

California Automotive Teachers

Fall, 2013

Issue #43

CAT NEWS

www.calautoteachers.com

Newsletter Highlights

- "New" Smog Check Program
- Officer Reports
- Elusive Current Draws
- Variety of Advertisements!

What's in this issue?

The New Smog Check	1
President's Letter	3
Executive Director's Report	4
HS/ROP Officer's Report	5
WEBMASTER Report	9
New BAR Chief Appointed	9
Ah! Retirement	10
"New" HS/ROP Officer	11
Program Accreditation	12
Current Draws	17
Excellence in Education	18
ASCEF Scholarship	20
CalARC WEBSITE	23

Fall 2013 Conference

26

Are You Ready for the New Smog Check By Vince Mow

Even from the early days when California won the battle with the USEPA to replace IM240 with ASM, State administrators have learned that along with the inevitable unpopularity of mobile source emissions control testing comes a constantly changing landscape of compromise between science, politics, and clean air.



While the lack of CAN protocol integration may have been somewhat of an embarrassment to the Bureau of Auto Repair, the

causes of that program deficiency have a lot to do with the design of the new program. As anyone who listens to shop owners complaining about high costs of maintenance and updates for the BAR97 EIS knows, software changes have historically put shops at the mercy of the vendors. Because the BAR97 specification did not originally require full OBDII capabilities, the cost of hardware and software updates to make all the legacy equipment fully OBDII compliant was seen as prohibitive. So here is a partial list of the new program features that are intended to be a huge advance over past practices:

- Full Generic OBDII capabilities including CAN protocol
- Requires 99%+ vehicle compatibility without fallback tailpipe testing
- Free software updates for the life of the DAD product
- Free first year equipment warranty
- DAD interface is the only component that must be purchased from Smog Check vendors
- Standard PC, Bar Code Scanner, etc. may all be supplied by users
- Enhanced methods for detecting fraud and anomalies
- Much faster test than ever before

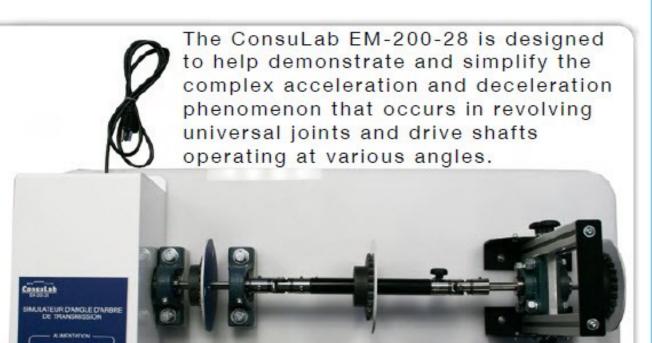
So as you can see, although we may still be the only State with an OBDII inspection program that can't pass or fail a CAN protocol vehicle, Smog Check Program changes coming in 2014 will make that a thing of the past. From the standpoint of someone who

(Continued on page 24)

The California Automotive Teachers will meet at Chabot College for the Spring 2014 Conference on April 25 & 26



Check out these ConsuLab trainers





A ConsuLab custom engine bench can be equipped with an engine from any vehicle of your choice. This custom trainer can be designed to incorporate any vehicle system you require like this Ford Focus **GDI** shown here. In fact, we are making more and more clean diesel TDI trainers. Ask how we can make an engine bench for your classroom!

WWW.CONSULAB.COM

President's Letter by Don Schumacher

I hope everybody enjoyed the Fall 2013 CAT Conference at Santa Barbara City College. What a beautiful backdrop for another successful conference. Dave Brainerd, Bob Stockero and Glenn Troub did a great job hosting this event. The tours were full and by all accounts everybody enjoyed them. I also want to thank all those who work behind the scenes. Anyone who has hosted an event like this knows how important their support staff is. As usual lunch was fantastic, although it was a little rocky getting started. I want to thank all the members for your patience. However, with the delay came an opportunity. Many of you came up to me and other board members afterward



and commented on how they enjoyed that format, holding the general meeting then having lunch. That format will be something the board will discuss at the Winter Board Meeting.

Unfortunately at De Anza College we had some technical difficulties that resulted in the postponement of the election for Vice President. I want to congratulate Glenn Troub, our newly elected V.P. from Santa Barbara City College. For those who did not attend the conference, our High School/ROP rep. John Chocholak had sent a letter to the board a few months ago announcing his retirement from that position. John decided after 20 years with CAT it's time to spend quality time with his family and finish his 1949 Kaiser Traveler 3 door Station Wagon. John has been an outstanding member and High School/ROP Rep. He dedicated himself to fighting against the closures of High School programs and worked with industry to help support the programs that remain open. As most of you know over the last 3 years John along with Steve Tomory developed a small engine program that donated truck loads of engines from Kholer and Briggs and Stratton. We can't thank you enough for the tireless work! John has assured us that he is not riding off in to the sunset. John will continue to work with our new High School/ROP Rep., Armando Hernandez who was elected to the position at Santa Barbara City College. For those of you who do not know Armando (you can read about him on page 11 of this newsletter), he teaches at Montebello High School and is looking forward to working with John.

We had nine new members and first time conference attendees at Santa Barbara City College. With that I encourage all our members to spread the word about CAT. If you know somebody who is not a member yet keep the pressure on. They will thank you in the end. Also, please make an effort to join ASCCA. Both organizations will benefit. I encourage any member who wants to know what's happening with the Board to attend a meeting. Meetings are held the Friday night before the conference and start at 7pm.

Our next conference will be held at Chabot College April 25th and 26th, 2014. Phil Jelinek 1st Past President and Conference Coordinator will be working with the Chabot Faculty to make it another can't miss conference. Remember to register online early if you want to attend one of the tours because space can be limited. Again thanks to Tom Broxholm and Steve Vail for making the registration process simple and easy.

See you all at Chabot!

Executive Director's Report by Bob Barkhouse



By the time that you read this report, the candles are out in the pumpkins and you have eaten all the candy left over that you carefully bought because it was your favorite and you knew that it was up to you to finish it off. Now it is time to think of Turkey Day and all the family festivities that go with it. Don't forget on that day to be thankful for all that we have here in the United States and the great CAT Conferences.

I have to tell all of you how proud I am of CAT and you, the automotive teachers, and the industry, that supports your classroom. As I travel around the state doing your business, I have a chance to see other associations and how they work. CAT is a poster child for them to emulate. While others are facing a declining membership and in turn a dues that is considerably higher

than ours, CAT has been able to hold its membership to around 300 with dues at \$50 and still provide your needs. Also, most of these other associations also see a dwindling attendance at their conferences with a decrease in venders at their mini-trade shows. CAT on the other hand continues to have about 200, or slightly more, in attendance with industry supporting the trade show with about 20 venders. Most of this success is due to your Board and Officers who are putting in many hours outside the classroom to make sure that your conference is a top notch program that you have grown to expect. Thanks to all of you, it takes all of us to keep this thing going!

There are 8 CTE bills in the legislature this year as follows:

AB 708 - Teachers: compensation: Career Technical Education Teachers.

A teacher with a 5-year clear designated subjects career technical education teaching credential, that requires 3 years of work experience, be the equivalent of a Baccalaureate Degree, and would require that the holder be placed on and advance along the salary schedule of the school district in the same manner as a teacher with a Baccalaureate Degree. STATUS - in Assembly, held in Ed. Com.

SB 45 - The Leroy F. Greene School Facilities Act of 1998.

Would create the Kindergarten-University Public Education Facilities Bond Act of 2014, to become operative only if approved by the voters at the next statewide general election. STATUS - in Senate, held in committee.

SB 524 - Pupil instruction: Pathways Curriculum Task Force.

Would develop a voluntary K-12 curriculum to educate pupils and their families about college and career opportunities. The bill would require the task force to establish specified learning goals for pupils at elementary, middle, and high school levels and help pupils to achieve these goals. STATUS - out of Senate, in Assembly, had first reading.

SB 594 - California Career Pathways Investment.

Would require each school district and community district to create a Career Pathways Investment Trust Fund, the funds in which would be used for the purposes of financing program and administrative costs relating to the operation of career pathways programs, as provided. STATUS - out of Senate, in Assembly, had first reading.

SB 660 - Career technical education: funding.

Would, for the 2015-16 fiscal year and each subsequent fiscal year, require the Superintendent of Public Instruction, using funds appropriated in the annual Budget Act for regional occupational centers and programs, to apportion from the amounts provided in the annual Budget Act for those purposes an amount to each county office of education, school district, and joint powers agency based on the same relative proportion of funding that each county office of education, school district, and joint powers agency received in the 2012-13 fiscal year for those purposes. The bill would authorize

(Continued on page 6)

High School/ROP Officer's Report by John J. Chocholak Dramatic Findings Illustrating Value of SHOP

This should be mandatory reading for all administrators in the K-14 California public school system. The evidence is not new, just ANOTHER restatement of research that has been done over and over again for many decades. Read the piece below and give it to your school administration.

Career Technical Education Linked to Boys' High School Survival By Caralee Adams on March 4, 2013, Education Week

Making the case for career technical education, researcher James Stone III presented findings today that show enrollment in CTE is a strong predictor of staying in high school—especially for boys.

Earning three or more CTE credits within a focused sequence of courses was second only to 9th grade students' grade point average as the strongest variable affecting high school survival for boys. While CTE "did no harm" to girls' high school engagement, it did not produce a similar positive effect on females.

The results were "stunning," said Stone, a professor and director of the National Research Center of Career and Technical Education at the University of Louisville, at the National Policy Seminar of the Association of Career and Technical Education in Crystal City, Va., today.

"We have a boy problem. Boys are less likely to finish high school, go to college, finish college, go to graduate school, or finish grad school," said Stone, noting that 75 percent of D's and F's are given to male students. "We are driving them out. We are not giving them things that engage them."

The analysis was based on restricted data from the National Center for Education Statistics looking at high school transcripts for the class of 2004, the most recent set of data available, he said. While unique in showing the gender difference, Stone said the results build on other research that has consistently shown a link between CTE and higher levels of engagement and achievement.

About 400 CTE professionals have gathered this week to learn about the latest research and meet with lawmakers on Capitol Hill to advocate for CTE legislation and funding.

"Many policymakers and their staff do not actively value and support our students and programs," wrote ACTE President Karen Mason in a letter to members attending the summit. "In many cases, this is due to the fact that they have not been exposed to the data, information, and student success stories which highlight CTE's effectiveness." She encouraged members to hammer home the connection between CTE programs and the economy in discussing the future of the Carl D. Perkins CTE Act, the Elementary and Secondary Education Act, and the Workforce Investment Act.

In his remarks, Stone said it was important to emphasize evidence-based strategies that clearly link CTE with student success. Rather than thinking of "rigor" as merely meaning more courses, he said the focus should be on how to teach better. Research shows that when math, science, and English are woven into CTE courses and students apply their knowledge to real-world problems, they become more engaged and perform better.

With four-year high school graduation rates around 78 percent, Stone maintains that still one in five students is not getting a high school diploma, and CTE can be one tool to keep some of those students at risk of dropping out, he said.

Schools are increasingly preparing all students for a four-year college, when that's not the right path for many, notes Stone. And the narrowing of the curriculum is squeezing out the kinds of programs that attract boys, he said.

Starting career exploration early and developing individual graduation plans is a key to keeping students on

(Continued on page 8)

local educational agencies that operate career technical education programs to form into regions for these purposes and would require the apportioned funds to be expended only to ensure the development and maintenance of a high-quality career technical education program. STATUS - out of Senate, in Assembly, had first reading, referred to Education Committee

SB 69 - New Pupil Funding Formula

Very extensive and long bill. On page 14, covers specific CTE funding language for school districts and community colleges. Worth reading. STATUS - out of Senate, in Assembly, had first reading.

SB 540 - Career Technical Education: Recognition Certificates

After completion of 4 semesters of a CTE discipline and meeting other requirements, a Certificate can be issued. The Certificate is not in lieu of a Diploma. STATUS - out of Senate, in Assembly, had 2nd reading, referred to Education Committee.

SB 223 - Maximum Categorical Funding Flexibility and Accountability Program

If District meets certain standards it can use categorical funding in any way for the purpose of improving pupil achievement and academic instruction. STATUS - in Senate, had first reading, held in committee

As you know, these bills can change dramatically or be eliminated. Another thing that you need to remember is that some of the bills *contain other related provisions*." Unfortunately most of these bills have been put into two year bills. This means that they can be brought back into session next year. The problem will be that if the budget does not loosen up, most bills that require money will be dead. We can follow these bills by going to leginfo.ca.gov and typing the bill number into the website. You will get all of the language and the status of the bills. On April 16th, I attended ASCCA's Legislator Day at the Capitol, visiting the bill sponsors to give CAT's position.

Just a note to inform you of some new technologies coming your way. Just what you need, another technology to learn.

- Ford, Nissan and Daimler are working together to launch hydrogen powered vehicles by 2017.
- Toyota and BMW are working together to launch hydrogen power by 2020.
- Ford is coming out with inflatable seatbelts/shoulder belts that will increase the width of the belt considerably in the case of impact. The wider belt will distribute the impact energy over a larger portion of the body, hence safer.
- Telematics is a technology whereby a vehicle can send an email or text to the vehicle owner and/or a third party, such as a repair shop, alerting them of routine maintenance.
- According to Parts & People, Mitchell 1 has added 9 new videos to the product training center website. The brief
 videos focus on how to use the Pro Demand repair, diagnostic, and maintenance information program and suggest
 ways to get the most out of the system so professional technicians can become more efficient at finding information
 quickly and effectively. These videos may be ideal for your program. Go on the web and check them out,
 www.mitchell.com.

National Performance Warehouse will hold its 2014 Expo at the Santa Clara Convention Center on April 13. The Expo provides shop owners and the general public with the opportunity to meet one-on-one with manufacturers' reps and industry experts.

Parts and People also coming out with a education "eNewsletter" designed for Educators, Students, Trade Associations, Community Colleges, Vo-Techs and OEMs. It will cover industry-wide automotive aftermarket coverage focused exclusively on education and training. Sign-up by going to http://tinyurl.com/cr575cr.

AUTOMOTIVE





Automotive Maintenance & Light Repair, 1E

Thompson ©2014

ISBN-13: 978-1-1113-0741-7



Modern Diesel Technology: Heavy Equipment Systems, 2E Huzij/Spano/Bennett ©2014 ISBN-13: 978-1-1336-9336-9



The Service Consultant: Principles of Service Management and Ownership, 2E Garner/Garner ©2014 ISBN-13: 978-1-1336-1235-3

AVAILABLE DECEMBER 2013



Automotive Engines: Diagnosis, Repair, and Rebuilding, 7E Gilles ©2015 ISBN-13: 978-1-2854-4174-0



Modern Diesel Technology: Diesel Engines, 2E Bennett ©2015 ISBN-13: 978-1-2854-4296-9

AVAILABLE 2014



Automotive Technology: A Systems Approach,

Erjavec/Thompson ©2015

ISBN-13: 978-1-1336-1231-5

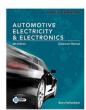


Auto Body Repair Technology, 6E Duffy ©2015 ISBN-13: 978-1-1337-0285-6

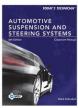
Today's Technician: **Basic Automotive Service** and Systems, Classroom and Shop Manual, 5E Hadfield ©2015 ISBN-13: 978-1-2854-4229-7



Today's Technician: **Automotive Brake** Systems, Classroom and Shop Manual, 6E Pickerill ©2015 ISBN-13: 978-1-2854-2970-0



Today's Technician: **Automotive Electricity** & Electronics Classroom and Shop Manual, 6E Hollembeak ©2015 ISBN-13: 978-1-2854-2571-9



Today's Technician: **Automotive Suspension** and Steering Classroom and Shop Manual, 6E Schnubel ©2015

ISBN-13: 978-1-2854-3810-8





62 Scenarios Covering 8 ASE Areas

To learn more about DATO, visit: http://sites.cengage.com/DiscoverDigital To request free trial access to DATO, please contact your sales representative.

To learn more about these and other related products, please visit: www.cengage.com/automotive

track, said Stone. Also, to be effective, CTE must have high-quality instruction, work-based learning programs, and active career-tech student organizations, he said. This requires more professional development to help teachers find the best ways to integrate math, science, and English into their curriculum, he added.

"We are missing the boat when young people don't have the time to engage in intensive work-based learning," he said. The new emphasis on college and career readiness puts CTE in a good position to advance that goal and support the new Common Core State Standards, Stone said.

For CTE to succeed, schools need to form strong connections with industry, Stone added. He urges educators from high school and postsecondary institutions to consult with businesses to better connect curriculum to the workplace.

A Message from the Newsletter Editor!

We always need technical articles to share with our members.

If you have an article for the newsletter

(it is never too early) please email them to:

rick@calautoteachers.com

(Continued from page 6 - Barkhouse)

ASC Education Foundation offers scholarships through it's "Cars 4 Careers" program. Scholarships range from \$500 to \$1,000 that can be applied toward tuition, tools and books. The scholarship is open to high school seniors who plan to enroll in post high school technical/academic training or college undergraduate in the automotive service field. The annual deadline is in February. Applications are located at http://www.ascca.com/scholarships/. Money to support this program comes from ASCCA members and a vehicle donation program. Many of you have old vehicles, running or not, laying around in your compound that have served your program well or someone comes in off the street wanting to donate a vehicle. Call ASCCA at 800-745-6121. The Foundation will provide free pick up; prepare all the required documents; and send you the tax documents. You will need a pink slip and if the vehicle is a factory donation to you, no parts can be removed and the vehicle **must** be crushed by ASCCA. You should keep a record of the crush in your file for the future if needed by the factory.

Now that we have a working relationship with ASCCA, it appears that there is a possibility of working with CAWA which is the California Automotive Wholesalers Association. It will be a good relationship for both of us. At the noon report that I gave to you at Santa Barbara I told you that we were working on a Summit meeting with CAWA for February. That is now put off until latter. We will keep you informed.

Some outstanding news from last spring, Brian Wheeler from Alhambra High School, in Martinez, won this year's Northern California Ford AAA contest. Hope someone can fill me in on who won the South and the State. Congratulations Brian.

A number of conferences have occurred since I last wrote to you. They were all outstanding. It never seems to amaze me, they just get better and better. They had set bar quite high for Santa Barbara and they came through with flying colors. At the Santa Barbara Conference, we elected a new Vice President and that is Glenn Troub from Santa Barbara. The Board and I have had a chance to talk and work with Glenn during the conference and the time building up to the conference. He is a good worker and is eager to get started. Welcome aboard Glenn.

Remember, KEEP THE SHINY SIDE UP AND THE GREASY SIDE DOWN. Bob Barkhouse.

WEBMASTER Report by Tom Broxholm

Just a quick note from your webmaster. In an effort to keep our conference cost to our members as low as possible we are securing another 3 years with CVent at our current rate. Remember to register early for the conference to ensure a tour seat and to take advantage of the early bird special pricing. At our past few conferences registration on the day of the conference has dropped approximately 80%. This makes registration on the day of the conference easier for everyone. This means that you can get to the vendors and workshops sooner. Remember, the best way to register is to respond to the email invitation. The first one is sent out on the first day of registration and a second one is sent out two weeks later. If you are not getting an invitation please let me know by filling out a contact form from our website.



Unperformed and Underperformed Automotive Maintenance

According to the Automotive Aftermarket Suppliers Association (AASA), unperformed and underperformed automotive maintenance represents 27 percent of the total aftermarket potential. Its recently released report, "Unperformed Maintenance," is based on analysis of a broad spectrum of product groups, including regular maintenance, engine, undercar, cooling and air conditioning; the dollar figure is reported in end-consumer dollars spent, including parts and labor and, in 2012, totaled \$66 billion, a near-record high. AASA has reported the estimate of vehicle maintenance that is unperformed or underperformed annually since 1978.

ERA of Hydrogen Fuel Cells Begins Next Year

Public attention—government funding—shifted to biofuels and electric vehicles. While some automakers pushed forward on fuel cells, others placed their bets on plug-ins, introducing mass-market electric cars that are slowly but steadily gaining sales.

ERA of hydrogen fuel cell cars begins next year [Sunday, December 1, 2013] sfgate.com

page 20

By-Wire Age is Coming; What's missing is Trust

Gingerly, the auto industry is stepping up the push for car features that work by electronic impulses instead of metal pumps, pinions, and cylinder.

By-wire age is coming; what's missing is trust [Monday, December 2, 2013] autonews.com

page 27

Governor Brown Appoints Patrick Dorais as Chief of the California DCA Bureau of Automotive Repair

Patrick Dorais, 49, of Carmichael, has been appointed chief of the California Department of Consumer Affairs Bureau of Automotive Repair, where he has served as deputy chief since 2007. Dorais served as deputy chief at the California Victim Compensation and Government Claims Board in 2007 and at the California Department of Consumer Affairs Bureau for



Private Postsecondary and Vocational Education from 2004 to 2007. He served in multiple positions at the California Department of Consumer Affairs Bureau of Automotive Repair from 1995 to 2004, including bureau chief and deputy chief. Dorais was special assistant to the secretary of the California Environmental Protection Agency from 1991 to 1995, special assistant to the director of the California Governor's Office of Planning and Research in 1991 and a legislative correspondent in the U.S. Senate from 1987 to 1990.

Retirement – Letting Go of a Dream Profession By John Chocholak

There came a point in my career when I knew that within about 18 months I was going to run out of gas (yes, I was teaching auto) and could possibly "burn out" on the job. After some 36 years of teaching, (my best dream job) I decided to actively plan on leaving my teaching position. I started work on finding my replacement BEFORE I retired on the job.

I was advised by retired teachers to carefully evaluate my decision to retire. That required discussions with STRS over many, many, months. There came a point in this work where it was clear that retirement was a good idea for me.

STRS (State Teachers Retirement System) worked with me on the specifics of planning my retirement. It was complicated, required MANY meetings with an STRS rep, but all of that work tied up all of the details of ending my long career in education. I filed all of my retirement papers with STRS and wrote my letter of resignation to my administration in September, ten months before my planned retirement date, June 17 of 2005.

I had more than one retired shop teacher encourage me not to cut myself off from education with a meat axe approach. They all advised me to "taper off" from teaching a little at a time. Clearly, these people knew what can happen to teachers like myself when they are cut off from a favored and dedicated life time of work – eventual depression and loss of purpose and self worth.

So when my school district offered me a multi-year consultancy contract with non-binding provisions for part time teaching AND mentoring other shop teachers in the district, I jumped at the opportunity. It was a great decision on my part. That consultancy helped me to slowly let go of my connection to my shops and programs at my high school, and at the same time support the needs of instructors in my old department.

But in the first year of retirement I made the mistake of not saying "NO". Just about every time some educational organization or individual asked me for help, I said, "YES". So in fact I became busier in education AFTER retirement then I was when I had a full time teaching assignment.

In my second year of retirement I started being more selective in my "pro bono" work. I kept my board position with CITEA and CAT. I allowed my car hobby club work to slowly fade away. My family time began to fill my calendar and getting away on vacations with my wife became more important.

During the next few years I began to accept professional work creating educational programs for Briggs and Stratton Corporation. Major engine companies began to make equipment available to me for donation to schools on the West Coast.

The CAT Board made a decision to actively support the donation to schools of the equipment I was getting from industry. The Board also promoted the training of teachers in how to use that equipment for instruction. Rio Hondo College, and Steve Tomory, stepped up to the plate with an equipment storage and distribution plan. By using industry contacts, the cost for transport, storage, and distribution of all donated equipment was kept to a minimum.

The success of the CAT donation/training program clearly had to do with the work of many people who will never be known to the teachers who were the beneficiaries of that entire process. For Steve, and me that work was very exciting and also fulfillment of things we had talked about for some time.

I am turning over my professional and "pro bono" responsibilities to others who appear to have the passion I have had for education all of these years of my adult life. I have built my dream garage, purchased a new lathe and mill, and intend to soon restore my old collector cars so I can drive them whenever I get the urge. I am spending more time with my grand son and my children. And I enjoy almost always being within 20 feet of my wife almost all the time.

I still volunteer and help out at my old high school. I love attending CAT and CITEA conferences. And when some desperate teacher calls me and asks for help, I do what I can to give that person my best. For me, the best part of retirement is the lack of pressure to meet professional deadlines or professional obligations. Most days now start out unfilled, like an empty cup. I get to fill that cup with whatever I decide, almost each day, almost every day.

And yes, my wife has a direct influence as what goes into that cup!

Meet the "New" High School/ROP Officer "Armando Hernandez"

For many years John Chocholak has represented CAT as the High School/ROP Officer. John recently decided to step down and he will be replaced by Armando Hernandez.

Armando Hernandez is 44 years old, married to his wife Aissa whom he met in high school, and they have 3 children; Andrea age 18, Armando age 15, and Austin age 8. He enjoys spending his free time with his family dirt bike riding, camping, and spending time in Santa Barbara.

Armando Hernandez started his career in the automotive field as a student at Schurr High School in Montebello, the same high school where he currently teaches. After graduating from Schurr High School in 1987, he attended the Chrysler Apprenticeship Program (CAP) at



Cerritos College and was sponsored by Walker Bros. Jeep Eagle in Los Angeles, California where he worked as a heavy line technician. In 1989, upon completing the program, he was hired by the Southern California Gas Company as a Heavy Diesel and Automotive Technician where he continues to work today.

He spent several years working for the Gas Co. and teaching high school auto shop concurrently before deciding to concentrate on teaching only at the high school. Although he has never stopped teaching at the high school level, he has returned to the Gas Company over the years to serve in several management positions from Project Manager Technical Advisor and most currently as the Sr. Automotive Trainer heading up the training department for the nation's largest energy company.

During this time, Armando attended California State University, Los Angeles and earned a Bachelor of Vocational Education degree in 2004 and subsequently a Master Degree in Educational Administration from the University of Concordia in Irvine. Armando is currently planning on completing his education by pursuing his doctorate next year.

Armando started his career as a high school teacher in 1995 at Los Altos High School in Hacienda Heights, California. There he found an appreciation for alternative energy. His students competed in events such as Electrathon America, the Winston Solar Challenge in Texas, The Arizona Public Service's APS 500 Solar and Electric Challenge, and for the past eight years at the Shell Eco Marathon Event in Houston, Texas where his students have regularly placed in the top twenty out of a field of 130 universities from around the world.

Armando currently serves on the Department of Education's Automotive Advisory, Curriculum Review, and the Standards writing teams. In 2011 the CAT Board presented Armando the Outstanding High School instructor award.

Welcome aboard Armando!

Did You Know?

California is the second-most expensive state in which to operate a motor vehicle, according to a new study released by Bankrate.com. The report weighed the costs of gasoline, insurance, repairs, taxes and fees in each state; California came in at \$3,966 per year, significantly above the national average of \$3,201. BANKRATE said that Georgia is the most expensive state, where a typical drive spends \$4,233 annually. Oregon is the cheapest state in which to operate a vehicle, with an annual cost of \$2,204. BANKRATE credits the absence of a state sales tax and relative low car insurance costs; also, the typical Oregon resident drives 16 percent fewer miles than the national average.

Wyoming, Rhode Island, and Nevada rounded out the five most-expensive states. Alaska, South Dakota, Montana and Indiana were the other least expensive states.

The Power of Program Accreditation by Darrell Parks, NATEF Consultant

Is NATEF program accreditation really worth it? Occasionally that question is posed by teachers and school administrators, particularly from a time and cost perspective. Well, here is an experience of one high school that recently went through the throws of program re-accreditation.

The general condition of the program at the time of re-accreditation included old and out-dated equipment, a lack of physical facility maintenance and organization, and overall general clutter. But graduates were achieving ASE certification, so course work and the learning environment were of little concern.

The general attitude of the automotive program instructors was one of complacency and their initial preparations for program re-accreditation were showed that. It seemed that the process for re-accrediting their program would be easy and they would 'just roll through it'. But then the on-site program evaluation was conducted and the overall picture changed dramatically.

NATEF standards seven (instruction), eight (tools and equipment), and nine (facilities) were rated less-than-four on the five-point scale. The NATEF P-1 and P-2 tasks being taught in engine performance were less than the required 95 and 80 percent levels, respectively. One lab and classroom appeared to be very disorganized and cluttered with outdated teaching props, and there was a need for better and safer containment of hazardous waste materials.

In fact, not one member of the on-site evaluation team representing the automotive service industry recommended that the program be NATEF accredited due to the lack of organization, the presence of outdated vehicles that were used for instructional purposes, and outdated electrical and engine performance trainers. Subsequently, the school was officially notified by NATEF that the program could only be re-accredited pending significant improvements.

As previously noted, there was a sense on the part of the automotive instructors that program accreditation wasn't really that important until the school received the official notice from NATEF that program accreditation had been rejected. According to the program administrator, the issues brought forth in the notice of rejection led to considerable embarrassment, a sense of urgency, and a lot of motivation.

The high school principal and the automotive instructors then demonstrated determination and hard work to correct noted deficiencies. The automotive labs have been cleaned and organized. The principal and instructors have convened meetings with the local area automobile dealers association and received valuable input regarding technician training needs as well as potential donations of vehicles and offers for learner co-op placement and graduate employment opportunities.

The principal and automotive instructors have also had meetings with the local community college president and Toyota T-Ten program chair. An articulation agreement is currently being developed that may allow high school graduates to apply for T-Ten enrollment openings. The community college has also agreed to have a representative sit on the high school automotive program advisory committee.

The high school principal noted that perhaps one of the biggest challenges facing the high school was obtaining adequate funding to make other necessary automotive program improvements that were recommended by the evaluation team. To that end, the school district committed to a three-phase funding plan that included \$83K for nine new lifts, four scan tools, and new classroom tables by August, 2013; \$80K for A-Tech trainers and boards by October, 2013; and \$80K for a new Hunter alignment system and A/C equipment by February, 2014.

In light of the pending improvements, the high school is now positioned to attract higher quality students and it has recently become a "magnet high school" that will allow students from throughout the county to attend a number of its career-based programs that are not offered at any of the sending high schools.

So back to the initial question: Is NATEF program accreditation really worth it? To quote the high school principal, There is a sense of pride now – our shop will be better equipped, our instructors feel better about the program and are planning how to recruit more students into their programs. We are serving our local industry!" And by the way, the program did eventually achieve NATEF re-accreditation.

Applied Electrical Trainer (model 4810)







The Applied Electrical Trainer (AET) is a self-contained training device for the study of electricity and electrical circuits.

The AET contains the following components and capabilities:

- Power Supply With Dual Voltages (12V and 5V)
- · Eleven 'Loads' Including Both Resistors and Lamps
- ON/OFF Switch With Indicator Light
- · Banana Jacks for Making Wire Connections
- Connector Wires in Three Colors for Building Circuits
- · Auxiliary Jacks to Insert an Additional Component
- · Toggle and Momentary Switches
- · Two Ground Connection Points
- · Circuit Breaker for Device Protection
- · A Compact Durable Case for Easy Use and Storage
- Courseware Including Student Manual and Instructor Guide

Using this electrical trainer, Students can learn the areas of:

- Voltage
- Current
- Resistance
- · Power
- Voltage Drop
- · Series Circuits
- · Parallel Circuits
- · Series-Parallel Circuits
- Meter Usage Including Prefix Conversion
- Ohm's Law Voltage/Current and Resistance/ Current Relationships
- · Ohm's Law Value Calculations
- · Diagnostic Testing

This training unit also has the flexibility to allow instructors to create their own circuits and/or tests for measurement and evaluation.

Call Now to Place your Order (Press 2 for Sales)

ATech Training, Inc.
12290 Chandler Drive • Walton, KY 41094
Toll Free: 1-888-738-9924
Phone: (859) 485-7229 • Fax: (859) 485-7299
E-mail: sales@atechtraining.com

www.atechtraining.com

Automotive Technology

VITH THE





We put the POWER to Diagnose back in the hands of the technician!

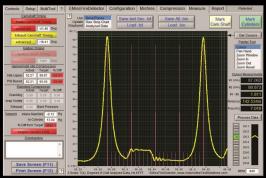
Features Exclusive to the EScope Pro...

- Eight Channels
- Auto Circuit Detection
 Powers 4 Pressure Transducers
 16 Bit for High Resolution
- Dual Time Base
 Bi-Directional Controls
 Sensor Component Simulator
 - Elgnition Analyzer Software

Fast Accurate Diagnosis, Reduce Comebacks, Maximize Profits with the EScope Pro!

Free Updates
 Live Internet Support
 Complete Kit Ready for Use







- Camshaft Timing Check
- Ignition Timing Check
- Exhaust Restriction Check
- Intake Valves Check
- Exhaust Valve Check
- Piston Rings Check
- Cylinder Misfire ID
- Compression Analysis



1-800-572-6112

www.AutomotiveTestSolutions.com

• Free Updates • Live Internet Tech Support • Complete Kits Ready for Use







SMOG CHECK PROGRAM CHANGES IN 2014 WILL YOU BE READY?

Early next year, Smog Check stations planning to inspect model year 2000 and newer OBD-equipped gasoline powered vehicles will be required to purchase a new BAR-certified Data Acquisition Device (DAD).

Did you know...?

- The Bureau of Automotive Repair (BAR) is implementing a new OBD Inspection System (OIS) in 2014.
- The DAD is required to utilize the OIS and can be purchased from a company other than your current BAR 97 equipment supplier.
- The DAD operates independently of and is in addition to your existing BAR 97 equipment.
- Participating Smog Check stations will also be required to supply a computer, barcode scanner and printer to complete the system.

Introducing the Applus Technologies solution, Smog DADdy™

- · Quality is the hallmark of our success. Applus successfully passed the Alpha phase of BAR certification and is now approved to move into Beta testing of Smog DADdy with participating shops.
- Smog DADdy is available in wired or wireless versions and is also offered as a part of an affordable and complete OBD inspection system. The system includes a computer, barcode scanner and printer all packaged on a shop grade cart ready for operation. Just plug it in and go!
- Applus is a global leader in vehicle emissions testing equipment, software, and services. Our solutions are used in 47 states and 55 countries. We engineer and manufacture vehicle emissions and inspection equipment, and conduct more 8.5 million vehicle tests per year.



Applus Technologies - A leader in vehicle inspections innovation for over 22 years

For more information about Applus Technologies visit www.applustech.com



444 N. Michigan Ave., Ste. 1110 Chicago, IL 60611 phone: 855-SMOGDAD 855-766-4323 email: SmogDADdy@applustech.com

Keep it simple with ONE P.O.!

Let AESwave support your tool & equipment needs.



uActivate

Perform resistance, voltage and current tests right from the palm of your hand.

The ultimate circuit test assistant:

- ① DMM Resistance and Voltage
- 2 Voltage Waveform
- 3 Current Waveform
- 4 Inductive Current
- 5 DMM inline Amperage

Alll in the palm of your hand!

The ultimate circuit test assistant and you are in control!

(AES# 07-80)



The AES LineSpi SMART BOB is a pass-through breakout box for the OBDII DLC. It's a DLC magnifier: makes the DLC 5-times larger. It's a DLC extender: puts the DLC where you need it. It's a spy: exposes the activity on each OBD-II dedicated dataline.

(AES# 08-200)



Inflatable block off bladder w/ a pressurized vapor pass-through

(AES# RD-95-0082)



Pico Automotive PC-Based 4 Channel Labscope

(AES# PT-PP857)



Smog Tool for BAR-OIS (IMclean DAD)



All you need is just one contact:

one Email address: one Phone number:

one@aeswave.com (877) 351 9573

www.aeswave.com

Elusive Current Draws by Steve Caruso

This is about current draws on late model vehicles which appear elusive. What I am starting to find as one reason for this problem is the OBDII devices that are used by insurance companies to rate their customers. This problem was addressed by SAE at the last OBD II Symposium meeting in Anaheim, Ca. as well as with the OE's that are currently struggling to find reasons for batteries doing dead for no reasons.

The issue is the OBD connected devices. They are classified on the data bus as a scan tool. Their job is to request data and send it out over Bluetooth to a phone, or log vehicle data for later download.

With the vehicle running this is not a problem, but when you turn off the vehicle, the device is staying powered up because of constant power on the OBDII connector. The 'scan tool' is still

requesting data. The CAN bus which normally goes to sleep is now continually kept awake. The 'scan tool' does not appear to detect if a vehicle is running therefore not adjusting its mode of operation and also going to sleep.

If the CAN bus is only to the PCM there is usually not an issue, but many vehicle have gateway devices which will continue to interrogate other vehicle networks and prevent network sleep. This problem does not seem to be occurring on the other communication protocols where the PCM's power down when the ignition is turned off.

If the CAN bus is networked so that communications is allowed after vehicle is powered down, this current draw issue is now appearing on these vehicles. The vehicle population that I have seen this problem effect is on vehicles with Permanent DTC's capability, 2010 and later. Also on vehicles with high end CAN busses.

Which manufacturer of the device is to blame? It does not appear to be manufacturer dependent at this time. The problem is the device is a 'scan tool' that is requesting data after the vehicle is turned off and is turning the CAN bus on to get this information.

The solution: Unplug the device when you turn off the vehicle. Hope this helps!

Looking for new BAR approved Update Training classes?

UT001 - OBDII - Regulations and Strategies (Gas) (16 hour course that is a lecture and lab)

UT002 Regulations and Strategies (Gas) (8 hr lecture only),

UT008 Regulations and Strategies (Diesel) (8 hr lecture only),

UT010 OBD II Monitor Training for Chrysler Vehicles (8 hr lecture only)

UT024 OBD II Monitors training for Audi and Volkswagen vehicles (8 hr lecture only)

The OBD II Gas and Diesel classes were written to Federal guidelines and covers various SAE documents and CARB/California Rules and Regulations regarding OBDII, from the beginning to the end of legislation (1996MY-2014MY)

OBDII serveice modes \$01 through \$09 and \$0A and all Readiness Monitors are covered in detail

The Chrysler class explains how Chrysler has complied with OBDII regulations by way of Emission monitors

The Audi and Volkswagen class cover how Audi and Volkswagen have complied with OBD II regulations Emission monitors.

All classes come complete: presentation (that has the presenter's notes), lab (as applicable), text book, lesson plan, syllabus, as well as tech support. Minimum order may be necessary.

Contact Steve Caruso for more details:

steve@obd2training.com or 714-655-5324

Excellence in Education Steve Vail—MiraCosta College



Age: 55

Family: Wife of 35 years Nancy, 23 year old son Anthony, and 105 pound Black Lab

named Yogi

Hometown: Santa Monica, West Los Angeles

Current City of Residence: Encinitas, San Diego North County for past 15 years. South

Lake Tahoe for prior 10 years.

Training/certificates: ASE A1, A3, A4, A5, Mercury Outboards, Mercruiser Sterndrives and Systems, Johnson/Evinrude Outboards, OMC Stern drives and Systems (incl. Cobra), Volvo Penta Stern drives, Basic and Advanced Hybrid Powertrains, Anti-lock Brake Systems, Advanced Alignment Technician, Trailrite Trailer Specialist.

Automotive experience and how many years at each: Bob's Auto Parts and Machine Shop? Venice Ca. 2 years. This was where I gained my love of the automotive machine shop and engine building. Coast Auto and Marine Supply: Marina Del Rey Ca. 5 years. I didn't realize when I started here how large a part boats would become in my career. Pacific Marine Repair: Marina Del Rey Ca. 4 years. This is where I started serious wrenching on boats; trailer boats and boats in the Marina. Napa Auto Parts: South Lake Tahoe Ca. 1 year. Moved to Tahoe in 1987 and this was the first place that hired me. Great idea to take an auto parts job when you are new in town; best way to get to know all the shops, both the good ones and the bad ones! Gunter and Son Diesel Injection Service: South Lake Tahoe Ca. 2 years. I had a blast building diesel pumps and injectors and wrenching on big rigs from Lucky Supermarkets and UPS. Marine Performance: South Lake Tahoe Ca. 1 year. I yearned to get back to working on boats, so I went to work for Marine Performance and after about a year opened, owned, and operated Tahoe Auto Marine, which later became Lake Tahoe Marine Center, for the next 6 years. My business was successful but very seasonal. As I approached 40 we decided to move back to Southern California so I could work on boats year round. I was hired to manage Sunset Marine in Oceanside, Ca. and remained there for 6 years. MiraCosta College Automotive Technology, 10 years. To find out just how I wound up at MiraCosta read on!

What were your favorite and least favorite subjects in school? My favorite academic subjects were always the more subjective ones; History, Political Science, Psychology, etc. I hated Algebra, but gained an appreciation for it when I returned to school as a 40 year old. I finally realized it was all about sticking with a problem until you solved it and not the X's and Y's!

Where do you get your update training? C.A.T., Perfect Sky, Cal Kona Marine (and Machine), Hunter Alignment Inc.

How did you get your start teaching? In 1998 my Father retired as a professor of music at USC. A huge retirement banquet followed his final concert. Former colleagues and students were taking turns speaking and reminiscing about his 38 year career. I was asked to speak impromptu on behalf of the family. I had never spoken in front of that many people, half of whom didn't even know he had a son! I pulled it off, had them cracking up and got a bunch of accolades afterwards. The whole next day at work I couldn't think about anything else; what a difference my dad had made in so many people's lives, etc. So I'm lying down in this boat bilge; I had to cut a hole in the fiberglass panel so I could access the hose clamp on a leaking fuel fill hose. My arms were cut up and itching from fiberglass, my back was twisted in a pretzel so I could reach the hose, sweat was dripping in my eyes and it stung from the fiberglass dust on my cheek...it was at that precise moment that I decided to go back to school and earn my degree so I could teach high school auto shop and coach baseball. While studying for a class at Cal State San Marcos, my wife yelled across the room that there was a job for an instructional associate at MiraCosta College. I decided to apply; what better way to get my feet wet and decide whether this was the right move for me. Well for the first time in my life I got a break! Out of 55 applicants, Terry LaCroix and the hiring committee chose me! That was in November of 2003, and after working with Terry just a short time he understood my deep desire to teach, threw me a carburetor one morning and said, "you wanna' teach these guys about carburetors today? Well, I can build a Holley or Quadrjet in my sleep, so despite no prep time whatsoever, dry mouth and all, I pulled it off. I shadowed Terry for the next 6 months during which time he informed me he was going to retire. (I owe a lot to Terry LaCroix for

(Continued on page 19)

believing in me) MiraCosta had just closed its Auto Body Program, Automotive Technology was expanding and there were two positions available. I took a leave from my instructional associate position to teach full time for a semester. Once again, there were many applicants, and in the end, three positions were filled; one by me, and the other two by my esteemed colleagues Paul Katson and Arnoldo Wiliams, both of whom were associate instructors at MiraCosta. And thus the MiraCosta team was built.

Hobbies? Engine Building, My 72 Malibu and 64 220 SEB Benz, Surfing, Boats, Fishing, Baseball, Basketball, Beach with Wife, My son coaches high school water polo and I have grown to love that!

What is the closest you have been to a famous person and who was it? We spent the day with Todd Rundgren at his house on Kauai. I know Bobby McFerrin personally (Don't worry be happy!). I've met a bunch of NASCAR guys.

Tell us about a life changing experience: That evening at my dad's retirement banquet helped me decide to return to school to finish what I had started 23 years earlier. I had the Associate's Degree, but I wanted a Bachelor's. I had no idea what I was in for; not having been to school for so long and working 6 days, 50 hours a week at Sunset Marine, but it was totally worth it. My only regret, and I tell this to my students when encouraging them to pursue their degrees while young, was missing a few of my son's little league games and karate tournaments. You can't get those moments back.

What was your first job and what was the pay? Baskin & Robbins 31 Flavors, \$ 3.15 per hour, I exaggerated my age to get the job!

Person you most admired and why? Every single man and woman who has fought for this country, and at the same time, all world leaders, past and present, with enough courage to stand up for peace.

Favorite music? Todd Rundgren/ Utopia, Yes, Led Zepplin, Genesis, Oingo Boingo, Rush, George Fredrich Handel, Johann Sebastian Bach

If you were granted one wish, what would it be? The safety and long life of my family members.

Favorite sports team:? Padres, Celtics, Trojans

What changes have you seen in your classroom over your career? Classroom Technology (no more VCR's!) I have noticed the last few generations of students becoming more serious and less disruptive and aggressive. They are happy with a 9 dollar an hour starting job as a lube tech now, in 2004 they were not.

What is the biggest problem you see for the automotive teacher? Sacramento and the folks in charge of California's education system.

What is the biggest problem you see facing the automotive industry today? More reliable vehicles constitute less demand for repairs.

What was the first car you owned and how did you afford it: It was a 1966 Ford Country Squire Station Wagon with a 390. I crossed up the firing order the first time I tuned it up and burned a big round spot in the paint on my hood when it back fired on the freeway...guess I had left the air cleaner off! I earned it mowing lawns and getting good grades. We bought if from my Uncle for a couple hundred dollars.

Hobbies/interests? I am a news junkie and follow current events with a passion. Kauai.

What are your favorite automotive magazines? Engine Builder, Brake and Front End, Super Chevy

Favorite quote? Lord help me to remember ain't nothing going to happen to me today that you and I can't together handle. And of course: Do unto others as you would have them do unto you.

RELEF

Automotive Service Councils Educational Foundation

1 Capitol Mall, Suite 320 Sacramento, CA 95814 TEL: 800-745-6121

FAX: 916-444-7462

Scholarship Application

Deadline February 3, 2014
Eleven Scholarships to be awarded, valued from \$500 - \$1,000

Our mission: Founded in 2000, The ASC Educational Foundation exists to provide educational and training opportunities, scholarships and endowments in the field of automotive repair and maintenance. ASCEF Scholarships have been instrumental in helping recipients create rewarding careers in Automotive Technologies.

SCHOLARSHIP REQUIREMENTS

Prerequisite: Open to California High School Seniors who plan to enroll in post high school technical and academic training or California college under-graduates in the automotive service field satisfying the following GPA requirements, which require an official transcript.

- 2.0 overall grade point average.
- 3.0 grade point average in the automotive-related courses (This applies to both High School ROP automotive related courses or California college courses).

Application Documents: All applicants must also submit a fully completed application with the following components:

 Automotive instructor's letter of recommendation with contact information. (Note to instructor: Letter may be placed in a sealed envelope for confidentiality, if desired.)

Instructor letter should include comments on the follow:

- Attendance and punctuality;
- Participation;
- Judgement;
- Initiative:
- Reliability:
- · Mechanical aptitude; and,
- Work Ethic.
- Copy of High School and/or College transcripts with GPAs computed for auto courses and overall.
- A brief narrative about your career goals including why this scholarship is important to you.
- A brief description of your community service activities.

Applicants will be scored on the quality, completeness and details of the information provided in items 1-4 above

Failure to submit a fully completed application and all requested supporting materials will result in disqualification. If selected, you must be able to attend an awards ceremony at your school or one of our local ASCCA Chapter Meetings to accept your award.

Applications can be submitted by fax to meet the filing deadline but originals must also be sent to the ASCEF office at:

ASCEF Scholarship Committee 1 Capitol Mall, Suite 320 Sacramento, CA 95814

Page 1 of 2

Name:							DOB:	,	,
	Last		First			MI	_ DOB	_'_	
Address:					Phone: (_)_			
4	Street		City	ZIp			Required		
CHECK ONE:	ECK ONE: High School Senior Entering Freshman (check if not a graduating HS Senior) Continuing Student: College Units Completed:								
CHECK ONE:	Immediate Goal: 0	Certificate	□ Assoc	iate Degree	Four Year	Degree			
	Major, if Declared: _			Minor, if Dec	clared:				
currently enrolle	y: Please list the high ed in. <u>Your list must a</u> aper if additional spac	ppear in order							
Name of School		City/State	(Grad/Date Las	t Attended	Units or	Degrees E	amed	
Provide the name and address of your hometown newspaper. Your submitted application will serve as permission for us to release your name to your newspaper in the event you are awarded a scholarship.									
Contact information for the person responsible for your school's awards ceremonies (required):									
CERTIFICA	TION & RELEAS	SE INFORM	IATION						
By my signature below, I certify that the academic information and summary of school activities submitted with my scholarship application to be true and accurate and meet the eligibility requirements as outlined.									
Signature:						Dat	e:		
By my signatur	e below, in the event of ation documents for u	of becoming a	scholarsl	nip winner, I a	ım releasing th				
Signature:						Dat	e:		

ASCEF Scholarship Application

APPLICANT INFORMATION



Free EVAP Teaching Resources

Get articles, PowerPoints, video, graphics & more...

StarEnviroTech.com click on Educator

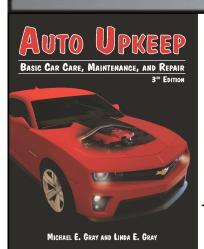
The World's Only OEM-Mandated Smoke Technology



OBDII DTC lookup







AVAILABLE IN:









CORRELATED TO THE NEW NATEF MLR TASKS

Looking for an Introductory Auto text that is reasonably priced? Auto Upkeep correlates to over 50% of MLR Tasks, making it an ideal first course text in a NATEF program.

Request a FREE preview copy at:

Rolling Hills Publishing Phone: 1-800-918-7323 info@autoupkeep.com



CAT NEWS AD Space!

	Color	B & W
Full page	\$300.00	\$200.00
Half page	\$150.00	\$100.00
Quarter page	\$ 75.00	\$ 50.00

We would like to invite your company to advertise in our newsletter. Please note that part of the newsletter is now printed in color! The number of color ads is limited so get your space reserved as soon as possible. Every attempt will be made to accommodate your first choice.

Since space is very limited and sells out quickly, reserve your advertising space early. The deadline for submitting an advertisement for the fall issue is October 15th and April 15th for the spring issue.

Contact rick@calautoteachers.com

California Automotive Resource Center (CalARC)

At the fall conference hosted by Santa Barbara City College Rocky Carlisle from BAR introduced a "new" WEBSITE to those in attendance. The following information was taken from his slide presentation and it highlights the site's features. It will be launched at a later date.

In response to AB2289's mandate to promote training, along with the success of the Nursing Boards Nursing Resource Center, BAR has proposed a web-based utility called the California Automotive Resource Center or CalARC. BAR has contracted with the Foundation for California Community Colleges for the development of this website.



The CalARC provides a community for California Smog Check Professionals. It provides information for individuals who seek training to become licensed, for technicians and licensees seeking employment, for technicians seeking technical information, for employers seeking to hire skilled technicians, and for instructors to distribute information regarding their training programs.

The CalARC is a hub for students, shop owners, instructors and other professionals in the automotive industry. Whether a smog technician working in the field or a student preparing to make that next step in your career, or a technician already employed, you'll find numerous resources to advance your career and education

Ask and Answer feature. The Ask and Answer feature allows members to ask a question and their peers can provide answers based on their education and experience. Experts can respond and vote answers up and down. The member can then use the input to decide on the best response.

Ask and Answer gives community managers the tools to spot popular topics and manage users. Community members have the chance to foster discussions by asking questions and receiving answers submitted by auto enthusiasts and certified experts and professionals.

The Forum gives members an opportunity to share information. It also lets participants discuss and share ideas on topics they choose. Posts are moderated by knowledgeable community members.

The Training feature offers the information needed to qualify for jobs in the automotive industry. It allows members to search for specific training needs, search for nearby training and certification to advance in their career.

The career feature gives job seekers the chance to connect with employers. By creating an account, job seekers can search for jobs posted by verified employers.

Part of the career function includes a Job Manager. Using the Job Manager, job seekers can their contact information, resumes, cover letters, letters of application and other documents for employers to view. Seekers can submit any of their documents to specific employers they select; or, they can choose to make whatever documents they wish available to any interested employer.

Job seekers can also use the job manager to review jobs they've applied for and check the status of submitted applications.

has worked on development of the new OIS-DAD (OBD Inspection System – Data Acquisition Device) it looks like Smog Check's OBD capabilities will be going from the worst in the US to the best before the second quarter of next year. Not only will all OBDII protocols including CAN be supported, but a number of advancements in "vehicle fingerprinting" and OBD readiness determination will make this one of the toughest and most comprehensive OBDII inspection regimes in the country.

So the bottom line is that practically every vehicle of model year 2000 and beyond must receive an official Smog Check OBDII inspection, and perhaps more importantly, be maintained in OBDII compliance in order to pass Smog Check. There will be no fallback tailpipe testing and not a lot of options for vehicles with MILs illuminated or more than one readiness monitor not complete.

TECH TRAINING CHALLENGES

So what does this mean to the tech in the Smog Check trenches? To start with a new set of OBD Inspection Procedures with revised Smog Check Manual to be understood and applied unfailingly to inspection and repair processes. You can take a look at the update regulations at:

http://www.bar.ca.gov/80 BARResources/05 Legislative/RegulatoryActions/2011 221%20Notice%20of%20Approval.pdf

For a list of common questions and answers take a look at the New Smog Check Q & A on the BAR resource page at:

http://www.bar.ca.gov/80 BARResources/05 Legislative/RegulatoryActions/NewInspectionProceduresEquipmentQnA.pdf

- OBD test failure criteria includes several new conditions including failure to communicate with the OIS and an OBD data stream that does not match the expected software/firmware configuration for that vehicle.
- MY 2000 and newer vehicles cannot pass with any incomplete monitors anymore, except for the evaporative monitor.
- Diesel OBD compliant vehicles MY 1998 through 2006 cannot have any incomplete monitors either; while 2007 and newer can have only the particulate filter system monitor excluded.

Not only will inspection techs have to get used to recognizing and testing CAN vehicles but repair techs will need to sharpen their cognitive toolbox if they are to cope with the swell of CAN OBDII failures that will emerge after the new program rules take effect. Inspectors will no longer be able to perform BAR inspection on any vehicle newer than 1999". When you consider that 2000 and newer vehicles are probably over 70% of the total fleet, failure to provide durable repairs could be a big problem. Especially when you add monitor readiness and failure to communicate to the mix of defects that must be cured to pass the new Smog Check inspection.

One thing that has not changed are the basic requirements to become a Smog Check technician or a Test Facility. You still need the training, equipment, building and qualifications to meet BARs requirements. But while it may still be awhile before anyone asks you if you want fries and a drink with that inspection, the lower cost barriers make it seem pretty likely that the ranks of the inspection network will swell along with the demand for qualified inspectors and repair technicians.

DATES AND DEADLINES

Just like any other major changes to Smog Check, this one has endured a wide variety of changes and delays. The latest being the BETA testing start date which should have been about a year ago and as of this writing has slipped to 12/4/13.

This past summer only four vendors managed to enter their equipment into BARs DAD certification program before the ALPHA testing start date. They were Applus Technologies a global provider of emission inspections services and equipment, Bosch / SPX who you are familiar with as a current Smog Check vendor, Drew Technologies who many of you have come to appreciate for their flash programming equipment and Worldwide Environmental Products also a current Smog Check vendor. Of these four only Applus and Drew received approval to continue to BETA testing.

Contrary to BARs original representations to the vendors that there would be no second chances at ALPHA, BAR is letting Bosch and Worldwide re-submit their equipment for another try.

It is expected that the initial phase of BETA testing in which 1500 tests must be gathered by each vendor will be completed before the end of the year. Then a total of 18,500 additional tests must be completed and accepted by BAR before the vendor's equipment can finally be certified. In the absence of further unforeseen delays, that probably means March or April before the new program can officially start.

THE PLAYERS AND THE PRODUCTS

For those in the business right now, or who want to be, there are several important decisions and preparations to be made not the least of which is to make sure there are enough trained technicians to handle their facility. Another is which equipment to select and/or provide from third party vendors. While BAR only requires that the DAD itself be purchased from an authorized vendor, the PC, Cart, Barcode scanner, Keyboard, Mouse, Monitor and Printer can come from anywhere. This could raise some difficult issues for the Smog Check vendors who are expected to support their DAD products. It's doubtful that any of them want to be in the PC support business for equipment they didn't sell. Therefore these vendors have made some pretty attractive offers for completely integrated systems for a seamless plug n play experience. The following links will take you to those vendors offerings:

- Applus Technologies Inc. www.smogdaddy.com
- Drew Technologies http://www.drewtech.com/emissions/products/imclean-wireless.html
- Worldwide Environmental Products http://www.wep-inc.com/dad/

While it is beyond the scope of this article to provide a comparison of each product's merits, I will admit to being somewhat partial towards the two vendors that have thus far survived BETA; namely Drew and Applus. Not only do I respect the extraordinary effort and technical prowess it took to get this far, but I happen to believe their products exemplify the kind of commitment to quality that Smog Check professionals have a right to expect. With that said ... on to the important part

READY OR NOT

When I first started turning wrenches in a sleepy village of the Sierra foothills, it was the perfect fit for someone like me, the renegade descendant of California gold rush pioneers. I was most at home in a remote shop where I could muster whatever resources I could scrape together to keep my next customer on the road. Back in those late 60's there were no regulators, inspectors or auditors, no cellphones or email, barely a pager or answering machine to be found. I thought what made me a pretty good tech was being able to hold a screwdriver against my ear and the rocker cover of a straight six to tell if the valves needed adjustment.

The challenge for techs and teachers alike today grows more critical by the minute. The kids that will make a successful career in automotive today must attain a level of proficiency that I never imagined back in my sleepy Sierra's shop. This next generation of Smog Check surely raises the ante for those that wish to be proficient and successful as automotive techs. Forget about the inspection side for a minute, nobody knows better than CAT members that these cars have actually go to be fixed!

Now that this new Smog Check program will leave even fewer places for defective cars and deficient techs to hide, who will make sure the guys that show up for training can really get the job done?

Let's hope it's us ...

Vince was born in San Jose where he received his first automotive technical training at Lincoln High School in 1965, eventually moving near Grass Valley in the Sierras where he opened his first shop. Since the mid 90's he has consulted in various automotive technical areas including vehicle emissions inspection program development for several State jurisdictions and the USEPA. He recently left a corporate position with a major contractor of vehicle inspection services and equipment in the mid-west to return to his career as an independent consultant.

Fall 2013 Conference Highlights By Phil Jelinek

As the 1st Past President of CAT, it is my responsibility to coordinate the conferences by helping those who step up to host our Spring and Fall conferences. CAT supplies the host school with a framework to guide them through the process and it has worked quite well from the responses I have received from the hosting schools.

Our fall conference this year was at **Santa Barbara Community College**, the #1 rated community college in the country. SBCC was awarded the prestigious Aspen Prize as the top community college school in the nation for success in attracting, retaining and graduating students into jobs and four-year universities.

Sitting atop a bluff, overlooking the Pacific Ocean was an idyllic setting during the fall conference. There were 131 attendees, 20 vendors and many SBCC student workers, making this a very successful conference. The Friday tours to ARP Fasteners, Magnuson Superchargers, the Mullen Collection and the Land Shark tour added to the enjoyment of the conference for those who went on a tour. The Land Shark tour is one that gave more information about Santa Barbara that you could possibly remember. It was a great tour! During our drawing at the close of our conference, there were thousands of dollars of give-a-ways including tools, equipment and gift certificates. Special thanks needs to be given to Dave Brainard, Bob Stockero and Glenn Troub (our new VP, see below) for their hard work and dedication to putting on a very well run conference.

During the meeting portion of our conference, we had an election for CAT VP and ROP/High School Representative. Glenn Troub of SBCC was elected our new VP and Armando Hernandez, from Schurr High School in Montebello, CA was elected as our new ROP/High School Representative. Please congratulate them the next time you email or talk with them.

Hope to see you in the Spring at Chabot College in Hayward, CA.



ELECTUDE





Electude is the world's leading automotive e-learning company. Our product, Argo, is being used in over 30 countries on 5 continents.

The simulation-based modules are programmed according to realistic gaming principles to keep students actively involved.

Argo has been designed and developed by automotive instructors who know and understand the needs of today's students. It allows them to learn about the complete vehicle and the inner working of its components, from bumper to bumper, as well as teaching them how to maintain and repair cars, by using interactive animations and simulations. The result of this self-discovery approach is that students and trainees are achieving better results.

Over 400 lesson modules already available

2-3 new modules are added each week

The Electude Diagnostic Trainer engine simulator

Constantly updated with the latest technologies

4 Learning Levels: Level 1 (Beginners) to Level 4 (Diagnostic Specialists) Fully compliant with NATEF Standard 11 for e-learning

Sign up for a free trial by sending an email to salesusa@electude.com or go online at www.electude.com, and Electude will set everything up for you. Free training sessions are available to all schools using or trialing Argo.

CTUD



EXECUTIVE DIRECTOR

Bob Barkhouse, bob4cat@sbcglobal.net

OFFICERS

PRESIDENT: Donald Schumacher, Yuba College, dschumac@yccd.edu

VICE PRESIDENT: Glenn Troub, Santa Barbara City College gdtroub@pipeline.sbcc.edu

EXECUTIVE TREASURER: Steve Vail, Mira Costa College, svail@miracosta.edu

HIGH SCHOOL/ROP: Armando Hernandez, Schurr HS hernandez armando@montebello.k12.ca.us

BOARD OF TRUSTEES

Jim Custeau, Cuyamaca College, jim.custeau@gcccd.net

John Overton, Retired, joverton@calautoteachers.com

Phil Jelinek, Retired, pjelinek@calautoteachers.com



PRESIDENTIAL APPOINTMENTS

HISTORIAN: Anthony Jewell, Reedley College, anthony.jewel@sccd.com

CONFERENCE COORDINATOR: Phil Jelinek, Retired,

pjelinek@calautoteachers.com

EXHIBITOR CONTACT: Phil Jelinek, Retired, pjelinek@calautoteachers.com

NEWSLETTER: Rick Escalambre, Skyline College, rick@calautoteachers.com

WEBMASTER: Tom Broxholm, Skyline College, tom@calautoteachers.com

The CAT Newsletter is always looking for technical articles and advertisements! The deadline for submitting articles an ads is April 15th for the spring issue and October 15th for the fall issue. Articles should be submitted in Word. It is preferred that ads be submitted in JPEG or EPS formats, PDF will work but sometimes the text is distorted once it is placed into the newsletter. The cost and sizes for advertisements can be found on our Website.

For additional information about the California Automotive Teachers' organization, future conferences, job announcements, training opportunities, and much more:

www.calautoteachers.com

visit our WEBSITE at

CAT Conference Spring 2014 Chabot College April 25 & 26

Conference Host Information

Phone: 510-723-6855

Email: ssmall@chabotcollege.edu

Mailing address:

Stephen Small Automotive Department Chabot College 25555 Hesperian Blvd Hayward, CA 94545