



# THE INVERTED FLYER

NEWS of the BOULDER AEROMODELING SOCIETY  
AMA Charter # 906

## June 2015 Edition

Ken Miller Editor & VP # 83



## Front Range RC Flying Events Calendar for 2015

by Mike Cross – Longmont Associated Modelers Association (LAMA)

**Note 1:** This events calendar is very dynamic and being updated frequently, bear with me on changes.

**Note 2:** Some of these events are not firmed up ---- **verify before you plan to attend.**

**Note 3:** The events with a (C) = are AMA sanctioned events Or (I) = are IMAC sanctioned events.. The rest were gathered from the AMA Web site calendar, club web sites and emails.

### June

6/06 -07 –(I) LAMA IMAC LAMA

6/06 – Pluckrose Memorial Fly-In Mile Hi RC Club

6/06 - Long Lake Float Fly-In Arvada Associated Modelers

**6/08-12-National AMA Indoor NATS (INDOOR FF NATS/NFFS USIC) Colo Spgs Auditorium**

6/12-14 – (C) Warbirds Over Denver Jefco Aeromod'lers

6/13 – Fun Fly (Freestyle Acrobatics) at Fremont County Airport Fremont CountyRC Club

6/19-21 – (C) Rocky Mountain Big Bird and 3D Throwdown LAMA

6/20-21 - (C) Warbirds Over Pikes Peak Pikes Peak RC Club

6/20-21 – (C) 2015 Colorado Pattern Challenge Arvada Associated Modelers

6/20 - AMA Sanctioned pylon race #2 AirPark Elite

6/20 - June Air Show BBQ 10:00 a.m. to 12:00 p.m.Denver RC Eagles

6/20-21 – (C) Colorado Pattern Challenge Arvada Associated Modelers

6/21 - Long Lake Float Fly-In Arvada Associated Modelers

6/25 - June BBQ and Evening Flying BBQ 6:00 -9:30 p.m.Denver RC Eagles

6/26-27 - (C) Rocky Mountain Regional Jet Rally LoveAir

### July

7/11-12 – (C) 3rd Prairie Dog Pattern Classic Miniature Aero Sportsters (M.A.S.)

7/11 - Long Lake Float Fly-In Arvada Associated Modelers

7/11 - Fun Fly (Climb & Glide) at Fremont County Airport Fremont CountyRC Club

7/18 - PPRCC Electric Fly-In Pikes Peak RC Club

7/18 - July Air Show BBQ 10:00 a.m. to 12:00 p.m. Denver RC Eagles

7/23-July BBQ and Evening Flying BBQ 6:00-9:30p.m.Denver RC Eagles

7/25-26 – (C) Warbirds over Parker Colorado Crosswinds

7/26 – Long Lake Float Fly-In Arvada Associated Modelers

## RC Aerobatics: Take off with a Snap!

A takeoff with a 1 1/2 positive snap roll will get everyone's attention on your flight right from the start! Before attempting this move, you should be proficient with performing positive snap rolls in general. When you execute this move, you must be in complete control and exit the maneuver at a safe altitude. Do not drop altitude throughout the snap roll as this can be fatal when you're only feet from the ground!

Depending on the power to weight ratio of your aircraft, your throttle percentage may differ slightly. On most of my models, I prefer to apply almost maximum power throughout the takeoff roll and then decrease power slightly once the airplane breaks ground. Then I pitch the airplane up slightly by pulling back on the elevator control stick and apply the same direction rudder and aileron. I'll release elevator to unload the airplane and ensure that it does not drop any altitude through the rotation. Then, once inverted and after 1 1/2 snaps have been performed, I'll release aileron and rudder input and apply a touch of down-elevator to sustain level inverted flight. While this may sound simple, there are a lot of different elements that need to be perfected.

Let's divide this stunt into four steps. In this example, we will take off from left to right. Always take off into the wind. If a strong crosswind exists, take off in a direction that is favorable.

**Step 1.** While on low rates, add about 80-percent throttle and apply rudder input as needed to keep the airplane travelling straight down the runway. With tail-drag-gers, you'll need to hold some up-elevator and slowly release elevator input as the airplane is nearing the liftoff speed. Then, pull back ever so slightly on the elevator control stick until the airplane is in the air.

**Step 2.** Once you are about 15 feet in altitude, flip to your mid rate and come back slightly on power if the airplane's speed is too fast. Pull back slightly on elevator input and apply the same direction aileron and rudder to initiate the snap roll. In this case, we will perform the snap roll to the left, so we will need left aileron and left rudder. Sometimes, people are confused by the control inputs needed in performing snap rolls. When performing a positive snap roll, up-elevator is needed along with the same direction of aileron and rudder input. When performing a negative snap roll, down-elevator is needed in addition to opposite direction rudder and aileron. It is critical to time this portion of the maneuver so that the airplane will precisely execute 1 1/2 rotations and exit inverted.

**Step 3.** Throughout the 1 1/2 rotation, apply throttle (if needed) to keep the airspeed up. Once the airplane nears the 1 1/2 rotation point, you'll need to neutralize aileron and rudder so that the airplane stops the rotation precisely where desired. This step may take some time to perfect, so altitude and familiarity is key. After all, this maneuver should only be done on takeoff if you are confident in your ability to execute snap rolls on demand in a precise fashion.

**Step 4.** Since 1 1/2 positive snap rolls have just been performed, you will now only have to apply down-elevator, as needed, to sustain your altitude. Once you are familiar with how to perform this maneuver, you can pull the throttle back to drop airspeed slightly and descend in altitude so that you are just inches off the ground while inverted!

I have just described the perfect scenario where little to no wind is present. If a severe crosswind exists, I recommend that you perform the snap roll into the wind. For example, if we are taking off from left to right and there is a strong wind blowing in, I would snap to the left so that the airplane snaps away from you. Heavy winds may cause the airplane to drift throughout stalled maneuvers like the snap.

Now you have the keys to fly the 1 1/2 positive snap on takeoff with utmost pizzazz. I must admit, this maneuver is very exciting to both watch and perform, but it is demanding on your flight skills. Do not attempt this maneuver until you are fully capable of precisely executing snap rolls without any loss in altitude. Until next time, safe flying and always remember to have fun!

BY JOHN GLEZELLIS;

**BAS in the late 1960s - We flew almost exclusively control line and free flight. - we pitched the idea of a permanent flying site at the Boulder Reservoir to the city council.**

## by **Zachary Hicks**

I was a Boulder Aeromodeling Society member as a kid when I was in junior high school. I think 67, 68, 69 were the years I was active.

There was no RC flying field at the time. There wasn't much RC. The father of a girl I sat next to in 7th grade science class flew some RC. At that time a form of RC called Galloping Ghost was the only vaguely proportional form of control. The vertical and horizontal stabilizers were moved essentially by chattering solenoids.

I even saw the early form of RC that used a rubber band like in a rubber model except the rubber band powered an escapement like a clock combined with a mechanism hooked to the rudder. The transmitter had one big button it. You pressed the button once for left and twice for right or something like that.

We flew almost exclusively control line and free flight. There were permanent rodeo grounds on 30th street. The city must have owned it because the BAS got permission to fly on the parking I remember as a 14 year old going to the paint stores and begging for them to donate some paint so we could paint the control line circle. I did get some paint and we drove a nail and stretched a control cable and I painted circle on the parking lot.

We had contests with people from Denver clubs coming. We flew stunt, combat, raced Goodyear racers (4 planes on a circle with limited gas tank size and a number of laps to complete). The planes had to land and refuel several times. The pit man would grab the plane jam a bulb like turkey baster gas refueling device into a quick fill gas tank and fill with fuel in one big squirt, then he had a glove with battery terminals sewn in and he would grab the cylinder head and make the glow plug glow and finger the prop. The gas engines would get hot and not want to start.

We flew a diesel engine that got better mileage and did not need a battery to start it. Four pilots in the circle flying at the same time. Planes at different speeds passing. We used a fuel cutoff, with a quick flick of full down control the fuel would cut off and the engine would not slowly lean out and get the motor hot.

The other flying area was at Phillips road way out towards Longmont off 95th. 95th was dirt. We held free flight contests there. Towline glider, and power free flight with 10-15 second motor runs. You would pull a pin out of a hole and a timer would start when you pitched it straight up. The motor would be cut off at 10 seconds and then turn into a glider for a timed flight. The goal was to put in 8-10 3:00 minute flights. It was actually very challenging to put in a clean round. Kind of like breaking 50 clay birds 2-3 times in a row. That was the BAS in 1968.ot.

I think Dave Millard was the BAS President back in the day when we made paper drawings and went to a City Council meeting, with sport coats on and narrow ties, where we pitched the idea of a permanent flying site at the Boulder reservoir. I think I was the example of the teen age kid that BAS was keeping out of trouble. It was many years ago, but that was the start of the Boulder Reservoir flying site.

**Submitted by Jim Gautreaux**

## **BAS MEETING MINUTES HOBBY TOWN USA LONGMONT CO May 13, 2015**

Meeting called to order by **PRESIDENT** Murray Lull at 6:30 pm. with 10 members present. Motion by Augie Bruno with a second to the motion by Dean Ehn to accept the minutes of the last meeting as they appeared in last month's newsletter. Motion was voted on and passed.

**TREASURE REPORT**— Dean Ehn gave a detailed report of the clubs finances

**VICE PRESIDENT** — Vice President Ken Miller was not in attendance due to his continued illness, thus there was no report. We all wish Ken a quick recovery. President Murray Lull read an email he had received from Ken regarding his recovery and his plans to be back “on top” by the picnic.

**SR. ADVISOR** — David Goodnow was absent, thus there was no report.

**SECRETARY** — Richard Myron had no report.

**MEMBERSHIP** — Tom McKinnon reported that the club presently has 82 members, with 25 members participating in the float fly activities. The Club has three new members: Steven Rutkowski, Keith Williams, and John Harris. Welcome to our new members.

**PRESIDENT** — Murray Lull gave thanks to Al Coelho for helping two flyers from out of town get orientated with, and fly, a foamy they had brought out to the field. Thanks Al for showing our good will. Murray further acknowledged and thanked Ken Jochim for assisting a “father and son” with learning to fly their quadcopter. These are two great efforts which support our “outreach” program which is very important. Finally Murray acknowledged and thanked Augie Bruno for his monthly meeting “furniture setup”. Thanks from all of us that attend the meetings, Augie,

**OLD BUSINESS** — Rich Anderson suggested that the weed spraying be postponed due to weather. No future date was set as the predictability of the current “rainy” season remains a mystery. Further, President Murray Lull canceled the planned May 16th workday due to weather concerns as well. No rescheduled date was set.

Murray stated that the painting of the runway will occur when weather permits. He has the paint and rollers needed. Regarding the Picnic, Murray stated that it was still set to occur sometime in July. Ken Miller is checking on the catering details. The exact date for the picnic will be set at the June meeting.

**NEW BUSINESS** — President Murray Lull announced that he had received an email from Joy Masters, the Conservation Ecologist for the City. In that email, Joy stated: volunteers have reported the presence of protected birds in the vicinity of the field, reviewed the format for the required downed aircraft log book for planes that go down within the restricted area, procedures for retrieval of downed aircraft within the restricted area, and noted that the keeping of the downed aircraft log is “mandatory.” In that light, Murray Lull noted that Club Members can only encourage non-members to comply with both the restrictions and the filling in of the required log.

Procedures emphasized by Joy Masters include: calling her directly (number is to be posted in the shelter) when persons are NOT following protocols, reminding all that the fine for violation of the restrictions and/or following the downed aircraft rules can be up to 90 days in jail and a fine of \$1000. Please be aware that one member has been fined in the past. The Club will not pay, or reimburse, any member or non-member for fines levied for violating the City rules or protocols.

It was decided that the fine for violation of the above needs to be posted on the fence.

Murray was going to ask Joy for a sign from the City. Tom McKinnon was directed to send out an email notice to all members with regard to the required actions for downed aircraft in the restricted area as well.

**NOTE:** It is imperative that ALL follow the restrictions and the required procedures and protocols for downed aircraft within the restricted area. Basically it’s “Obey OR Pay.”

Please remember that the June, July, and August meetings will occur at the field.

Motion by Dean Ehn with a second by Mike Gulizia to adjourn the meeting. Motion voted on and passed. The drawing was held for the \$20.00 gift card. Richard Myron was the lucky winner. However, due to Ken Miller’s illness, the OFFICIAL TICKET BUCKET was AGAIN not available.

**Respectfully Submitted Richard Myron.**



Ken Miller

Gary Paterson

Mark R. Bradley

Dave Butler

Shelby Lynn Hart

Greg Hine

Eric Anderson

Richard Bertschinger

## Reminder

There are FIRE EXTINGUISHERS in the Shelter. If or when your aircraft might crash grab a fire extinguisher on your way to pickup the aircraft in case of a FIRE.

## BAS Meeting

June 10th

6:30 pm

Chandler Field

Laser Kit Cutting...  
CNC Router and....  
Vacuum Forming....  
CNC Foam Cutting....  
ALL Done to order...  
Quality work...

[www.vicsrc.com](http://www.vicsrc.com)

### BAS—RC—Forum

[www.TinyURL.com/BoulderRC](http://www.TinyURL.com/BoulderRC)

Will purchase "Estate Lots" or other entire large collections of RC kits, motors, accessories, for reasonable amounts.

Cash paid.

Richard Myron

303-746-4274

