

California Automotive Teachers

Fall 2017

Issue #49

CAT NEWS

www.calautoteachers.com

Newsletter Highlights

- ◆ Automotive BA Degree
- ♦ Solano' CC's \$26 mil Facility
- ♦ 10—2018 Tech Breakthroughs

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Automotive Bachelor of Arts Degree by Steve Tomory

After the program was officially approved by the State Chancellor's Office early 2015, the Upper Division curriculum for both the Major and General Education portion of the Degree was developed and refined with the help of our local Steering Committee, which comprised members of our local Industry Partners, such as American Honda, Mitsubishi Motors, Porsche NA, and local dealer/aftermarket representatives.

The curriculum was then locally approved by the Rio Hondo Curriculum Committee early Fall Semester 2015. Several guidelines regarding the curriculum had been set and strongly encouraged by the Chancellor's Office, the Academic Senate, the CSU and UC systems, as well as the Accrediting Commission for Community and Junior Colleges.

This included requirements for number of total units, number of units for the Major and GE, minimum qualifications of faculty teaching Upper Division courses, and assurance of more depth, breadth, and rigor of content, objectives, and Student/Program Learning Outcomes. Once locally approved, the curriculum was sent to the Chancellor's Office for final approval, which was approved late 2015.

During this process, faculty and staff attended several BDP Steering Committee Meetings hosted by the Chancellor's Office and the Consortium oversight group, which is comprised of members from all 15 Community Colleges, Academic Senate, and other interested parties. During these sessions, we all worked together to sort out the many issues as a group to make sure this program is successful for all involved.

The Rio Hondo program kicked off Fall Semester 2016 with the first group of 8 cohort students. By the start of Spring 2017 Semester started, the group grew to 20

(Continued on Page 13)

The California Automotive Teachers will meet at Pasadena City College for the Fall 2017 Conference on October 20 & 21.



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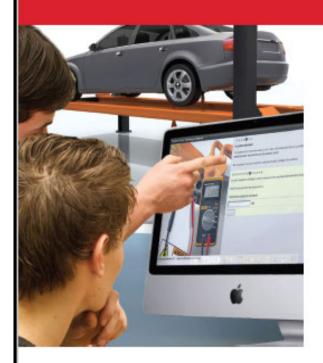


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President's Letter by Ruben Parra

Greetings CAT members. Hoping that your semester is off to a great start, and that your Automotive Technology programs are strong and enthusiastic. As for things at Skyline College, our program is doing very well, we have strong support, and receiving recognition (more about that later).

This would be my first report as your California Automotive Teachers president. I have been a member since '95, just one year after starting to teach. Since my first experience with CAT, I have received support, direction, and mentoring that has



greatly helped my career and guided me professionally. Not to mention the friendships that have now spanned decades.

So when I was given the opportunity to serve first as vice president, then elected as president, I had to accept and give back to this wonderful organization. Even though I could not put a dent into what I feel I truly owe California Automotive Teachers.

So a little about me, as I mentioned I teach at Skyline College, in San Bruno Ca. I have been here going on four years, and hope to be here for many years to come. I have been an Automotive Technician all of my professional career, working mostly in GM dealerships, but I do have independent shop experience. My interest was sparked by growing up on a farm in Gilroy, and watching the mechanics work on tractors and other equipment. I decided then, that working in a converted barn, on massive machines, was way cool! I also have 5 older brothers who were constantly wrenching on their Impalas, Mustangs, and Chargers. All of my brothers are decent mechanics, but not in the automotive field.

I started teaching at a private school first, then moved on to doing contract training with Snap-On, taught part time at a Junior College, and returned to work in the field for a number of years. I returned teaching again, full time, over ten years ago, in the private sector. Through CAT I learned about the opportunity at Skyline, applied twice, before they picked me up. So, here I am, proud to be part of the program here at Skyline and to work with our dedicated staff. Skyline College Automotive Program was recently recognized by the State Chancellor's Office as a Strong Workforce Star Program.

This summer I attended NACAT in Detroit, as your CAT representative. I made many new contacts, networked with colleagues from all over the country, and received some very good training on technical and academic subjects. If you have never been to NACAT (www.nacat.org), or have not been there lately, I recommend that you plan on it. The next annual conference is scheduled for July 18-21, 2018.

With that, I hope that you have a great CAT conference, and hope to get to know every member personally, please walk up and introduce yourself to me if you see me walking about. Please feel free to contact me personally if you have any questions or concerns. (Parra@smccd.edu or 209-568-9772)

Executive Director's Report by George Hritz

Welcome and congratulations to the start of the 2017-2018 school year. Some of you have greeted your students many times; some of you are still learning best practices to start the year and for some of you this is your first year of teaching, your very first time in front of the class. I know you will do everything within your power to make it an effective learning experience for the students. Remember you have access to a tremendous wealth of knowledge, expertise, and resources in your fellow CAT members.

What is new to all of us in education this Fall 2017 is President Trump's decision to effectively end the Deferred Action for Childhood Arrivals (DACA) program. This will impact your "Dreamer Students" and could impact your enrollment. I urge you to read the September 5, 2017 letter written to the California Congressional Delegation by California's education leaders.

https://www.universityofcalifornia.edu/sites/default/files/DACA-CA-Ed-Leaders-Letter-FINAL-9-5-17.pdf

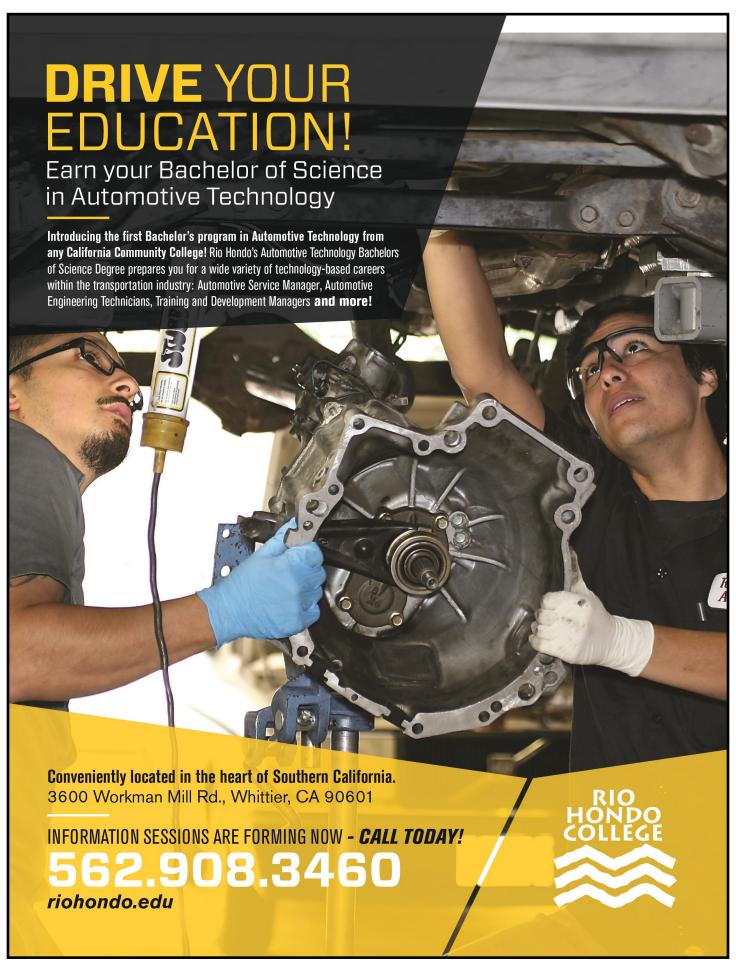
The Spring 2017 conference at Yuba College was a great success. Don Schumacher, Auto Body, Phillip Milks, Automotive, Mike Morse, Automotive, Gil Terrones, Tool Room Attendant, Bryan Aimee Student, Raminder Bains, CTE Secretary and the Auto Club Students all clearly put in a maximum effort to make the conference rewarding for all who attended. Many members went on the Beale Air Force tour; what a remarkable place. One of the things I took away from the tour was how the young men and women are given the responsibility to maintain the U-2s and surveillance drones. They step up to the task and do it knowing they hold the life of the pilot in their hands. One of the purposes of the tour was to highlight the Air Force's need for people with an aptitude for the skills students learn in our programs.

Pasadena City College will host the Fall 2017 Conference on October 20th and 21st, Wendy Lucko, Wayne Houlihan and Rowena Chan are working hard to build a meaningful event. I am looking forward to seeing you there.

One important fact is that no one knows how many high school automotive programs exist in the State, let alone where they are and who the instructors are. In an effort to compile a list. I will, on behalf of CAT, be contacting all Community College Auto Tech Program Coordinators asking you to send CAT the contact information for all of your local feeder schools. We need the name of the High School, the mailing address, and the instructor's name, phone number and email address.

I attended the CDE Transportation Industry Sector – Statewide Advisory Committee Meeting in San Diego on Apr 20th. Robert Wilson, whose title is Education Programs Consultant, Career and College Transition Division, CTE Leadership and Instructional Support, facilitated the very informative and productive meeting. There was unanimous support from the industry members which was welcomed by the CA Department of Ed. The need for Certification was a major topic. Both the industry members and the Department of Education support and recommend that all Transportation Programs to be certified.

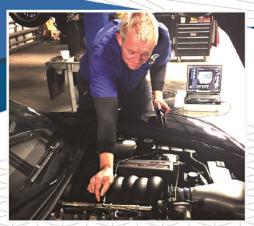
The opportunity to attend two days of SkillsUSA competition in San Diego on Apr 21st & 22nd was well worth my time. I was impressed by both the students and the instructors who spend a tremendous





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amount of time preparing for, and competing in the event. The industry support for students and faculty in SkillsUSA was exceptional.

On Apr 25th ASCCA, CABA and CalABC sponsored Legislation Day at the State Capital. I spoke with two members of the Assembly and one Senator about the state of Automotive Education in CA and encouraged them to consider sponsoring a bill to fund schools to earn Industry Certification.

The BAR Advisory Group was established by the Department of Consumer Affairs and Bureau of Automotive Repair (BAR) to increase the level of communication between BAR, the automotive repair industry, and stakeholders. The advisory group is an informal assembly that meets quarterly to provide input to the Chief on BAR program issues. CAT President Ruben Parra of Skyline College and I serve on this group to represent the concerns of California Automotive Educators.

CalABC (California Automotive Business Coalition) and ASCCA (Automotive Service Councils of California both support Automotive Education by tracking CTE bills in the Legislature and lobby for or against the bills. They know that their industry is dependent on there being a pool of trained new technicians. I participate in the monthly conference calls, quarterly board meetings and team weekends. The topic of new technicians and how to recruit them comes up frequently. CalABC and ASCCA want to help! Many industry members of CalABC and ASCCA want to join your advisory groups and are willing to provide internships for your students.

Finally, if you have an interest in getting involved with the automotive repair industry on a national level you might consider joining NASTF the National Automotive Service Task Force. There are no dues. Once you join you could serve on any of the six committees; Service Information, Equipment and Tools, Education, Vehicle Security, Collision Repair and Communications. Rick Escalambre is serving on the NASTF Education Committee. You can find more information at www.nastf.org.

"We are only as strong as our weakest link." http://theeducatorsroom.com/2014/02/weakest-link/

Automotive News Stories—Online Articles and Links

GTHO! Going In Depth With Mazda's Brilliant Skyactiv X Engine - Technologue:

http://a.msn.com/08/en-us/AArqVAI?ocid=se

This is the most baffling and wonderful engine swap around:

http://a.msn.com/08/en-us/AArYC6Y?ocid=se

9 Cars That Are Almost Self-Driving:

http://a.msn.com/08/en-us/AAqRKOJ?ocid=se

2019 Chevrolet Corvette C8 "Zora" and C7 ZR1: What to Expect:

http://a.msn.com/08/en-us/AArtOi9?ocid=se

Treasurer Report by Jules Varga

Welcome to the Fall 2017 California Automotive Teachers conference here is beautiful Pasadena. Pasadena is home of the Tournament of Roses parade every New Year's Day.

I would like to introduce myself, Julius Varga, I am the new CAT Treasurer and have been in this position for about 1 year now. I replaced Steve Vail, who had the Treasurer's position for the past 12 years.

I retired from General Motors Corp, and have been teaching for about 5 years. I teach part time at College of the Desert in Palm Desert. The College of the Desert Automotive program is a NATEF certified program and we are a Chrysler CAP (College Automotive Program) Lite school.

As many of you know CAT registration has gone fully electronic. When you register for the conference, register for a conference tour, or pay your membership, you are able to pay with a major credit card or you have the option of using PayPal. This has helped us with the accuracy of membership and registration process, and is saving some time.



ASC Educational Foundation

The <u>ASC Educational Foundation (ASCEF)</u> is a nonprofit corporation dedicated to supporting and advancing the entire automotive industry. Governed by a code of ethics, the Foundation serves the industry through educational and training solutions, scholarships, endowments and professional development.

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The scholarship program is open to high school seniors who plan to enroll in post-high school technical/academic training or college undergraduates in the automotive service field satisfying certain criteria. Currently the Foundation issues eleven annual scholarships that can range from \$500 to \$1000 and can be applied toward tuition, tools and books.

Please click here for the Scholarship Application.

You may make a tax deductible donation to the Foundation by submitting payment to:

ASCEF One Capitol Mall, Suite 800 Sacramento, CA 95814

NOTE: For members who only read the printed version of the CAT Newsletter here is the link to this page. It will allow you to access the underlined links above:

https://www.ascca.com/asc-educational-foundation

WEBMASTER Report by Tom Broxholm

Boy did I screw up. When Rick Escalambre asked me for my Webmaster report I was busy and didn't really have anything new to report. I asked him to just run my last newsletter report without proofreading what was in the report that would be printed. The newsletter went to print and I just read the first paragraph about paying by check. This is an older report and that paragraph is not valid since we are no longer accepting payment for membership or conference fees by check. So please if you read this and speak to anyone who has read the hard copy of my report mention to them that CAT no longer accepts membership or conference fee payment by check.



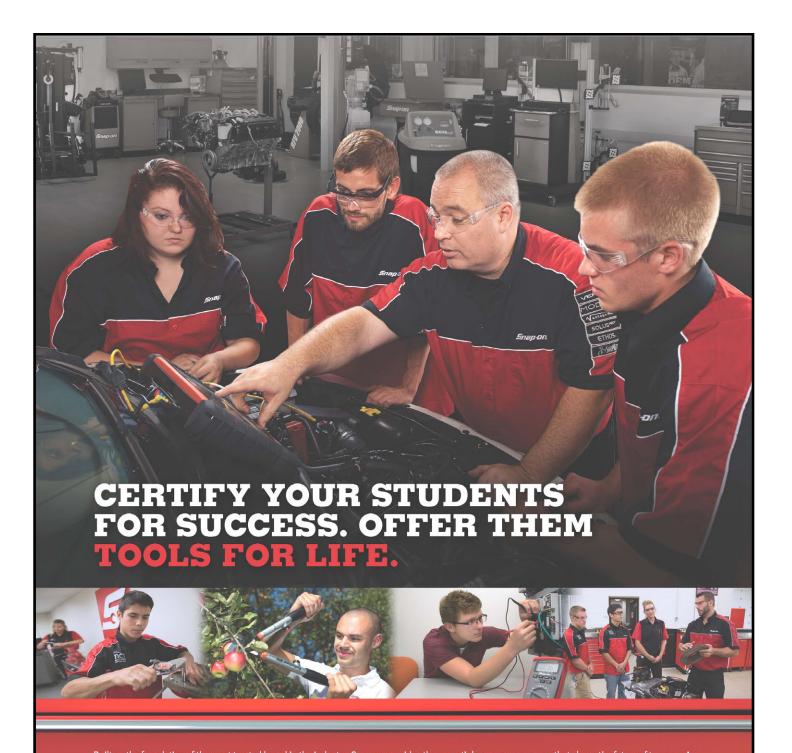
Split Your Payment

Everyone who must pay for membership and conference fee from a different pot of money we allow you to split your payment in two. When making a partial payment choose the type of payment and enter the amount you wish to pay. An example would be credit card and \$50 for your membership or for your conference fee \$65 early bird or \$85 normal. Additional information on the splitting payments procedures, or modifying your registration can be found by click on the link "How to Modify your Conference Registration". This is found on our conference page www.calautoteachers.com/conferences **Group Registration**

We now offer a group registration method. This allows one person to register multiple members all at once and make a final payment for everyone all at once. You can also take advantage of the split payment feature above if the member is responsible for part of the payment. Specific instructions on group registration can be found on our conference registration page. www.calautoteachers.com/reg_join. Please note reg_join in the URL has an underscore between reg and join. Click on the "Group Registration" link to view the instruction. Please read these instructions before attempting the group registration because detailed information will be needed prior to registration. As always I can be reached for questions or comments by clicking on the "Contact the Webmaster" link that is located on our home page, www.calautoteachers.com

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Solano CC Opens New \$26 Million Facility

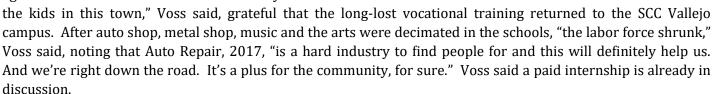
Current suits mingled with future grease monkeys. And the automotive repair world — and perhaps Earth's inhabitants — can breathe better. Especially when talking alternative fuels. Wednesday afternoon was a chance for various officials to get the grand tour — and Solano Community College Vallejo Campus Automotive Technician Training Program students to feel some pride — in the ribbon cutting grand opening of the new Auto Technology Building.

Four years after re-establishing its Auto Tech Program, the Vallejo Center Facility boasts 30,000 square feet of learning space, including 16 bays, two classrooms and tutoring space and rooms for engine and transmission diagnostics. The entire facility cost around \$26 million, according to executive bond manager Lucky Lofton. "It's a great project," Lofton said at the grand opening. I remember this as a dream the day we stood out here breaking ground. And now it's become a reality," said Vallejo Mayor Bob Sampayan. "This is technology at its

best and it's great for the students," Sampayan said.

The state-of-the-art facility isn't just a golden opportunity for the students, but provides the best available technology for Auto Tech professors Paul Hidy, Rick Marshall, and Andrew McGee, said Celia Esposito-Noy, the school's superintendent-president. "It's exciting, the fact we have this partnership with the local car dealers who entrust us to train the next group of technicians they will eventually hire," Esposito-Noy added. "It's a great opportunity for the entire region."

Mike Voss, service manager at TEAM DGDG, agreed. "It shows how much the community cares for



Marshall had worked 27 years — 25 full-time — with Avery Greene before taking the professor job at SCC. "It's exciting. This is kind of like a dream. It'll make a big difference in our community," Marshall said, smiling that he's gratified "seeing students get into the field, get excited, want to learn, and getting placed in a job. I like the idea of not getting them a job, but getting them a career." Marshall said he was 14 when he bought his first car, broke it down, and put it back together. As a high school senior, he taught the automotive class when the school lost the auto teacher. Marshall's quest is to "teach them real-world experience. We set it up like they're working on cars like they would on the job. If you only teach from books, nobody will learn how to fix the cars."

When Rick Marshall joined Paul Hidy in the Auto Tech Program, there were 20 students. Now there are almost 200. "I think we'll see 400 in the next year or two," Marshall said. "The jobs are out there."

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active members. It was decided by the group at this time that the upcoming Summer and Fall 2017 Semesters were to focus on completing the required 12 units of Upper Division coursework.

Currently, there are 17 active students in the cohort taking these courses. The focus for the next two semesters will now be for them to take and complete one of the two tracks available as the focus of their Major (Technical Studies or Business/Marketing). As of this writing, the split is roughly 50/50, with the group on target to graduate mid-to-late 2019.

We are actively recruiting students who are ready to start the second cohort group and be on track to graduate by the sunset date of this 'Pilot Program' of 2023. I encourage each and every one of you to go to our website www.riohondo.edu/autotechbachelor and take a look at the detailed information regarding the program, so you are familiar with it and be able to tell your students (or you and your family) there is an opportunity to achieve a 4-year degree in Automotive Technology in the State of California at a Community College.

The next few steps I am working on is to make the courses available as a hybrid-online format. This project is a short-term goal and is targeted to be available within the next 12-months. There is contact information on the website for answers to some questions you may have, as well as to request marketing and outreach materials.

The experience of being able to develop, implement, and teach students at this level has been a very rewarding experience for me, as I went through a similar program at Cal State LA in the early-mid 1980s under Professor Ray Fausel, which like so many related programs in the State have gone by the wayside. I feel like I am giving back to him and the State Education System for giving me the opportunity to grow both professionally and personally in this exciting world of Automotive Technology.

Rio Hondo Automotive Technology Bachelor Degree Program Students

Field Trip to Southern California Section SAE Meeting

UC Irvine Master's of Automotive Engineering Program

Engineering Design in Industry Presentation





2017 Industry Award Rocky Carlisle - BAR



2017 President's Award Joyce Mitchell– Ross Campbell Inc. California Channel



Exiting 3rd Past President John Overton-Retired



2017 Post Secondary Award Wendy Lucko - Pasadena City College



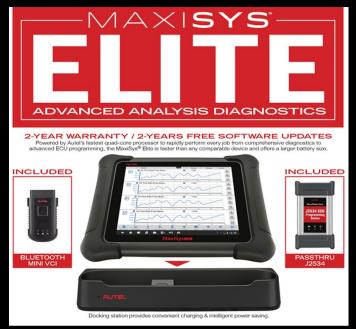
2017 HS/ROP Award Jim Horton-Mark Kepple High School with HS/ROP Officer Armando Hernandez-Schurr HS



Exiting Three Term President,
Don Schumacher - Yuba College
with New President
Ruben Parra-Skyline College

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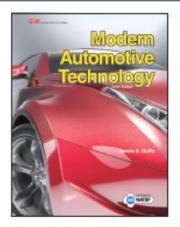
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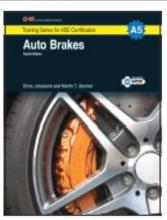
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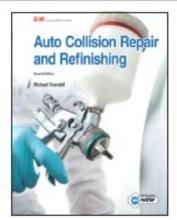
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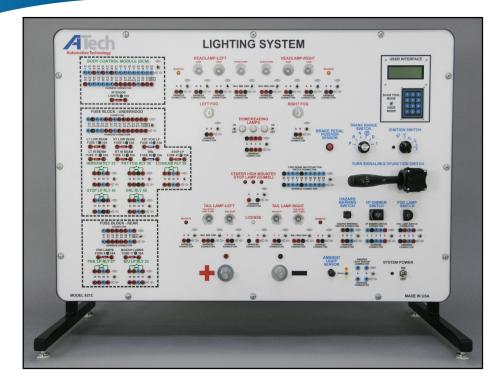
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California Automotive Teachers & Facebook!

The Mission of the California Automotive Teachers is "To promote the best interests of automotive instruction throughout the State of California".

To help promote the organization's Mission Statement, CAT now has a Facebook page. It can be found at: https://www.facebook.com/calautoteachers. The purpose of the Facebook page is to allow automotive instructors to share their program successes with their peers and industry partners in California, United States, and around he world. At the present time, many of our followers on Facebook are industry partners who play a role in our success. Please feel free to post innovative teaching techniques, program highlights, facility improvements, and anything else that will help promote the

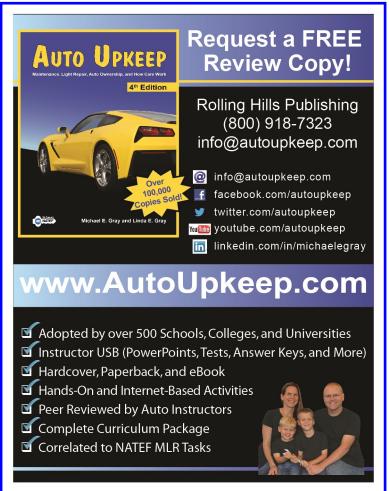
best interest of your program and automotive instruction.

If you experience any problems with our Facebook page please send a message to our page, or email rick@calautoteachers.com Help to make this page a success!

Editor's Note:

On behalf of the CAT Board and its membership, I would like to thank the newsletter advertisers, the conference exhibitors, presenters, and sponsors.

Without your commitment to the organization and to education in general much what CAT does could not take place. We appreciate your support and willingness to contribute money or time to improving the educational environment for our members.



10 Breakthrough New Car Features for 2018—Forbes

Cadillac: Leave The Driving To Us

Cadillac's long-awaited semi-autonomous-driving Super Cruise system finally comes to market for 2018 as a \$2,500 option on the brand's flagship CT6 sedan. It incorporates the car's existing suite of driver-assistance systems, including adaptive cruise control, blind spot and lane-monitoring systems, and forward auto-braking – and enhances them with a self-steering function and advanced LiDAR-scanned mapping. Though it's limited to use on multi-lane highways, Super Cruise affords hands- and foot-free driving by automatically maintaining a safe distance between the vehicle and traffic ahead at a speed selected by the driver, and keeping the car centered within lane markers.

A driver attention system keeps an electronic eye on a motorist's head position via a steering wheel-mounted camera to ensure he or she is properly and prudently monitoring the road and is ready to re-take control of the vehicle if necessary. Should the driver be caught, say, reading a book or is applying makeup while in Super Cruise mode, the system will give a series of audible and visual warnings to tell him or her to refocus on the task at hand; if after continued warnings the system determines the motorist is unresponsive, it will bring the vehicle to a controlled stop and, if necessary, contact first responders.

Volvo: Steering Out Of Trouble

Taking yet another step toward fully autonomous driving for 2018, both the redesigned Lexus LS sedan and Volvo XC60 crossover SUV can literally take the steering wheel away from the driver in certain situations if necessary to avoid collisions. The LS offers a new Intuitive Pedestrian Detection with Active Steering system that will apply the brakes and steer around a person if he or she happens to be in its path, while staying within the current lane of traffic. Meanwhile, the XC60 incorporates auto-steering in its low-speed City Safety system to avoid hitting other vehicles, pedestrians, and even large animals in its path; auto-steering is also now included in the XC60's optional Blind Spot Information System and its new Oncoming Lane Mitigation system to help avoid collisions with vehicles in adjacent lanes.

Daimler: Wellness on Wheels

As it is, Mercedes-Benz's big S-Class virtually defines excess with regard to over-the-top luxury features like heated armrests, but the 2018 version of this serene sedan can even further a motorist's well-being thanks to a newly available ENERGIZING Comfort function. It adjusts the car's climate control, seat heating, cooling, and massaging functions, ambient lighting, audio system programming, and even the car's automatic fragrance dispensing system according to six selectable programs claimed to maximize both a motorist's overall well-being and his or her performance.

These 10-minute mobile spa visits are designed to enhance "Freshness," "Warmth," "Vitality," "Joy," and "Comfort," along with a "Training" function with simple exercises designed to promote muscle relaxation, muscle activation and balance. Color graphic visualizations are displayed on the car's infotainment system screen, with pre-selected music running in the background. Five tunes are already stored in the system, and if the driver uploads his or her own songs, the interface analyzes and assigns them to a specific program according to the number of beats per minute. The S-Class's 64-hue ambient lighting changes according to the car's ambient temperature, can welcome the driver and passengers with a custom atmosphere, and can be set in either of five intensity levels for four separate zones within the cabin.

(Continued on page 22)

CALIFORNIA SMOG TECH UPDATE CURRICULUM

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Annual Training Opportunities in addition to CAT Conferences



<u>VISIONKC</u> is held in Overland Park, Kansas, the first weekend in March. It is the largest aftermarket conference in the country. It offers training opportunities for educators and industry professionals. Training classes are offered Thursday through mid-day on Sunday. Many of the top trainers from across the country conduct the training sessions. Certificates of Attendance are awarded for NATEF credit.

For additional information go to: http://www.visionkc.com



NACAT Conferences commence the third week in July. The conference site moves each year, in 2018 it will be held in Williamsport, PA. The conference offers instructors the opportunity to obtain 20 hours of training that meets NATEF requirements. This is a family event with tours and other family activities during the week.

For additional information go to: http://www.nacat.org



ASE's Industry Education Alliance offers a week long Instructor Training Conference the last week of July. The conference site moves each year, in 2018 it will be held in Frisco, Tx. The conference offers instructors the opportunity to obtain 20 hours of technical training that meets NATEF requirements.

For additional information go to: https://www.asealliance.org/events/conference

Kia: De-Compressing

Audio purists have long decried the inherent loss of fidelity in today's digital music, arguing that it loses up to 90% of its sonic details when it's compressed and loaded onto a smartphone. While the auto industry briefly toyed with and subsequently nixed the notion of in-dash turntables that would bring the warmth and richness of vinyl analog recordings to the family car, the new-for-2018 Hyundai Elantra GT and Kia Stinger models are taking a more practical approach to upping the aural ante. Both models offer Harmon's new Clari-Fi system that purports to restore digital audio signals to full fidelity. The system scans compressed audio files for lost music details and corrects waveform deficiencies to create clearer, crisper, wider, and more dynamic source quality.

Lincoln: Video-To-Go

With many vehicles already offering built-in Wi-Fi hotspots for connecting portable devices to the internet, the redesigned 2018 Lincoln Navigator goes a step further with the technology. The full-size SUV's available dual-screen rear entertainment system can now accommodate a Slingbox streaming media device that enables passengers to access live streaming TV channels while on the road.

Hyundai: Augmented Reality

While some automakers have already digitized the owner's manual, Hyundai's Genesis luxury-car division gives it the augmented reality treatment for 2018. A free download for iPhone and Android-based devices, the new Genesis Virtual Guide leverages 2-D and 3-D tracking technology to make looking up how a particular system or function operates as easy as pointing a phone or tablet at it. The app includes 135 how-to videos and 25 3-D overlay images that pop up on a smartphone or tablet's screen when the device's forward-facing camera is focused on a particular spot within the car's engine bay or interior, along the exterior, or within the dashboard's instrument panel. Aiming the camera at a specific part of the engine will display maintenance instructions, while a "button scanner" function identifies key control functions on the dashboard and allows a user to access instructional videos that demonstrate operating key features.

Honda: Instant Bluetooth

One of the biggest bugaboos reported by new-car buyers in recent years, has to do with balky Bluetooth mobile phone pairing. Honda seeks to make this process much easier in its redesigned midsize Accord sedan via so-called Near Field Communication (NFC) technology. Though its use is (at least for now) limited to Android phones, all a motorist has to do to pair a phone is to simply tap it against a stylized "N" logo on the dashboard. Most recent cell phones incorporate an NFC chip, which otherwise works with tap-to-pay systems at stores and fast food restaurants.

BMW: Finding A Parking Spot

Parking, especially in crowded urban environments, is the bane of many motorists. Today's cars help make the matter easier and safer with front and rear proximity alarms, backup cameras, and even self-parking systems. BMW models will go a step farther for 2018 by incorporating technology from the smartphone app company Parkmobile that helps drivers reserve and pay for parking in 250 cities across the U.S. and Canada via the cars' iDrive infotainment system. This includes locating both available on- and off-street parking, and airport and event reservations. Users are given a choice of parking locations based on current GPS coordinates, and can preselect parking times with the ability to extend sessions remotely via the companion ParkNow app.

(Continued on page 23)

Honda: Don't Make Me Come Back There

Keeping the peace among bored and irritated children that are confined to a car during a long road trip is a ritual that likely dates back to the Model T era. Sure, rear seat entertainment systems and mobile technology have replaced playing Auto Bingo or singing "99 Bottles of Beer on the Wall" to help pass the time, but Honda is now letting parents keep a closer eye – and ears – on the kids in its redesigned Odyssey minivan via a pair of new features. CabinWatch lets parents snoop on the kids via an embedded camera and dashboard video display (parents can even electronically observe an infant strapped in a rear-facing safety seat), while CabinTalk lets both front- and rear-seat occupants communicate back and forth without having to shout.

Ford: Silence Is Golden

One of the real thrills inherent in driving a high-performance car is experiencing the forceful and throaty growl of the exhaust system upon startup or whenever one gives the throttle a solid push. Unfortunately, this can be a major annoyance among the neighbors, especially if the vehicle's owner keeps odd hours. To help preserve the peace, Ford is offering a new "Quiet Mode" function for the updated 2018 Mustang that essentially muffles its riotous roar to a subdued whisper when activated. Once out of earshot the driver can fine-tune the system according to selectable levels of audible aggression, including sport and track modes.

MORE FROM: Jim Gorzelany, Contributor



Myron Maurseth - 1/8/1938 to 9/1/2017



Sherman Myron Maurseth January 8, 1938 - September 1, 2017 Newport, WA Sherman Myron Maurseth passed away on September 1, 2017, with his daughter Maria Worthen and son-in-law, Wes Worthen Sr., by his side. Myron as he was known by all was born on January 8, 1938 in Northwood, ND. He grew up on a farm, went into the Air Force, and then graduated from the University of North Dakota with a Bachelor of Science degree. He planned on becoming a doctor or dentist, but became an automotive doctor instead. Myron helped start the CA smog program teaching out of his bay at the Shell station he owned. He

and his wife, Margaret Maurseth, DOD March 24, 2016, moved to San Marcos and opened High Tech Auto, teaching at night out of their shop. They opened CIAT (California Institute of Automotive Technology), in 1997. His two grandsons, Matt Bartlett and Aaron Allen, both became smog technicians at ages 18 and 19. Myron wrote many manuals for the State of California, and sold them to private schools and colleges throughout California. He also was involved in the Train-the-Trainer program, teaching others to become instructors. He always thought of the student first, and wanted to make sure that what he wrote and taught was something the student could easily understand. He loved to fly and obtained his pilot's license, and also loved to mine. He would take the family to Trona, CA. in October for their annual gem and mining show. Myron was admired by many of his students and those who became Instructors. Many of the students now own their own shops, and their children are now coming to CIAT. His motto for the school was Integrity and Expertise, which he and his wife, Margaret, lived up to. Matt Bartlett is now manager and smog technician at High Tech Auto. Maria and Wes Worthen Sr. operate both High Tech Auto, and CIAT. We are all trying to live up to Myron and Margaret's legacy, not an easy thing to do. He was preceded in death by parents Ingvald and Stella Maurseth, sisters Sylvia and Ilah Maurseth, and his beloved wife of 56 years, Margaret Maurseth. Surviving loved ones are daughter and son-in-law Michelle and James Lycans, daughter and son-in-law, Maria and Wes Worthen Sr., grandchildren Matt Bartlett and wife Lindsey, Brianna Johnson and husband Chas, Aaron Allen and wife Melissa, Wesley Worthen Jr., and Ashley Worthen. He also had seven great- grandchildren, Zoey and Noah Bartlett, Kaitlyn and Joy Johnson, Alexia and Braden Allen, and Rylynn Worthen.

Editors's Note: Myron was a member of CAT for many years. Many of us benefitted from using his training materials and attending his workshops. I had the pleasure of serving with Myron on BAR Smog Check Advisory Committee for 8 years. To his daughter, Maria, and Son In-law, Wes, Myron will be missed by many of his peers. Thank you for sharing him with us throughout the years..

Terry LaCroix - 10/27/1942 to 7/1/2017

Terry grew up above Los Angeles, in the quiet hills of La Canada, where he wreaked havoc in the streets into early adulthood. He volunteered for the Army Reserves during the Vietnam era, was honorably discharged, then co-owned a carburetor shop in Burbank, paying his way through USC and graduating Suma Cum Laude.

Brimming from a formative education, he was offered an assistant professorship at Pasadena City College in their Engineering and Technology Department. Ford Motor Company was drawn to Terry's technical abilities, bringing him to Denver, Colorado, where he worked as District Engineer solving dealership problems on the Western Slope. After Ford, he sold testing equipment for Sun Electric, always outpacing his peers nationally through his knowledge and kindness.



After interstitial success in engineering and sales, he returned" to professorship at a then-small MiraCosta College, with an even smaller automotive department. Out of his passion for cars and education, he grew the nascent department into a thriving, competitive program. For his care and dedication, he won the Hayward Award in 2002. Terry retired two years later, in 2004.

Terry deeply loved many things. He loved to read, he loved to run, he loved cars and politics, but above all, he loved his friends and family. He will always be remembered for giving all he had to the people he loved.

"When knowledge is delivered in an uplifting, inspiring manner, many will, for the first time, see education as a source of great personal pleasure and pride. To experience education this way can turn on a light and instill pride and confidence in a student that can burn indefinitely".

-Terry LaCroix-

Editors's Note: Terry was a member of CAT for many years. Terry and I became friends at the 1991 CAT Conference hosted by Skyline College. At the Friday night board meeting I was asked to close the door and by the time I returned to my seat, both Terry and I were nominated and elected to the CAT Board. Not long after that Terry took on the role of CAT Newsletter Editor. I offered to help him with the advertising. Many of you can probably picture the drab grey paper with blue lettering. It was such a joy to work with Terry on the newsletter. He would be so proud of how the newsletter has evolved.

I always enjoyed hearing Terry talk about his Shelby and Lincoln. One day he told me that his Lincoln had a shutter at 120 mph so he took it to dealer. The dealer proceeded to tell him that they could not duplicate the concern because they would not test drive a car at that speed!

The battle is over, R.I.P my friend!

S.T.E.M. Basics Part 1 - Phil Jelinek

This is the first of many articles about S.T.E.M. to help students/learners understand the basic concepts of what everyone in talking about, in easy to understand terms. I have attended many S.T.E.M. symposiums, only to discover that after the students explain their projects, they are unable to separate which part of their project is either the Science part, Technology Part, Engineering part, or the Math part. You see, S.T.E.M. is an acronym that stands for Science Technology Engineering and Mathematics.

Acronyms/Initialisms! Many of my students did not know what an acronyms/initialisms were. Acronyms, of course, are abbreviations where the abbreviation is formed from letters of other words (usually the first letter of each word, though not always). The part of the definition of acronym that many people miss is that the resulting abbreviation needs to be pronounceable as a word. Examples of this would be things like RAM (Random Access Memory); LASER (Light Amplification by Stimulated Emission of Radiation); NASA (National Aeronautics and Space Administration), and OPEC (Organization of Petroleum Exporting Countries).

Initialisms are very similar to acronyms in that they are made up of letters of some name or phrase, usually the first letter of each word as is common with acronyms. The difference between an acronym and initialism is that the abbreviation formed with initialisms is not pronounced as a word; rather you say the individual letters, such as FBI (Federal Bureau of Investigation), CIA (Central Intelligence Agency), and DVD (Digital Video Disk*). The Initialism "cc" stands for Cubic Centimeter and is a Metric Math term we use to explain the volume of our engines. I use a model of a "cc" and a cut-away cylinder from a 1600 cc Volkswagen motor (See Figures #1 & #2 on page 27). I find it easier to explain the single cylinder's combustion chamber volume as 400 cc's (1600 cc's/ 4 cylinders = 400 cc's per cylinder) and easier to understand when I put the cc's in the combustion chamber as a visual.

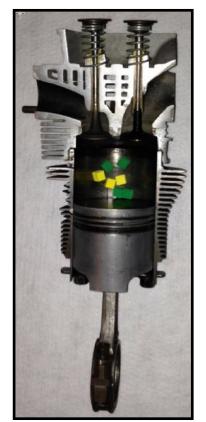
The initialism "cid" stands for Cubic Inch Displacement and is another Standard Math term we use to explain the volume of our engines. A 350 cid engine has 8 cylinders, i.e. 350/8 = 43.75 cubic inches per cylinder. **Figure #3 on page 27** shows how Cubic Inch and Cubic Centimeters blocks displayed in the same manner will produce similar results.

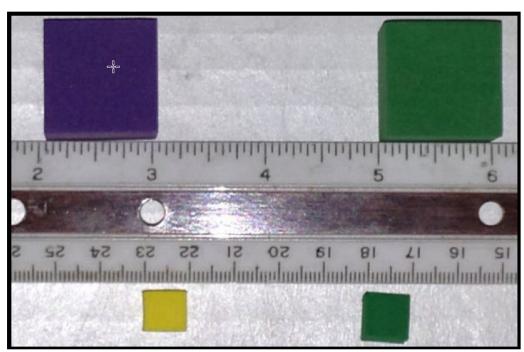
The initialism "cfm" stands for Cubic Feet per Minute and it describes the rate at which a certain volume of air moves in a certain period of time. In the Automotive Field, we use this term to measure the airflow into an Internal Combustion Engine. To give students an awareness of how much a Cubic Foot is, see Figure #4 on page 27.

What I would suggest, for those of you who use ACRONYMS and/or INITIALISMS in any teaching

situation, that you frequently tell the class what the acronyms/initialisms mean – often and don't ASSUME the class will get it the first, second or fifth time one is used......

Editor's Note: Phil has a series of articles related to S.T.E.M. and they will be published in future issues of the CAT Newsletter.





(Figure #3)

(Figure #1)



(Figure #4)



(Figure #2)

Spring 2017 Conference Pictures Provided by Roddy Rampersad



What Makes a Successful Program? - Rick Escalambre



Over the years, I have visited many automotive programs throughout California and across the country. One question that comes up is, what makes a successful program or is it the amount of funding \$\$\$ a program receives? My theory is, people make a program and people break a program. Quality people (instructors & support staff) establish control of their program by being proactive. Are the instructors involved in campus activities and committees? Are they seen and heard by the administration? Are the instructors known by their local automotive industry? Do

they get off their campus to attend industry sponsored workshops locally and around the country?

Successful programs require support. I like to use the word "support" because it encompasses a number of items. First and foremost is administrative support. Does the administration allow the program to control its own destiny? Does the administration support your program when enrollment has hit a decline? Do they allow the program to be creative with how they teach and what they teach? Do they understand the role vocational programs play in the college's Mission Statement? Do they understand and accept the fact that vocational programs, per student, are expensive to operate, but they are a vital part of the college and the success of the local business community? Administrators will come and go, so the program has to be positioned so the next administration is told to "leave them alone because they will do what is right".

How do you maintain a successful program? To maintain a successful program instructors and support staff must take a proactive approach and not a reactive approach. Successful programs are creative and they plan ahead. I was told many years ago, always have a Plan A, if Plan A doesn't work move on to Plan B, if Plan B doesn't work move on to Plan C. I can't tell you the number of times we have reverted to Plan B and occasionally Plan C.

How do you find instructors to maintain these standards over a long period of time? **Grow your own!** You start by identifying current and former students who could make excellent instructors. When you identify potential instructors from this group, tell them you would like to see them come back and teach for you someday. Usually their response is, **really, you think so? You know, I have thought about teaching.** When I retired from full-time teaching, one thing I was really proud of was the 18 former students who have become full or part-time instructors at Skyline College, other colleges, with a manufacturer, or somewhere else in the industry. Start them as an adjunct instructor, which typically requires different qualifications than a full time position. Generally, they have the technical knowledge. What they lack is the classroom and learning management skills. Mentor them and most will succeed.

How do you keep the students the length of the program? At Skyline College it is clear that the student comes first and automotive comes second. Without the students we would not have a program. While their interest in automotive attracted them to your program, it is the instructors and staff that keep them there for the long haul which is 2 to 3 years.

Once you establish a student-first attitude and the administration acknowledges it, the program will take an immediate upturn. We do this by hosting a Christmas Luncheon where the students provide all the food and we invite the college administration, the Chancellor, and the Board of Trustees. We also invite people from the campus who have helped our program: Building and Grounds, Admission and Records, Advisory Board, etc. At the end of the year we have a graduation/awards banquet and parents are invited along with the college administration, Chancellor, Board of Trustees, and the Advisory Board. On a regular basis each class has a barbeque. We make sure the students understand that it is **THEIR** program. Most administrators feed off of the students. Our administrations over the years have had a feast with all that we do for the students.

I have met with Deans and instructors from other colleges who wanted to see why Skyline College's program is so successful. When they saw what we have they were in awe. Unfortunately, no amount of money would have fixed their programs at that time because they had people problems. By this I mean instructors who did not get along or were not willing to work cooperatively in the best interest of the students who are their program. Some of those instructors have now retired and the programs are slowly improving. Might additional funding \$\$\$ help them now? The simple answer is yes! I bet there are a few people who will read this and say, is he talking about my program?

Vocational programs have to be aggressive, involved, creative, and most importantly **respected** by their students, administration, and local business community. Administrators feed off of the enthusiasm of their faculty. Let that enthusiasm come from the vocational programs. Then the funding and good things will begin to happen.

As an instructor you can earn the **RESPECT** that makes and keeps a successful program by:

Realistic goals!

Enthusiasm for what you do!

Students come first!

Professionalism is contagious!

Energy that is renewable with each new day!

Commitment to the student, program, and college!

Teach less and they will learn more!

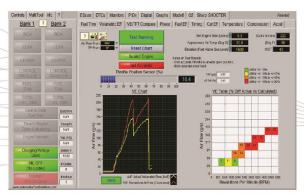


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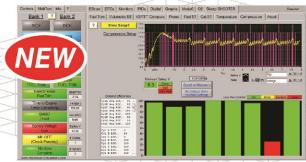
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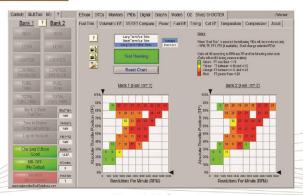


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The CAT Newsletter is always looking for technical articles and advertisements! The deadline for submitting articles an ads is March 25th for the spring issue and September 25th for the fall issue. Articles should be submitted in Word. It is preferred 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:

visit our WEBSITE at

www.calautoteachers.com

CAT Conference Spring 2018 Hartnell College April 27 & 28

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