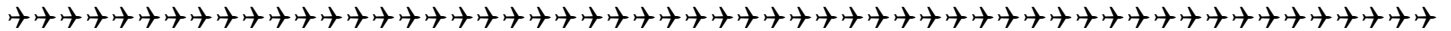




# Squadron News February 2022

An AMA Gold Club

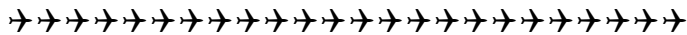


## Newsletter Editor.

Hello everyone, I'm John Lawyer and I am going to be taking over as the newsletter editor. I will admit I am terrible with names, so if I get your name wrong in the newsletter I apologize beforehand. If I get other facts wrong, I apologize. If you send me an email or hand me a note on any corrections, I will be glad to get it into the next newsletter. Besides, that will help me to take up space in the newsletter also. ☺ You can contact me at [jlawyer41@att.net](mailto:jlawyer41@att.net) or 765-918-7229

I will always be happy to take input from anyone for the newsletter.

P.S. Pictures of your latest bird or project are always welcome



## Upcoming Club Events

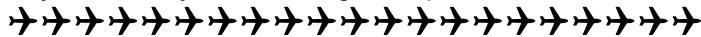
March 2 - monthly club meeting, 7:00 pm at clubhouse or Zoom meeting. Watch your e-mail for details.

April 6 - monthly club meeting, 7:00 pm at the field.

May 4 - monthly club meeting, 7:30 pm at the field

June 1 - monthly club meeting, 7:30 pm at the field.

July 6 - monthly club meeting, 7:30 pm at the field.



## Upcoming Area Events

March 26 - RC aircraft auction American Legion in Brownsburg. See Flyer later in newsletter.

April 1 & 2- Toledo RC Swap meet and Expo. Click [here](#) for event details.

April 29 & 30 - Dayton Modelrama RC Swap Meet and Auction. Click [here](#) for event details.

June 24 thru 26 - AMA National Fun Fly Intl Aero Center, Muncie, IN.



## February 2022 Meeting Minutes

*Recorded by Tom Carlyle, Secretary*

The February 2022 club meeting was held on February 2, 2022 via Zoom. President Rege Hall called the meeting to order at 7:00 PM. Eleven (11) club members were in attendance.

### President's Report

- No report.

### Vice President's Report

- No report.

### Treasurer's Report

- Richard reported on the club's bank account balances and transactions.

### Secretary's Report

- No report.

### Field Marshall's Report

- The flying field is in pretty good shape. We will need to apply some crab grass treatment early this spring. Waste Management is still working on a solution to the drainage issue. We've also been talking to them about extending the parking lot further west. We may end up trying to get some gravel on our own.

### Safety Coordinator's Report

- No report.

### New Members/Visitors

- No new members or visitors.

**Old Business**

- Indoor flying is not likely to happen this year; the elementary school is using the gym for storage during construction at the school.

**New Business**

- Rege Hall renewed the Club Charter and owner insurance with AMA.
- The Club website provider fee was paid.
- Tom Carlyle checked AMA’s website to fill out the Gold Leader Club renewal form but AMA has not updated the form to 2022 (still shows 2021 at the top of the form).
- The Johnson County RC Club swap meet will be held on February 19, 2022. Address: 250 Fairground St, Franklin, IN, 46131. Vendor setup at 7:00 a.m. Doors open from 8:00 a.m. to Noon.
  - <https://www.modelaircraft.org/events/jcrc-flyers-swap-meet-0>
- The Anderson Extreme Flyers swap meet will be held on February 26, 2022. Address: 3001 Mounds Rd, Anderson, IN, 46016. Doors open from 8:00 a.m. to Noon.
  - [2nd Annual Extreme Flyers Swap Meet \(facebook.com\)](https://www.modelaircraft.org/events/2nd-annual-swap-meet)
  - <https://www.modelaircraft.org/events/2nd-annual-swap-meet>

**Show and Tell**

- John Louden showed us some replacement nose cones for his Viper that he 3-D printed. Warren Estep is also printing some things with a 3-D printer.
- Rege Hall showed us some of his new jets that he’s been working on this winter, one of which was an F-16. He showed us the retracts cycling, along with the marker lights.
- Tom Carlyle talked about a 1/5 scale Waco YMF5 that he’s working on.
- Roger Dahm is working on a B-25. Also working on a Cessna.
- Steve Bushman is working on a 1/4 scale SE-5A.

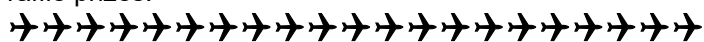
**Raffle**

- No raffle was conducted.

With no further club business, the meeting was adjourned.

The March club meeting will be held on Wednesday, March 2nd. The meeting will begin at 7:00 p.m. An email will be sent prior to the meeting with information regarding the status of a face-to-face meeting and with a link to a Zoom meeting.

One last reminder, please support your local hobby stores. Special thanks go out HobbyTown USA in Castleton for extending a discount to our club for our monthly and year end raffle prizes.



**Message from the President.**

President's message:

Another month gone by, and flying weather seems to once again escape us. John Louden, Parker and I were able to get some snow flying a couple Sundays ago. Despite drifts

around my neighborhood, the 6-8" snow cover at Corsair field was perfectly level and perfect texture. I was able to get in flights with my E-Flite Clipped Wing Cub on floats and my old Skipper. John flew his E-Flite Maul on floats and Parker flew my Skipper. Had a blast, I left the floats on the Cub hoping for another day to enjoy the snow.

I have completed the BVM F-16 that I demonstrated the retracts on at the last meeting, now waiting for flying weather to maiden. Here are a few photos of the plane, lights look cool, and being 1:6 scale larger than I anticipated. It is powered with a Jetsmunt 200 and controlled with my DX18 and a 12 ch power safe receiver.

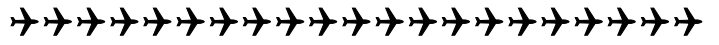
Consider sending pictures of your winter or new project to John Lawyer for the newsletter and me to post on the website. Speaking of the website, if you have items to sell, trade or are looking for something particular, we can place on the Swapshop page. If you have hints, tips or just words of wisdom and want to share, we will find a place on the website.

Wednesday nights March meeting will be live at the clubhouse (weather depending) and on Zoom for those not wishing to make the journey to the club house. Again, not a lot of business, so, have your Show N Tell ready to share. Also, please feel free to attend and renew membership if you have not.

Looking forward to blue skies and fair winds, Rege







BROWNSBURG POST 331  
 AMERICAN LEGION RIDERS  
 636 E MAIN ST. BROWNSBURG, IN  
 46112 - 317-852-3200

MARCH 26TH / 10AM-4PM

# RC PLANE SILENT AUCTION

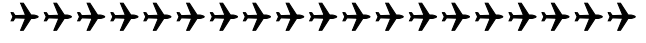
MAKE A BID FOR A CAUSE  
 PUBLIC SERVICE FUND RAISER - To Serve & Honor our Public Safety Heroes,  
 who risk their lives everyday in service to our communities.

ITEMS TO BE AUCTIONED:  
 OVER 50+ Radio Controlled Airplanes,  
 29 Kits pre-Assembled, 12 kits NIB (new in box). 7  
 Factory ready to fly kits, new engines, many  
 controllers, tools, lots of extras.

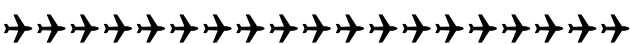
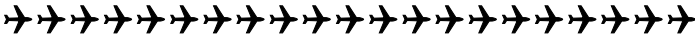
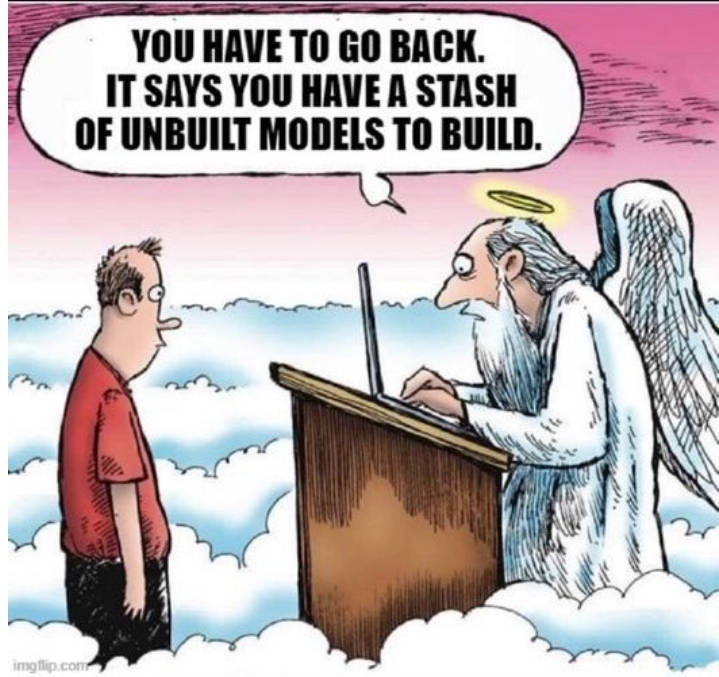
MORE INFO:  
<https://www.facebook.com/Brownsburg-American-Legion-Public-Service-FunRaiser-106563398576755>  
 or email:  
 Ron.Moe@Motorolasolutions.com Lunch will be Available



Click [here](#) for an event flyer and list of aircraft and accessories to be auctioned.

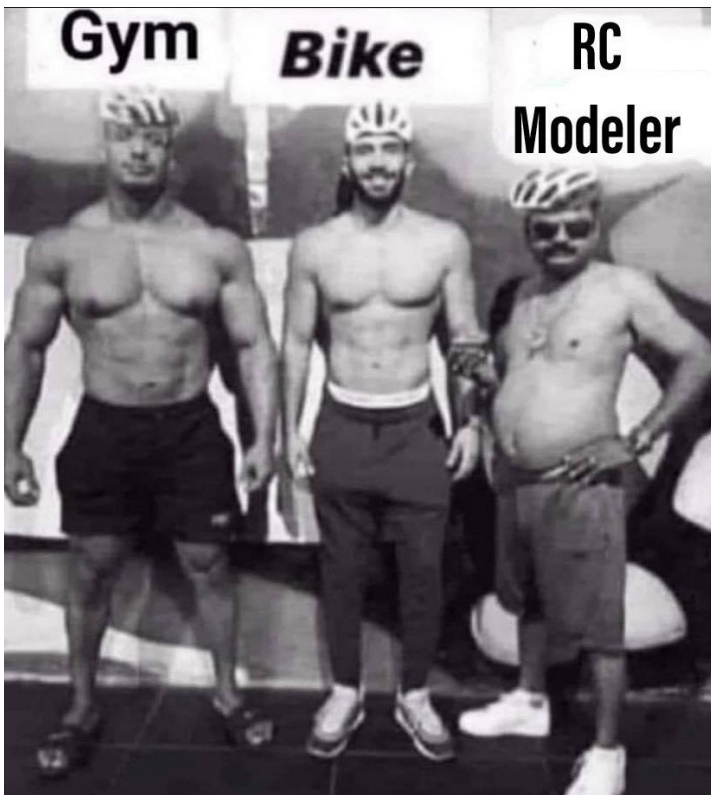


Funnies for the Month



Funnies for the Month





**FOUND DADDY'S RECEIPTS  
FOR R/C AIRPLANE  
PARTS**

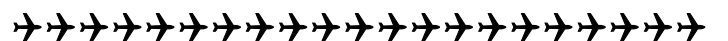


**GOT \$20 NOT  
TO TELL!**

**National no flying days**



**Feb 29th-31st**



# Flying Precision Rolls

[Model Airplane News](#)

[Featured News](#), [Flight Techniques](#)

[3 Comments](#)



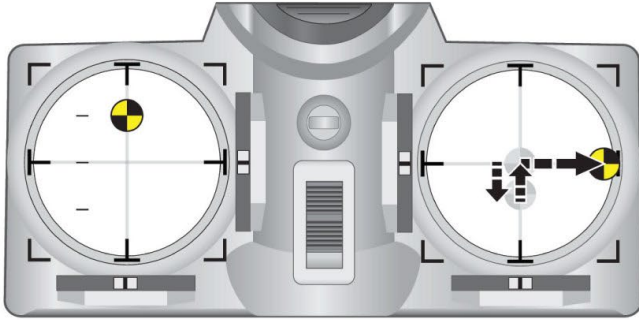
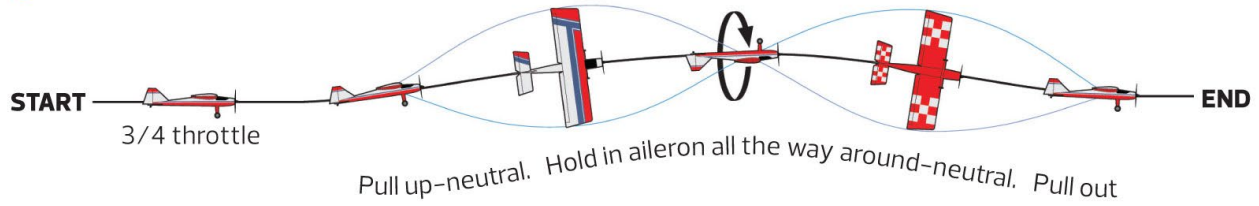
## **BASIC ROLLS**

The basic aileron roll starts by pulling the airplane up into a 10- to 20-degree climb. This way, the pilot doesn't have to worry about altitude or the ground and can then apply full left- or right-aileron and roll all the way around (Figure 1). The most important step in this sequence is making sure that you've neutralized the elevator used to set the climb before you apply aileron. This precaution ensures that the roll remains axial and on the same heading. Novice pilots must be especially careful not to get ahead of themselves by directly applying aileron while holding in the elevator. This can result in a clumsy barrel roll and loss of heading (Figure 2). Once you have initiated the roll, you need to focus all of your attention on preparing to quickly neutralize the aileron the instant the wings approach level.

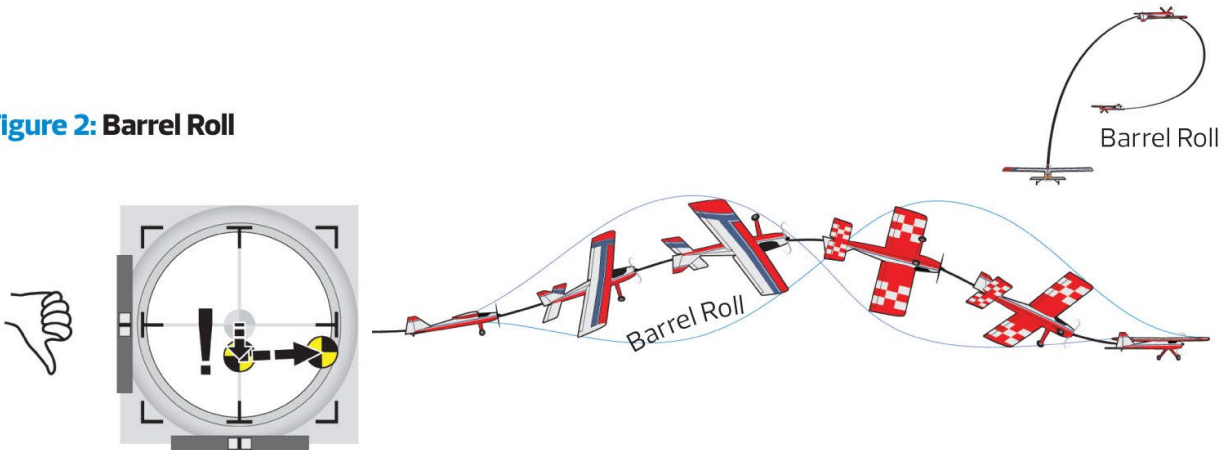
Since most rolls only take a second or two, you'll have to wait until after the roll is completed to consider the result and reflect on whether or not you need to make any changes. For example, if you find that your roll finishes lower than where it was started, you might want to try a steeper entry next time. When learning new maneuvers, I've found that it's best not to muddy the waters by making corrections during the maneuver. If there are deviations, you want them to be obvious and to leave no doubt about what you need to improve next time.

While nearly all symmetrical wing airplanes will roll just fine at half throttle, rolls performed at lower airspeeds tend to be more influenced by gravity and, as a result, tend to drop more toward the end. Rolling at higher speeds reduces the influence of gravity and therefore lessens the drop. Applying full aileron also makes the basic roll easier because it's completed before it has a chance to lose any appreciable altitude.

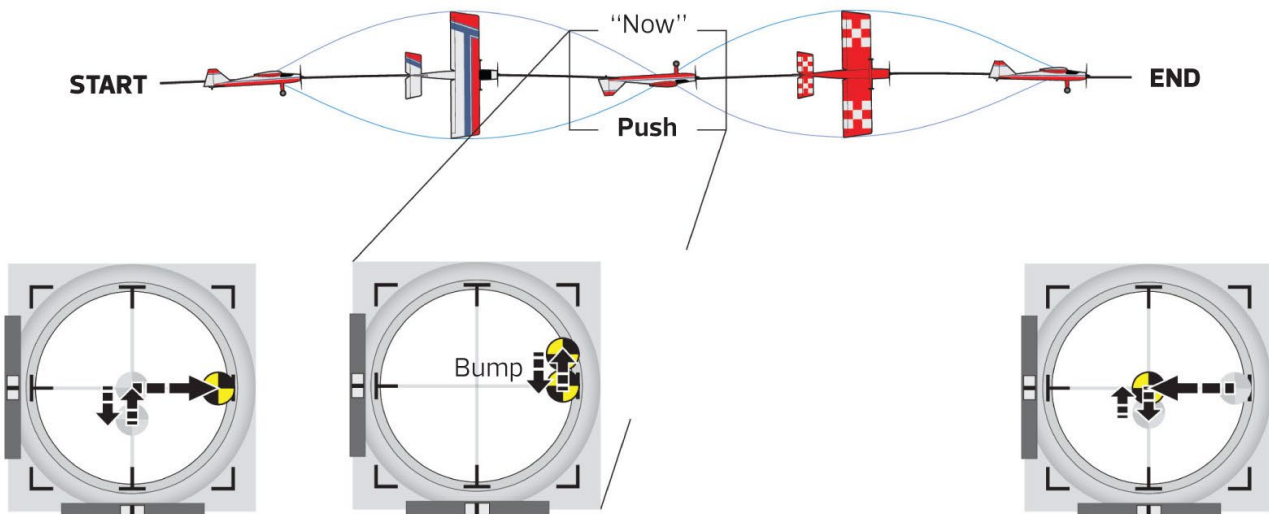
**Figure 1: Basic Aileron Roll**



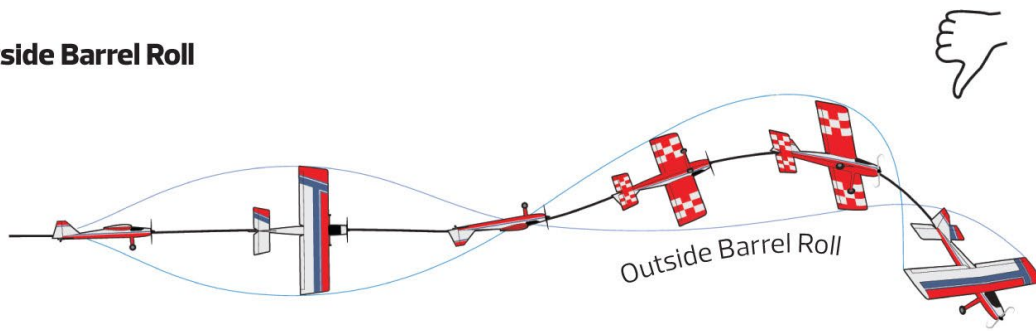
**Figure 2: Barrel Roll**



**Figure 3: Horizontal Roll**



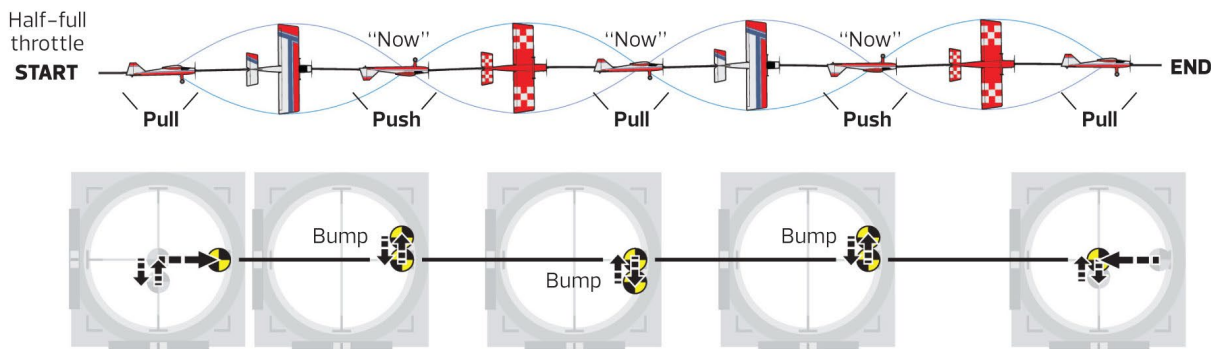
**Figure 4: Outside Barrel Roll**



When you're comfortable with basic rolls, you're ready to add a bump of down-elevator (push) to keep the airplane level through the inverted portion of the roll (Figure 3). Since the airplane is inverted only for a brief moment during a roll, the down-elevator input will have to be brief as well, i.e., a "bump." It's worth mentioning that those who attempt to base their down-elevator input on watching the plane will often end up holding in the elevator too long while evaluating its effect. Consequently, the plane will perform an outside barrel roll, which will result in a loss of heading and altitude (Figure 4). A proper elevator bump input is just enough to keep the roll level without actually being seen. If the bump is seen or causes the airplane to change altitude or heading, it was either too large or, more likely, held in too long. Thus, as a rule, you'll do better to bump less, rather than more. Remember, refinements, such as the elevator bump, will only help to perfect an otherwise perfectly good basic roll. If the bump of down-elevator causes you to botch your rolls, leave it out until you're comfortable with the basic roll again. As soon as you're all set with the basic roll, that's the time to reintroduce the down-elevator.

As your confidence increases, the addition of the bump of down means you can start to shallow the entries of your rolls. The eventual goal is to pull just enough up-elevator to keep the plane from dropping through the first part of the roll.

**Figure 5: Double Consecutive Rolls**



## CONSECUTIVE ROLLS

The logical progression from a good single roll is to a double (consecutive) roll. Start by pulling the nose up and then commit to holding in the aileron through two complete rolls. Each time the airplane

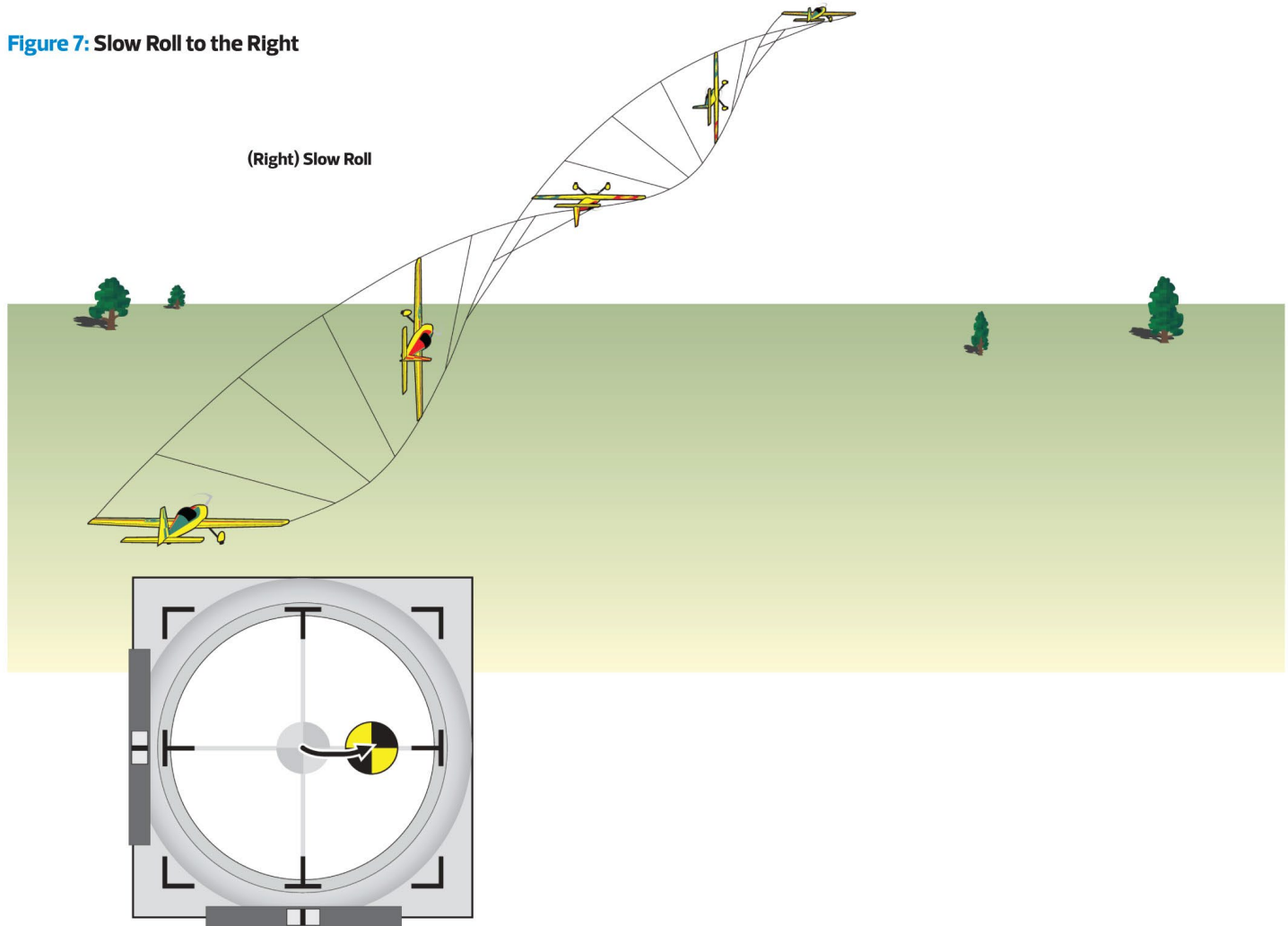


approaches inverted, briefly bump down-elevator (push). As the airplane approaches the start of the second roll, briefly pull up-elevator again (Figure 5). Using the climbing start will make learning when to input the elevator bumps at the appropriate times much easier. When you have mastered the timing of the elevator, you can then easily start to shallow the entry.

While the type of elevator inputs used during rolls are predetermined, i.e., brief bumps, you'll need to watch the airplane to determine when to input them: "Inverted, upright, inverted, upright."

Remember that the elevator bumps need to be applied individually at the appropriate times. If you go directly from one bump into the next prematurely, you'll cause the roll to change heading. Keep in mind that you can save hours of practice by taking some time to rehearse on your transmitter and to input individual elevator bumps (in-out) while continuing to hold in the aileron (Figure 6). When you do fly, all you'll have to concentrate on is when to apply each bump.

**Figure 7: Slow Roll to the Right**



## ADVANCED UPRIGHT SLOW ROLL

Few maneuvers truly demonstrate pilot skill like the slow roll. You don't see slow rolls performed by stunt pilots or those who feel equipment upgrades and programming are substitutes for flying skills. The day that you can perform a slow roll the length of the flying field is the day you can truly call yourself a good aerobatic pilot!

After mastering horizontal rolls with timely elevator inputs, you're ready to start holding in less aileron to slow the roll rate and add rudder during the knife-edge portions of the roll to keep it level.



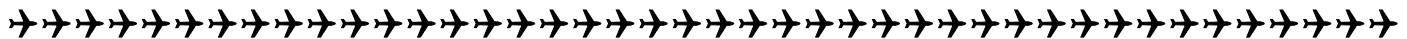
First, keep in mind that it doesn't matter if the top or bottom of the airplane is facing you; the rudder should always be applied in the "opposite" direction of the roll/aileron input. The rudder is then applied in the "same" direction of the roll entering the final knife-edge. Thus, if you're rolling right, the opposite left rudder is smoothly applied to maintain altitude through the first knife-edge. Remember to smoothly push down-elevator through inverted and apply right rudder (same direction as the roll) through the final knife-edge (Figure 7). Keep in mind the correlation between the amount of aileron you're holding in and the pace of the rudder and elevator inputs: The slower the roll rate, the slower you'll need to apply and take out the rudder and elevator inputs. This is where applying maximum stick tension and paying attention to your control inputs really helps in comparison to merely reacting to the airplane. Be sure to note that the rudder inputs should be just enough to maintain level flight. Visible yaw is not the object; the object is to locate and repeat the control inputs that consistently produce the best results.

The most common error during slow rolls is neglecting some or all of the required elevator inputs and keeping the roll level with larger earlier rudder inputs. Not only can neglecting the elevator result in descents, but applying large rudder inputs before the wings are noticeably banked can also initiate a slight turn. At every skill level, the most influential factor and what dictates the quality and ease of the remainder of the roll, is the roll's entry. It's crucial that you input a small amount of up-elevator at the start of the slow roll to prevent it from dropping. You should also delay inputting the rudder until the wings are banked at least 30 to 45 degrees. Don't forget to smoothly push forward elevator through inverted to keep the plane level before "same" rudder is introduced when approaching the final knife-edge.

## **BOTTOM LINE**

The success of any maneuver, even advanced ones, hinges on good fundamentals. Advancing pilots often assume that any difficulties they run into will require learning more involved techniques or more stick time to solve. In truth, it's often just the opposite. If you experience difficulties attempting to add refinements to your rolls (or any other maneuver), get reacquainted with the basics and reaffirm the foundation you need to propel yourself beyond the trouble spot. Practice can only make perfect if you maintain a solid foundation on which to build. Happy flying

Text & Illustrations By Dave Scott, [1st US R/C Flight School](#)



Editor: John Lawyer

**\*\*\* Till next month may all your landings be wheels down. \*\*\***