Yellow Jackets vs. N.C. State. 6:30 p.m., Alexander Memorial Coliseum. For tickets and more information, call 1-888-TECH-TIX or 894-5447, or see www.ramblinwreck.com.

Men's Basketball. Tech vs. Clemson. 9 p.m., Alexander Memorial Coliseum.

Jan. 31

Women's Basketball. Lady Yellow Jackets at Florida State. 12:30 p.m.

Men's Basketball. Tech at North Carolina. 4 p.m.

Miscellaneous

Feb. 1-7

Goodwill Family Annual Booksale, benefitting job training programs for people with barriers to employment. MOVE Office seeks volunteers. Please sign up for any of the following shifts: Jan. 31 (for set up), 7 - 10 a.m., 6 - 10 p.m.; Feb. 1 - 7, 9 a.m. - 12:30 p.m., noon - 3:30 p.m., 3 - 6:30 p.m., 6 - 9 p.m. Contact: 894-2002.

Classifieds

AUTOMOBILES

1993 Escort wagon, 46K miles, A/C, \$5,000. Call 770-945-8305.

1993 Mitsubishi Mirage S, 4-dr sedan, auto, a/c, power steering/windows/locks, am/fm/cassette, 82K miles. \$3,300. E-mail km101@prism.gatech.edu.

1993 Honda Civic EX Coupe, black w/ beige interior, 5 spd, A/C, pwr windows/locks, sunroof, cruise control, tilt wheel, one owner, 93K miles, \$7,000. E-mail joanie.turner@arch.gatech.edu.

1995 Chrysler Le Baron GTC convertible, auto, V-6, power steering/windows/locks, white w/ white roof, 52K miles, \$8,950. Contact 770-434-2090 or bruce.spratt@business.gatech.edu.

1996 Ford Contour GL sedan, 4-dr, auto, a/c, power steering/windows/locks, am/fm/cassette, sliding sun roofs, alloy wheels, 60K miles, \$6,700. 894-8807, 678-442-6361 or jae.park@ece.gatech.edu.

COMPUTERS

Wanted: Older audio card for 486/33 ISA bus computer. Must be non-plug 'n' play. Original SoundBlaster32 preferred. Can

trade for other cards. 894-4484 or robert.cargill@me.gatech.edu.

Wanted: used, working PC with Windows 95 installed. Call Vicki, 373-2366, and leave message with details, phone number.

Briefcase traveling bag for laptop computer, Tumi, with SafePort computer protection. \$335. Contact proberts@ce.gatech.edu or 894-2219.

For sale: HP 540 Printer. \$50 OBO. Contact matthew.eshleman@gtri.gatech.edu.

FURNITURE

Queen-size Sealy Comfort Guard Supreme mattress, box spring w/ deluxe frame. Hardly used (guest bedroom), four years old, \$85. Call 894-5677 or 894-0597.

Off-white sofa, oversized chair and ottoman. Grey marble coffee table, wood side table, black CD tower. For pictures, see www.prism.gatech.edu/~ls76/sofa.html. E-mail ls76@prism.gatech.edu.

REAL ESTATE

For sale: 2BR, 1BA house in Norcross, immaculate, large fenced yard, storage shed, vinyl siding, gas log fireplace, breakfast bar, low taxes! \$93,500. Call 770-923-6246.

For rent: Large furnished BR w/ private bath, secure, private neighborhood. Walking distance to Stone Mt., Marta. \$400/mo. plus security. Utilities free. 770-498-9103 after 8 p.m.

For sale: Two condos, Marietta. 2 BR, 2 BA, formal LR and DR, fireplace, central air/heat, all appliances, washer/dryer. Gated community. \$59K each. Call 625-8185.

Wanted: Furnished house or 2 BR apt., 3/25-6/15 (approx.). Safe/quiet neighborhood, good elementary school, reasonable distance to Tech; prefer access by public transport. E-mail cook@math.gatech.edu.

For rent: 2 BR, 1 BA condo in Buckhead. Hardwood floors. \$800 per month, includes cable and water. Available in April. Contact raymond.vito@me.gatech.edu or 894-7502.

Efficiency, garage or very small apartment wanted for non-smoking, non-drinking, CRT staff member. In Atlanta during week, in Athens most weekends. 894-3683 or mark.johnson@crt.gatech.edu.

For sale: Orlando timeshare, West Gate Resort, sleeps 8. 5 min. from Disney. Every other year (odd-year). Can trade weeks. Maintenance \$444. \$6,000 OBO. Contact shuana.durham@ohr.gatech.edu or 894-9361.

SPORTS/FITNESS/RECREATION

For sale: 20" girls bike, pink/purple, \$20. 24" ladies Huffy mountain bike, \$50. Proform stairclimber, like new, \$150. Contact charlene.bayer@gtri.gatech.edu.

Wanted: 3 tickets to Duke-Tech basketball game, Feb. 6. E-mail anne.steinemann@arch.gatech.edu.

AreoFit aerobic glider with video, very good condition, \$25. Call 894-5677/0597.

MISCELLANEOUS

Wedding set: size 8, band w/ 8 stair set CZ diamonds. Wedding ring w/ 18 side CZ diamonds w/ marquis CZ pear-shaped diamond in center. \$1,500 OBO. Contact ralph.brown@ipst.edu or call at 894-5703.

Afternoon nanny needed for two girls in middle school, high school. Must have safe car, safe driving record, flexible schedule and be non-smoker. Call 894-5361 (day) or e-mail charlene.bayer@gtri.gatech.edu.

Satellite dish and accessories, \$70. Cellular phone, batteries, recharger, \$50. Contact anne.steinemann@arch.gatech.edu.

15" Zenith TV. Works fine. Good for tinkering with, or for kid's videos/games. \$20. Call 894-5677/0597.

Free to good home: Black 4-yr-old male cocker spaniel (with papers). Prefer home without small children. Ernie Walker, 894-1988 or ernest.walker@success.gatech.edu.

Editor's note: Faculty and staff may submit classified ads via e-mail to whistle.ads@icpa.gatech.edu or fax to Denise Nobles at 894-7214. The deadline for submission is 10 days prior to issue date. Ads run for a maximum of three weeks in the order in which they are received. For more information, call 894-8324.