

HUMAN FACTORS

Wisdom for Hire: Bettering the Best



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By John Croft

Richard Komarniski, veteran aviation maintenance technician, human factors consultant and teacher, has convincing evidence that his for-hire human factors curriculum can help correct an organization with human performance wrongs. A year or so ago, he gave his two-day human factors course to trainers who worked for one of 11 business units in a particular company. The trainers in turn held workshops on the "dirty dozen" causes of human error — too little communication; complacency; lack of knowledge; distractions; too little teamwork; fatigue; lack of resources; pressure; not enough assertiveness; stress; lack of situational awareness; and "norms" (behavior that is not required, but is expected). The following year, the business unit had transformed itself with respect to errors and had climbed from the second-to-last position among the 11 units to the best performer.

Now the not-so-good news: The dramatic turnaround came from the pharmaceutical industry and the errors involved filling out prescriptions incorrectly, not mending airplanes (although such improvements for pharmaceutical companies are comforting nonetheless).

When it comes to the aviation sector, Komarniski's bread and butter industry, results from maintenance human factors (MHF) programs typically are more anecdotal in nature, which makes paying \$560 per employee for his introductory training course more difficult to swallow from a cost-benefit standpoint. "It's hard to measure accidents you didn't have," said Komarniski, whose company, Grey Owl Consultants

Inc., based in Onanole, Manitoba, has been providing initial and recurrent MHF training to the likes of Midcoast Aviation, Bombardier, Cessna, Sikorsky, Premier Turbines, NetJets and Executive Jet Management for the past 10 years. Komarniski said Grey Owl typically works with companies having 600 or fewer employees and at the moment doesn't have any airline clients.

Grey Owl provides MHF training in Canada, where the government in 2002 mandated initial MHF training and refresher courses every three years. Maintenance organizations under the European Aviation Safety Agency (EASA) umbrella will have to provide initial MHF training to their employees by next July, with refresher training every two years thereafter.

As for verifiable results in the aviation sector, this is about as good as it gets: Komarniski said a survey at a maintenance shop that took Grey Owl's training in October 2003 revealed that there were nine personal injuries and four OSHA reportables in the three months before the training, and two personal injuries and no OSHA reportables for the four months following. Some would say that's evidence enough that MHF works, others would say it was a fluke.

Komarniski is quick to point out that training itself is not a panacea, regardless of the metrics, and can sometimes end up doing more harm than good. He recalls giving a training course to the employees of a Canadian maintenance shop where there was no company support for setting up a safety management system, a necessary feedback

loop so that technicians can voice their concerns and improve processes. As a result, several technicians quit not long after taking the course. "If it's just training," he said, "all management is doing is ticking-off the employees; they come back with all of these good ideas they can't implement."

That's partly why Komarniski is leery, despite the obvious business potential, of a mandate for MHF programs in the U.S., a move the FAA has been kicking around for many years and may consider again in the future. "If the training is done right, with company support," he added, "there will be an attitude change that equals a behavioral change that equates to an error-reducing culture."

Perhaps a stronger indication of the worth of MHF programs to the industry, he said, is the caliber of companies that are voluntarily spending their money to put the training and the support infrastructure in place. "We're there because the managers want us there," Komarniski said of his U.S. clients, "training everyone from the maintenance directors down to the groomers and line service people."

As an example, Executive Jet Management (EJM) in Cincinnati brings Grey Owl back every year to teach MHF courses, and the company is scheduled to give the inaugural training at EJM's new maintenance facility in White Plains, N.Y. "We find that the companies that are sharp to begin with, just want to become a little bit better," said Komarniski. ■