

## TO TRAIN, OR NOT TO TRAIN? IT SHOULDN'T EVEN BE A QUESTION

PAUL MAGNO – CONTRIBUTING AUTHOR

In my aviation career of 33 years (so far), I've had the pleasure of also being an instructor for 23 of those years. Many of my most enjoyable moments have been, and still are, in the classroom.

Since first becoming an instructor I've determined that, basically, there are two groups with differing philosophies regarding maintenance training. The first group believes that such training is valuable and beneficial and seeks it out. The second group believes that it's a waste of time and money and attempts to avoid it.

Clearly from my experience, those that believe that maintenance training is valuable are in the minority. Those subscribing to the "waste of time and money" thinking are the majority. This second group believes that training beyond the minimum required by the FAA or an aviation insurance company is unwarranted, unneeded and/or unjustifiable. Directors of Maintenance usually fall into the first group but, unfortunately, in many cases work for a member of the second group.

The 1980s, the so-called "Decade of Greed", saw the second group take control of the world's purse strings. With their takeover came a completely financial mentality. Expenses became investments. Investments should yield a profit. Known as ROI (Return on Investment), that meant the "return" or "value added" of the investment must exceed its cost. Expenses that produced no return had to be justified, reduced or eliminated. "Metrics" became the buzzword then and it's still the same today, except that expense justification, reduction or elimination is even more demanding. Fundamentally, this is sound reasoning but not every return is directly measurable and this is a big part of the second group's thoughts on training. In their view, training simply produces no measurable return, only cost.

The costs of training are directly measurable. For example, sending a technician to a training course has a tuition cost and travel expense costs. In addition it's likely that there are travel expenses (airfare, hotel, car, meals, etc.). And, there's the technician's wages while attending the course and possibly overtime costs incurred as other technicians work extra hours to cover missing personnel. Beyond the monetary costs there's also the problem of productivity loss and loss of aircraft use while people are out for training.

Granted, training can be expensive but with proper planning and budgeting the cost can be reduced and, depending on the operation, it may even be a tax deductible expense or might even reduce insurance premiums.

Unfortunately, the benefits of training are not so easily computed or quickly realized. For the most part, the benefits are intangible and unpredictable. You can't measure improvements in employee morale, self-confidence, teamwork, communication, sense of importance, etc. You cannot predict the savings due to increased productivity (i.e. less wasted time), reduced aircraft down-time (faster repair turn-around), reduced rework, reduced unnecessary equipment exchanges, purchases and repairs.

It won't happen overnight, but over a period of time, perhaps several years, the savings you couldn't predict can become measurable, if you know where to look. Large or small, over time, the savings can become huge, but lack of patience usually wins out.

Over the years I've heard all the typical excuses for avoiding training. Here are some samples along with commentary which may serve as a guide to where savings can be found.

"It's too expensive."

This classic is used by some operators with multiple aircraft (fixed-wing and helicopter) fleets worth hundreds of millions of dollars, not to mention the value of hangars, offices, equipment and salaries. Ironically, those who use this excuse seem to have no issue wasting tens, or hundreds, or thousands of dollars shotgunning problems by replacing multiple high-cost components that aren't the cause. But, they have a big problem paying a small fraction of that on training that very well may have resulted in the technician finding and fixing the problem faster and with less, or no, waste. I've frequently seen different operators replace the same LRUs three or more times only to find out the problem was a bad ground, a broken wire or they were replacing the wrong box! Thankfully, most large corporate operators are pro-training.

"We don't have time.",

This reminds me of the, all too frequent, frantic panic calls from technicians late on Friday afternoons. The boss wants the aircraft but it's AOG. Of course the tech, who usually had no training on the system, was out of ideas or had no idea how to troubleshoot the problem. What made it worse was that the problem surfaced on the previous Monday! This made my job as a customer support rep much more difficult and time consuming because now I had to teach the technician along the way so that he could understand what he needed to do so that I could solve his problem over the phone. It should be painfully obvious that technicians with relevant training were able to understand and follow my verbal instructions resulting in faster aircraft return-to-service. I've had operators decline training that was completely free because they simply could not, or would not take a technician off the line to attend a course that would have covered that same failure. The next excuse is closely related.

"We can't afford to take someone off the floor for that long."

I guess its okay to let someone keep doing what they're doing, spending hours, or days in some cases, doing something beyond their skill set while paying for their learning curve. Then, when something goes wrong, having to call someone in, or take the aircraft somewhere, to have corrective rework performed and oh by the way, incurring even more expense and down-time. While this type of excuse might come from nearly any operator, it's very disturbing to hear it from, of all places, repair stations! Think about that for a while.

"Why do we need training when I can just call my tech rep?"

Let me tell you a dirty little secret. While some operators believe that training produces no measurable return, some manufacturers (airframe, engine, avionics, etc.) believe that providing customer support and training produces no measurable return. Don't believe

me? As an operator, ask yourself this simple question; has your customer support gotten better or worse since the 80s? Why do they do it then? Competition forces them to.

Many manufacturers have moved their customer support call centers outside their own countries (especially U.S. companies). Not to provide better service or support, but because it's cheaper. That's not to say all off-shore support is bad. Some are very good or excellent. But how many times has your call gone overseas and not been resolved? Possibly because of a language barrier or the lack of knowledge at the foreign call center? Regarding lack of knowledge, don't throw stones if you live in a glass house. See "We don't have time." above.

Do you still even have a tech rep? Assuming that a tech rep is even still provided by a manufacturer, chances are they are so overworked (due to down-sizing or customer population growth), you'll be lucky if you get a response, much less an on-site visit, in a reasonable time. And, some manufacturers have started charging for tech support! Why? Remember the terms "ROI" and "metrics"? Manufacturers don't see a measurable return by providing free customer support, especially on aircraft and equipment that are, literally, decades old and out of production. Forget any idea that the return is measurable in future sales to "loyal" customers or that "good will" attracts new customers. I can tell you that's a bunch of crap, period! Such customer support is extremely costly and that cost is covered by what you pay for exchanges, repairs, extended warranty plans or hidden in the price tag of a new aircraft. It's about the bottom line these days, for the customers and the manufacturers.

Ultimately, you are responsible for the proper maintenance of your aircraft, not a tech rep. A properly trained technician is an asset to the tech rep as well as your operation. He or she becomes even more of an asset if you don't have a tech rep.

#### To Train or Not?

Embrace it, tolerate it, deny it, or avoid it, training is a necessity in aviation. It always has been and always will be. Aircraft and their systems have grown in sophistication and complexity well beyond the knowledge required to obtain an A&P or AME license. The safe and reliable operation of any aircraft is a direct result of the competency of the people that fly it and maintain it. Training breeds competent professionals. Competence improves performance. Lack of training breeds mediocre workers. Mediocrity supports stagnation.

All of the excuses above relate to money and time. Of course, time is money. So, all of these excuses relate to money. It's been said that "money is power" and "knowledge is power". Training imparts knowledge. Logically, knowledge equals power which equals money. Therefore, training yields money. That is, money saved, not money wasted! If you're a member of the group that believes training is a waste of time and money, perhaps you've just been taught otherwise.