

Equipment Repair Evolution Revolution: Part 2

How Proxy Tech programs can help close the widening skilled mechanic gap

By E. Victor Brown



In the first installment of this article, the nature of a Proxy Tech program for various industries needing additional maintenance support that goes beyond operator care programs was discussed. The seven aspects to developing a Proxy Tech program include: 1) identifying proxy tech tasks, 2) program framework development, 3) choosing and vetting proxy tech candidates, 4) developing skill sets and training, 5) developing tool sets and parts kits, 6) putting oversight component in place, and 7) developing evaluation framework for program success. Let's continue with program development aspects 4-7.

4: SKILLSETS AND TRAINING

After tasks identification comes list skills development needed to perform each task. This guides training protocols based on a combination of OJT with technician mentors and OEM training programs. This would include electrical fundamentals, the importance of fasteners and torque, lubrication principles, and more.

5: TOOLS AND PARTS

Next, development of the Standard Operator Care Kit (SOCK) or "Uptime Kit," which is a combination of parts and tools for very specific repairs based on defined tasks. This is accompanied by development of single-point lesson plans or job aids for each task. These short narratives with logical pictures developed from OEM manuals and best practices

would be assembled into a laminated book to eliminate memorization needs.

6: OVERSIGHT

Proxy Tech success depends on program oversight, so committees need to identify personnel to sponsor and oversee the program. Sponsorship must include senior level executives and regular weekly meetings at program launch to ensure functionality. Meeting frequency can gradually diminish as the committee moves to monitor and process adjustment mode. According to Preston Ingalls, the CEO of maintenance and reliability consulting firm TBR Strategies, companies should start with a pilot program before expansion into other crews. "The pilot needs multiple crews to show true cause and effect in terms of the results and success of the program," explains Ingalls.

7: EVALUATION

Process evaluation is the last program component and is based on a pre-program baseline for downtime per 24-hour period and costs per hour for repairs. This means determining mechanic dispatch frequency based on hours per crew over a set period. Consequently, companies gain quantifiable evidence of change and success based on metrics.

BENEFITS OF A PROXY TECH PROGRAM

The increase in rolling stock and machinery uptime is the most obvious Proxy Tech program aspect. In construction, one downed paver can

create a domino effect where dump trucks and the asphalt plants that supply them are negatively affected. This results in significant losses that grow exponentially over time.

To counter such effects, TBR Strategies has instituted and encouraged Proxy Tech programs as part of their Total Process Reliability (TPR) initiatives for more than a decade. Time has revealed quantified first-hand benefits for companies. Ingalls explains how increased uptime necessitates Proxy Techs with mechanic jobsite distance and insufficient numbers in companies:

"Having the right skills, the right parts, and the right tools at the right time makes perfect sense," says Ingalls. Unfortunately, many companies don't do this, and instead wait for equipment breakdowns that lead to panic mode and delays. That leads to premium costs and added overtime expenses that must be made up later."

REAL-WORLD BENEFITS: SUPERIOR PAVING CORP

With numerous TBR implementations of customized TPR, TPM, and Proxy Tech programs across many industries, the firm has helped facilitate 2 percent breakdown rates and award winners for world-class maintenance practices. "We help all of our clients install operator care as a basic component of TPR, which yields greater results for those with heavy repair-side responsibilities," says Ingalls. "This can be expanded into a Proxy Tech program."

ABOUT THE AUTHOR

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New York state's The Gorman Group and Gainesville, Virginia's Superior Paving Corporation are just two of those clients. Superior Paving Corp. has nine asphalt plants across Northern Virginia and more than 270 pieces of rolling stock with major projects across the state.

Superior Paving designates their Proxy Techs as "Crew Mechanics," which operate as part of their paving and milling crews. Their role is aiding crew self-sufficiency, increasing productivity, decreasing downtime, and thereby improving the bottom line. According to Superior Paving Corp. Operations Manager Jacob Dodson, having crew members trained to be responsible for minor repairs has delivered numerous quantifiable benefits:

"We get jobsite repairs completed quickly by capable people with the right tools, which eliminates or significantly decreases mechanic travel time while keeping the crews producing," says Dodson. They also facilitate increased crew training and knowledge specific to operational quality, which ultimately leads to better inspection and care of the equipment."

REAL-WORLD BENEFITS: THE GORMAN GROUP

The Gorman Group is a prominent highway construction and materials company based in New York State with three construction facilities, as well as large asphalt emulsions production and asphalt storage and distribution facilities. Their Amsterdam, New York maintenance facility is a central hub for servicing an equipment fleet of 300.

Sixteen crews provide services across several northeastern states, so it's not cost-effective, or efficient to dispatch maintenance personnel to jobsites hours away. Gorman Group Continuous Improvement Manager Patrick Ryan explains how their program and its designation as "Second in Command" are designed to fit those needs:

"We concentrate on the five largest crews with the greatest equipment compliment and largest projects," says Ryan. "Our approach was to create a Second in Command that acts as a foremen's assistant, which goes beyond their role as proxy technician and operator."

Gorman Group Senior Vice President of Operations Kevin Nichols explained how the program acts as succession planning via training for future foremen and superintendents. "We've divided responsibilities for the position so that different Seconds have different levels of responsibility," explains Nichols. "That gives us greater flexibility in leadership quality at that level."

In addition to defined task site repairs, Seconds oversee operator care initiatives to ensure process and inspection completion. This includes operator inspection form completion and submission follow-up, as well as facilitating repair scheduling follow-up with the maintenance department.

The seasonal company sends its foremen and technicians to OEM training schools each winter with Seconds rotated through each year as part of their training. Additionally, Seconds and operators work in the shop pre-season with technicians for equipment training and overhauls to elevate their maintenance skills. "With crews often working beyond maintenance technician reach, this

ensures that Seconds and operators have a good understanding of equipment," says Nichols.

GORMAN GROUP RESULTS

Through the combination of its TPR program with its Second in Command program component, The Gorman Group has seen impressive results that show:

- Emergency repair rates have dropped from 35 percent in 2008 to 2 percent in 2015
- Maintenance costs as a percentage of sales have dropped from 10 percent in 2008 to 4.7 percent in 2015

TBR Strategies continues to do what it can to spread the gospel of Proxy Tech as an adjunct of TPR and TPM to counter high equipment repair costs and downtime that limits growth and stability of most companies. "With no end to technician shortages in sight, companies must come up with strategies like the Proxy Tech program that have a track record of success and flexibility," says Ingalls. ■