

General Aviation Security

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Flying Training Issue Where Are the Women?

*Focusing on security and safety
issues within general aviation.*

Online edition

Flight Training, GA Security & Trends in Both
By Jason Blair

"The Sky's the Limit" for Future Pilots
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Good GA Security Also Cuts Maintenance Costs

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Thwap, *Thwap*, *Crack*, "Kapow!", "Kapow!", "Whack"....."Bang, bang, bang..." That's what I heard coming from behind the hangar door. Naturally I was curious. What I found when I opened the door was the 8 year old son of one of the aircraft renters from our FBO, sitting in the Piper Warrior playing dogfight. His dad was nowhere to be found. He didn't notice me at first, continuing to throw the controls back and forth to full stops as hard as he could, pulling and pushing on any knob or lever he could grab. I quickly put a stop to this and delivered him back to his dad. Then I found my maintenance staff and had them go check over the plane. We found a cracked plastic cover on the throttle quadrant. Fortunately that was all.

"We found a cracked plastic cover on the throttle quadrant. Fortunately that was all."

On another occasion, a "helpful" passenger went into the hangar to open the hangar door for their friend, who was the renter customer of our FBO. Thinking he would help speed things along, he turned the hangar door switch to the up position. What he didn't know was that the hangar door also had two locking clasps, one on each end of the door. Naturally the door didn't move, but the motor kept turning, causing 3 of the 6 hangar cables to break. Of course it was a Saturday. Monday we were able to get replacement cable and again open the door after replacing cables. That meant all the



Matt Younkin pulls through a loop in his Beech 18

planes in the hanger didn't move over the weekend.

While I am no longer the operator of this FBO, the new FBO has continued a practice I started—locking the hangar door via code lock and only allowing people into it when their pilot is with them or line staff accompanies them. This is a good general security practice since the hangar door, when opened, also allows access to the airport ramp, but it also is a way to stop potential damage to aircraft and equipment.

Good aviation security practices not only keep our airport safe from external threats of the criminal type, but they also keep our aircraft and equipment safe from unintended consequences. A few key security practices in general aviation can help you keep your aircraft and operation from incurring unintended maintenance consequences. Think about the following for your airport to help keep your equipment in good working order.

Limit Vehicle Access to the Ramp - Many general aviation airports have open access to airport ramps. While convenient for loading and unloading of equipment to aircraft, an unattended vehicle or a driver who isn't aware of driving practices on airport surfaces can cause hazards. Roughly two years ago, I watched as a passenger drove out on the ramp to meet an arriving friend in his plane. After they unloaded his friends gear from the plane, he backed up, turning around in the process, and while doing so backed over the electrical post in between the aircraft tie downs. He didn't mean to do damage. When asked what happened, he said, "I had no idea there would be an electrical post out here in the middle of the grass." The post was there to plug in aircraft that have engine heaters during the winter. A locally knowledgeable airport driver might have known this. At least it wasn't another aircraft he hit.

Even if your airport doesn't have a full fence around it, a basic security gate across entrances to hangar areas or ramps is, in most cases, good enough to get a potential driver to stop. Most drivers will not drive off the "road" and into the grass to go around a gate, unless they have serious intentions to do something that they shouldn't. There is no doubt that when someone sees this happen they should talk with the driver or call appropriate authorities. While funds may not be available to develop full fencing at many airports, a few pilots chipping in or a few well spent dollars from the local airport operator may go a long way to helping reduce vehicle traffic by parties who are not supposed to be on airport surfaces.

Best practices would encourage an airport to have vehicle access limited only to necessary parties or escorted guest vehicle access.

Lock Hangars - If the stories above don't illustrate the need for security measures



U.S. Customs and Border Patrol EC120B enroute to conduct surveillance along the U.S. border.

enough, I'll add one more. At one point in my aviation history I owned an aircraft painting facility. The hangar we used was approximately 80' x 80' in size and had special systems for ventilation and drainage to accommodate the painting activities. One of my well-meaning line staff was bored one Saturday. Since our paint shop staff worked Monday-Friday and weren't in the building on the Saturday, he decided to help by "cleaning the floor." Earlier that week, we had been stripping paint off of another aircraft, a process during which we switched our floor drains to two special drains that collect and reuse the chemicals and water we used in the liquid stripping process. This liquid was then collected and properly hauled away for chemical disposal. Unfamiliar with this process, my line staff member went out into the hangar and, with the hose, squeegee broom, and a brush broom, began washing down the floors. The amount of water he was spraying, in conjunction with the fact that our reclamation pumps were not engaged, caused the water to back up above the floor drains and start flooding the hangar. I entered approximately the time he began sweeping the water away from what he thought was a "plugged drain" toward the back drains in the hangar. The back drains went to the city sewer. Fortunately, I caught him before he got to do this and we managed to avoid sending highly toxic chemicals into a public sewer system.

So what's the moral to the story? Manage access to hangars, equipment, and systems to make sure only people who are supposed to be using them (and actually know how) can gain access. Doors to hangars can easily be updated to have code number access, a great tool for use on internal doors from FBO facilities into the hangar bay. These codes can be given to authorized users, and this encourages non-authorized users to talk with staff when they need access, giving staff an opportunity to supervise the user while they are in the hangar.

Best practices would encourage general aviation pilots to limit access to hangars using coded or keyed doors, locking them behind themselves. It is best for staff or pilots to escort guests while they are in hangars to avoid unintended damage to aircraft or equipment. When using personal hangars, it is a good practice to close them when

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your aircraft is out and while you are gone. I know many pilots that like to leave their hangar door up or open while they go out for a quick 1-2 hour flight for convenience, but the added time it takes to close and reopen the hangar door while they are gone limits unauthorized hangar access by other parties (even if it just keeps your next door hangar mate from "borrowing" your tools that you will spend hours looking for later).

Lock Aircraft Doors - This seems like a common sense practice, but many GA pilots don't lock their aircraft doors. This is something few of us would ever consider with our cars in a parking lot at the local grocery store, but do regularly when we park on the ramp at an FBO anywhere in the country. The likelihood that someone is going to encounter a theft of their aircraft may be small, but locking the doors can be just one more line of security to avoid this possibility. More commonly, locking your doors can eliminate the potential that something you have in your aircraft grows legs and disappears. Many of us carry portable electronics, headsets, sunglasses, and other expensive gear in our aircraft for our flights. These pieces of equipment, in addition to being expensive, can be valuable to the conduct of our next flight. Imagine leaving your iPad with all of your flight charts in your unlocked aircraft, going to lunch, and returning to find that it was no longer there. While you have incurred a major expense loss, you may also no longer be able to conduct your next flight without proper charts. Most pilots are pretty darn honest, but that doesn't mean they all are.

Not all reasons to lock your door relate to theft. Again, the maintenance factor may

ANSWERS to the Quick Security Quiz on Page 37

Questions and answers taken from the Winter 2012 edition of *General Aviation Security Magazine*.

1. D (page 5)
2. A (page 9)
3. C (page 22)
4. True (page 14)
5. B (page 24)

Bonus Question: Grumman American AA-5 Traveler

come into play. Pilots are curious; we like to look at other people's planes, especially instrument panels. Sometimes, we are brave enough to do this when the owner isn't present. I stopped by one of my local airports one day and noticed a plane that was parked on our ramp had its door flapping in the wind. The Cessna 180 door would swing with the wind, almost close, and then bounce back again. Did I mention it was snowing? Upon further research, I managed to get in contact with the transient pilot, found he had arrived two days ago, and was certain he had closed all his doors. It turns out that one of the local line staff members had been curious about the plane when they came in the next day, had gone outside, opened the door, and checked out the instrument panel. Too bad he didn't get the door all the way closed when he was done. Based on the amount of the snow that had accumulated in the aircraft I am sure it required some "drying out" before it was ready to fly again.

Many older aircraft do not have lockable aircraft doors, or the locks stopped working many years ago. In most cases, a capable mechanic can resolve this problem for less than \$500.00. Take the time at your next annual to make sure your aircraft locks work.

Good general aviation airport and aircraft security isn't just about making sure we keep the TSA happy at our local airports. It's also about keeping us safer and saving us money. Each of the examples above cost time and equipment to repair the problems caused when access was not limited. Flying is expensive enough. If we secure our aircraft, our hangars, and our ramps, then it is less likely that equipment will encounter unintended damage and costs associated with fixing the damage. It could have been even worse if the damage went unnoticed and unresolved. How much goes unnoticed remains a question that is unanswerable. What if my line staff member had pushed all the chemical laden water into the sewer system and went home? What if I hadn't heard the renter's son playing "dogfight", would there have been damage to the aircraft that could have lead to a failure on the next flight?

If we limit the potential for these types of "security" breaches to take place at all, we will also make our aviation activities safer.



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