

Play Around With The Future.  
Today!



TECHFEST '94  
Saturday, May 14, 1994  
10 A.M.-4 P.M.  
Southern College of Technology  
1100 South Marietta Parkway  
Marietta, GA

# TECHFEST '94

## Building A—Joe Mack Wilson Student Center

**Puzzled?** It's almost impossible to solve "Soma Cubes" and "Instant Insanity" with random guessing. But these intriguing puzzles are quite susceptible to a logical approach! Give it a try and you'll be surprised.

### Fractals and Julia Sets—a moving experience.

Video graphics are popular with most everyone, but not everyone knows how much of a role math plays in graphics. In this exhibition, watch Fractals and Julia Sets move and grow, with fascinating patterns that border on the very artistic or the quite bizarre.

**It's not as hard anymore!** The modern graphing calculator adds a new dimension to mathematics. Problems that were too difficult or too tedious can now be solved almost instantly. It almost makes you want to go back to school and do it over again.

### The Pulp and Paper Partnership.

See samples of intermediate products and final products produced. Learn more about the paper industry—a major factor in Georgia's economy. It's an industry of opportunity and discussions and videos will show you more about it.

(Don't miss the International Festival in the Ballroom)

## Building C—Library Rotunda

**Birthday News & Anniversary Times!** Visit our library and check out what the world was like on your special days. You can take home a computerized print out to always remind you of these newsworthy occasions.

## Building E

**Reaction!** Chemical reactions are simple or very complicated. Use non-toxic substances to create your own chemical reactions. Watch a multi-media presentation on what happens when reactions get much more explosive! (E-234)

**Scope it out.** Welcome to an open house for Southern Tech's brand new biology laboratory. Scope out what's going on through the lens of new microscopes. (E-204)

**From a little atom to a lot of levitation.** The ever so mighty, yet extremely tiny, atom is displayed on the new STM microscope. Don't miss Rotational Dynamics, superconducting levitation of objects and super conductors, which are used to move magnetically levitated trains. Enter the worlds of lasers, optics, and computerized quantum chemistry calculations. (E-203 and E-206)

**The International Information Highway.** Don't be road kill on the information highway! Explore the highway to people and places in other parts of the world. We've arranged a computer network link with people you can talk to, via computer, in other countries. You'll also learn about other features of the highway, including video electronic mail. (E-127)

## Building G

**PCAD—layout and design.** Tedious old methods of producing circuit boards are a thing of the past. Come watch how to layout and design a circuit board on the computer, using the built-in artistry of computer-aided design. While you are here, observe a series of projects by computer and electrical engineering technology students who are preparing for their futures in business and industry. (G-230, G-147)

## Building H—Burruss Academic Building

### Futures in Technology

**Women in Technology**, sponsored by the Social and International Studies Department. (Lobby)

**Opportunities in the Management of Technology**, sponsored by the School of Management. (Lobby)

### Stump the Spanish Professor!

¿Habla Ud. español? Have some fun finding out. (Lobby)

### A train with a mind of its own—almost.

What makes MARTA run? A real-world computer system that monitors and controls physical processes that are as simple as sewing machines or as complex as a space vehicle. Visit our computer-controlled train and see how it works. (H-243)

**Grab onto graphics. Meet multi-media.** Comic strip characters come to life with a hand-held scanner. PCs grab and manipulate video frames, run a fractal builder and show 3-D fractals. Get less hyper with HyperCard. View chemical reactions with the help of a multi-media program. (H-241)

**Learning Resources.** In today's education, individualized instructions using tutorials and computer-assisted instructions help students get on target quickly. Explore the options. (H-125)

## Building I

**Up a tree?** Back yard tree houses bring back many memories. Today, 18 high school students have competed to design the very best tree house of the '90s and they're on display for the kid in us all. They're also competing for scholarships, so give them a big hand! (I-230 – Gallery)

## KinderCity for creative kids

Visit KinderCity, a TECHFEST favorite for two years. Here, young children become city planners and explore being architects of the future. It's a hands-on playground in the world of designing and building structures. (I-240)

## Go ahead—Interact with CAD

An interactive display of designs created on computers and drawn on a high-speed plotter. (I-206)

## We've got designs on the future!

Our Architectural student designs are on display. (I-230 Gallery)

**An award-weighty bridge.** This steel bridge is proudly shared with you by the student team who designed and built it—and took it to second place awards in the 1993 National Steel Bridge Design and Construction competition. (I-147)

**A concrete canoe?** Yes, it's concrete and it definitely floats. In fact, it rides so well that this canoe finished number three out of 23 entries at the American Society of Civil Engineers Southeast Region Competition. Meet the students who designed and built this water-going marvel. (I-122)

**Fluid flow.** Changes in river flow have to do with much more than just rainfall. This exhibit demonstrates the principles of fluid flow or, more technically stated, hydraulic flume. (Outside Bldg. I on sidewalk)

**Surveying gone global.** At the turn of the century, surveying equipment seemed exciting and sophisticated. But today's state-of-the-art surveying equipment goes so far as to monitor satellites. This demonstration introduces you to such equipment as total stations and satellite signal receivers for global positioning. (I-140 and outside building)

## Building K

**Formula Race Car.** This beauty was designed and built by Southern Tech students in the American Society of Mechanical Engineers (ASME), and has competed nationally in competitions sponsored by the Society of Automotive Engineers.

(Between Bldg. K and the trailers)

**Human Powered Vehicle.** Officially, this unique bicycle has been clocked at 47 mph (but unofficially we know it can go approximately 60 mph.) It was designed and built by Southern Tech ASME students and it looks nothing like the bikes you're used to.

(Between K and the trailers)

## Dazzling computer-aided engineering.

If you think you've seen everything computers can do, you haven't—yet. You'll marvel at the impact of computers on the design and manufacturing process. Experience 3-D computer-aided design systems, photo-realistic renderings of designs, computer generated movies, visual displays of stresses and deflections, how computers control machine tools, and more. (Room K-155)

## Building M—W. Clair Harris Apparel & Textile Center

**Mighty Manufacturing.** Computer-aided design and computer-controlled manufacturing have revolutionized the apparel and textile industry. Style and patterns change before your eyes at the touch of a computer keyboard in the CAD lab. Design becomes reality through computer-enhanced, automated production. CIM network-linked computers talk to each other to put clothes on your back and carpet under your feet. And don't miss the sewing machine of the future at TECHFEST now. It's voice activated!

## Building SM—Wilder Communications

**Lasers & satellite.** Don't miss this stop. The building looks little—it's impact is mighty! Transmit music across rooms by laser, and turn it off and on by using your body! See some of the very latest fiber optic communication equipment. Stop for a television show being received via satellite through Southern Tech's antenna and receiver.

## WELCOME Visitation Day Participants!

**NOTE: IMPORTANT  
INFORMATION  
FOR YOUR  
SAFETY  
AND ASSISTANCE.**



**TECHFEST CENTRAL** is located in Building F. (See Map.) The on-campus telephone extension is 7372. Notify **TECHFEST Central** if you need assistance.

**LOST CHILDREN WILL BE TAKEN TO TECHFEST CENTRAL.** It is also a good location for family members to meet if they get separated.

**FIRST AID:** A nurse and first aid for minor injuries is available at **TECHFEST Central**. First Aid is also available at the Marietta City Fire Truck exhibit. In case of serious illness or injury, do **NOT** move the victim. Contact **TECHFEST Central** and they will send trained help to the person.

# SPECIAL GUEST EXHIBITORS

## National Aeronautics Space Administration (NASA) Federal Aviation Administration (FAA) and Civil Air Patrol

### Kennedy Space Center space and shuttle exhibit

Meet our NASA representative and share the challenge of space flight. Examine samples of flight equipment and lunar rock samples that once nestled on the face of the moon. Experience the excitement of a shuttle journey through space during exciting and beautiful videos.

**Burruss Academic Building Auditorium, Bldg. H**  
**Presentations: 10:45 a.m., 11:45 a.m., 1:30 p.m., 2:45 p.m.**

### Become a pilot, air traffic control officer or weather expert for a day

Fly away in the FAA's Flight Simulator and also enjoy displays on wind shear and air traffic control.

**Burruss Academic Bldg. H, Room H-202**

### CAP – search and rescue experts

Share what goes on behind the lifesaving missions of the Civil Air Patrol. And G-suit demonstrations introduce you to the gravity pressure suits worn by fighter pilots.

**Burruss Academic Bldg. H, Room H-202**

## Naval Air Station Atlanta

### AH-1 Cobra Helicopter

The famed Cobra makes a return visit to TECHFEST by popular demand. Come get a rare close-up view of this sophisticated, state-of-the-art gunship and meet its high flying crew from the Naval Air Station.

### Stinger Missile Team

Go uncover the camouflaged mobile vehicle and see missile trainers, night sights, and radios in this HMMWV.

**Between Howell & Norton Dorms, Bldgs. S & V**

## Clear Choice

What is a satellite? How can images be manipulated to understand weather patterns? Can weather forecasters ever really be sure? Clear Choice's Interactive Weather Satellite Image Interpretation Program may make things clearer for you. **Student Center Lobby, Bldg. A**

## City of Marietta Fire Department

Save some special time for these real-life, lifesavers and let the youngsters share their exciting, sophisticated 100-foot ladder truck. **NOTE: FIRST AID AVAILABLE HERE.** Near Howell & Norton Dorms, Bldgs. S & V

## Georgia Youth Science & Technology Centers (GYSTC)

### STARLAB Planetarium

Enter the West GYSTC's STARLAB planetarium and explore the beauty of space, the earth and human cells. Presentations are sponsored by GYSTC and conducted by the Kensington House.

**Apparel and Textile Center, Bldg. M – Lobby**

### Under the (radar) gun

West GYSTC calls for young baseball fans to come find out how fast you can pitch a baseball. It's fast and fun, and you'll learn a lot more about how radar works.

**Outside Apparel & Textile Center, Bldg. M**

### The magical mystery of chemistry

GYSTC sponsors demonstrations by South Cobb High School students that will unravel the mysteries of Polymer chemistry, acids and bases, liquid nitrogen and rockets.

**Apparel and Textile Center, Bldg. M-100**

### A bad hair day

Get acquainted with an electrostatic generator and you will find you're having a very hair-raising experience. You will enjoy the energy of it all!

**Apparel and Textile Center, Bldg. M – Lobby**

## AT&T Tridom

### VSAT Satellite Communication

High-speed data voice and video transfer may seem complex, but these communications experts can help you understand. Follow the satellite antenna to AT&T Tridom and see how communications make a 45,000 mile round trip in just milli-seconds!

**Just outside Student Center, Bldg. A**

## Automated Logic

**Energy!** Controlling the energy of today's buildings is a matter of sophisticated logic—superbly automated. Today you can see SuperVision—interactive automation software that uses colors and graphics to transmit energy information to users, and EIKON, graphical programming. Get introduced to I/O Hardware and more.

**Student Center Lobby, Bldg. A**



## **ENTERTAINING EXPERIENCES!**

### **RE/MAX Hot Air Balloon Rides \***

**10 a.m.–noon**

(\*Weather/wind/fuel capacity permitting. Insurance regulations restrict size and number of riders and require that children be at least six years of age.)

**(Between Buildings K and M)**

### **Space Walk**

A bouncing experience for the energetic young and the young at heart.

**(In Front of Building F)**

### **Celtic Connection Bagpipe & Drum Corps**

A bountiful mix of pipes and drums in a terrific presentation of music that makes everyone Scottish for a while.

**(Presentation begins 2 p.m., Parade Circle and tours campus)**

### **Southern Tech's own WGHR Radio Station**

Take the mike, and choose the chatter. It's your chance to be a DJ when you go on air for WGHR. And take a tour of our little station with a big sound!

**(WGHR Radio, Student Center Lobby, Building A)**

### **Marietta City Police and ROBO**

ROBO is a very friendly automated car who likes visitors! A special safety friend for children. **(Parade Circle)**

### **Putting Golf**

Are you a putting pro? It's not the Master's, but it's fun.

**(Near Library, Building C)**

### **Li'l General Cloggers**

Heart stealing stars of national television shows and personal appearances are now at TECHFEST to bring us their special brand of toe-tapping fun.

**(Presentation at 11:30 a.m., Parade Circle)**

### **530th Air Force Band, Dobbins AFB**

A wonderful big band sound you definitely won't want to miss from some special musicians in blue.

**(Presentations at noon and 2:30 p.m.,**

**Stage 1)**

### **McEachern High School NJROTC**

This dynamic, award-winning drill team pleases with shows you won't forget.

**(Presentation begins at 11 a.m., Parade Circle and tours campus)**

### **Bungee Cord Quartet**

Jump fearlessly into the music of this wandering troupe of barbershop troubadours.

**(Noon - 2 p.m. Tours Campus)**

**(Sponsored by the Campus Activities Board)**

### **Pop-A-Shot Basketball**

Give it a shot, all you Michael Jordan wannabes and bench warming fans.

**(Apparel & Textile Center, Building M, Patio)**

### **Trackless Train**

Give your feet a rest and let the TECHFEST miniature train take you to your next destination, or just for an old-fashioned choo choo ride.

**(Tours Campus)**

### **The International Student Association Festival**

Experience beautiful, exotic cultural exhibits and activities of students from around the world. Enjoy unique entertainment and an authentic international buffet.

**Student Center Ballroom, Building A**

**Exhibits: 10 a.m.–4 p.m.**

**International luncheon buffet: noon**

**Entertainment: 12:30–4 p.m.**

**Meet a clown, paint your face, greet the FAA's Air Bear, hug the Hornet  
(Around campus)**

