

Nuts, Bolts, and Electrons

Better Hangars and Gardens



Check out the picture above. Study it carefully. Note the appearance — the condition of the floor, the amount of refuse in the area, and the overall accessibility of maintenance items. Does it look a bit like your own hangar? A *lot* like your own hangar? If this picture "feels like home" to you then it is obvious that you do a lot of work in your hangar and that it sees a lot of activity.

Now picture a new client calling to tell you he wants to bring his prized Piper *Tomahawk* with a nose gear problem for you to work on tomorrow. What do you do?

Well, if you are anything like me on the day before I know my mom is coming to visit, you might frantically try to clean the place up. Because, after all, would you want your new client/mother to see you in this truly "natural" state?

Probably not. I wouldn't either. If a picture is worth a thousand words, this one might tell a new costumer that this technician might not be the most organized, and that can be a bad indicator for maintenance practices. Although this might not actually be the case, one never gets a second chance to make a first impression, and unfortunately a bad impression can often be the one that lingers.

While this photo was generously offered as an example of "what not to do" by a experimental/amateur aviation enthusiast and not by an actual contract AMT, if you are starting to feel a little bit guilty of the infractions going on above (food on the work table, tools loose and unaccounted for, messy work surfaces), you might want to read on.

This edition of *FAA Safety Briefing* focuses on "preparedness," and that is definitely a concept that applies to aircraft maintainers. Are you prepared for the new project that could walk through your hangar door at any moment? For that matter, are you adequately prepared for the "old regulars" who rely on you to do their annuals?

Be Prepared

Take a look at your inventory. Really scrutinize it. Have you got everything you need to do even the most basic jobs? Maintaining a ready supply of the most common tools and bench stock used in maintenance can be a real time-saver later when a job comes in. This goes for consumables as well. Lubricants, clean rags, filters, and all those "use-once" items can leave you



stuck if you don't keep a good accounting of what you have on hand before you go to work.

Maintain the appropriate technical data for your regular jobs, and know how to research guidance for aircraft that aren't usually in your purview. This is especially important for aging aircraft. Before you start work on an "old" aircraft, ask the owner for all the data available. Reviewing all of the available data beforehand will help to better expose potential areas of concern and inform you of that aircraft's particular traits and characteristics. Bookmark valuable internet tools such as the FAA aircraft page, found at http://www.faa.gov/aircraft/. This website highlights safety alerts and advisory circulars, warns of unapproved parts in the supply system, and provides repair request forms and equipment listings.

A Tale of Two Toolboxes

As is the case with inventory, how you keep your stock is also a very important part of preparedness. Look at the photos on this page. These are two completely different examples of how to organize (or not) a tool box.

The red tool box looks like the items have been tossed in with no easy way to see whether or not what you are looking for is actually in the box. There is no clear indication as to the functional grouping of the items (clamps vs. screwdrivers vs. motorcycle gears?). Although the items appear to be clean, looking for a tool in this box would be a time consuming, frustrating process. This method of "organizing" could also be costly in the future, as more sensitive equipment, such as torque



Photos by Tom Hoffmann

wrenches that require calibration, can be rattled and knocked around as the drawers are opened and closed.

The blue tool box is a different story. It has been shadowed out and each tool is clean. The entire box is neat and organized by function and size. It would appear that this maintainer takes care of his or her tools, and that accountability is important. This is good: it means a tool is less likely to get "lost" in an aircraft once the maintenance has concluded — a very realistic fear that a lot of aircraft owners have. This method also all but eliminates the "who took my tool?" game — you know, the one you play when you aren't sure if it's really gone or just hidden under a half-eaten turkey sandwich.

White Glove Test Not Necessary

It is a given that the act of maintenance in itself can be a messy job, and certainly no one is implying that the typical dirt and grime that go hand in hand with being a mechanic should be (or even could be) completely eliminated. And yes, sometimes there is a little bit of clutter that goes along with a job well done as well. The real trick is to find a good balance between organized chaos, and just chaos.

Assigning larger items (tool kit, work table, bench stock) to a specific "spot" on the hangar floor will go a long way in keeping you organized and will be a time-saver when you are reaching for your equipment. A good thorough cleanup of the truly yucky bits (filthy rags, full drip pans, grimy floor) at the end of the day will help you start the next one on a good note and prevent the panic attack that might come with a "surprise" visit from a client.

Whenever we go someplace where a service is rendered, we have a certain idea of how that place should look and operate. Restaurants should be clean and sanitary. Retails stores should be organized with clearly labeled items. Supply stores should be well stocked. This is true for a good maintenance shop as well. Having a shop that is organized with supplies readily on hand will go a long way in reinforcing the rapport you have with your usual customers, and it might even entice a few new patrons to come through the door.

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