

FAA Change to Heart-Test Limit Triggers Worries Over Pilot Health, Public Safety



A doctor reads an EKG in Glen Burnie, Md., on Oct. 28, 2020. (Alex Edelman/AFP via Getty Images)

By Janice Hisle

Print

January 23, 2023 Updated: January 25, 2023

Concerns and controversy are swirling around the decision by the Federal Aviation Administration (FAA) to alter an electrocardiogram test limit for pilots.

A researcher for an aviation advocacy group, US Freedom Flyers (USFF), stumbled upon the EKG change in December, several weeks after the FAA enacted it.

Because the revision was made without a published explanation, USFF turned to a nationally known cardiologist and other experts to assess its importance.

They say the FAA's change involving "the PR interval" is significant. The PR interval represents the time it takes for an electrical impulse to travel from one part of the heart to another. It is an indicator of heart health.

But "the new normal" PR interval that the FAA set for pilots is 50 percent longer than the previous limit; it deviates from a long-accepted limit in cardiology.

Critics fear that expanding the limit could endanger pilots' health and passengers' safety.

This worry is especially acute amid rising reports of cardiac arrest and sudden death since the COVID pandemic began in 2020. Some researchers suggest that some heart conditions could be tied to aftereffects of COVID-19 injections or the virus. Because pilots were threatened with job termination, a large percentage of them took the COVID jabs.

These factors make a very worrisome mix, said Josh Yoder, a commercial airline pilot who heads the USFF advocacy group.

"This is a ticking time bomb on a level like we've never seen," he told The Epoch Times in an interview.

While some people question whether that level of concern is justified, others agree with Yoder. For many months, he and others have railed against the FAA for declaring the COVID injections safe for pilots, as the Epoch Times reported previously.

Yoder and others say the FAA should be held accountable for relaxing the EKG standard. They say the new standard increases the odds that a pilot's heart condition would slip past, undetected and untreated, setting the stage for disaster.

FAA Gives Partial Answer

In a Jan. 17 email to The Epoch Times, the FAA said there is "no evidence of aircraft accidents or incapacitations caused by pilots suffering medical complications associated with COVID-19 vaccines." That was the same language the FAA used in previous responses to inquiries.

Critics allege that the FAA has found no such evidence because no investigation has been done.

Regarding the revised EKG standard, the FAA said: “When making changes to medical requirements and guidance, the FAA follows standard processes based on data and science.”

But the FAA has yet to reveal what data drove its decision to allow COVID injections for pilots. The agency has not disclosed the reasons for changing the acceptable range for pilots’ PR intervals.



The Federal Aviation Administration (FAA) building is seen in Washington on March 13, 2019. (Eric Barada/AFP via Getty Images)

Stephen Carbone, a former FAA safety inspector, takes issue with the FAA on both counts—allowing the COVID shots and the new EKG standard for pilots.

“The FAA’s decision to lower the EKG standards is the latest assault on aviation safety from an organization that has pledged to put aviation safety ahead of all else,” he said in a Jan. 22 email to The Epoch Times. “It is nothing short of safety sacrilege; to those of us in aviation, safety is sacred.”

Whatever the reason for the FAA's change to the PR interval limit, Carbone is distressed over its possible consequences.

"I can't highlight enough how dangerous this is and how irresponsible," he said. "It risks the lives of pilots; it risks the lives of passengers; and it risks the lives of anyone in a house, apartment building, school, car, beach, park, or museum under the aircraft's path."

100 Milliseconds Means a Lot

On an EKG reading, the PR interval indicates how well electrical impulses travel within the heart, "so the whole heart can contract at once," cardiologist Dr. Thomas Levy, who serves as USFF's medical adviser, told The Epoch Times.



Dr. Thomas Levy, cardiologist. (Thomas Levy)

A PR interval longer than 200 milliseconds (ms) is considered a red flag, said Florida-based Levy. Such a reading, by itself, doesn't prove there is a heart problem.

Yet a reading above 200 ms does warrant further testing and "shouldn't be ignored," Levy said. That has been a given in cardiology for almost as long as EKGs have been used, Levy said.

That's why, in Levy's view, it makes no sense for the FAA to broaden the range significantly. Pilots with PR intervals longer than 200 ms used to require further evaluation. Now that happens when the pilots' PR readings go beyond 300 ms.

Dr. Peter Chambers, a retired U.S. military Special Operations flight surgeon, agrees it was unwise for the FAA to change the PR interval limit.

"That removes the 'safety zone' that allows us to catch the problem early," Chambers told The Epoch Times in an interview. "It's like coming up on an intersection where the traffic light goes directly from green to red—and you're in the center of the intersection, facing a semi that could hit you."

“Maybe you get lucky, and the semi doesn’t hit you,” he said. “But how many times are you going to get lucky?”

Levy said PR intervals above 200 ms may indicate that the heart “is no longer completely healthy, and the conduction rate is slowing down.” He notes that PR readings tend to increase as a person ages, although some younger, healthy athletes have abnormally high PR intervals.

However, in many cases, a PR interval longer than 200 ms “is clearly associated with arrhythmias in the future, pacemakers, and early death,” Levy said, citing a respected Harvard study. He said those risks elevate with PR readings even slightly above 200 ms, not even close to the new 300 ms limit that the FAA has set.

In sum, Levy said, a PR interval longer than 200 ms “might be innocuous, but you can’t assume it to be innocuous,” particularly “in the setting of the pandemic.”

COVID Heightens Concerns

COVID’s spike protein “likes to hit” cardiac cells, Levy said. This can trigger “myocarditis,” or inflammation of the heart muscle cells. This condition has been considered rare. But since the advent of the pandemic, cardiologists have been seeing it more often, Levy said.

Myocarditis is one of several medical conditions that can prolong a PR interval. It also can touch off heart-rhythm problems because inflamed cardiac cells become “electrically unstable.” That can become life-threatening or deadly “if it’s in the wrong spot of the heart.”

A sudden surge of adrenalin can provoke the problem, Levy said. In the case of pilots, that could happen if they encounter an emergency during flight.

Levy is concerned that myocarditis could be lurking unnoticed in many people who received a COVID-19 injection or contracted the virus.

By February 2022, almost 60 percent of the U.S. population had been COVID-infected, the CDC estimated.

As of this month, as the pandemic entered its fourth year, about 69 percent of the U.S. population has had at least a “primary” COVID immunization, the CDC reports.

Yoder, president of the organization that consulted with Levy, said the percentage of COVID-inoculated pilots is almost certainly higher than the general population. He notes that some airlines publicly stated that more than 90 percent of their pilots had complied with demands to get the shots or be fired.

Pilot groups attacked the COVID shot mandates in court cases, challenging their enforceability. At the same time, word began to spread among pilots that they could obtain a religious-based exemption to the shot requirement. Still, many pilots had already taken the shot under duress.

Last year, disturbing statistics began to emerge, Yoder said. At one major commercial airline, between January and July 2022, “there was a 300 percent increase in long-term disability claims among pilots,” he said. That’s according to data from a pilots union, Yoder said. What caused the numbers to climb is not known, although Yoder notes the timing closely follows the vaccine mandates that affected pilots in late 2021.



A nurse receives a COVID-19 vaccination in Orange, Calif., on Dec. 16, 2020. (John Fredricks/The Epoch Times)

What Should Be Done

Levy says the FAA “has its head in the sand” by not requiring additional testing until a pilot exceeds the 300 ms PR reading.

The 2022 FAA Guide for Aviation Medical Examiners says pilots should be cleared to fly at levels under 300 ms, provided that the examiner has no concerns and the patient reports no symptoms.

That’s inadequate protection for the public, Levy said. Many people with myocarditis and other heart issues may notice no problems; a medical crisis can strike these people suddenly.

Levy was shocked to learn that the FAA hasn’t routinely required cardiac stress testing for pilots—a much better way to screen for heart health, he said. Levy sees EKGs as merely an indicator that no heart attack has occurred.

A pair of blood tests, which check for proteins called D-dimer and troponin, should be widely used screening tools, he said in a [Jan. 5 publication](#).

While the D-dimer test checks for evidence of blood clotting, the troponin test can detect signs of damaged cardiac cells.

Levy said the troponin test is critical, not just for pilots.

“Everyone should have this test done, even if they are feeling perfectly well,” he wrote in the Orthomolecular Medicine News Service article. Thus, the tests can show a “normal” baseline for a person or detect any suspected low-grade myocardial inflammation.

Levy said he would avoid flying with any pilot registering abnormal results on either of those tests. Ditto for one with a 200-plus PR interval but no further testing.

“For the purposes of a safe flight, it doesn’t matter” what might be causing out-of-the-norm results, Levy said. What matters is that the problem is detected, investigated, and treated.

Some people have suggested that a pilot shortage, which pre-dates COVID, could have influenced FAA to make the PR interval change. The broadened range could give more leeway for older pilots to continue flying.

But Levy sees that as no justification for the changed PR interval and the lack of extra testing. He thinks the public should be “stunned and outraged,” and ought to demand accountability from the FAA.

‘Working Completely Blind’

Dr. Theresa Long, a flight surgeon specializing in military pilots’ medical health, has repeatedly expressed concerns over pilot safety and the COVID shots. She has been under whistleblower protection.

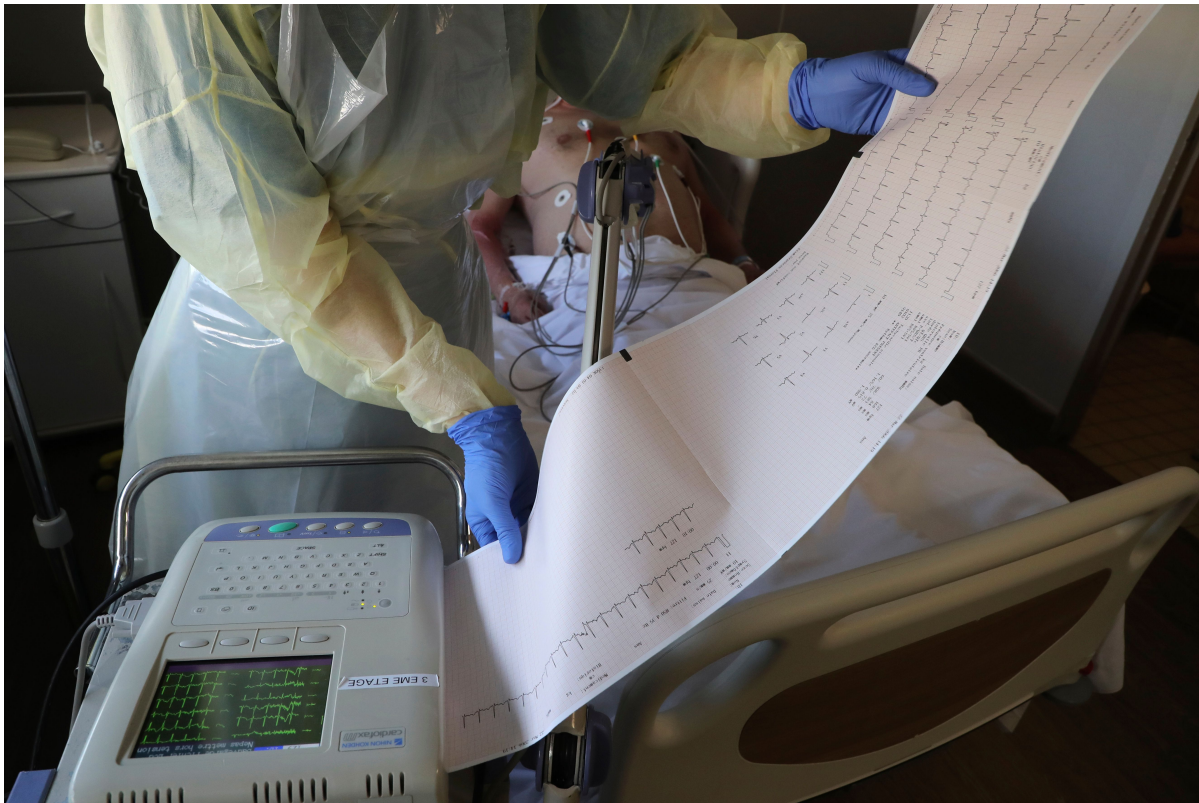
Now, emphasizing that she is expressing her personal opinion—not that of the U.S. military—Long told The Epoch Times why she is puzzled and concerned about the FAA’s new PR interval guideline.

Long said cardiologists have told her that “it would be negligent of me to see a PR interval of 290 and do nothing.”

She can’t understand why the FAA would elevate the acceptable PR interval to 300.

Long notes that, even before the PR interval change, the FAA’s medical standards for pilots were less stringent than those in the military. She also said it’s atypical for the FAA to make such a change without citing a study or specific rationale.

The FAA’s decision to relax the PR interval standard seems especially odd, Long said, considering that—to her knowledge—no national medical organization has recommended such a change.



A nurse checks an electrocardiogram in Bagnolet, near Paris, France, on April 8, 2020. (Ludovic Marin/AFP via Getty Images)

In aviation, “everything is a calculated risk,” Long said. Pre-COVID, her job as a flight surgeon was more clear-cut and less stressful. Most of the pilots whose medical histories she reviewed were healthy and young; check the box, and they’re cleared to fly.

For the few pilots with certain health conditions, Long could consult medical study tables or aeromedical policy letters for each disorder.

But now, because COVID is relatively new and clinical trials on the COVID shots were done quickly, there is no reference guide to help flight surgeons decide whether it’s safe to put a COVID-inoculated pilot in the cockpit.

For example, flight surgeons such as Long have no idea what percentage of people who took the shots develop myocarditis.

“I am working completely blind,” Long said. “So I’m taking on an unknown amount of risk. Every pilot we put in there who’s vaccinated, it’s completely unknown.”

More than a year ago, Long spoke with an FAA federal air surgeon cardiologist. Confiding with Long on condition of anonymity, the doctor agreed that all COVID-inoculated pilots should undergo cardiac screening and that all COVID shots for pilots should cease. Long made a sworn statement attesting to those statements in a court case.

Since then, the FAA has been alerted to those recommendations, Long said. As far as she knows, the FAA has yet to respond. That, says Long, is shocking.

Theories and Facts

Tom Oltorik, Florida director of MoveFreelyAmerica.org, said he, too, is concerned about pilots' health after COVID infections and injections. Oltorik, who has nearly 40 years of experience as a commercial pilot and a military pilot, said, "it's undeniable" that many people, including pilots, are experiencing health problems from the COVID spike protein.

He is not ready to opine on the FAA's possible motivation for changing the PR interval. But he wishes the FAA would explain. "Until we get a clear answer out of the FAA, we're just chasing our tails," Oltorik said.

The retired flight surgeon, Chambers, isn't holding his breath. He said everything related to COVID is so politically charged, free discourse is being shut down.

Investigations into what is happening to pilots' health should be launched. But "you're not even allowed to ask the questions," he said.

He keeps hearing that more and more pilots, including young ones, are losing their flight clearance certificates over heart-health issues.

But when Chambers tries to talk about that phenomenon with his flight surgeon buddies in the military, they say they have been "ordered not to talk about it." He finds it disturbing that they can't even discuss the problem confidentially and informally with a longtime friend and fellow medical professional.

"It's keeping us from doing our normal doctor thing, which is, 'Let's have a conference about this,'" Chambers said. "But we can't. Because it's the 'elephant in the room.'"

Then, tossing away that idiom, Chambers revised his statement. “Actually, it’s the ‘elephant’—and the ‘donkey’—in the room,” he said, referring to the Republican and Democrat mascots. “It gets political.”

Yet, he said, politics should play no part in any discussion of aviation safety. “It’s a zero-defect environment; there is no room for error,” he said. “A pilot with your family on board, that’s a zero-defect environment...We can’t fudge.”