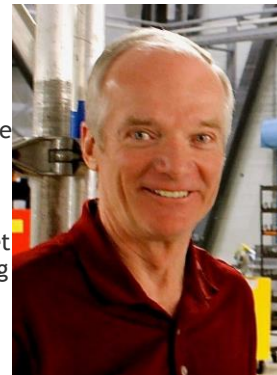


— LATEST BRIEFING —

What Good Looks Like - The Gold Standard Safety Award is here!

by Charlie Precourt, CJP Safety Committee Chairman

This year's CJP convention in Phoenix marked a new beginning for the safety focus of our organization. It was great to hear from some of you about the value this effort is creating for our members. Based on this feedback, our new Safety Standdown will become a regular part of our annual convention lineup. Among the items in our Standdown agenda was the new CJP Gold Standard Safety Award. After a significant amount of thought and outreach to the members, we now have established the criteria for achieving this prestigious award. There is an online application set up on our web site, as well as reference to the criteria for meeting the Gold Standard. Additionally, we're providing information to facilitate your accomplishing the prerequisites to receive the award at next year's convention. [Click here to download the form.](#)



You'll note the criteria includes the completion of a 61.58 annual recurrent training at a Part 142 simulator training provider. In addition, you will need to complete a second 61.58 at a Part 142 simulator training provider or six (6) hours of Citation dual instruction in an

aircraft, as well as one more enrichment training event as listed on the application. During the convention Safety Standdown, we had excellent discussions about the merits of in-aircraft versus simulator training. In particular Neil Singer's contributions to our panel session with the instructors was very enlightening. The takeaway for me is that neither simulator nor aircraft training is sufficient by itself. Training only in-aircraft leaves significant knowledge and proficiency gaps. There are things we can and should only attempt in the simulator because of their seriousness to maintain safety. Failing engines and major subsystems is not easy to safely simulate in the aircraft, and in most cases not wise. A V1 cut in the aircraft is far more hazardous than in the simulator - because it's real! Bad things can happen in the aircraft if you make a mistake during simulated emergencies, which leads to folks just not doing them in the airplane. But in the simulator, you can repeatedly expose yourself to the challenges of these events to the edge of your skill set building the necessary muscle memory to make them a non-event if they should ever happen to you in real life. On the other hand, the simulator can't provide all of the real aircraft, "day-of" situations that pop up that you have to deal with... talking to real ATC controllers with real airspace and traffic issues and real weather, real fuel management, challenges that can't be duplicated as readily in the simulator. However, many of the more difficult challenges, and even incidents and accidents can become scenarios to take to the simulator where we can learn to cope with them the easy (and safe) way.



Tom Abood made a great post on December 22nd on our website forum that emphasizes the in-aircraft training side of the equation. His comments are in reference to the NTSB final report that was just released on the Cedar City, Utah fatality involving Don and Dawn Baker on their return flight to Tucson from Salt Lake City, where they had attended a CJP regional meeting. Their loss has had a big impact on a lot of us. Tom spent time with them at that event... I did also, having given a talk to the group the morning before the accident. The NTSB listed the probable cause as:

The pilot's loss of control due to spatial disorientation while operating in instrument meteorological conditions, which resulted in an exceedance of the airplane's design stress limitations, and a subsequent in-flight breakup. Contributing to the accident was the pilot's reported inflight instrumentation anomaly, the origin of which could not be determined during the investigation.

The complete NTSB report can be found [here](#). Moving forward, this accident provides a great reference point for us to balance simulator and aircraft training. The NTSB pointed to spatial disorientation. Now that we have the detailed data on the accident sequence, we could recreate the spatial disorientation scenario in the simulator. That scenario would be excellent at reinforcing the critical reactions we need to make if spatial disorientation happens to us - recognize the situation, identify the functioning instrument references, and transition to them. Often our challenge in confronting an anomaly like this is just forcing ourselves to give up on the primary and transition to the backup instrumentation. We will likely never know the full extent of Don's situation, as the NTSB reported they were unable to find any instrument failures; however we can likely replicate the confusion he faced in the simulator to train ourselves to react.

But there will still remain a shortcoming to the simulator piece of this as Tom highlighted in his post:

"I recently returned from upset recovery training at Flight Research. I am convinced more than ever that unusual attitude training in a simulator is not enough. There is just no way to simulate the confusing and stressful pressure induced by G loads and the proper techniques to regain control of the airplane. It takes actual flight. Nor is acrobatics in a light plane sufficient in my mind. Training in your jet and a similarly control forced jet

with a higher G load envelope with expert instructors is indispensable part of learning how to recover from loss of control in flight. I urge all of you to give consideration to this type of training.” You can find his complete post here:

<https://www.citationjetpilots.com/forum/?fid=11&tid=4043>.

Thanks Tom! Great validation for including upset recovery training on our list of “additional training” events that provide credit for the CJP Gold Standard Safety Award. Tom also contributed to this edition of CJP Right Seat with an article highlighting the details of his recent upset recovery training.

Another Safety Standdown takeaway was the need to improve the simulator training that we currently have, because too much of our time spent is non-value added. I experienced some of this frustration myself in my own 525 checkout. I was not very familiar with the Proline 21 system, yet the only place I could gain hands-on time to build muscle memory and proficiency was in the full-motion simulator sessions where the real objective was flying mission scenarios, and where prior mastery of the avionics is assumed. There is a compelling need for an off line, non-motion, Flight Training Device to enable private time working with the FMS and autopilot mastering the automation. As single pilots we have to be very proficient at managing these systems so we have the bandwidth to handle the unexpected. The CJP Safety Committee is working directly with the avionics OEMs to facilitate additional training events throughout the year.

There are numerous other shortcomings of our simulator curriculum that we believe your CJP Safety Committee can address by working with the simulator providers and the FAA. At the 50,000-foot level, we have to recognize that much of the simulator training syllabus we receive today is derived from prior years when business jet aircraft were not certified for single pilot. The curriculum was based around a crew concept. Today we need to think about the unique aspects of flying single pilot as we critique the curriculum offered. Things like the progressive checking policies for 61.58 check rides, online ground school and better focused classroom content all need attention from the perspective of the single pilot. For those of you who do train in the simulator, we need your input on what you believe are the shortcomings to the current simulator training curriculum (in your aircraft) so we can build an alternative. Let us hear from you by email at safety@citationjetpilots.com.

In the articles that follow in this edition of CJP Right Seat you will hear from Tom Abood about his recent training experience. David Hayes from TRU shows their readiness to step it up and help you achieve the CJP Gold Standard Safety Award with their own new program, including development of scenario based training. And finally, David Miller provides us a full recap of our Safety Standdown.

Fly Safe!
Charlie

My URRT Experience at Flight Research

By Tom Abood

Inspired by the Safety Standdown at the CJP convention and comments on our forums from prior participants, I recently signed up for and attended upset recognition and recovery training (URRT) at Flight Research, Inc. In the 20 years I have been flying I've participated in and received quite a bit of training, both in planes and in simulators. The URRT experience at Flight Research without question ranks among the best in every facet, and certainly the most exciting.

I signed up for the two day "CJP Specific" URRT for \$9,200. This consists of two full days of training, with each day consisting of a half day of ground school and a half day of flying with full pre- and post-flight briefings and debriefings. Day 1 flight is in your own plane and day two is in the FRI Impala, a single engine Italian fighter jet with high G load capability. From the time I signed up, the FRI staff was all over working with me to get them the needed information. Beyond the usual pilot qualifications, they also needed my clothing, hat and boot sizes for my flight suit. My flight suit sizing experience lead to my designated call sign of "Rocky", but more on that later. The staff takes care of all the details, two nights of hotel are included in the price and they set that up along with a rental car to get back and forth to the hotel from Mojave. Walking through the hangar on arrival tells the whole story of the place, the floor is eat off it clean, each plane is precisely parked and has a just washed look and everywhere desks and classrooms are neat and tidy. Ship shape.



After a light breakfast and introduction to FRI from its founder Bill Horner, a former USAF pilot with many combat missions, a distinguished flying cross and a silver star, we met our instruction team. Two of our instructors were former flight test pilots and one a former shuttle pilot. All had some airline experience. Did I mention my classmate was an NOAA pilot? A hurricane hunter. This was starting to feel like a round of golf with a few touring pros. I was really excited.

After introductions, we moved in to ground school. The fundamental theme of the frequency of upsets and loss of control in flight provided the backdrop for a review of the basic flight envelope of our plane, covering topics known to us as pilots but with enough sophistication to build the foundation for the recovery methods discussion that followed. Unload, Throttles, Ailerons, Pitch "UTAP". This method was applied to various scenarios such as nose high, nose low and inverted variations of these positions. It made a lot of sense, at least at 1 G and zero knots.

Afternoon on day 1 was up in my plane with my instructor, Scott Glaser a tremendously experienced flight test pilot and engineer. We thoroughly briefed the flight including each expected maneuver. Up in the plane, we did things I've never done before in a jet. Full stalls. Unusual attitude recovery from nose high and nose low positions. We did several accelerated stalls in 60 degrees of bank at 2Gs. It was a revelation to me to apply the UTAP method to these encounters. Particularly relevant was the calibration effect of learning what a 2G pull feels like (well within the G load limit of our planes) and how necessary it can become to use this capability if caught in one of these unusual attitudes. After flight, debriefing was every bit as thoughtful and deliberate as the events leading up to it. We

went over the things I did well, and the things that needed reinforcement during our flight. It was a very positive learning experience. Then it was on to an hour of pre-flighting the ejection seat on the Impala. That certainly built anticipation for day 2.

Day 2 had flying first, ground second. After more briefing, donning our flight suits and strapping in to the Impala (me in the rear seat, Scott in the front), we were off. Jaw dropping is all I can say about the next hour and a half. We did it all, with me handling the controls, from full stalls to high G recoveries from nose very low and nose very high unusual attitudes, to inverted flight, tail slides, barrel rolls and even a fighter pilot arrival with break, perch and continuous turn on to final. Doing these maneuvers in a high G environment is an exhausting, physically draining, exhilarating experience. The additional G forces further calibrate the range of control inputs possible (though not to be done on our planes) and demonstrate even more effectively how the proper application of UTAP principles can recover almost any situation. Plus, it is a total rush! Again, a thorough debriefing followed and we went over what went well and where there was room for improvement.



A fine graduation ceremony completed the end of two very full days. A great tradition at FRI, the ceremony includes a fun review of the time spent as well as formal recognition of your staff given call sign. Ok, so the first flight suit I tried on was a bit tight and form fitting. I jokingly commented it had an Italian suit sort of feel and maybe I should keep it. Hence, I was dubbed the Italian Stallion or Rocky for short. I did get a bigger suit after that...

The takeaway for me is the direct benefit of this training for safety in the way we fly, single pilot. No amount of simulator training can replicate the stress and confusion caused by encountering higher G loads and the other sensations that come from unusual attitudes. Doing this in my own plane and in a jet with control forces similar to my own plane, as opposed to a light acrobatic plane, really reinforced the feel and recovery methods that FRI is imparting on us. I will go back for more. I urge all of you to consider this type of training.

Focus on Safety Draws Record CJP Convention Attendance

By David Miller

Just under 400 Meet In Phoenix To Hear from safety and training Experts

"The focus on safety really made a difference for me," was a frequently heard comment during the CJP annual convention held in October. Organizers built the programming around operational safety in Citation aircraft that included the first ever CJP Safety Standdown and live webinar.

Featured speakers included:

- Peter Basile, Senior Air Safety Investigator, Textron
- Greg Feith, former Senior Air Safety Investigator, NTSB
- Neil Singer, Single Pilot Expert and Designated Examiner
- Brian Moore, Wichita East Center Manager, FlightSafety International
- Tom Stackpole, Training Center Manager, TRU Simulation + Training
- Scott Glaser, Senior VP Operations, Flight Research, Inc.
- David Miller, Chairman CJP Safety and Education Foundation
- Charlie Precourt, Chairman CJP Safety Committee

This year's conference featured in depth accident reviews of Citation accidents and discussions on the two most recent fatal events (CJ-Cedar City, Utah and CJ4-Cleveland, Ohio) both involving CJP members. It was eye opening to hear the details of these accidents and learn how to prepare for various emergency scenarios.



Speakers covered a wide range of topics including, "What Does Good Look Like," "In Airplane vs Simulator Training," "Flying with a Mentor/Safety Pilot," "Runway Analysis," "The Value of Upset Training," and much more.

Each speaker prepared their remarks for CJP members regarding Citation operations. Not only were accidents and incidents reviewed in detail, but operational recommendations and "best practices" were discussed as well. Owner members came away from the briefings with specific procedures to enhance their safety.

On the next day, members broke into model specific working groups to focus on airframe, avionics and engine operation. OEM representatives from Textron, Garmin, Rockwell Collins, Williams, Pratt & Whitney and more met directly with owners to provide additional support.

And while safety was definitely the focus, CJP members enjoyed evenings of great food and entertainment including a private concert from country western recording star, Jake Owen accompanied by our own Dr. Russell Boyd!

CJP Chairman, Kirk Samuelson promises that our 2018 convention in San Antonio, October 24-28 will take our efforts to new flight levels.

The TRU Way to the CJP Gold Standard Safety Award

By David Hayes, TRU Simulation + Training

Training pilots to fly complex, turbine powered aircraft single-pilot has been the cornerstone of TRU Simulation + Training from the beginning. From the Conquest and CJ3, to the M2/CJ3+ and CJ4, designing training programs for single pilot operations of these airplanes involves more than just creating courseware and simulator scenarios. Emphasis must be placed on the special challenges faced by a pilot without another crew member to share responsibilities in the cockpit. As anyone knows who has done a single-pilot check ride, task saturation can come quickly.....and often in a simulator.

TRU is proud to be a CJP Platinum Partner, and excited to be involved in the Gold Standard Safety Award process. We have always believed that a pilot should feel current year-round, not just when they are fresh out of initial or recurrent training. Our approach to training is one of currency, not recurrency, and we have designed our training programs around that philosophy.



With that in mind, we created our Current 365 program. The basis of this involves 2 recurrent training events within 13 months, year-round use of our Citation exclusive Online Ground School, and unlimited use of our Integra Flight Training Devices. So how does it work?

- Sign up for the Current 365 program for your aircraft. A one year commitment is all that is required...no multi-year extended contracts.
- TRU will assign login credentials for your aircraft's Online Ground School (OGS).
 - OGS must be completed within 60 days of arrival for simulator training for the FAA to count it as ground school
 - OGS can be used year-round for systems study
 - Email generated system questions are available and can be delivered to your inbox based on the frequency you chose
- Our exclusive Integra Flight Training Devices are cockpit replicas with control loading and visual systems, not just touch-screen trainers. They can be flown just like the simulator, and are available for self-study or additional scenario based training throughout the period.

This program will fulfill the training requirements of the CJP Gold Standard Safety Award application. We are currently working with the CJP Safety Committee to design scenario-based training events that can be incorporated into the Integra FTDs at no additional charge for Current 365 customers. Full motion simulator-based scenario training will be available to all Current 365 members for a nominal charge. We are demonstrating the first of these scenarios in January to a couple of your safety committee members.

As an added benefit for CJP members, we also provide one free pinch hitter course for a flying companion. This course is designed to provide basic skills needed to safely get the airplane on the ground in the event of pilot incapacitation. This training typically involves approximately an hour of ground school training and an hour of simulator training.

TRU Simulation + Training looks forward to being an integral part of the Gold Standard Safety Award process. Both of our locations, in Carlsbad, CA and Tampa, FL, offer the training needed to get you there!