

# AutoTeacher News & AIPC News

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## ATech's October Invitational Workshop



Front Row: John Wood, Thomas Hill-Wayne County CC, Loren York-North Canyon High School, Mary Hutchinson-NATEF Executive Director, Jeff Parks-Tarrant County College, Ken Collins-Central Piedmont CC, Carl McClure-Honda Training Center Troy  
Back Row: Brett Colson- Heart of GA Tech, Don Sheets-Mckenzie Career Center, Melvin White-Tulsa Tech Center, Jeff Hunt-Spartanburg Tech, Mark Spisak-Central Piedmont CC, Rick Griffin-Daniel Morgan Tech, Dan Beeson-Bellingham Tech

The October ATech/AIPC Invitational Workshop included teachers from Ohio, North Carolina, South Carolina, Washington, Virginia, Texas, Arizona, Michigan, Georgia, Indiana, and Oklahoma. The diverse group included high school teachers, community college teachers, an OEM instructor, and the Executive Director of NATEF. The discussions that ensued both in class and after class included the real-world difficulties of teaching OBD II and Electrical/Electronics troubleshooting. Virtual "hands-on" training, as applied and experienced in the Workshop, demonstrated its capability to dramatically improve instruction efficiency.

two teams. This was one of the best troubleshooting performances we have ever had in the workshops. One of the winning troubleshooting teams consisted of Dan Beeson from Bellingham Tech in Washington State and Mary Hutchinson, the Executive Director of NATEF. The other first place team consisted of Loren York from North Canyon High School, Arizona and Carl McClure from the American Honda Training Center in Troy, Ohio. Each member of the winning teams was awarded an AutoTap Scan Tool.

These Workshops are proving to be a great forum for improvement in technical skills and also



Left to Right: Gene Brown-ATech, Dan Beeson, Mary Hutchinson



Left to Right: Gene Brown-ATech, Loren York, Carl McClure

The highlight of every Workshop is the Troubleshooting Competition. This one produced a tie for first place - five complicated faults solved in 6 minutes by

improvement in instructional methods. Each individual leaves with an increased enthusiasm for teaching and the self confidence to make it happen.

## October Workshop cont'd

## South Carolina NACAT

ATech Training has been involved with the NACAT organization for many years and a member for the last 10 years. It was my pleasure to attend the NACAT South Carolina chapter's conference in Spartanburg a few weeks ago. It is surprising to see a State chapter draw as many participants as this conference did. Jeff Hunt, who is now the President of NACAT, organized the conference and trade show and did an excellent job. The barbeque dinner was excellent and I truly enjoyed meeting all of the instructors that attended.

The importance of NACAT and these local chapters cannot be over-emphasized. If you aren't a member, you are missing a great opportunity to share ideas and learn new things from your peers. These organizations are the seeds from which improvements in Automotive Education will take place. The NACAT website is [www.nacat.com](http://www.nacat.com)

*Paul Hines*



Mary Hutchinson and Lyle Taylor discuss an exercise



Troubleshooting Contest Warm Up



Rick Griffin, SC Chapter President



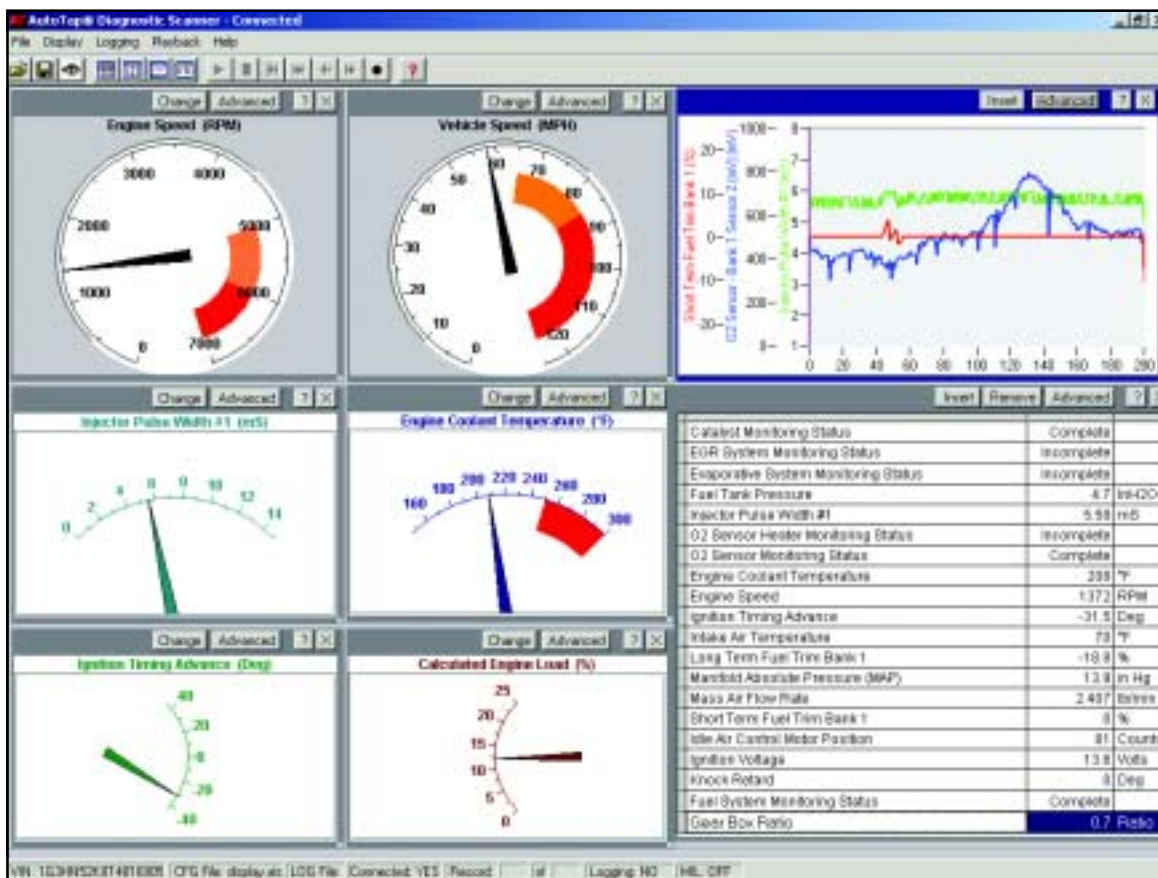
OBD II and Fuel Trims



Chapter Business Meeting (Great Attendance)

# “New” Expanded Program

## ATech, AIPC, AutoTap (A-A-A) Educator Scan Tool Program



**Multiple Data Display - Screen LapTop Computer**

Use your PC or Palm to quickly diagnose and fix problems on 1996 and newer OBD II equipped cars and light trucks.



- Read Diagnostic Trouble Codes
- Read Freeze Frame Data
- Clear the Check Engine Light
- View emissions readiness monitors
- View and log real-time sensor data, including manufacturers enhanced data for GM, Ford and Chrysler
- Graph signals to illustrate relationships for classroom presentation
- Allow students to “discover” operational characteristics of systems.

**The A-A-A Educator Program**

Schools in the United States and Canada can now purchase limited quantities of the AutoTap Scan Tool at the \$249.95 price for program use under the new expanded A-A-A educator purchase program.

ATech Training and the Automotive Industry Planning Council (AIPC) in collaboration with AutoTap are very excited about this opportunity for schools across the United States and Canada. In an effort to improve instruction of OBD II and, as a result, improve the skills of the graduating technicians, this enhanced data scanner for laptop computers or Palm™ PDA devices is being made available at a special greatly discounted price. How long will this offer last? At this point that is unknown so make your requests soon.

This is a 50% price reduction from list. A combination of the LapTop version and the PDA version can be purchased for \$349.95. Visit the ATech website for the required application and additional details: [www.atechtraining.com](http://www.atechtraining.com)



**Diagnostic Scanner**

# The Next Generation of GM S.E.T.

## GM S.E.T. Troubleshooting Trainer



**GM S.E.T. Troubleshooting Trainer 18002TT**

ATech designed the original General Motors Specialized Electronic Training (S.E.T.) hardware and is now introducing the next generation of S.E.T. hardware. The new Troubleshooting S.E.T. allows all of the Stage 1, 2, and 3 circuits to be constructed using the same reliable banana plug connection technology as the original trainer. All components are permanently mounted - no more lost modules or storage problems. A locking suitcase provides security and ease of storage. The trainer is light weight - 25 pounds, suitable for mobile labs or portable instruction.

The **S.E.T. Troubleshooting Trainer** was designed in response to the many requests from Education and Industry users. Both groups want to take the S.E.T. program to the natural next level; troubleshooting instruction. The Trainer includes a keypad and 2 line LCD display for student response and local fault insertion. Faults can be inserted by: selecting a number on the keypad, through a computer connected to the trainer, or by ATech's Instructor Management Program when the Trainer is connected to a standard network. Network connection requires the use of a network adapter available from ATech. The Instructor Management Program (IMP), through the ATech Network System (ANS), monitors/displays student logon to the

**ATech Model 18002TT. General Motors S.E.T. Troubleshooting Trainer for use with General Motors "Electrical/Electronics Stage 1, 2, and 3" course:**

- Includes components for all three stages and original "faulted" components.
- Local and Network Fault insertion
- Fault insertion selection by circuit number, ex.3-2
- Fault insertion selection by module
- Instructor can develop circuits and fault at component level
- Network display and storage of student's performance
- Compatible with ATech's Network System and Instructor Management Program

Trainers, allows creation and reuse of fault files, provides automated fault selection, and transmission of selected faults to each student. Student responses on the keypads to inserted faults are shown on the ANS monitor screen along with correct answers. Records of student responses can be stored in Instructor designated hard-disk directories.

Faults can be selected by two methods: Select the S.E.T experiment number and the circuit schematic will be shown on the computer with available faults or "Build Your Own Circuit". For this capability, the entire Trainer front panel with all components and faults is shown on the computer in a scrollable format. Select the components and faults you want, set hard/intermittent and save for future use.



## AIPC 2004 Awards Program

The 2004 Guidelines and Application are available on the AutoIPC website, [www.autoipc.org](http://www.autoipc.org). Registration is required at the website to receive the documents in an email. Ensure that the email address you enter is correct. In year 2003, 99% of the problems with receiving the documents was due to an incorrect email address. The first year for registration was 2002 and proved to be very valuable in tracking submissions from schools and obtaining input on improving the process.

The entry process requires some time and effort, but the materials you produced for NATEF certification are an excellent resource. You must perform a thorough self evaluation of your program and involve other members of your school, including the administration. The improvements in your program that will result from going through the process are worth the effort.

The prizes for this year's program have not been determined as they depend on donations and commitments received by AIPC during the year. If you know of any organizations or individuals who might participate in supplying items for the winners, please email [fhines@autoipc.org](mailto:fhines@autoipc.org) with the information. Additional funding for operations is also being solicited.

## The Troubleshooter Program

The AIPC/ATech Troubleshooter Training Program has been very successful. The program has had many downloads and instructors are using it in many innovative ways. Both regular classes and evening technician upgrade classes have found it effective. The program has been used as a pretest for transfer students, a post test for students finishing the electrical area, and as a self evaluation for practicing technicians. If you think your electrical/electronics training section is doing the job, let your students try to identify the faults in these circuits.

Some instructors have asked for additional support materials, for example - student activity sheets. If instructors would like to develop those or other support materials and wish to share them with all instructors, send them to [fhines@autoipc.org](mailto:fhines@autoipc.org). They will be placed on the AIPC website for everyone to download.



## Education Foundation

### Educational Grant Opportunity

The IMACA Education Foundation was formed in 1999 to promote educational training and assistance to persons or organizations for the advancement and improvement of automotive air conditioning education and related technology. The Foundation operates exclusively for charitable or educational purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code.

In furtherance of that general purpose, the Foundation performs the following specific activities:

1. Awards financial assistance to qualified organizations for the advancement and improvement of automotive air conditioning education in order to benefit specific schools, educators and students;
2. Awards grants and endowments to advance and improve the automotive air conditioning industry by supporting vocational institutions, high schools, private and public colleges and universities.

The Foundation will make awards and payments of various grants using the Foundation's funds as determined by the Foundation's Board of Directors.

If your organization is a qualified tax exempt, charitable or governmental entity and has an interest in seeking additional funds to support qualified training programs, please submit to the Foundation a one-page, type written letter briefly describing the general purposes for which the proposed grant would be used. The letter, with appropriate contact name and address for the Applicant, should be mailed to: **Executive Director, IMACA Education Foundation, 6410 Southwest Blvd., Suite 212, Fort Worth, TX 76109.**

**Editor's Note:** This is a great opportunity to receive some additional funds for your program. All that is required is a one page letter describing your need. ATech through AIPC is offering special pricing on ATech Air Conditioning Training Systems if purchased with an IMACA grant. Request specifications on the ATech systems from [sales@atechtraining.com](mailto:sales@atechtraining.com). Don't miss out on this opportunity, time and funds are limited!

## Why Bother Including Environmental, Health And Safety In Automotive, Body and Truck Programs

In my 19-year position as Director of a college Automotive Training Center, I would attend OSHA and EPA seminars and immediately feel overwhelmed and frustrated. I didn't know what was truth and I didn't like to be threatened. My reaction to all of this was to ignore the situation. This meant the shop did not receive the safety and environmental attention it should have. This also meant our courses did not include the environmental, health and safety information they should have. By the way, the college's safety officer did not follow many of the OSHA and EPA required regulations either. Another situation that worries me is, I have an AAS in Automotive Technology, a BS in Vocational Education and a MS in Occupational Education and these programs did not cover environmental, health and safety in an appropriate depth. So, they did not prepare me to teach this information properly.

Having spent the past 8 years working and learning about EPA and OSHA issues I have discovered three things:

- There is a language barrier to understanding environmental, health and safety issues. Just as automotive has a technical language, OSHA and EPA have their own language. A basic understanding of their terms makes it easy to understand the standards and regulations.
- There are some regulations that are important for the industry and schools. However, most automotive schools do not teach them.
- If automotive, body and truck programs do not teach this information, who will? Students need this information for their apprenticeships, internships and full time jobs. They need it as technicians, managers and owners.

Whenever I talk to instructors, the most common responses are: "OSHA hasn't been here yet." "I do not have the time to teach this." My response to these statements is this:

Some of the material that hasn't been covered really worries me as it involves training and information that is required by regulation and government standards. The lack of this information has caused people in the industry and schools to harm the environment, be fined, sued and injured. It is relatively easy to add the required activities and information.

Some people in automotive education and the industry aren't too happy about having to learn about environmental, health and safety issues. They would rather be repairing vehicles and learning the newest

technical information. But... the reality is, there are environmental and safety regulations, which affect this industry, schools and YOU! People are getting hurt, being exposed to major risks, and yes, even dying on the job.

Here are some true stories that help illustrate why workplace environmental, health and safety should concern YOU!

### Environmental

- Preparing to sell a dealership, it was discovered during the required environmental land audit, that hazardous wastes had been dumped down the shop drain. The drain emptied into a septic tank. The whole community now has to use special water treatment as the hazardous wastes contaminated their drinking water. It will take approximately \$300,000 to clean up the land before the property could be sold.
- A shop was charged \$400,000 in EPA fines and clean-up fees due to a leaking wastewater tank. The service director indicated that he should have known more about secondary containment and that his lack of understanding helped cause this situation.
- If technicians and managers know how to clean up spills properly, they can save their employer money and handle the material safely.
- If technicians know how to properly dispose of used oil, solvents, paints, batteries, antifreeze and tires, they can save their employer money.

### Safety and Health

- Employers are required to provide personal protective equipment (PPE) and certain training. Owners, managers and technicians tend to ignore personal protective equipment and injuries and fines are occurring. Schools have told me they do not have to follow this rule because they are not a business. The reality is that OSHA may not fine a school for a student injury caused by the lack of PPE, but the student can sue through a civil suit. Schools are liable in this situation!
- Considering the problems with HIV and hepatitis, technicians and students need to be aware of how to work around blood from cuts, injuries and customers' cars that have been in an accident.
- Many technicians and students develop chemical sensitivities from improper handling of shop chemicals. Once developed, these sensitivities will stay the same or get worse. They will never

go away.

- Too many shops do not have an appropriate Right to Know program. This is the most fined area in the automotive industry. Students need to know this information for their school and work experience!
- OSHA looks very favorably at businesses with safety programs. When a business has a safety program, OSHA tends to reduce any fines and limits the type of inspection.
- Lack of shop safety meetings and procedures have helped cause the following types of injuries: dermatitis, bad backs, hernias, carpal tunnel, eye injuries, foot injuries, crushings, chemical poisonings, respiratory disorders, fractures, vision loss and more.
- Technicians should know that used oil is a carcinogen and how to handle it safely.
- The improper use of a blowgun, and improper air pressure, caused a technician's hand to blow up like a balloon. In a similar incident, a technician had his stomach become detached from the intestines.

These are only some of the stories I have discovered. The bottom line is this:

- Safety programs and meetings in schools and industry help limit injuries, accidents and fines.
- Schools are being cited. If a school is cited, there is a time consuming process that has to be followed including fixing the problems. The failure to fix problems can cost thousands of dollars per day.
- Environmental awareness and compliance with regulations limits fines and costly clean-ups.
- Automotive, body and truck students need to learn about environmental, health and safety to be prepared for the reality of the work environment.

Fun and Easy Learning, LLC can provide your school with student safety kits and training materials so you can teach safety and environmental as part of your existing program. A Teacher's Guide is available that details the topics that need to be covered and easy ways to insert the material into existing lectures and labs. Train the Trainer seminars are available. Visit our web site at [www.funandeasylearning.com](http://www.funandeasylearning.com) or e-mail us at [info-fun@funandeasylearning.com](mailto:info-fun@funandeasylearning.com) or call at 505 899-5380.

Author: Jessica Levy, co-owner of Fun and Easy Learning, LLC is a certified OSHA trainer and has spent years working on automotive EPA issues.

## AIPC 2003 Awards Program Winners

### Secondary Programs:

#### National Winner

[Central Nine Career Center](#)

Automotive Service Technology

Nick Banos, Director

Greenwood, IN

#### Runners Up

[East Valley Institute of Technology](#)

Automotive Technology

Linda Tani,

Grants/Continuing Education Director

Mesa, AZ

[Technical High School of Carroll County](#)

Automotive Service Technology

Sonny Reeves, Instructor

Carrollton, GA

### Post-Secondary Programs - Generic:

#### National Winner

[Skagit Valley College](#)

Automotive Technology

R. Scott Hall, Dept Chair/ Instructor

Mount Vernon, WA

#### Runners Up

[Elizabethtown Technical College](#)

Diesel Technology

Jerry Clemons, Auto/Diesel Instructor

Elizabethtown, KY

[Delaware Technical and Community College](#)

Automotive Technology

Sam Brittingham, Dept. Chair

Georgetown, DE

### Post-Secondary Programs - Manufacturer-Affiliated:

#### National Winner

[Ranken Technical College](#)

General Motors ASEP Automotive Maintenance

Technology Program

John Wood, Automotive Instructor

ST. Louis, MO

**AIPC 2004 Awards of Excellence Documents available on [www.autoipc.org](http://www.autoipc.org).  
Start Early and Win**



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Automotive Industry Planning Council



Automotive Training Managers Council

## And actively supports:



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