

Welcome to the *Over the Airwaves* aviation journal. This complimentary e-publication is prepared monthly for pilots and aviation enthusiasts around the world. Its aim is to promote flight safety, encourage students and new pilots, and to build enthusiasm for aviation in general.

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"The highest art form of all is a human being in control of himself and his airplane in flight, urging the spirit of a machine to match his own."

— Richard Bach

Dear Pilots and Aviation Enthusiasts:



The "Munson Factor!"

NY Yankee catcher and team captain, Thurmond Munson, was homesick following his many days on the road . . . so he took flying lessons as a way to see his family more often.

Armed with a big dream and lots of money, Munson apparently was not content with your typical Cessna 172 or Piper Warrior. Instead, he acquired a Citation I/SP twin engine jet.

With far more airplane than most mortals could hope to manage with his limited piloting time and training, Munson proceeded to drill his airplane into the ground just short of the runway while practicing touch and goes at the Akron-Canton, Ohio Airport, killing himself and injuring others. The year was 1979.



The facts vary but the story is the same for countless hundreds of inexperienced pilots whose fledgling skills were no match for the sleek airplanes they purchased and attempted to fly. I call this the "Munson Factor."

I was reminded of the "Munson Factor" this past month when my friend and locally prominent businessman from my community traded up from his Piper Archer to a Cirrus SR22. Having just a few hours of transition training from a local CFI, my friend and his wife took off from Buffalo, NY to Tallahassee, FL, with an enroute stop in Ohio. Like Thurmond Munson, this pilot managed to land two miles short of the runway, killing both himself and his wife.

While the probable cause of this wreck has not yet been determined, the end result was the same. Newspapers and local radio and TV splashed images of the carnage across the living rooms and kitchens of families throughout both the WNY and the Northern Florida region. And we wonder why the public is afraid of little airplanes!

More affordable today . . . but just as challenging!



Okay, so most of us cannot afford a Cessna Citation jet like Thurmond Munson was able to purchase, but many of us can afford high performance, carbon composite singles like the Cirrus SR22 and the Cessna 400.

Each of these sleek piston beauties are miracles of modern aeronautical engineering. They are well-

constructed and bountifully equipped with the most advanced avionics.

There is only one very serious problem with each of these airplanes. That problem is . . . they go fast, very fast! Unlike the metal airplanes of an earlier era, the Cirrus SR22 and Cessna 400 are built for speed and performance. Lightly loaded and trimmed for climb, each can race up to the flight levels at an ear-popping 2,000 feet per minute. And they can come down at twice that rate without losing their wings.

Is there a problem here somewhere?

So what's the problem? Isn't flying about speed? Don't we want to go fast?

Answer: Sure . . . but let's not forget the cost of speed.

We all know that each increasing knot of indicated airspeed costs us money. What we often forget, however, is that each increasing knot of airspeed also has a training and proficiency cost. Sadly, if we fail to underwrite this training and proficiency cost, we die!

Want proof? Take a look at the Cirrus record. Back in 2003, we GA pilots were given access to an affordable airplane called the Cirrus SR22. It has near jet-like qualities with a 21st century glass panel cockpit. It is fast, efficient, and affordable. Like the Cessna 400, in the hands of properly trained and proficient pilots, the Cirrus SR22 is a dream to fly.



But let a moment or two of pilot incapacity, oversight or neglect occur, these airplanes quickly turn themselves into high-powered lawn darts!

As for proof, the NTSB accident database provides details on 30 fatal Cirrus SR22 accidents. Twenty-three of these fatal accidents involved either weather issues or maneuvering mishaps. In short, the pilot either exercised poor judgment or weak stick and rudder skills. To Cirrus' credit, many more fatalities were prevented by installing ballistic recovery systems (BRS) in these airplanes to protect us against ourselves.

Think . . . this is just the beginning. Very light jets (VLJs) are just around the corner! One must wonder what that fatal accident experience will look like?

Here's the message . . .

The Cessna 400 and the Cirrus SR22 are not your typical single engine GA aircraft. Transitioning into one of these birds is not like moving up from a Cessna 152 to a 172 or from a Piper Cub to a Piper Warrior. You cannot strap yourself in, receive a few lessons, do a couple of touch and goes and be sufficiently proficient to stay ahead of these airplanes. Those who think they can often leave grieving families. Remember the "*Munson Factor!*"

The message here is simple. If we're going to fly sophisticated carbon composite airplanes, we must receive sophisticated initial, transition, and recurrent training in these airplanes. We need, yes (hold your breath), something equivalent to a "type" rating required of all aircraft over 12,500 pounds and/or turbine-powered pure jets. Such training, of course, can be provided by the factory or by factory-training flight instructors in the field.

Essential elements of this training should include:

1 - Aircraft systems: Pilots must be intimately familiar with major aircraft systems, particularly the primary, secondary, and emergency electrical bus operation and management.

2 - Avionics systems: Understanding of the automatic heading reference system (AHRS) and the air data computer (ADC) and how they are integrated with the on-

board navigation system is essential to safe flight.

3 - Autopilot operation: Mastery of the autopilot, flight director, and related automated control systems requires both competent instruction and lots of practice.

4 - Aircraft control: Slow flight, stalls, steep turns, and unusual attitude recovery proficiency must be acquired before soloing these aircraft.

5 - IFR Operations: Proficiency on the glass while in all phases of IFR flight remains one of the most critical skills a pilot can have.

6 - Emergency procedures: Knowing what to do at precisely the right time when something goes wrong is the key to survival. Committing correct emergency procedures to memory is an essential part of this responsibility.

How long will such training take? It's hard to tell but something equivalent to 25 hours of dual instruction and a matching number of ground hours is good beginning. Such training should be reinforced by one or two days of annual FITs (FAA/Industry Training Standards) recurrent training.

So who is going to encourage this to happen? AOPA?? The manufacturers?? The FAA??

Answer: No, on all counts. Such training, they all say, would likely create an *"undue burden"* on the GA pilot community. Thus, the only way such training will ever come about is if we, ourselves, step up to the plate and do it. If we all do this, the *"Munson Principle"* will simply fade away just like the trusty old ADF radio.

Fly safe, fly smart.

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