

NEWSLETTER

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SAFETYWIRE



Commandment #1 Preflight Essay

FAA Steps Up Safety Collaboration with Industry FCC Exploring Alternatives To Mitigate GPS Interference Safety Manager's Corner: PRISM SMS: Training Qualification Tracker (TQT) – Completion Date

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Commandment #1 Preflight Essay

(Source: Tim Tucker, USHST Winter 2025 Newsletter)



Early on the morning of December 17, 1903 at Kill Devil Hills near Kitty Hawk, NC, Orville and Wilbur Wright circled the soon to be famous Wright Flyer. They checked the two 8 ft wooden propellers for nicks, inspected the truss and wing warping wires for fraying and looked for tears in the muslin fabric coverings on the wings. They then turned their attention to the security of the 12 HP engine they had helped develop and examined the condition of the 60 ft monorail launch track they would use to become airborne. Little did the two brothers know, they had just completed an activity that would become one of the most fundamental, basic operations of an industry that would change the world.

The "Preflight Inspection" is the first procedure a student will learn on the road to becoming a pilot and they will continue to use it for the rest of their flying careers. It's unique to aviation—we don't preflight our cars, our trucks or our motorcycles and the reason is obvious. However, I'm amazed at how such an important task is often overlooked or approached in a sloppy, haphazard fashion. In this discussion, I will not get into specifics of what to look for and what not to look for on a preflight inspection, other than to quote Pat Cox, Robinson's former Service Manager, who would say during the maintenance portion of the Safety Course. "If it's supposed to move ensure it does, if it's not supposed to move ensure it doesn't".



Instead, I'd like to take the 30,000 foot view. We fly in machines and machines will break. We fly these machines in an environment that's not natural to us—we're not birds. As soon as you think you have total control of your machine or your environment and allow complacency to seep in, this helicopter world will rise up and take a big bite out of your ass, the size of which you may not survive. So, I want to apply a more Zen-like approach to the "preflight". To paraphrase the title of a Billy Joel song from the mid-70s, you have to be in a "Pilot State of Mind" [1] and the door to this state of mind is the preflight inspection. The preflight is the perfect opportunity to mentally transition from the normal, two-dimensional world we're used to operating in, to this unnatural, three-dimensional world of flight. In this "Pilot State of Mind" the helicopter will speak to you, but you have to listen and it starts with the preflight. A fluid level that decreases, the increasing play in a bearing or, in flight, a change in noise or vibration are all examples of the helicopter tapping the pilot on the shoulder, alerting them of a potential issue. Don't rush the preflight, avoid distractions, use a checklist and as I said "listen".

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Thou shalt inspect thy aircraft carefully before each flight lest the seeds of destruction fester and grow.



A safe flight begins with a good preflight.

I want to make an important comment about the use of a checklist during the preflight. Every evaluation standard (PTS & ACS) for every practical test from private pilot to airline transport pilot requires the use of a checklist for the preflight inspection. During my 27 year career as a US Army instructor pilot, every checkride I gave required the use of a preflight checklist. This is not just to show the ability to use the checklist, but, more importantly, to instill the importance of overcoming the common human mistake of "forgetting something". I've been flying the Robinson R22 as long as anyone alive and have thousands of hours in it, but I'm human. I can sometimes miss something if I don't review my checklist during or at the end of the inspection. If you are new to the make & model, I recommend a line-by-line use of the checklist, but as you get more familiar with the model, you can refer to the checklist after inspecting a section of the aircraft. I wish I had a dollar for every checkride I've given where at the start of the preflight I've had to say "Are you forgetting anything"?



I'll end this discussion with my favorite preflight story, which occurred early in my Vietnam experience. I had only been in-country a few weeks and was conducting a preflight inspection with Steve (Robbie) Robinson, my aircraft commander (AC) for the day's mission. Some ACs directed the co-pilot to conduct the preflight, some insisted on doing it themselves and others, like Robbie, saw it as an opportunity to mentor the new pilots so both conducted the preflight. Robbie took one side of the UH-1 (Huey) and I took the other. As Robbie moved to the long tailboom section of the Huey, he rapped his knuckles indiscriminately along the bottom of the structure, like he was knocking on a door. I asked "Robbie, what are you doing? That's not on the checklist." He answered with "Listen Newbie, I use two checklists: one the Army gives me and one my experience gives me." He explained that a number of months ago, he was preflighting a ship that had just come out of maintenance. The aircraft had been down for quite a while, waiting for some uncommon spare parts to arrive. To save space in the hangar, the maintenance people had detached the tailboom, placed it next to the fuselage and stored it outside covered with a tarp. During the preflight, Robbie just happened to tap the bottom of the tailboom and instead of the ringing sound expected from tapping sheet metal, he heard and felt a dull thud. To investigate further, he opened the right rear cowling for the "oil cooling fan and heater" compartment. In Vietnam we didn't have heaters in the aircraft, so there wasn't much in there except you could stick your head in and look down the interior of the 15 ft. long tailboom. Robbie took the flashlight from his survival vest and shined it down the length of the tailboom. About half way down the tailboom, the light caught a curled up 12 foot Burmese Python as it rose into a striking position poised to attack. Robbie dropped the light and smashed his head on a support strut, trying to withdraw from the compartment. It took the maintenance people two full days to coax the snake out of the tailboom. For the next 50+ years, I've done a modified tap-test along the tail section of every helicopter I've flown.

For additional information and specific preflight guidelines, I recommend the US Helicopter Safety Team's (USHST) Helicopter Safety Enhancement 28 (H-SE-28), which can be found at https://ushst.org/recommended-practices/



FAA Steps Up Safety Collaboration with Industry - Agency held a Call to Action

with business and general aviation leaders

(Source: Kerry Lynch, AIN, March 10, 2025)



The FAA is pledging to take a series of steps—from improving communications for pilots to conducting further risk analysis—to bolster business and general aviation safety. That pledge followed a "General and Business Aviation Call to Action" that the agency held last week with leaders of several key industry organizations to discuss recent accidents and trends. The summit "will kick-start even greater safety collaboration" between the agency and the industry, the FAA added.

Immediate actions include communicating to pilots the importance of checking notams, familiarizing themselves with destination airports, avoiding complacency by carefully following preflight checklists, and paying attention to onboard collision warnings, even if they don't think a conflict will occur.

Other actions ahead include a safety-risk analysis of close calls involving a mix of VFR and IFR flight; increasing FAA Safety Team outreach on radio communication phraseology, notams, and operations around Class B airspace; working with Part 135 and air tour operators on safety management system (SMS) implementation; and exploring further tools for pilots to assess operational risk. In addition, the government/industry General Aviation Joint Safety Committee will discuss further strategies this week that can be developed to improve safety.



"Safety is a collective effort that requires constant, proactive collaboration among all stakeholders," said acting FAA Administrator Chris Rocheleau. "Complacency is the enemy of safety, and we need to be vigilant to address emerging risks before they become problems."

Held at FAA's headquarters in Washington, D.C., the call to action on Thursday brought together more than two dozen FAA, industry, and labor representatives with sessions moderated by senior FAA officials; NBAA president and CEO Ed Bolen; Sean Elliott, v-p of advocacy and safety for EAA; and Jenny Ann Urban, managing director of air charter and maintenance for NATA.

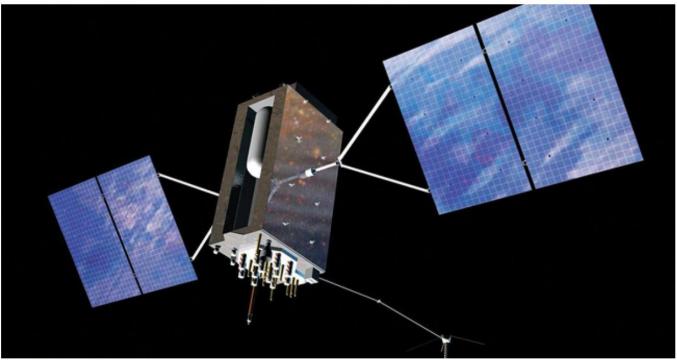
According to the agency, several themes emerged during the discussion, including a need to improve VFR/IFR interactions, examine methods for VFR aircraft to safely fly through Class B airspace, continue the installation of aircraft-tracking technology in control towers, and enable VFR pilots to broadcast a specific code on their transponders and monitor a specific radio frequency around airports with mixed VFR and IFR traffic.

Concerns were raised about safety drift and a common trend of "acceptance, boredom, and complacency." This highlighted the need to emphasize the imperative for pilots to pay close attention to details, use their checklists, and implement SMS. The discussions also explored how scenario-based training and AI could enhance safety.



FCC Exploring Alternatives To Mitigate GPS Interference - Jamming and spoofing are compromising GNSS capabilities

(Source: Matt Thurber, AIN, March 27, 2025)



GPS Block III satellite © Lockheed Martin

An As jamming and spoofing of global navigation satellite system signals continue to grow, the Federal Communications Commission (FCC) today launched an inquiry to explore commercial technologies that would provide an alternative source of position, navigation, and timing (PNT) data.

"Although GPS is indispensable to America's economic and national security, it represents a single point of failure that can be vulnerable to disruption or manipulation by our adversaries," according to the FCC. "PNT data is integral to countless military, public safety, agricultural, and commercial activities. Because the American economy and national security depend on GPS as the sole source of PNT data, the U.S. government has shown great interest in developing resilient backups that would protect critical operations from any disruption in GPS signals."

In a fact sheet describing the problem and some potential solutions, the FCC said that it plans to accelerate efforts to "support new and complementary or alternative PNT solutions that will maintain U.S. global leadership in this space and mitigate harmful GPS disruptions caused by foreign adversaries. Moreover, we note that the United States' progress in developing complements to GPS may not be as far along as those currently underway in China, Russia, and other nations that have had greater success in deploying PNT solutions, including terrestrial backup to satellite-based services. China, for example, has been focusing on developing a multi-pronged system of systems based on satellite, terrestrial broadcast, and fiber solutions."



The fact sheet outlines four potential technologies that could provide complementary PNT services. These include space-based systems that can provide PNT services, including low-earth-orbit satellite networks such as SpaceX's Starlink and Amazon's Kuiper. Iridium, TrustPoint, and Zona are also offering dedicated PNT capabilities.

Other technologies under consideration are ground-based and include the broadcast positioning system, which uses television signals; enhanced long-range navigation (eLoran), which has repeatedly surfaced as a robust alternative to GPS; and NextNav, a ground-based multilateration system.

"The commission intends to build a comprehensive record on what actions it can take to strengthen GPS and promote other PNT technologies. These actions could include FCC rule changes, public-private partnerships, testbeds, innovation zones, and more."



SAFETY MANAGER'S CORNER

PRISM SMS: Training Qualifications Tracker (TQT) -**Completion Date**



A much-awaited feature has been added to the Training Qualification Tracker (TQT). A completion date can now be added to training events.

The completion date field is an optional field that is now available on all training events.

What does the Completion Date allow me as a user to do?

The completion date provides the ability to more accurately capture when an event was actually completed. This will help TQT Admin determine when a recurrent event needs to be re-scheduled to ensure training records are accurate and stay current.

How can someone add the Completion Date?

Ehlke, Wayne

Test 3-24

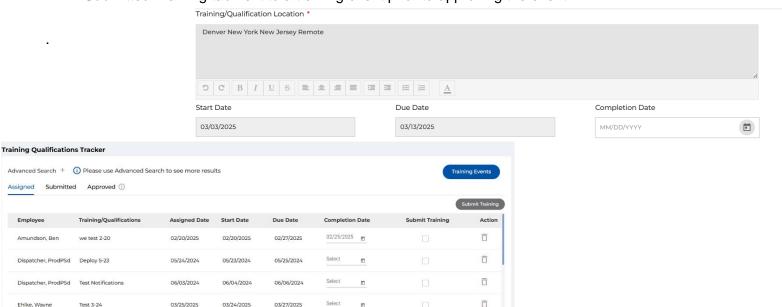
03/25/2025

03/24/2025

03/27/2025

The completion date can be added a couple different ways which are listed below:

- 1. A TQT Submit user can add the Completion Date either by opening an assigned training event or from the Assigned Training tab next to a training event prior to submitting the event.
- 2. A TQT Admin can also add the Completion Date either by opening an assigned training event or from the Assigned Training tab next to a training event prior to submitting the event.
- 3. A TQT Admin can add the Completion Date either by opening a submitted training event or from the Submitted Training tab next to a training event prior to approving the event.



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Quote of the Month

The problem is not the problem; the problem is your attitude about the problem

BY: Captain Jack Sparrow



Attitude, attitude, attitude. It's the one variable constantly under your control when all else fails. Sure, it's no easy thing, staying positive and keeping the glass half full. Frustration is the devil, waiting to rear up and let loose when provided the opportunity. No doubt opportunities abound; rare is the day when no problems arise and often the easiest path leans toward venting. Really, isn't it all about the response? How are you willing to contribute to fixing the problem, contributing to the solution? Sure, no person is perfect, and every day isn't sunny but understand how you can make a positive difference with your words and actions. Flip the coin and know you can also erupt a huge negative impact and worsen the problem. Sure, it's no easy thing, but the choice is yours. Be the solution.

On Short Final...



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#PRISMPREFERS

UPCOMING COURSES

April 7-11, 2025—PROS Course

ALAT Training

Denver, CO

April 8-10, 2025—PRISM Course

Safety Management

System (SMS)

Denver, CO

April 15-17, 2025—PROS Course

Airline Safety

Management

System (SMS)

Virtual

April 22-24, 2025—PROS Course

ICAT Training

Virtual

May 13-14, 2025—PROS Course
Risk-Based IOSA Training
Virtual

Go to <u>Upcoming Training Classes</u> to register.

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