No Small Task

There’s no such thing as a minor detail in aircraft maintenance

The following article is provided to recognize all of the professionals in our industry who continue to realize how important all of our jobs are in this industry. I found the author and received permission to reprint this article. Every person in this industry should be able to relate to this article, no matter whether you are an aviation maintenance manager, a foreman, crew chief, technician, aircraft groomer, or aircraft fueler. Being a conscientious worker and taking pride in every job that you do is critical to ensuring the airworthiness of every aircraft every day. As you read the following story, think about what you would do if you were in Doug’s shoes.

Reprinted with permission from Harry A. Hamlen

Editor - Quiet Birdmen “Beam.”

The Spirit

It was Doug’s first job. The pay was good, 20 cents an hour, and it allowed him to work around airplanes. His job was to sweep the floor, save dropped rivets, nuts, and other undamaged hardware, and put the trash into an empty oil drum with one end cut out. Mahoney Aircraft Company, located on Dutch Flats, was close enough to San Diego Bay that Doug could smell the ocean.

A tall, lean pilot taxied a brand new airplane from its final test flight, parked it on the concrete slab, and shut down the engine. Then he got into a black touring car and rode off with the chief engineer.

The working crew closed their tool chests, picked up their lunch boxes, and headed home – all but the shop foreman, the two-lineman, the night watchman, and Doug. The foreman told the line crew exactly how much fuel to put into the main tank. Doug helped them roll out five drums of aviation gasoline from the fuel shack, climbed a stepladder with a funnel and a foot-long rubber hose extension. He held the funnel while the linemen poured in gasoline, five gallons at a time.

Doug called out the number of gallons, “five gallons, ten, fifteen, etc.” as the linemen carefully measured it into the fuel tank. When the last gallon was poured, Doug removed the funnel and accidentally dislodged the extension hose into the gas tank. The lineman hadn’t noticed. Doug deliberated. The hose was too large to block a fuel line. Also, he might be fired. Jobs were scarce.

He tightened the fuel cap and climbed down the ladder with the funnel. He helped them clear away the empty drums, the ladder and other equipment, and lock them in the fuel shack. All three of them lived at the same boarding house at Sixth and Maple Streets. “Get in the car, Doug. Let’s go home,” the chief lineman said.

Doug couldn’t sleep. He thought about the hose. No harm was really done. The hose wouldn’t be found for months, if ever. Then he thought about how carefully the mechanics had worked to build this airplane. They had constructed every detail, from
the wing ribs to individual rivets, with meticulous care, nothing left to chance. Anything that wasn’t perfect was discarded and made over.

He came to love the silver-coloured airplane. He still couldn’t sleep. Would that piece of hose be the only part of the airplane that wasn’t perfect? If so, it would be his fault.

Close to midnight, he got up and dressed. It was about a mile to the foreman’s house at Kettner and Grape streets. He knocked hard on the front door and called out several times, before he heard someone stir. Then it was two or three minutes before a light came on and the sleepy shop foreman, dressed in pyjamas, opened the door. He looked annoyed.

“Yes?” he inquired.

Realizing he might be fired in the next minute, Doug said, “I work for you at the factory, I think I better tell you something that happened tonight.” A somewhat friendlier expression came on the foreman’s face as he recognized his floor sweeper. “Come on in, Doug. What the hell is it that can’t wait until morning?”

Doug told him about the dropped hose. “I don’t think it can hurt anything, but I thought you ought to know.” The foreman thought for a moment, then said, “Get those linemen out of bed, and the three of you meet me at the airplane. We’ll be working all night.”

Doug ran all the way back to their boarding house at Kettner and Maple. The two men yawned and complained but got dressed. Doug cranked their Model-T, and they went to the factory. It was two a.m.

The airplane glistened in the moonlight just where they had left it. The night watchman still stood guard.

“Get the hand pump and five empty drums,” the foreman ordered. “Pump the gas out of that tank.” They took turns at the pump crank. Three hours later they had pumped out enough fuel so the foreman could see the hose with a flashlight. He fished it out with a coat hanger. Then they carefully strained, measured and refilled the tank back to its former level.

The foreman dropped the hose into a five-gallon glass bottle, filled the bottle with gasoline, capped it, and set it in a back corner of the fuel shack. He turned to Doug, “You’re fired, but I’ll hire you back tomorrow at 25 cents an hour. All three of you get some sleep and be back by noon if you want to see this airplane again.”

The three of them skipped breakfast at the boarding house and came back to the factory. Doug was happy that he hadn’t really been fired, but had gotten a raise in pay. They watched the tall, lean pilot climb into the airplane, now with Spirit of St. Louis neatly lettered on its cowling. He took off from Dutch Flats and disappeared eastward over San Diego. The date was May 10, 1927. The San Diego Sun carried the story.

On May 20, the tall, lean pilot took off from New York. Thirty-three and one half hours later he landed in Paris. Every newspaper in the world carried the story.

The foreman told Doug, “Bring me that glass bottle.” The rubber hose had disintegrated into a sticky glob of black goo.

It would, almost to a certainty, have caused an unexplained loss of a beautiful new airplane and a tall, lean pilot somewhere over the Atlantic.
What would you have done if you were in Doug’s shoes? The lowest paid, least educated, and least experienced worker in your crew or hanger can have a profound impact on the safety of aircraft and the flying public. We have too many examples over the past few years where aviation maintenance personnel, ranging from senior managers to technicians, did not follow procedures, refused to adhere to the rules, and lost all ability to work in a conscientious manner. The result has been serious incidents and catastrophic loss of life. Learn from Doug, who was willing to risk his job to do the right thing. If you cannot do the right thing, then please do not work on any aircraft that my family, myself, or my friends might fly. Better yet, find a job where your actions cannot ever hurt anyone.

About the Author

Richard Komarniski is President of Grey Owl Aviation Consultants Inc. He has worked as an Aircraft Maintenance Technician for the last twenty-six years holding AME and A&P Ratings. Richard has been providing Human Factors Training to various aviation maintenance departments. For information on Human Factors training or assistance in setting up a MRM Program contact Grey Owl Aviation Consultants Inc., Box 233, Onanole, Manitoba R0J 1NO Canada, telephone (204) 848-7353, or fax (204) 848-4605, www.greyowl.com or richard@greyowl.com.