



# Landing a Seat

By Camille Wheeler,  
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## Wanted: Ag Pilots Who Can Fly Tail Wheel, Stick and Rudder— And Tell the Difference Between Soybeans and Alfalfa

**Texas Co-op Power Editor's Note:** *This story examines the biggest dilemma facing the small, aging agricultural aviation industry—retirement: As the world's population rapidly increases—and food and fiber demands along with it—who will fill the seats in expensive aerial application aircraft that require modern, high-tech knowledge and old-fashioned tail wheel, stick and rudder flying skills?*

The pilots file into the room, looking for a seat in a circle of chairs. There's plenty of room—no need to jockey for position. But mere minutes into a mentoring session at the 2011 Texas Agricultural Aviation Association (TAAA) convention, a harsh message is sinking in: Not just anybody can become an ag pilot.

***It takes someone special to land a seat.***

To be more precise, which is exactly what the ag aviation industry requires of its pilots, it takes individuals who can fly tail wheel, stick and rudder; show

loyalty to employers; spray the right fields with the correct crop-protection and growth-aid products; and demonstrate integrity by admitting to and learning from mistakes. The sticking point, of course, is that the only way to learn to fly an ag plane is to, well, fly one.

As the small and aging ag aviation industry braces for a vacuum of experienced pilots over the next five to seven years, the demand increases for new talent to fly ag planes and helicopters (which represent about 13 percent of the nation's aerial application fleet).

In the industry, there's no higher compliment than to be called a good "stick," meaning an ag pilot who has good control stick and rudder coordination—not an easy proposition while flying small aircraft at low altitudes in constantly changing weather conditions that can put a crosswind or a bird in your face in a hurry.

But skill alone can't fly ag aircraft. "I want to know this," co-session leader Leif Isaacson says, pointing an index finger to his head. "Some of the best sticks in the world are the worst guys to put into an ag plane because their ego runs away with them."

Judging by the grim faces and hunched shoulders around the room, not too many egos are off and galloping this morning. Some of the job-seeking 20-, 30- and 40-something-year-old pilots in the room have extensive experience flying commercial airliners and corporate jets. Yet they're seeking jobs in a new aviation field as the commercial airline industry cancels routes and cuts salaries.

But when Isaacson and session co-leader Rod Thomas go around the circle, asking those men for their total flying hours, only a few have logged much time in an ag plane cockpit. Some of the pilots have zero ag hours.

It's doubtful that any of these pilots will walk out of the hotel meeting room with a job. But after dialogue with the experienced ag pilots and aerial applicator business operators sitting in the same circle, the non-ag pilots will at least have a better understanding of what they're doing right—and what they're doing wrong—in their pursuit of that coveted first seat.

That's the simple version of what the National Agricultural Aviation Association (NAAA) hopes to accomplish through its *Compaass* Rose Series, which is administered as part of its Professional Aerial Applicators' Support System (PAASS).

The broader view is that *Compaass* Rose forums, such as this one held at the TAAA convention in January in San

Antonio, are designed to expose pilots to a plethora of industry-related issues, from GPS and spray patterns to overall professionalism and ethics.

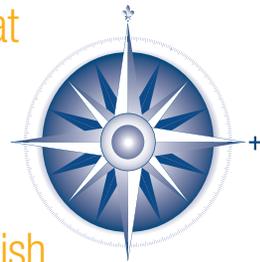
Perhaps the hardest lesson of all is learning that sure, total flying hours look great on a résumé. But the difference between flying a huge jet and a tiny ag plane, Isaacson says, is like the difference between driving a bus and a Ferrari. The skills don't automatically transfer.

"Not much in the flying industry equates to what we do," says Isaacson, a 59-year-old ag pilot who owns Desert Air Ag in Terreton, Idaho.

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The common denominator for any ag pilot, the veterans in the room say, is that he learns to perform ground duties before he learns to fly. But one 42-year-old pilot argues that his long-term experience flying commercial airliners and freight planes—and even a private corporate jet overseas—qualifies him to immediately fly ag planes.

Thomas, a 57-year-old ag pilot who's president of Thomas Aviation in Gooding, Idaho, asks the other business operators in the room if they'd give the pilot a seat in the cockpit of an ag plane.

"I wouldn't," says Roger Krause, a 65-year-old ag pilot and owner of Aerial Farm Service in Clifton, near Waco. "I'd put him on the ground and see what he does. He's got to start at the bottom."

The pilot protests, saying his expertise in the cockpit and as an aircraft mechanic make him well qualified. But the experienced ag pilots in the room, many of whom operate

their own crop-spraying businesses, stay on point. They're looking for pilots who are willing to grow into the job. Pilots who are interested in cultivating relationships with farmers, just like they have. Pilots who won't look down their noses at non-glamorous jobs like cleaning windshields, mixing and loading, making sure fields are clear of workers and monitoring wind conditions.

"Don't be insulted if you have to wash your own airplane," says Krause, who still insists on washing his plane 46 years after he first flew one.



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*There's no higher compliment than to be called a good "stick," but there's a lot more to agricultural aviation than just flying the aircraft. Having the right temperament is crucial.*

To be fair, business operators say, they owe the same level of integrity that they demand: When an inexperienced pilot has paid his dues and learned the ground drill, it's time to let him earn his ag wings. But, operators remind, they own the planes being flown. Even when they're not at the controls, they're responsible for every takeoff, every landing and every spraying pass. They've invested in the training of new pilots, a relationship that plays a critical role with insurance underwriters. So they ask for a commitment: Stay, learn, grow.

"Ride for the brand," Thomas tells the job seekers in the hotel room. "Don't leave for a dollar. That operator's reputation rides with you on every flight."

And do your homework. Krause's interview questions include this potential stumper: "At 100 feet, can you tell the difference between soybeans and alfalfa?"

### **Bracing for change**

Ironically, it's the evolution of aerial application aircraft that has placed the industry on the precipice of difficult change.

Bigger and faster than ever, with jet-fueled turbine engines and hoppers typically holding up to 800 gallons, the ag planes and helicopters of today are capable of doing three times the work as older, smaller aircraft.

With the development of larger and more powerful aircraft over the past three decades, operators have decreased their fleets, often from five or six planes or helicopters to one. With fewer aircraft, they needed fewer pilots, and many operators filled their own seats.

Now, the industry is bracing for a vacuum of experienced pilots over the next five to seven years. New pilots, by and large, haven't been trained.

Yet the industry continues to help meet the food and fiber demands of a growing nation and world: According to the NAAA, ag pilots treat almost 80 million acres of cropland annually—about 25 percent of the total 309 million-plus acres of cropland commercially treated with crop-protection products. And almost all of the rice crops in the U.S., including Texas, are treated by aerial applicators.

Farmers across the nation have come to rely on top-notch aerial crop protection: According to the NAAA, aerial applicators in the U.S., on average, have 25 years of experience in the industry.

Still, the ag aviation industry, while robust and viable, is starting to show its age. The downside for agricultural growers is that some of the nation's estimated 3,225 ag aviation operators and pilots—already a small, tight-knit group—are nearing retirement or slowing-down age.

The NAAA does not keep retirement statistics per se, but in a preliminary survey conducted last spring, about 20 percent of the nation's 1,600 hired pilots listed their average age as 50. And almost a third of the nation's 1,625 aerial application business owners listed their average age as 54—within shouting distance of 62, early retirement-eligible age in the U.S.

This is not to say that these operators are about to sell their businesses; some today in their 70s show no signs of slowing down. And some pilots in their late 50s, 60s and 70s just aren't ready to quit. They love it that much.

[2011] NAAA President Rick Richter is grooming his 26-year-old son, Nick, to someday take over Richter Aviation in Maxwell, California. But the 59-year-old father, ag pilot and business owner understands others' reluctance to step down because he feels the same.

“The hardest part of it is, I’ll tell you the truth,” Richter says, “is to give it up. It’s been so good. It’s such a passion that it’s hard for the older pilots to crawl out of that airplane and let somebody else take over. But I’m doing it with my son. I see him carrying on the legacy.”

### Know your limits

Saturday, July 17, 2000, was a scorcher in the Panhandle. By afternoon, the temperature had hit 103 degrees. It was too hot to safely fly with a full load, so Gaylon Stamps, owner of Stamps Spraying Service, and Joe Parazuski, one of his two pilots, busied themselves cleaning airplanes and preparing for the next spraying rounds.

By 6 p.m., the temperature had dropped to 93 degrees. It was still too hot to fly a big load, but Parazuski wanted to fly to see if he’d fixed an oil leak in a plane’s radial engine. Stamps agreed to let the pilot spray a small, nearby grain-sorghum field with the hopper one-quarter full of herbicide. Parazuski climbed into the cockpit, warmed up the engine and saluted his boss. Stamps returned the salute, as per their custom, and Parazuski took off.



*Gaylon Stamps knows firsthand that protecting their livelihood isn't the only thing operators have to worry about when training a new ag pilot.*

It was the last time Stamps would ever see Parazuski, a close friend. They were both 54 at the time. “I watched as Joe eased the bird aloft, then continued to watch until he was a small dot low on the far horizon,” Stamps wrote in an article published in *Agricultural Aviation*, the official publication of the NAAA. “Then he was out of sight. The last evidence of his having been there was the rumble of that old radial

engine as it clawed the air toward the southwestern skies. Then the sound, too, was no longer to be heard.”

About an hour later, Stamps got a call from a farmer. “Did you have a yellow airplane flying over here south of my house?” he asked Stamps. Yes, Stamps said. The farmer paused, and with a tremble in his voice, said, “I’m afraid he’s crashed.”

The cause of the crash east of Amarillo was a mystery: The hopper was almost empty, ruling out extra weight as a factor. And investigations by the Federal Aviation Administration and National Transportation Safety Board ruled out mechanical failure of the plane or the engine.

It’s possible, Stamps says, that Parazuski, who crashed nose first, went into a snap roll during a steep turn, with the bottom wing stalling and the top wing continuing to lift, making the plane roll upside down.

Today, Stamps uses one plane at his business in the small town of Panhandle, northeast of Amarillo. His sole pilot, son-in-law Jason Davis, does most of the flying, and someday will take over the operation from the 63-year-old Stamps, who over the past three years has flown for other operators in Texas, New Mexico, Illinois, Iowa and Wyoming.

The accident was one of those cruel rarities never to be explained or forgotten. “Sometimes you just have to say, ‘Things are what they are’ and go on, and that’s what I did,” says Stamps, a former TAAA president who also is a longtime TAAA board member, a Texas delegate to the NAAA board of directors and secretary of the New Mexico Agricultural Aviation Association. “I had a lot of friends help me through it.”

Stamps leaned on those around him, and in turn, he gives back to the ag aviation industry. Aerial application carries inherent risks, but many accidents can be prevented. Stamps, one of 10 PAASS presenters who work seasonally throughout the nation, is helping fulfill the program’s two primary goals: reduce accidents and drift incidents (which occur when wind blows the aeri ally applied product away from the target area) through education.

PAASS, considered ag aviation’s premier education program, is succeeding on both fronts: According to the NAAA, the number of reported drift incidents continues to decline. And per 100,000 ag flight hours, the industry has seen reductions of 20.7 percent and 11 percent in accident and fatality rates, respectively, since the program began in 1998.

Sure, ag pilots make mistakes. The key, says 2011 TAAA President Jason Wooten, is avoiding the ones that can cost you your life. Take the 33-year-old Wooten: He knows his planes, he knows his farmers. And he knows himself, as revealed in these interview responses at the TAAA convention in January:

“Have you ever crashed?” “No, ma’am.”

“Have you ever come close?” “No, ma’am.”

“You’re that good?”

Wooten, wearing a black, button-down vest and a cap pulled down tight over his ears, smiled and then answered. “No, it’s not that I’m that good,” he says. “You gotta know your limits. You gotta know what you can do and keep it inside the envelope.”

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—Richter Aviation Owner/Operator Rick Richter

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That means knowing your own skill level and the airplane’s limitations, Wooten says. It means making split-second decisions while flying 6 feet above the ground at 130 mph. For example, his father, Dudley Wooten, who owns and operates B&W Aerial Spray in Dimmitt, taught him it’s often better to go under power lines: That way, you can see the line, and you don’t risk pulling up too late and hitting it. But whether you go under or over, make your decision and stick with it.

Ag pilots who grew up in the industry certainly have an advantage over those who didn’t. After Wooten obtained his commercial pilot’s license, at the age of 23, he and his dad flew in a tandem-seat plane, with the son in front, at the control stick. They identified obstacles and practiced flying around them.

When Wooten got his own plane, he practiced spraying water and handling the aircraft. His dad, standing on the turn row, watched Wooten make simulated spraying passes. He’d radio his son and ask, “How high are your wheels off

the ground?” Wooten might say “6 feet,” and his dad would fire back, “closer to 10.”

So on the next pass, Wooten would drop lower. “How close are you now?” his dad would ask. “I don’t know, 5 feet,” Wooten would respond, to which his dad would say, “Nah, you’re about 2 feet.”

Generally speaking, says Stamps, who learned to fly in similar fashion under tutelage from his father, ag pilots are autodidactic. Save for two-seat training planes, you go it alone. “There is only one seat in a crop duster, and there is only so much you can learn from a book or a sermon,” Stamps says. “The rest has to be learned from experience.”

And for ag pilots—or crop dusters, as they sometimes still call themselves within their own ranks, even though they mostly spray liquid products—experience is often earned the hard way. Stamps likens the experience in the cockpit to what some drivers encounter on the road.

“If some people are about to have a wreck, they’ll give up and throw up their hands,” he says. “Some people are driving all the way through the wreck. That’s what makes a crop duster: You can never give up.”

Matt Fitch, who owns Fitch’s Flying Service in Pearsall, southwest of San Antonio, tested his ag wings in South Texas under the guidance of the late Bill Nunley, who owned a crop-spraying business. They took test flights in a two-seat tandem plane. Fitch progressed to a one-seater, at first flying with an empty hopper, then spraying water and, finally, making real spray runs.

As a young pilot starting out on his own, Fitch recalls some scary incidents, including the day he clipped a power line and left a rudder hanging on it. But more than two decades later, the 49-year-old Fitch, who served as the 2010 TAAA president, says he can’t imagine doing anything else for a living.

“It’s like a religious experience,” says Fitch, who rarely takes off the cross necklace his wife gave him. “Getting out early in the morning and seeing the sun rise from an airplane, realizing God sure does awesome work.” ■

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*Camille Wheeler is Associate Editor of Texas Co-op Power magazine. “Landing a Seat” is one of several articles she wrote for an expansive two-part series on the aerial application industry which appeared in the September and November 2011 issues of Texas Co-op Power. To read more from Wheeler’s series, please visit [www.texascooppower.com/magazine-archives](http://www.texascooppower.com/magazine-archives). Some of the articles available online did not appear in the print versions of the magazine.*