

## ATech/AIPC to Host Reception/Workshop at NACAT

ATech/AIPC will host a reception/workshop at the NACAT conference in Long Beach, CA from 7:30PM to 10:30 PM on July 17th. Everyone is invited to enjoy the free food, open bar, and problem solving discussions. The NACAT conference is being held on the Queen Mary ([www.queenmary.com](http://www.queenmary.com)) from the 16th through the 20th. Visit either the NACAT website ([www.nacat.com](http://www.nacat.com)) or the California Automotive Teachers website ([www.calautoteachers.com/nacat2007.htm](http://www.calautoteachers.com/nacat2007.htm)) for more information on the conference. While the reception/workshop is being held on a free evening during the NACAT



conference, NACAT as an organization has no involvement with the planning, funding, or agenda of the event. **You do not have to register for the conference to attend this event.**

The main purpose of the event is to have open discussion on the various problems associated with automotive/heavy duty public training in the United States. The agenda as it presently stands:

- 7:30 - 8:00**, Open registration and get acquainted
- 8:00 - 8:15**, Update on CAT- NATEF dialogue, Drew Carlson, past President of CAT
- 8:15 - 9:00**, "The State of Automotive Training", Fred Hines, ATech Training President and AIPC Chairman
- 9:00- 10:00**, Open Question and Answer Session

As most instructors know, there has been an ongoing discussion between NATEF and CAT. I believe it to be productive and applaud both NATEF and CAT for their efforts. Drew has agreed to present a short update on the discussions. For good things to happen we must work together as a group.

I will present an update on the activities of AIPC as related to:

- AIPC Awards for Non – Certified Programs
- ATech/AIPC Donation Program
- Teacher Shortage Problem
- Listing of available Positions
- Listing of available Candidates
- Consolidation of information from all states as to teacher certification requirements.
- College Credits for ASE Certifications

- Teacher Salaries - a practical approach
- Assistance to potential teachers
- Establishment of a "Task Force"
- The "Cockroach" Approach

If you want to improve the chances that your questions/concerns will be addressed, submit them before the conference by email to [kjewell@atechtraining.com](mailto:kjewell@atechtraining.com). Especially consider this if you will be unable to attend.



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### AIPC Application Deadline

The deadline for submitting your application for the 2007 AIPC Awards Program is July 16, 2007. The application does require some work, so get started soon.

Over the years, millions of dollars in equipment have been donated to schools. In the last 5 years alone, ATech, ASE, DaimlerChrysler, Honda, ASA, and NACAT have donated over \$2,500,000.00 in equipment, vehicles, tool certificates, and organization memberships.

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### ATech's Donation Program

Over the last two years, ATech with the assistance of Ford has donated over \$200,000.00 of training equipment to both certified and non-certified schools across the country. If you don't have a donation application on file with ATech, you need to submit one as soon as possible. Download the application document from the ATech website.

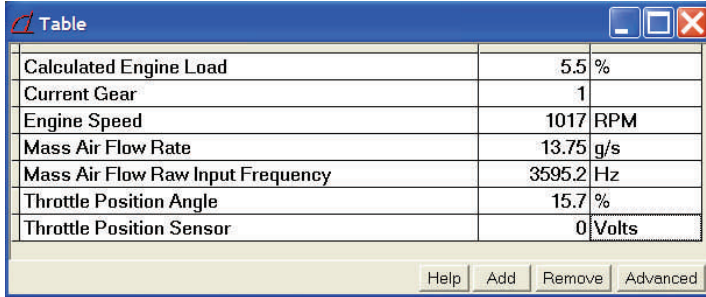
The last item donated was an older model Robinair Recovery, Recycling, and Recharging unit. This was a unit that was still in the original shipping container. Its value was over \$7,000.00. It was donated to Vale High School automotive program in Vale, Oregon.

Items become available on a regular basis. Some are trade-ins that ATech refurbishes. Others are new.



# AutoTap Scan Tool Record Function

# Cheat 'em if you can! II



Parameter	Value
Calculated Engine Load	5.5 %
Current Gear	1
Engine Speed	1017 RPM
Mass Air Flow Rate	13.75 g/s
Mass Air Flow Raw Input Frequency	3595.2 Hz
Throttle Position Angle	15.7 %
Throttle Position Sensor	0 Volts

Figure 1

Some people have experienced problems trying to record vehicle information and then play it back in the class room. It appears to be a quirk in the program but has a fairly simple solution.

When you set up to record the information during your drive, only use a table to record the data. A table is shown in Figure 1. You can include as many items as you desire but you should always consider the update rate if you have over 10 items.

After recording the data, it can be played back in the table form and/or graph form as shown in Figure 2. The graph form has the added advantage of a cursor indicating playback position and also step buttons which allow you to

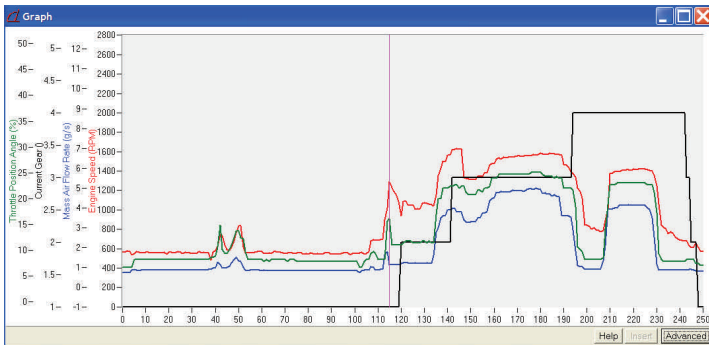


Figure 2

move one step forward or backward. If you have both a table and a graph, as the cursor is moved, the information at that position will also be displayed in the table.

The graph in Figure 2 shows the relationships between throttle sensor position, mass air flow, engine speed, and current gear. The AutoTap used in record mode can make a very effective educational tool for engine dyno data, actual vehicle road tests, and car clip information.

It never seems to stop. Individuals and companies that will intentionally mislead instructors and administrators with the sole intention of obtaining a sale. Following last month's newsletter, we have been in contact with the Attorney General of an eastern state as to the possible felony—level fraud that took place recently. The company that participated in this deception may lose their right to sell products in the state and may have some of the individuals concerned incarcerated.

Now, some individuals are attempting to mislead instructors that a program with a General Service Technician certification by NATEF will satisfy their state's requirement for a NATEF certified program. **There are no states that recognize the General Service Technician program as a substitute for the full NATEF certification.** While I believe the GST program to be a more suitable program for high school automotive, it has never been accepted by the states. Don't be misled by the shysters.

On a related topic, in a previous newsletter article a bid was mentioned in an eastern state that included 5 and 10 dollar parts included with thousand dollar trainers. It was obvious that this was a fraud attempt and possible criminal activity.

The Attorney General of the state has now expressed an interest in what took place as it would be considered a criminal activity at the felony level. It appears that there may have been collaboration between individuals internal to the organization and some external educational representatives. Upcoming newsletters will contain additional updates. **Again, to save your program money and protect your future, ask anyone trying to sell you something for their standard price list. If they won't give it to you or cause it to be sent to you, don't do business with them.**

Recently, we have seen another proposal where prices were dramatically increased over the typical selling/bidding price of the manufacturer. By not providing a standard price list, they are free to price the product at **"whatever they can cause the customer to pay"**. Sort of like buying a car without the manufacturer's suggested retail price listed on the window sticker.

Another thing you can do is make sure ATech is on the bid list for any proposals you submit. It is guaranteed that all manufacturers price their products much more fairly when they know ATech is one of the bidders. If you want a copy of ATech's standard price list, visit the ATech website, [www.atechtraining.com](http://www.atechtraining.com). Go to the Request Product Information page and check the price list box. We will email you one.

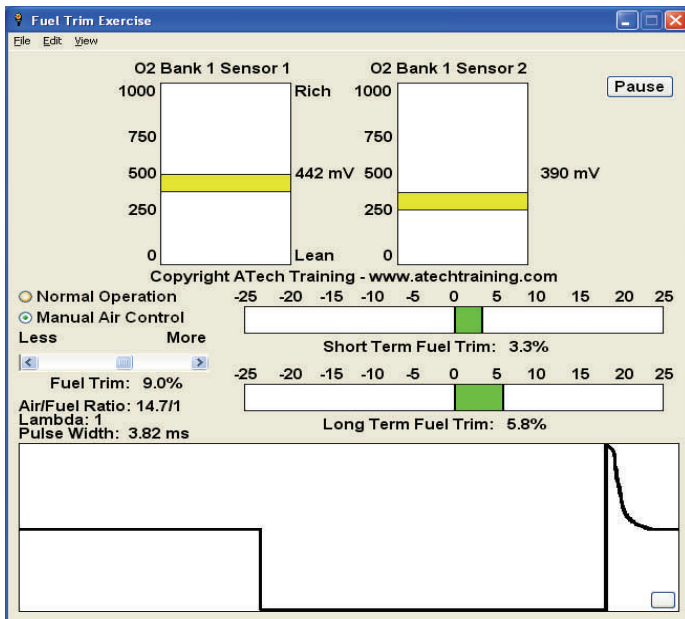
**AutoTap**<sup>®</sup>  
OBD II Diagnostic Scanner

# Simulators, Demonstrators, and Parts Racks!

ATech builds simulators and demonstrators but not “parts racks”. Let’s look at the definitions.

**Simulator** = a device, instrument, or piece of equipment designed to reproduce the essential features of something, for example, as an aid to study or training.

**Demonstrator** = something which shows people how to do something or explains how something works.



Fuel Trim Simulation

An example of an ATech simulator is the “discovery” based fuel trim simulation program that can be downloaded from ATech’s website. It illustrates the complete relationships of air fuel ratio, short term fuel trim, long term fuel trim, and injector pulse width.

One of ATech’s most popular demonstrators is the General Motors OBDII training system. What makes it a demonstrator as opposed to a simulator? From the definition given above; “a demonstrator is something which shows people how to do something or explains how something works”.

The GM OBDII training system actually operates like the vehicle. It allows students to perform a drive cycle in the same procedure that it is done with the vehicle. The parameters that can be pulled with a scan tool are the same as would be pulled on a vehicle. If you want see mode 6 information for the catalytic convertor PCM test, request it with the scan tool. Then run a drive cycle with an under performing convertor and see the resulting change in the mode 6 data that is returned by the scan tool. This is a real world system operation demonstration.

Do you want a mass airflow sensor that actually produces the typical values seen during vehicle operation: Or do you want one hooked to a blower which produces a MAF signal that has no relationship to vehicle operation and sets a fault code the instant the blower is turned on? Even better, how about one the students can blow into and see the effects? Do you need to

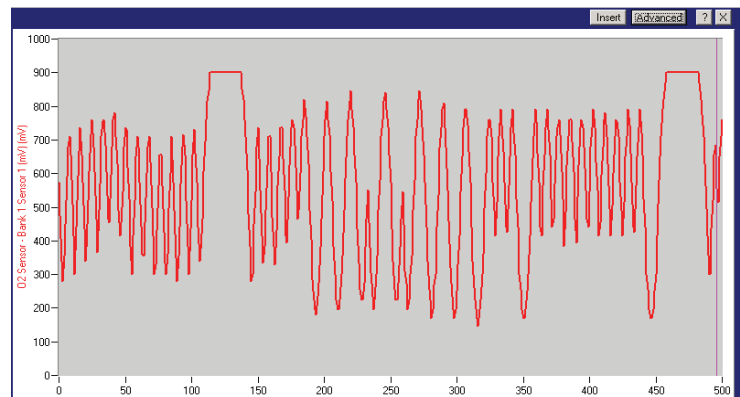
buy a \$8,000—\$9,000 trainer so that students can blow into a MAF sensor? You can build one for about \$5.00 and save the money for a real OBDII training system.



General Motors OBDII Training System

The figure below shows an oxygen sensor waveform from the trainer. The original waveform was modeled and shaped at the request of Ford to make it very realistic as compared to the actual waveform from the vehicle. The waveform effectively illustrates the varying switching speeds and amplitudes that result in the infamous “switch ratio” for catalytic convertor testing. Ask to see that on any other OBDII trainer. There are no other training systems in the world that run realistic closed loop and drive cycles like ATech training systems.

“Parts Racks” are a truly special form of training aid and do have their place but not now when they are sold as actual OBDII systems. Parts racks are great for showing the visual characteristics of parts such as resistors and fuel injector parts. But these can all be made locally by the instructor or students for very little money.



If you have been sold an OBDII trainer that does not run in closed loop mode or will not perform a drive cycle, you have a “parts rack” of OBDII parts. Contact ATech, we may be able to give you a trade-in allowance for a real training system.

# NACAT CONFERENCE 2007

Hosted by the California Automotive Teachers Association



## WHERE?

Aboard the dry docked Queen Mary Luxury Liner, Long Beach California  
Does it move? No, you won't know you're on a ship.  
There are casual as well as formal restaurants and lounges aboard the ship.



## WHAT?

This is a unique week long family oriented event which provides professional development seminars, a vendor trade show, networking, scholarships, industry tours, family activities, a banquet and honors program, and new friends you will value for years to come.

## WHY?

In order to provide automotive and related instructors the latest technology and exposure to teaching methodology and advanced knowledge for students in their classrooms.

The Queen Mary was chosen for its location and ability to house all of the major conference activities including sleeping rooms in one site. Local shopping and attractions are just a few steps away or you can take advantage of free shuttles to local spots. Long Beach has rolled out the red carpet to us with a warm invitation and hospitality.

## CONFERENCE REGISTRATION

Registering for this conference is easy. Just go on-line and visit the NACAT website a [www.nacat.com](http://www.nacat.com) and click on the NACAT 2007. You will find a registration form there that you can download, fill out and send in with your check made out to NACAT 2007.

## HOTEL REGISTRATION

For hotel registration call (562) 435-3511 and identify yourself as attending the NACAT 2007 conference. Your regular stateroom conference rate will be \$125.00 per night which is also good for a few days before and after the conference. Attempts to register online will not recognize the conference rate so make sure to call the number listed above. The ship's staff reported higher than average booking for our conference before the holidays so we encourage you to make your reservations as soon as possible before the rooms run out. We will have overflow rooms available at near-by hotels as needed.

### Conference Activities

**ATech Reception/Workshop**  
**Seminars**  
**Industry Tours**  
**Trade Show**  
**Family Activities**  
**Annual Valve Cover Race**  
**Family Bar-B-Que**  
**Banquet**

### Contact Information

**Contact person: Wayne Olson**  
**Golden West College**  
**P.O. Box 2748**  
**15744 Golden West St.**  
**Huntington Beach, CA 92647-2748**  
**Phone: 714.895.8792**  
**Fax: 714.895.8164**  
**E-mail: [wolson@gwc.cccd.edu](mailto:wolson@gwc.cccd.edu)**  
**[www.nacat.org](http://www.nacat.org)**

# New ATech Website!



**ATech Training, Inc.**  
**Automotive Technology**  
12290 Chandler Drive  
Walton, KY 41094  
Phone: (859) 485-7229  
Fax: (859) 485-7299

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[Workshop Brochure](#)

[ASE/NATEF Certification](#)

[AIPC Award Applications](#)

[ATech Donation Application](#)

[Request Product Information](#)

[Free Instructional Downloads](#)

[Build It Yourself Trainers](#)

[Technical Support](#)

Recently the ATech website was redesigned and below is a preview of information found on the site:

## [Home](#)

This page features ATech products and upcoming events.

## [About Us](#)

Here you will find the history of ATech and how it was started.

## [Products](#)

The products page is detailed by category and very easy to use.

## [Catalog](#)

The product catalog is provided in two versions:

**(4Meg) PDF Low resolution version**

**(9Meg) PDF Medium Resolution version**

## [Newsletters](#)

ATech & AIPC Auto Teacher News newsletters are provided on this page. You will need Adobe Reader to view the newsletter and a free download option is provided on the page for your convenience.

## [Workshop Brochure](#)

The workshop brochure outlines the program agenda for invitational workshops offered by ATech/AIPC. This program meets the NATEF annual 20 hour industry update training requirement.

## [ASE/NATEF Certification](#)

This page details the four area certification process outlined by ASE and NATEF.

## [AIPC Award Applications](#)

Each year AIPC presents the Excellence Award to Automotive Programs across the country. The applications for the 2007 Award must be submitted to ATech no later July 16, 2007.

## [ATech Donation Application](#)

ATech has a donation program whereby refurbished and some new equipment are donated as it comes available. To be considered for this program complete the application and return to ATech.

## [Request Product Information](#)

Complete the form for product information and submit online to ATech.

## [Free Instructional Downloads](#)

ATech provides free instructional download materials for the private use of individual instructors.

## [Build It Yourself Trainers](#)

Register and then choose from two trainers to download and build yourself.

## [Technical Support](#)

Notify ATech of any technical difficulty by completing the online form. Our friendly professional staff will respond promptly.

# Why Do You Teach?

A lot of my friends ask me why I miss vocational teaching; they can't fathom why I would actually want to teach a bunch of non-achievers, dropouts, jailbirds, substance abusers, and others not worthy of the "Great University?" (Their words not mine.)

I miss it because it made me feel like I made a difference. Having a skill, a trade holds great personal value for me; it represents pride, confidence, and freedom. I get immense pleasure in the success of my former students.

Is that hubris? Some of them have come a long way, not all of them stayed in the trade, but they are working. For the most part, 500 or more of them have done ok for themselves, their families, and society. Sure, I get some of that here at Purdue, but I make less of a change and less of a difference to the students. This level of "higher education" is open only to those deemed worthy, the bright and very bright, the wealthy, and perhaps a few individuals who show promise of excellence in sports.

Sadly, it's something that became very clear to me in my own educational experiences way back in the 60's; we very definitely do live in a stratified society. It amazes me

that in the 21st century we still have so many people in the educational establishment who are bigots. Oh, they will tell you they are prejudice free, and perhaps they are when it comes to race, religion, ethnicity, and obvious physical disabilities. However, when it comes to academics, literacy, and social class, it's a different story, a level of meanness edges into their voices. " Those people, those kids, why don't they pull themselves

up by their boot straps, they are lazy, intellectually they are not up to the rigor, it's a genetic deficiency, we give them the opportunity."

The argument that our egalitarian education system compensates for inequalities generated elsewhere in our society is CRAP! No matter what your politics are, it is difficult not to recognize that our education system is badly flawed. On the other hand, it is very efficient in doing what it was designed to do, maintain a social division of labor and fit students into their appropriate position in the class structure. This includes allowing 20% or more of our kids to leave the system without the tools necessary for survival.

Regardless of President Bush's intent with the passage of the 2001 " No Child Left Behind" Act, it would appear that the result may be to take away opportunities from those who need them the most. The Labor Department's youth opportunity grant program for disadvantaged youths will be phased out. Over 300 million in job training programs will not be funded.

The "highly qualified" clause in the new federal K-12 education law (requiring a minimum of a bachelor's degree) will make it even more difficult to fill the many vocational education teachers positions that remain unfilled at the secondary level.

Nationwide testing and the punitive treatment of schools that do not meet the standard is not the solution for our educational problems.

Your federal tax dollars only cover about 10% of the cost of public education, big deal! President Bush may be just as sincere about leaving no child behind as his mom was about literacy, but it costs more money not less. I don't know about you, but I'm not in favor of vouchers; they introduce a whole new can of social worms!

The other problem may be that the President must work through the existing "educational establishment." A system whose values denote a low status to occupational programs vs. academic programs. Who is the educational establishment? For the most part, they are people who have received the benefit of many years of education, in education, 22 years or more to attain a PhD., it is only natural that they would hold academics in high esteem.

Over the years many of us old-time-vocee's have witnessed the dismantlement and closure of quality vocational educational programs because they were perceived by the establishment as, not "high-tech" enough. In their rush to become "real colleges", many excellent technical institutes and two-year training schools phased out successful and needed "hands-on" programs in favor of cheaper and easier to deliver general education courses. The rationale was the promise of matriculation to the Great Universities.

Ok! I've been preaching to the choir, a lot of you have probably experienced this first hand, and already agree with a lot of what I have said. So what else is new? The Great Universities are realizing the need to put some Hands-On back into their curriculums. In some states, community colleges, and secondary education are forming partnerships that will enhance the opportunities for kids, problem is we don't have enough experienced, trade trained teachers to deliver the instruction.

**Fritz Peacock**  
**Supervisor of Technical Services**  
**Ray W. Herrick Laboratories**  
**Purdue University**





## A.A.S. DEGREE FOR CERTIFIED AUTOMOTIVE PROFESSIONALS

If you are an ASE certified technician, you may be well on your way to earning an Associate of Science Degree in Automotive Technology from Santa Fe Community College.

The American Council on Education's Commission on Educational Credit and Credentials (ACE) has recommended that college credit be granted for passing ASE exams. Your ASE certification can be worth college credit towards a degree.

Santa Fe Community College has developed this opportunity for automotive technicians and managers to get a head start toward an A.A.S. Degree.

### DEGREE REQUIREMENTS

Technical courses - 38 credit hours

(credit may be earned with ASE certification – See Course Requirements)

Co-op work experience - 15 credit hours

(credit may be earned by current and/or previous automotive service or management experience)

Academic courses - 15 credit hours

(courses may be taken evenings or on-line)

A minimum of 15 credit hours must be taken at Santa Fe Community College to receive this degree

### WORK EXPERIENCE REQUIREMENTS

Degree requirements include a total of 15 Credit hours of AER 1949 & AER 2949 cooperative training.

### ACADEMIC REQUIREMENTS

In addition to the technical and work experience credits, you must also take the required academic courses or an approved substitute. Successful completion of all six academic courses is required.

Visit [www.sfcc.edu](http://www.sfcc.edu) for complete details of the program.

### For further information contact:

Santa Fe Community College  
3000 NW 83rd Street Bldg. 1-50  
Gainesville, FL 32606

Tom Mason  
Program Advisor  
Phone: (352) 395-5361  
Email: [tom.mason@sfcc.edu](mailto:tom.mason@sfcc.edu)

Mario Schwarz  
Program Coordinator  
Phone (352) 395-5250  
Email: [mario.schwarz@sfcc.edu](mailto:mario.schwarz@sfcc.edu)

## Global Warming and The Scientific Method

When people talk about the “scientific method” what do they mean?

“**Scientific method** is a body of techniques for investigating **phenomena** and acquiring **new knowledge** as well as for correcting and integrating previous knowledge. It is based on gathering **observable, empirical, measurable** evidence, subject to specific **principles of reasoning**.

The process must be **objective** to reduce a **biased** interpretation of the results. Another basic expectation is to document all data and methodology so it is available for careful scrutiny by other scientists, thereby allowing other researchers the opportunity to verify results by attempting to **reproduce** them. This also allows statistical measures of the **reliability** of these data to be established.”

Notice the key points are that the new knowledge must be based on observable, measurable evidence. It must be evaluated in an objective unbiased manner and other researchers must be able to reproduce the results using the same data as the original scientist.

The global warming discussion today is not based on the scientific process because no where in the description does it say, harassment of dissenters, television commercials, or threatening letters from senators. Global warming may be real but it is most likely a natural fluctuation of the earth - sun relationship. To stretch it to being caused by human activity is in no way related to the scientific method. Volcanoes have dumped much more carbon dioxide into the atmosphere than mankind has ever produced.

Having built a few computer models over the years, I can say with absolute certainty, that to build an accurate computer model with the number of variables and uncertainties of the global warming crowd is impossible. At best, you could hope for some direction but that would be all. **This is “manufactured science” and is an embarrassment to the scientific community.**

## Mazda Donated Vehicles

The 4,700 vehicles that Mazda lost on an ocean freighter that foundered last year are still tied up in legal matters. Considering that the value of these vehicles is over a \$100,000,000.00, it is easy to understand why it isn't moving fast.

They still intend to donate some of those vehicles to schools. Hopefully it will be at least a couple of hundred. Primary concerns are ensuring that the vehicles and/or their parts never find their way to the market or parts stores.

We will continue updating everyone as information becomes available.



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A Tech Training Inc.

**A Tech Training is a member of:**




Automotive Industry Planning Council



**Extremely Important!**

If you know of automotive programs at any level, high school, community college, university, that have closed in your State in the last 5 years, send the information with details to [kjewell@autoipc.org](mailto:kjewell@autoipc.org).

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