



## Clean Up on Aisle 7

### *A Look at Good Workplace Safety Practices*

Once, when I was an aircraft maintenance unit commander at a fighter base in Arizona, one of my junior managers (in military speak, an expeditor) came to tell me that one of my avionics workers had had a nasty fall in the hangar. Just before that, another technician (crew chief) had spilled some hydraulic fluid on the floor. He had tried to do the right thing and clean it up with a mop and some water, and then had gone about his business. Shortly thereafter the avionics technician hit the unmarked, slippery spot and away she went. Worse, she had been carrying a piece of equipment at the time, so when she went down, it came down right on top of her. The end result was one very guilt-ridden crew chief, one injured avionics troop, and one exasperated expeditor. What might not be so obvious is that I also had on my hands an OSHA violation, a HAZMAT violation, and a possible EPA violation, but I will get to that in a moment.

June is National Safety Month — a National Safety Council initiative to raise awareness of preventable accidents and injuries in the workplace. Lucky for us, it just happens to coincide with this “Flying Green” edition of *FAA Safety Briefing*. How do these two concepts correlate you might ask? It’s

pretty simple: a clean, efficient, Environmental Protection Agency (EPA) and FAA hazardous materials compliant work center has all the hallmarks of being a safe one.

In 2011 the Occupational Safety and Health Administration (OSHA) recorded 586,870 incidents of slips, falls, and trips in the workplace. These incidents almost always resulted in missed days of work and made up about 22 percent of all recorded events. By practicing good housekeeping and maintaining a clean and tidy work area, it is proven that you can reduce the number of incidents by more than half. It also might keep you from being slapped with a hefty fine for violating some basic laws of doing business.

The first is that OSHA violation. They have a set of regulations, just like the FAA, that dictate how to keep safe in the work place. Title 29 Code of Federal Regulations section 1910.22, titled “housekeeping,” has a sub-section that states “the floor of every workroom shall be maintained in a clean and, so far as possible, a dry condition.” Safety, signs, and signals regulations went into effect in 1996. One such sign is easily recognizable — you’ve probably seen one before — it says “wet floor.” My technician forgot to put out this visual signal to alert others in the workplace about the potential danger and a mishap occurred.

But it doesn’t stop there. In addition to the OSHA foul, another error was made. Aviation hydraulic fluid is an oil-based product made up of alkyl (alcohol) and aryl phosphate esters. It is viscous and fire resistant, and, as an oil, it is also inherently resistant to water. Therefore mopping with just water was not only a hazardous material violation, it likely only exacerbated the problem. In this case, proper cleanup would have involved using a sorbent material to absorb the fluid. Afterwards, the area should have been mopped with a warm, soapy solution.

Last is the Big One — the potential EPA violation. After gently questioning my crew chief, I found out that he had in fact dumped the dirty mop water down the small drain in the janitor’s closet, and not one of the ones that ran along the sides of the hangar floor. So *not* the ones that actually had water separator devices attached. He had dumped it straight into the waste water supply. Granted, this was an isolated incident with only a small amount of



product having been dumped, but you can imagine in an organization such as this where hydraulic, fuel, and oil leaks can occur on a large scale and sometimes at random, it is our duty to make sure that we are taking environmental responsibility for every drop we spill. Not only do we risk harming our ecosystem and creating a health risk, but fines can start at \$500 for personal illegal dumping, and can go all the way up to ExxonMobil's whopping \$2.64 million fine for the alleged improper handling of HAZMAT. In fact, in 2012, the EPA levied a record \$252 million in civil and criminal penalties.

What my crew chief should have done was to alert someone nearby as soon as he spilled the liquid. He could have either sent that person to get cleaning supplies and a wet floor sign while he waited, or vice versa. Then, after cleaning up the mess and properly disposing of the waste in an appropriate HAZMAT collection receptacle, he should have made a supervisor aware of the situation before going on with his duties. These good housekeeping practices could have prevented the accident from happening at all.

Your take-away lesson here is this: check with your local HAZMAT authority before handling, cleaning up after, and disposing of materials you use in and around the hangar. Recognize that a clean, organized area makes for good maintenance and for good occupational safety. And lastly, remember that it is your moral and ethical responsibility to ensure that your area meets all of the environmental criteria that the FAA and EPA require of you. Doing so can help ensure your workplace is an outstanding one.

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# Calling All Mechanics

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