Radio Control Flyers Unlimited Flight Plan

AMA Charter # 1442
President: Jim Scott - 209-985-0859
Vice President: Larry Maxfield - 209-404-0659

IMAA Charter# 623
Sec/Treasurer: Steven Howie - 209-847-0567
Membership Chairman: Mike Cummins - 209-985-1550

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www.rcflyersunlimited.com

Current News

I would like to extend the club's welcome to our new member.

Fred Coe

Please make our new member welcome and give him any help and advice he wishes to have.

Finally, duck hunting season is over. You may now use the flying field any time of the day without restriction. The restriction will be re-imposed around the middle of October of this year.

Please be reminded that all members flying at the field are to have a current membership card for 2009. If you see anyone flying with out both the current AMA card and a 2009 membership card on the frequency board, you have both the right and obligation to inform that person that they cannot fly until the proper documentation is in order. The only exception, is a visiting flyer sponsored by a current member consistent with our rules for visiting pilots.

The club members have scheduled many events for 2009. These are:

1. Road cleanup day: February 28 @ 9:00 am

2. Jet Rally (tentative): March 20, 21, 22

3. Swap Meet at field: March 28

4. Fence construction with lunch: April 4 and 5.

5. Pattern Contest (tentative): May 23, 24, 25

6. IMAC Contest: June 6 and 7

7. IMAA 4th of July event: July 4 and 5

8. War Bird event: August 8 and 9

9. Toys for Tots Dinner: December 5

10. Float fly dates at the field (tentative) will be April 18, May 16, June 20, July 18, August 15, September 19, and October 3.

We will also be having our Father's day event at the field.

I have been noticing the continued cleanliness of the field every time I go out there. Again, thanks to all of the members that are looking out for the field and maintaining its cleanliness. It is very commendable for these members to take it upon themselves to maintain the field. This also includes weed maintenance and cleaning up of the fuel residue at the start up stations.

PILOTS CORNER

FOR SALE

Model Aircraft Trailer. Never used, 4' by 8' by 4', 2 each 4' by 8' pull out trays for mounting RC planes. Polyeurathene finished for protection with locks on doors.

$800.00 (Below material costs)

Don Robinson Cell # 209 614 2890

Give Me Exponential Rates
by Matthew George

From the Northern Utah Radio Control Aircraft Club

I wanted to take a few minutes and talk about the use of exponential rates as supported by most of our RC transmitters. After getting back into the hobby over the last several years, I'm surprised at the slow adoption rate (no pun intended) of using exponential rates.

I have even heard recommendations that you shouldn't use exponential rate features on your radio. I can tell you by experience, that any pilot serious about becoming accomplished in aerobatics will make his life much harder if he tries to fly precision maneuvers without incorporating exponential rates into his control surface throws. I am of the opinion that almost any aircraft should be set up with exponential rates on the control surfaces. You will immediately see an improvement in your flying once you understand and start dialing in exponential rates for all your aircraft. Trainers to unlimited IMAC birds, gliders, sport planes, flying lawn mowers, etc …

What is the definition of using an exponential rate on a control surface? Exponential rate is where the servo movement is not directly proportional to the amount of control stick movement on your transmitter. Over the first half on the stick travel, the servo moves less than the stick. This makes control response milder and smoothes out level flight and normal flight maneuvers. Over the extreme half of the stick travel, the servo gradually catches up with the stick throw, achieving 100% servo travel at full stick throw for aerobatics or trouble situations.

All the newer radios support this feature and the best part is the fact that no physical change is required on the aircraft. It's a simple matter of programming your radio to use exponential rates on some or all of your control surfaces including your throttle.

Have I convinced you to give expo rates a try? It's not scary; I promise. Pull out your transmitter manual and start reading. It's usually a simple matter of scrolling through your on-screen setup menu and finding the option to set expo for each control surface.

There is only one caveat I know of, if you have a Futaba radio, make sure to dial in your exponential rates as a negative number. All other radios use positive numbers when setting up expo rates.

I would start by static checking your control throws after you dial in some expo. Start with your ailerons and dial in about 30% expo for channel one. Now watch your aileron control throws as you move your stick on the radio. You will notice a soft, easy movement while you are at the center of the stick and as you move the stick to full left or right, the controls will begin to move faster to their current endpoint setup. This will make your aileron response much more soft at the center of the

stick and you will be doing full, slow rolls all across the field. When you need some quick aileron for a quick correction or faster aileron roll, you will still have the throw you need when the stick gets to its extreme position. It will make your flying much smoother. If you are using the newer faster servos, you will see much more effect by using expo rates.

So how does Matt have his radio set up? There is no exact formula, but this may give you a place to start:

My expo setting on my Composite ARF 330S for precision non-3-D flying are below. Keep in mind I have a lot of throw in my control surfaces even on low rates, so you will want to experiment and find the best settings for your aircraft. (Note: I'm using a Futaba radio, so these numbers are listed as negative. For other radios—JR, Airtronics, etc.—you would dial in positive numbers.)

Aileron: -50% (left and right)
Elevator: -40% (up) -20% (down)
Throttle: -38% (this smoothes out the throttle response across the whole stick movement)
Rudder: -80% (left and right)

If you are skeptical, start with lower numbers, 0% would equal no exponential at all. Try a different setting after each flight and get to a point where you see your flying get smoother.

You have heard all the top aerobatic pilots' names: Frazer Biggs, Quique Somenzini, Mark Leseberg, Christophe Paysant-LeRoux, Chip Hyde, Mike McConville, Bill Hempel, Kenny Lauter, Jason Noll, Jason Schulman, etc. I'm not even in the same league as these pilots, but guess what all these pilots have in common? Yep, they all make heavy use of exponential rates when setting up their radios.

So pull out that radio manual and start dialing up that expo! You will be glad you did and your friends will be asking you what you did to improve your flying.

Cash Flow Report

Income		Expenses	
Club Dues (including initiation fees, field assessment fees, and Donations)	$2,525.00	Port-o-potty service	$140.00
Raffel Income	$60.00	Raffel prize	$35.68
		Pest Control	$40.00
		Newsletter & member cards	$168.00
		Web Site	$29.85
Totals	$2,585.00		$413.53

Last Month's Total ……..	$13,451.45
Income ……..	$2,585.00
Expenses ……..	($413.53)
Balance ……..	$15,622.92

The February Club meeting is scheduled for:
Wednesday, February 11, 2008 at 6:30 pm
at the Police Station at 10th and G sts.