



# "Two Design" Competition

## CAN RVs CONTEND IN THE IAC?

Jeff Stoltenberg, Vice President of IAC Chapter 25

Right now, the International Aerobatic Club is facing the same problem as most pilot organizations: a continued reduction in membership. With gas prices continuing to climb and the economy stalling, the situation might not improve in the near future. This problem has been discussed at our local IAC Chapter 25 meetings as well as within the entire organization. How can we grow and maintain our sport in these difficult times?

One of the fastest-growing segments of aviation is experimental aircraft, which continues to expand at a steady rate. Much of this growth can be attributed to Van's Aircraft's RVs. There are now 5,700 RVs in use around the world. They are valued for their safety, engineering, and performance. They do many things well. RVs have great short takeoff and landing performance. They are able to get in and out of relatively short grass strips and are fast and economical. They make great formation platforms, having set a new world record for the greatest number of civilian aircraft in formation last year. They are also noted for their basic aerobatic performance. Indeed, many kits are completed with inverted oil and fuel systems to take advantage of these capabilities.

For these reasons, the IAC needs to reach out to this new and relatively untapped group of potential RV aerobatic pilots. It is time to invite them to participate in our beloved sport.

One of the potential barriers to the use of RVs in IAC competition is the standard inclusion of a spin in the Known sequence of the Primary category. Having heard that "you are not supposed to spin an RV," I e-mailed Van's Aircraft directly. Company President Tom Green gave me the official word on RV-6s and RV-7s: "Van's Aircraft recommends against intentional spins." As for the other RV designs, "The company's stand on the tandem planes is more in tune with the public's perception: i.e., they are spinnable, but within certain CG and weight limitations as set forth in the various construction manuals. The FAA requires the builder to define the allowable activities that each aircraft is 'approved' for, and those limitations must be included in the logs for the aircraft. So if you are looking for a plane that you want for aerobatics, then be sure and look at the builder-included limitations for Phase II flight."

The thinking behind this statement may have to do with the liability risks for Van's. These planes can certainly spin safely, but with their slick, recessed, riveted skin, they will build up speed quickly when pointed earthward. An inexperienced pilot could certainly reach

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never exceed speed ( $V_{NE}$ ) before he was ready to pull out of the maneuver.

Several years ago, IAC Chapter 25 wanted to develop a way to introduce new aerobatic pilots to competition while leveling the performance field among its active members. The "One Design" competition was introduced about 14 years ago. Primary was flown in the Aerobat, and Sportsman was flown in the Decathlon. This continued for about seven years. It was really a two-category competition with one design per category. More recently it evolved into a true "One Design" in which the entire contest, both Primary and Sportsman, was flown in a Super Decathlon. Harvey & Rihn Aviation makes its Decathlon available for rental use, including parachutes and safety pilots. Any other chapter members with Citabrias or Decathlons could also bring their aircraft. The competition was typically a one-day event flying both Primary and Sportsman. It was great for entry-level aerobatic pilots and also removed the performance advantages of other aircraft. Experienced upper-level competitors had often gone many years since flying the basic Decathlon. This has been a popular event over the years, with new members joining the chapter after this gentle and fun introduction to competition.

Last winter, at the yearly planning meeting for IAC



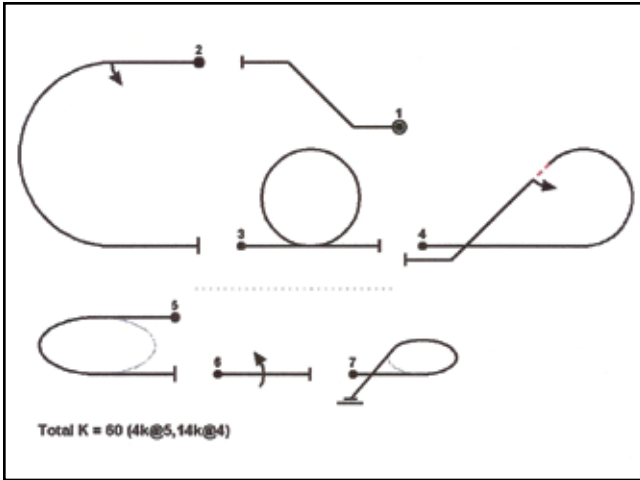
Linda Street-Ely (Third Place), Jim Doyle (First Place), and Jerod Flohr (Second) in Primary with Harvey & Rihn's Super Decathlon.

Chapter 25, a discussion developed about attracting new members. The "One Design" contest was once again recommended. After further discussion, members proposed expanding the contest to include RV pilots in a "Two Design" competition. This would include a separate RV Primary sequence without the spin. Safety pilots and parachutes would be available for the competition.

Over the next few months, an RV Primary sequence was developed that was as similar to the Primary sequence as possible, with the same "K" value. The goal was to have an equally challenging but safe sequence for RV pilots new to competition.



Jim and his RV-4.



The new RV sequence, with an emphasis on safety.

Chapter 25 approved the “Two Design” contest and advertised it on its usual sites as well as on RV websites. The first-ever “Two Design” was held at Giddings, Texas, on May 17. A total of 20 competitors flew, with most pilots flying the Super Decathlon.

Nine of the 20 pilots in the competition flew in their first IAC contest, and several said it was their first flight in a Decathlon. Three RVs competed—an RV-4 and RV-6 in Sportsman and an RV-8 in Primary. Other RV pilots were there to cheer them on and evaluate the process.

The competition was successful. Luis Luciani flew his RV-8 in the first RV Primary sequence. Luis had been practicing prior to the event and had received some ground instruction but no critiquing prior to his flight. His performance was excellent, impressing all of the pilots in attendance. Luis scored an overall 73.3 percent.

The two RV pilots who flew in Sportsman also did

Jim Doyle



Son and father: Wesley and Jeff Perkins at their first competition.



Jeff Stoltenberg

Bryan Butler in Lynne’s RV-6.

well. This was the normal Sportsman Known sequence with a spin.

Jim Pohoski narrowly missed the top three places, scoring a 77.7 percent, just 0.24 percent shy of third. He came in fourth and received the top First Time Sportsman Trophy. Bryan Butler, flying in my wife’s RV-6 (with no

## ***An RV Primary category is not only possible but functional.***

inverted system), also flew well. Since this was Bryan’s first time flying the RV-6 in aerobatics, he zeroed one maneuver, which took him out of serious contention.

The number of RV competitors was not as high as we had hoped. Unknown to us, two other major RV events in Texas were scheduled for that same day. Despite this, the competition definitely proved that RVs can fly in IAC competition. Both Jim Doyle and Bryan Butler are experienced aerobatic pilots, and they showed that an RV can compete in Sportsman if flown within the appropriate airspeed and G-load envelope. Our new RV Primary category was also a success, with Luciani easily demonstrating the capabilities of his RV-8. His score of 73.3 percent would have placed him first in the overall Primary category.

In the last few years, there has been a debate in the IAC about removing the Primary category. I have been against this idea. I have safety-piloted several pilots at their first competition in this category and have seen the benefits of this entry-level choice. Having shown that an RV Primary category is not only possible but functional, I recommend that we add this sequence to the Primary category with a “no-spin” sequence option with the same “K” value. I hope this will encourage more pilots to join us in our favorite pastime and help increase interest in the IAC. Fly safely. 🇺🇸