JUNE 2023

The Seminole Flyer



AMA Chartered Club 216, Founded in 1969



A Gold Leader Club for over ten years



Adventures in Aerobatics

Jeff Owens

This is the third installment of the series on aerobatics and the topic of the day is spins! Most of us have either flown or seen an RC model perform a spin. Often the pilot simply throws full aileron, rudder and elevator inputs at the same time and the plane executes a snap roll followed by a spin. Other times, the entry is more precise with the plane slowing in level flight while up elevator is gradually applied. This eventually leads to both wings being on the verge of a stall - that is, the loss lift by both wings. If, at this point one applies full rudder one wing will advance faster than the other. The advancing wing will maintain lift while the retreating wing will lose lift. The airplane's nose will drop and rotation in the direction of the rudder application will ensue -this is a true spin. In a true spin the airmen's wings are stalled and the axis of rotation passes through the fuselage. This is opposed to a spiral dive which can look like a spin, but of which the axis of rotation does not pass through the fuselage. If a faster spin rate is wanted, then aileron input can be applied in the direction of the rotation. The next question is how to exit the spin. Neutralize the ailerons, neutralize the elevator to break the stall, and give full opposite rudder application to stop the rotation, then neutralize the rudder, as well. The plane should now be going straight down and one can the apply up elevator to return to level flight. While this sounds complicated it actually is pretty straightforward - at least to the point where you want to have a precise heading and location for the entry and a precise heading for the exit.

The next question is what does this look and feel like from the pilot's point of view in the cockpit? In the CAP10 the control inputs are pretty much as described for an RC model. First, pick a heading that also has some good reference point on the ground such as a road - this helps with judging the exit. The Primary (formerly called Basic) class in IAC competition includes a single turn precision spin located in the center of the aerobatic box. One aims toward the center, aligned parallel with the flightline and the judges. Slowing as one approaches the center of the box, up elevator is applied until the airplane approaches a stall in the center of the box. At this point, full ruder (say to the left) is applied. The left wing will stall while right wing will continue to supply lift. From the pilot's point of view the left wing drops while the right wing seems to rise (actually it is just not falling) and it seems like the plane has rolled onto its side. The nose drops rapidly and one is suddenly looking down at the ground. Since this is a one turn spin with a precise exit direction you need to keep the ground reference point in sight. After 3/4 of a turn, apply opposite rudder to stop the rotation after precisely one turn and neutralize the elevator. This happens fast, so you need to keep careful track of the orientation of the plane in the box in order to judge this correctly. The plane is now going vertically downward, the throttle is at idle and one can apply up elevator to do a 3 g pull to level flight, being careful not to "bust" the floor of the box - the lower limit to which one is allowed to fly which is 1500 feet in the Primary class. While the spin is not a violent maneuver, the sudden change from looking up to looking straight down is, shall we say, interesting.

If not flying in competition, then one might continue the spin for several revolutions. At one point I had the opportunity to fly aerobatics in a Cessna 150 Aerobat - a specially reinforced version of the Cessna 150 that is rated for aerobatics. The spin entry is as described above. However, if you allow the spin to continue past three revolutions, the spin rate starts to increase. By the fourth revolution one is rotating noticeably faster than for the first three. That little plane can really wind up! I held it in the spin for about five revolutions and it was quite a ride!

That's it for this episode - next month we will look at the anatomy of a loop.

Independence Day Celebration

Seminole Radio Control Club invites you to join s

us Saturday July 1st, 8 am till 3 pm.

Come and enjoy some great RC aircraft flying. You can even try your skills with our club flight instructors and aircraft.



Lunch served 11:30 AM – 1 PM

Enjoy burgers, dogs, and more, plus drinks and the fixins'.\$10.00 per adult, children under 10, \$5.00.All you care to eat or drink. Club Donated Aircraft and other miscellaneous Items will be on display for 1pm Auction

Apalachee Regional Park, 7550 Apalachee Parkway Directions and map can be found at <u>www.seminolerc.com</u> For additional information, contact Jim Ogorek 850-766-2477

* All fliers must have current AMA membership. Normal AMA and SRCC safety rules are in effect

Club Meeting News

Jeff Owens

The June Meeting was called to order by President Jay Wiggins on June 15, 2923 at 7:00 PM. There were 9 members present with 6 more using Zoom. There were no visitors or new members.

Member Recognition - Jay Wiggins: Ken Kushner for handling the garbage detail; Jim Ogorek for creating flyers for our events; David Coury for organizing the food for the Memorial Day Flyin; Rhett Boudreaux for putting out the signs for the Fly-in; Everyone - for greeting the guests and visitors and making them feel welcome; Marcy Driscoll for her work with informing new members about the Club; Jeff Owens for his continued work as Secretary, Newsletter Editor and Webmaster; Gordy Meade for his ongoing and long time service mowing the field; Ed Budzyna for weed whacking; Dr. Mike for his ongoing safety and training efforts; Chris Mason and friend Claudia for cooking and helping at the Fly-in; Friedrich Mursch and Sandy Jaffe for their flight demos at the Fly-in; All the members who helped with the setup and teardown at the Fly-in.

Vice President's Report - Jay Wiggins for David Coury - plans are in place for the Firecracker Fun Fly. Details will be posted soon (see the copy of the flyer posted above.)

Treasurer's Report - MarcyDriscoll - the April report as contained in the May Newsletter was approved.

Secretary's Report - Jeff Owens - the minutes of the May meeting were approved as posted in the May Newsletter. The Gold Leader Club renewal was accepter by AMA and we are good for another year.

Safety Officer/Training Report - Mike Atkinson - no safety issues were noted. Jim Ogorek and Geoff Lawrence will be handling gate training duties for the near future.

Find Report - Gordy Meade - the grass was mowed on the 15th and the field is greening up nicely from the recent rain. One starting table was damaged by the recent storm and will be repaired.

Old Business - three quotes were obtained for painting the container. They were in the amounts of \$6980, \$6980, and \$7500. If we decide to go that route, the Board of Directors recommended the \$6980 quote from Blast Werks. Discussion followed. Gordy Meade expressed his opinion that the Club could not afford this amount while keeping a reserve for field maintenance. He volunteered to handle spot painting of the peeling areas. His offer was accepted. It would be good if other members would volunteer to help with the necessary scraping and priming.

New Business - Treasurer Marcy Driscoll reported that we are running in the red and broke even last year only because several individuals made contributions to the Club. The dues have been \$60(\$75) for single(family) since 1990. If adjusted for inflation the single annual dues today should

be \$139.20. The Board of Directors proposed a dues increase to \$80 (\$100 family) for 2024 and \$100 (\$125 family) for 2025. The Junior membership amount would remain unchanged. The proposed dues increase was approved by a vote of 12 to 2. The change to the Bylaws will be voted on at the next meeting.

In order to meet commitments for this year it was proposed that there would be a voluntary assessment presented to the membership with a suggested amount of \$10 although a higher amount could be given, if desired.

For those questioning whether we could "tighten our belt" with regard to spending, it was pointed out that we are already running a lean budget with most of the funds going for field maintenance and field projects like the starting tables, pavers, etc. Those who are interested can view the detailed financial statements contained in each Newsletter issue.

The meeting was adjourned at 8:24 PM.

The Seminole R/C Club Tallahassee, FL

Officers

PresidentJay Wiggins (moonangelb@gmail.com)Vice-PresidentDavid Coury (ddcoury@gmail.com)SecretaryJeff Owens (jfolso@comcast.net)TreasurerMarcy Driscoll (mdriscoll@fsu.edu)Field Safety OfficerMike Atkinson (nexnbax1@comcast.net)Field MarshallGordie Meade (Imeade@fsu.edu)Training CoordinatorMike Atkinson (nexnbax1@comcast.net)

Media Managers

Webmaster Newsletter Editor Jeff Owens (jfolso@comcast.net) Jeff Owens (jfolso@comcast.net)

Flight Training

Primary flight training is available by appointment on Saturdays from 10:00 AM until 2:00 PM when the weather is nice and not too breezy. Contact the Training Coordinator or one of the instructors to make an appointment:

Geoff Lawrence 850-591-6879 Jeff Owens 850-545-7482 Jim Ogorek 850-766-2477 Mike Atkinson (Tuesday only) 850-251-2694 Troy Emmett (Large Aircraft) 770-546-6199

Field Hours

All Aircraft: 30 minutes before sunrise until 30 minutes after sunset 7 days/week Please note: Although restrictions have been removed on flying hours for fueled planes, this is on a trial basis until further notice from Leon County. All gassers and nitros must have a suitable muffler.