By Joel Levitt CMRP, CMPP, CRL
JDL@Maintrainer.com WWW.MaintenanceTraining.com

Some Best Practices for Firefighting

We visited a local fire station with the kids. On the floor outside each of the doors of the fire trucks were a set of boots and a pair of firefighters' overalls so that you could step into the boots and pull up the overalls. The jackets, helmets, air packs, and entry tools were on hooks in the truck. Could you imagine the cost of lives and property damage if each firefighter had to stand in line at the parts window for their helmet or air pack?

Have you ever been to the emergency room in a hospital? When someone comes in with a broken leg, they roll over the orthopedic cart with all the tools and materials for broken bones. They cannot fix everything with what is on the cart, but they can stabilize almost everything and fix upwards of 90% of the emergencies.

Every area of our lives where quick response is essential follows some basic best practices:

1. Have the tools needed for 90-95% of incidents in a cart, truck, box, or other segregated area. The toolbox should be mobile and easy to access for the breakdown. A cart is okay in a building, but in a large industrial site, consider footlockers, toolboxes that can be thrown onto the back of a truck, or even a complete truck.

2. The tools are put away into the same places, pockets, drawers, and cabinets each time. In a breakdown, everyone must know where everything is to save time. That is why the drawer of all of a hospital's code carts (used when someone stops breathing or their heart stops) always has the same tools or drugs. Keeping the carts arranged correctly is crucial in a hospital where periodic task forces review and redesign the standard layouts as better technologies and tools become more commonplace.

3. Care is taken to clean, lubricate, charge batteries, and generally care for the tools after the crisis. There is nothing more frustrating than being in the middle of a repair and having a dead battery on a needed screw gun, meter, etc.

4. Predict the types of parts and materials needed and build up a cart, box, or vehicle with the materials required for 90-95% of the quick repairs. Alternatively, consider locking cabinets with critical spares in each area. The parts and materials issue in a typical maintenance setting is far

more bulky and complex than in a hospital (humans come in many styles but only two models, unlike machines!).

5. Replenish the parts used after the crisis is over. In a hospital, a nurse is assigned to inventory and replenish the cart after use. Who is explicitly assigned in your facility?

6. Create a work order for the records of what was done and what was used. Part of the job is cleaning and putting away the tools, replenishing the parts, and filling out the paperwork. Consider having a meeting a day or two later to discuss what happened, what went well, and what needs work for next time. This meeting is not to point fingers but to identify what worked and what didn't. In a hospital, there is a committee called the M&M Committee (Mortality and Morbidity) that reviews every death and sickness (that started once in the hospital) to determine what can be learned and if any procedures need to be changed (or reinforced).

7. Spend time training people in response to breakdowns. Let the people who are great at fire fighting teach what they do and how they approach these types of repairs. Use the work orders from the last crisis to jog people's memory.

Cart design:

Maintenance personnel and management should study the firefighter's cart. Consider the Phone Company or Gas Company. Tremendous thought goes into how to outfit a service person's truck. Next time you have an opportunity, ask the telephone installer or gas repair person how their vehicle is set up and why. Apply the lessons to the firefighting cart, van, (or even 5-gallon bucket!).

The more often you have the needed part in the cart, the more downtime you avoid and the more money you save.

Organizations that are serious about quick response to breakdown do the following:

1. Have meetings on this topic and discuss what happened in the past with their old-timers
2. Include the maintenance customer in these meetings
3. Decide who will do what when an asset breaks down
4. Decide where you will keep the cart and spares

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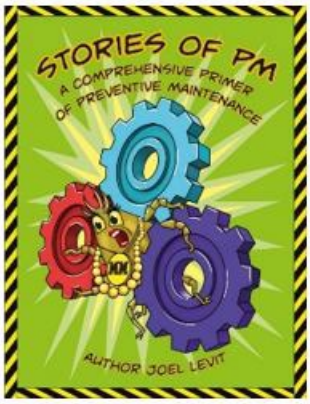

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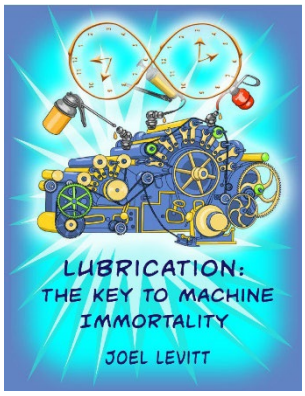

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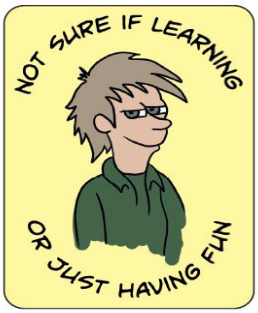

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- Boring texts don't cut it.
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- New students want ***entertrainment!*** (I made this word up from Enterainment + Training)

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