

Automotive Technology Program Advisory Committee Meeting

Meeting Minutes October 26, 2016

Members present: Oliver Taylor, John Miller, Ryan Thomson, Ken Rocha, Jose Castillo, Will Mobley, Michael Richards. Absent: John Neely, Lacey Cunningham, Dan Williams, Jeremy Rasmussen.

Call to order 6:30 pm.

Action items:

1. Approval of Minutes; motion to approve by, John Miller seconded by, Jose Castillo approved unanimously.
2. Approval of NATEF Compliance Review Report, motion to approve by, Jose Castillo seconded by, Ryan Thomson approved unanimously.

Discussion Items:

1. Maintenance and Light Repair Program

Mike briefly reviewed the committee on the ongoing effort to establish this one year certificate program and some of the challenges it has faced. The main remaining challenges are, a place to house the program that doesn't interfere negatively with the current program, adequate staffing to be able to run concurrent courses, and obtaining adequate tools and equipment. He informed the committee about a statewide initiative, that will allocate about \$500K to CR for the next 3 years. AT could put forth a proposal to use some of those funds to renovate and equip the old Diesel Lab to house the MLR Program. Cost estimates would be about \$200K 1st year for infrastructure modifications, \$100K second year for lift and shop equipment installation, and \$50K third year for tools and tech equipment. We could possibly also work advancements to our hybrid training into the proposal. It would take a lot of work to generate the proposal and we would have to demonstrate employability of completers, potential to increase enrollments, and sustainability. That would require significant research and documentation, with no guarantee of success, and the proposal is due near the end of November. Mike requested input from committee members as to the employability of students trained to this level and the approximate turnover rate of those type jobs.

Questions and/or comments:

- Ken Rocha stated that from his perspective as an independent shop owner he doesn't foresee completers of an MLR Program as someone he would employ in his business. He

has hired a number of AT Program students and feels his needs as a local employer are best met if students complete the full program. He doesn't believe a person trained to the MLR specialist level would be suitable for employment at his shop.

- Will Mobley stated that he doesn't believe the MLR Program would be sustainable in this area. He has an MLR type tech who handles the lube and inspection work at his dealership who has 16 years with the company and is not close to retirement. Will would not be interested in hiring completers of this level of training and thinks many established dealers in the area may be in a similar situation.
- Ryan Thomson stated that the city and county garage tech's have to be trained to do much more than MLR type work and he also doesn't see this level of training as beneficial to the local industry. He also voiced concerns about completers of MLR possibly taking jobs away from completers of the full MAST Program.
- Ken Rocha stated that MLR tech's would have to be trained on newer vehicles than are currently available for training at CR to be effective as the technology is evolving rapidly.
- John Miller also felt that State Parks would much prefer to hire someone with the full MAST Program training.
- Ken suggested that he would like to see the focus shifted to enhance and expand the hybrid electric training at CR as that is a growing demand in the local industry. He specifically would like to see evening professional update hybrid classes offered for tech's in the field as well as a full course on hybrids for the program.
- There was general consensus about pursuing the hybrid portion of Mike's grant proposal instead of the MLR portion.

2. Auto Course Review.

Mike passed out course content, curriculum, NATEF task lists, theory and lab coverage for AT 12 Brakes, AT 14 Manual Transmissions, AT 16 Automotive Electrical Systems, AT 18 Engine Repair, and AT 22 Automotive Electronics. The intent is to review 5 of 10 courses each meeting and gather input from committee members as to content and coverage, relevancy to current industry practice, and effectiveness. We'd also like to hear from any employers of our completers as to how they do in these areas.

Questions and/or comments:

Mike started off by explaining what is covered in AT 16 Electrical, basic electrical theory, batteries, charging systems, starting systems, lighting, horns and wipers. He further explained what was covered in the AT 22 Electronics course, electronic theory, warning systems and instrumentation, cruise control, power door locks and windows,

SRS, TCS, anti-theft systems, and hybrid vehicle technology. Mike explained how the new electronics trainers were being used but also informed the group that he very much emphasizes hands-on, live vehicle testing/training using a variety of test equipment.

- Will Mobley stated that we should leave these two courses as written.
- Jose Castillo agreed with Will that we should leave these two courses as written.
- Oliver Taylor suggested that emphasis be placed on power and grounds when diagnosing electronic circuits.
- Mike explained that he has always placed significant emphasis on verifying power and grounds as well as integrity of primary wiring or in other words strong emphasis on the basics.

Mike passed around the course info for AT Automotive Braking Systems and explained what was covered in that class.

- Ryan Thomson said they rarely machine rotors or drums anymore, they just replace them if found to be worn or damaged.
- Will Mobley concurred that they rarely machine as well and if they do it's usually only rotors using on-the-car brake lathes.
- Ken Rocha said they also replace most drums and rotors and mostly use on-the-car lathes on vehicles with fixed rotors or one piece hub and rotor assemblies.
- Mike stated that machining is always a difficult skill for students to develop and he agreed to examine and evaluate emphasis is being placed on machining of drums and rotors in future sections of AT 12.

Next up everyone got copies and explanation of what is covered in AT 18 Engine Repair.

- Oliver Taylor suggested that BMW's Valvetronic System should be covered as it has been around for several years and is used pretty extensively in BMW product lines.
- Ryan Thomson commented that although engine disassembly and precision measuring is no longer practiced in the field it is valuable to students to see first-hand the internal components of an engine and to practice proper re-assembly techniques.
- John agreed with Ryan that it was still worthwhile for students take an engine apart, inspect and re-assemble it.

- Mike stated that variable valve timing was covered in the class and the college has a few vehicles with VVT systems and agreed to review the BMW system. He also asked Oliver to be on the lookout for a possible vehicle donation with the Valvetronic System on it.

Mike then passed around the AT 14 Manual Transmission/Transaxle & Drivetrain course info and explained the course content, grading system, and lab activities.

- Ken Rocha stated that the covered things they do frequently in his shop and he felt it was a good class just the way as is.
- Jose and Ryan agreed.
- Mike appreciated the input from committee members on course content and curriculum.

3. Course Scheduling Review.

Mike handed out a proposed course schedule for the next 2 years for review. He explained that with the addition of new instructor the program is now able to offer a path to completion in 2 years which should dramatically improve completion rates. Additionally, the proposed schedule will allow students to complete all 10 AT courses in 2 years. We have identified a path to completion for students that would only require them to attend AT classes 2 days a week. Many of our students have stated the biggest obstacle to completion is that they need to work and have a life so they really need to be able to attend classes only 2 days a week. The proposed schedule provides a path to completion of the 2 year Certificate of Achievement, Automotive Technology in 2 years and the opportunity to do so by attending only 2 days a week. The Associate Degree Automotive Technology will require more coursework and more than 2 days a week. We'd like to get some feedback on the proposed schedule from the committee.

- John Miller approved of the proposed scheduling but inquired if it was sustainable.
- Jose and Oliver agreed.
- Ken Rocha said that scheduling of classes for the last few years has proven to be very difficult for his student employees to negotiate a path to completion, something he is strongly encouraging them to do. He understands the scheduling challenges with only one instructor and is encouraged to see the 2 year, 2 days a week scheduling implemented.
- Ryan Thomson made a motion to adjourn the meeting at 8:45pm seconded by Jose Castillo, unanimously approved.
- Mike again thanked everyone for their attendance and participation.