



Professional Technician Development Committee Information Report: 2007-2

Necessary Instructional Standards For Preparing Entry-Level Technicians

Developed by the Technology & Maintenance Council's (TMC)
Professional Technician Development Committee (PTDC)
Instructional Standards Development Task Force

ABSTRACT

The occupational outlook for employment of truck service and repair technicians remains strong and is expected to increase at an average pace for the next 10 years. There is a strong need for technicians because of industry growth as well as openings associated with turnover and retirement. This, coupled with the pace of changing truck technology, provides a challenge to managers in finding interested and qualified technicians to fill these positions. The trucking industry needs to establish a method to develop technicians with appropriate skills. One key resource to this end should be local and national career/technical programs. Standards from the National Automotive Technician Educational Foundation (NATEF) should provide task training that will meet most of the required skills.

ISSUES

Qualified technicians are needed by fleets, service-dealers, component suppliers and original equipment manufacturers (OEMs). Most service providers recognize the difficulty in finding trained technicians for current and/or future requirements. Past practices of "stealing" technicians from competitors do not address the long-term problem of finding additional technicians. Because this is an industry-wide concern, the recommendations offered in this paper apply to: fleet, maintenance, and service managers; career and technical school

personnel; state and national career and technical education (CTE) administrators; OEM and component manufacturers; and students.

Discussion of instructional standards began at TMC as a result of observations from managers questioning the skill training received by recent technical school graduates. It appears obvious that training expectations vary among managers, students, teachers, and technicians for numerous reasons. A service manager at an engine distributor expects different knowledge and skills than the service man-

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ager of a truck dealer or a motor carrier. Since most manufacturers provide specific product training, CTE programs should provide a basic skill level acceptable to most of the industry targeted. Required NATEF tasks are a good base for those skills.

NATEF CERTIFICATION

NATEF certification is a lengthy process and requires a certain amount of expense and extra work for achievement. Not all programs may presently have the needed funding, enrollments, facilities, equipment, or personnel available to complete or achieve NATEF certification. NATEF certification is not the only means for ensuring qualified graduates. However, NATEF certification does provide some assurance of the level of training the graduate receives. NATEF tasks serve as a useful comparison tool to ensure a school's curriculum meets expected training levels. Each secondary, post-secondary, and private program should be evaluated on its own merits and the hiring company's requirements.

RECOMMENDATIONS FOR FLEETS

- Establish a relationship with secondary or post secondary vocational schools. (See *TMC's PTDC Information Report: 2006-3—Technician Retention and Recruitment* for guidelines.)
- Review the NATEF tasks in each of the following Medium/Heavy Truck Standards areas:
 - Diesel Engine
 - Drivetrain
 - Brakes
 - Suspension & Steering
 - Electrical/Electronic Systems
 - Heating, Ventilation, & Air Conditioning
 - Preventive Maintenance Inspection
 - Hydraulics
- Identify the tasks your operation requires for entry-level technicians.
- Compare your company's requirements to the vocational programs with which your company has aligned itself.

- If a program lacks the training your company requires, inquire how it can be included. Will the school require additional equipment, tooling or training to add it to the curriculum? Can your company be of assistance? Perhaps your contacts in the industry are stronger than those of the school's.
- If time is a problem to adding desired tasks, review the present curriculum. Can some present tasks be eliminated from the program curriculum? Use the P-1, P-2, P-3 designations in the NATEF tasks to help decide priorities.
- Discuss with the school how your company can assist in preparing entry-level technicians. Some ideas can include: mentoring, work/study programs, internships, presenting career day skills (i.e., interviewing, work readiness, desired traits), field trips, and equipment loans.

CONCLUSION

Remember, this is an industry challenge—not just a company challenge. Get your competitors and vendors/suppliers involved because they, too, need competent technicians. Even the students your company does not eventually hire will need jobs if the program is going to sustain itself. Find a place in your work force for the “average” technician, also. Not all technicians will be “TMC SuperTech Grand Champions” when they graduate, but they could be in the future. Provide a path for growth and hope for students as well as schools and they will take it.

NATEF STANDARDS

More information about NATEF can be found on the internet at www.natef.org. Read the link **About Us** to find out more about NATEF. This site can also be used to find certified programs by state and CASE certified training providers. Clicking on **Certification Process** and then on **Program Standards** at the left side of the page will take you to a link of all the **Medium/Heavy Truck Program Standards**. □