



JATO Aviation founder April Gafford and her colleagues created a structured approach to flight training to achieve the highest levels of flight safety.

April Gafford's New Approach to Flight Training Produces Safe Pilots

by KIM BLONIGEN

COPA Member April Gafford saw a need to combine her knowledge of human factors and what she had learned flying Technically Advanced Aircraft (TAA) in the corporate aviation industry into a new approach to flight training. Founding JATO Aviation in 2004 was perfect timing as it was then that TAA piston aircraft, including the Cirrus, and very light jets were first being introduced to the general aviation community. "At the time, there was a lot of talk in the professional pilot community about not wanting the inexperienced pilots flying more advanced aircraft up in the same flight levels in which they were flying," Gafford explained. "I thought, with the current advances in technology and affordable price points, they're going to be up there regardless, so are we going to ignore that fact or teach and mentor them properly? I chose the latter."

Read on to find out how Gafford and her colleagues at JATO Aviation in the San Francisco Bay Area have created a structured approach to flight training to achieve the highest levels of flight safety.

Cirrus Pilot: Can you give a summary of your background – where you were born and raised, if and where you attended college and what you have done career-wise since then?

Gafford: I was born in the LA area and spent my high school years in the wonderful, small Danish town of Solvang, California. I was interested in studying physics in college, and ended up at San Jose State to play basketball. They didn't have a physics program, so I wound up in the psychology department and became interested in the study of human factors. I was involved with the NASA Ames Research Center and thought my career was going to be working with pilots and astronauts regarding human factors. My advisor suggested I learn how to fly to enrich my understanding of aviation, which would help with our research.

I went on to pursue my Master's of Science in Human Factors/Ergonomics and started taking flying lessons. The first time I climbed into an airplane it felt like coming home; I was in my element. I obtained my PPL and at the same time was working for a restaurant chain to ▶

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Gafford's passion for instructing, experience in flying glass-paneled aircraft in corporate aviation and human factors expertise allowed her the opportunity to teach general aviation pilots how to safely fly Technically Advanced Aircraft (TAA), specifically the Cirrus.

help pay for college. I was moving up quickly at the restaurant, so I took a break from flying, bought a house and continued that endeavor. It was a bit later for me than maybe some people when I decided what I really wanted to do career-wise; I was in my late 20s and decided it was flying.

Once I made that decision, I was all in. I sold my house, started an internship with American Flyers at the San Jose International Airport and obtained all my certificates, including my instructor ratings, as I have a passion for teaching. I then became a chief flight instructor at Diamond Aviation, and concurrently flew Citations and King Airs in the corporate world. Glass panel cockpits started showing up on local fields and I saw how human factors were key to safe flight operation.

I had kept in touch with some of the guys I met from the NASA Ames Research Center and there were five or six of us who were asked to work with the research center to develop the TAA Flying Handbook. That was about the time the conversations started about what flying TAA was going to be like in the general aviation community. Since my passion was still instructing and I had a good business background, I thought there was a real opportunity to teach pilots how to fly TAA, tying it together with my human factors expertise. With the advent and growing popularity of Cirrus, it was evident that the symbiotic convergence of the two fields of aviation and human factors needed to be embraced by the flight instructor community, so I decided to buy an SR20 and I founded JATO Aviation in 2004, which is now a Cirrus Platinum Training Center.

Cirrus Pilot: How did you get started?

Gafford: After I met some of the people in the flight operations department at the Cirrus factory, I thought we could really help with instructing in the airplane. There were a number of things regarding human factors that were taught in the corporate and airlines industries

that hadn't made it to general aviation yet, and I felt we needed to focus on the best ways of teaching in these kinds of airplanes. I connected with others in the industry, including people from UND (University of North Dakota), Embry Riddle, the FAA's FITS (FAA-Industry Training Standards) program, Cirrus flight ops department, and even some early COPA members. I've been so impressed that Cirrus continues to invest in a robust flight ops department and that they are so committed to training pilots in every phase of their Cirrus training. They also promote safety and best practices with their Standard Operating Procedures and are the only GA OEM that I know of that has a Flight Operations Manual (FOM) that goes out with every transition kit. The new interactive iFOM is excellent and a testament to their commitment to supporting Cirrus pilots.

I also recruited some of the best pilots I know to join me at JATO. Following the FITS doctrine, we decided that we not only needed to teach maneuvers-based training, but incorporate scenario-based training. We also added systems management and flight management on top of other traditional task-prioritization training. We believe that maneuvers-based training is important, but there is so much more to flying a TAA successfully – it deserves specialized training. At JATO, we also have a whole page of human factors training that we add to the transition training. I feel that COPA, through its CPPPs, the flight ops department at Cirrus and those of us at the Cirrus Training Centers have a strong commitment to training, and we have worked to better align our curriculum in the past few years. I believe that this amazing triangular partnership is driving the Cirrus community to receive the best training they can get. It's a different paradigm.

Cirrus Pilot: How do we get the people who are buying used Cirrus aircraft to realize they need Cirrus-specific training?

Gafford: It's a culture that we have to continue to propagate. I believe we need a multi-pronged approach to get to those people who aren't inclined to seek out the training. One thing would be to keep offering seminars and produce information that encourages pilots to acquire the training. Also, we have people who come to us because they want to fly the newest and most up-to-date aircraft. If they want to fly our airplanes, they have to meet our standards. Interestingly, new pilots getting their PPL in the SR20 don't know what the alternative is. We heard from a student who came back to us and said he had flown with a friend who had just acquired his PPL and conveyed how confident he felt as a pilot in terms of the relatively solid foundation and level of training that he had received.

We also need to get flight instructors who aren't part of the Cirrus Standardized Instructor Pilot (CSIP) network to buy in to getting the specialized Cirrus training. I know

some instructors who are almost offended by having to be qualified. Some of them are great pilots with good reputations, yet they look at the Cirrus as just another “fuselage with wings.” They don’t understand that it is an airplane that deserves specialized training and that they can be part of the solution to decrease accidents. If you sit in the cockpit with an instructor that you trust, and they say it’s a fuselage with wings; that doesn’t help the overall quality of training out there and shows up in the Cirrus accident rates.

We also must get the insurance companies to enforce higher standards. There are second- and third-hand aircraft being purchased and some insurance companies only require 10 hours in an SR22T.

JATO won’t sign off anyone just because they meet the minimum insurance policy standards, and we highly recommend that the new owner go through the official Cirrus transition training.

Cirrus Pilot: Have you seen a change in Cirrus pilots, from the very first owners to those who are now purchasing one?

Gafford: Yes! Many of the early owners committed to the safety aspect right away; however, there were some who were getting a TAA because they wanted the technology to supplant their own proficiency. Rather than seeing the automation as a tool, some wanted the system to manage and control the flying, abdicating their own mastery of the airplane. Risk management and Aeronautical Decision Making (ADM) were embraced by some, but not all. Now, due to Cirrus and COPA doing such a good job in educating the pilot population and having the information readily available via the internet, I feel when people come to us they are more committed to doing the full training and making sure they’re fully safe and proficient. Sometimes they’re surprised at the time and commitment in learning, but the sense of reward is huge.

Cirrus Pilot: What is some advice that you can give a more seasoned Cirrus pilot?

Gafford: There is so much to cover on the initial transition training that recurrent training is even more important, especially to cover emergency procedures. When the emergency happens, a pilot will react based on how they are trained. Perception narrows in stressful situations, so people don’t know how they will react. It’s really important they get extra training,



Catalina Island was a stop on a group trip of pilots from Germany. The trip was coordinated with JATO Aviation, Cirrus Germany and Fliergen Magazine.

and review other systems management areas, in particular, autopilot management.

Cirrus Pilot: I understand you and your staff participate in CPPP, do you see a difference in pilots who have attended one?

Gafford: Yes; in fact, we suggest to all of our clients that they attend a CPPP. They come back saying they learned some great things. Some of the ground courses taught at the CPPP – Peter King’s GPS automation, John Fiscus teaching about human factors, the weather course by Bill Frank, Trip’s command versus control class – are all extremely well done. Clients and the flight instructors always have positive feedback after attending.

Cirrus Pilot: Do you have any plans for the future? What about possibly flight training in the Cirrus jet?

Gafford: Rob Haig, executive director of flight training and operations at Cirrus, has done a great job of creating the jet transition training. I think to start with, the factory wants to do most of the training in-house; they’ll have a simulator there. Do I think in the future we’ll partake in it? Absolutely; but I’m patient and feel that for Cirrus Aircraft to execute their in-house program and monitor the results is the right starting point. I fully support what Rob is doing and when he needs our assistance, we’ll be there.

As far as future plans ... I feel that there is so much work we can do to make what we’re doing now even better ... and that’s what I look forward to doing. ☺