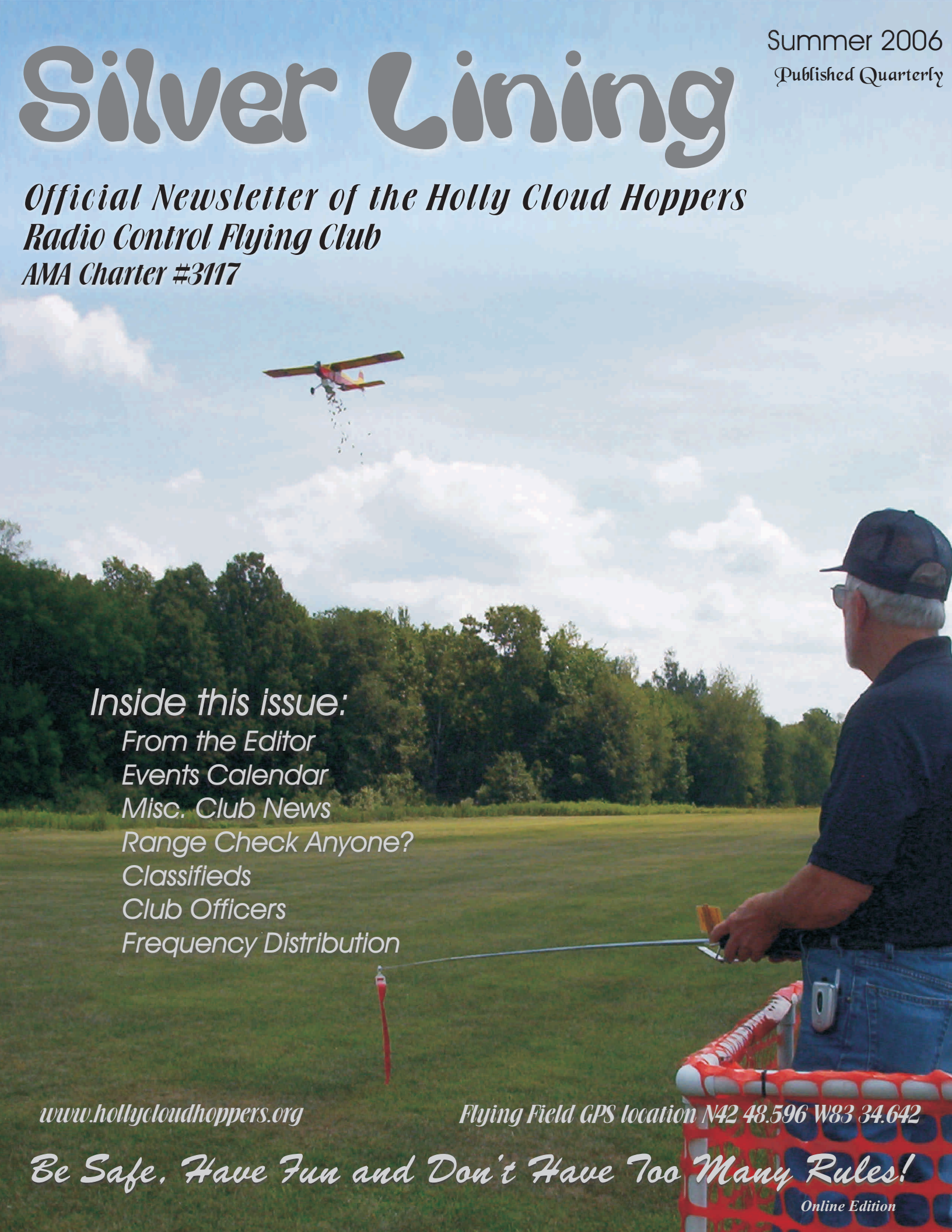
Summer 2006
Published Quarterly

Silver Lining

Official Newsletter of the Holly Cloud Hoppers Radio Control Flying Club

AMA Charter #3117



Inside this issue:

www.hollycloudhoppers.org

Flying Field GPS location N42 48.596 W83 34.642

Be Safe, Have Fun and Don't Have Too Many Rules!

Online Edition

From the Editor

Scott Rhoades

In this issue you will find a reprint of an article that was published in R/C Report by columnist Dick Pettit. Well, it's not a reprint of the entire article; it's just a segment that covers a subject that had been on my list of future topics for quite a long time. I don't like to do reprints from national magazines because there is no point in printing something all members have easy access to. My aim is to provide you with fresh information and entertaining material; not to be redundant. But why do a reprint now? What makes this one so special? First of all, I feel it's an important message about a procedure that I see few modelers take the time to do any more. Secondly, Mr. Pettit is a much better writer than yours truly and I'm also hopeful that his reputation will lend much more credibility to the message. Third, odds are, most of you did not read the original article because a vast majority of *HCH* members don't subscribe to R/C Report. This fact was presented to me when I changed address with R/C Report over a year ago. Out of the 16 *HCH* members residing in Fenton's 48436 zipcode at the time, I discovered that I was one of only three Fentonites that subscribe to the magazine. Assuming these numbers were a fairly good representation of the then sixty *HCH* members, anything I quote from R/C Report is going to be new to roughly two-thirds of you. Whether you're an R/C Report subscriber or not, please take a moment to read the article and thoroughly consider what Mr. Pettit is saying.

I have a personal experience to pass along that fortunately did not end disastrously. Hopefully everyone can learn from what happened to me. Over the winter I bought a previously owned and flown trainer for my kids. Even though the plane was complete and ready to fly, I still went through the whole allotment of checks just to make sure everything was okay. A few minor changes were but over all every thing checked out fine. All controls responded to the right Tx stick movement, the batteries cycled great and construction was sturdy. There was, however, one discrepancy that went unnoticed for too long…the radio system was not operating on the channel indicated by the sticker on the back of the Tx. We actually flew the plane one day assuming it was on Ch 45 when it was actually broadcasting on 44. It was a whim experiment that revealed the discrepancy when the plane wouldn't respond to my synthesized computer transmitter while dialed to Ch 45. We would likely still be reserving the wrong frequency for that plane if it had not been for some off chance tinkering.

If you purchase a used system like I did or you're helping a newcomer put their first plane into the air, take a second to pull the Tx crystal and confirm a match with any channel stickers on the Tx. If the crystal only states the frequency number, here is a simple formula to calculate the channel number.

Take the hundredths from the frequency, for example with 72.810; use just "81"

Subtract 21 (81 - 21 = 60)
Divide by 2 (60 ÷ 2 = 30)
Add 21 (30 + 21 = 51)

There you have it - 72.810 is channel 51

► **Editor, 3**

On the Cover:

HCH member Jeff Lambert piloting the candy drop plane at the 2006 Open House

Photo by Scott Rhoades

A picture of the flight line where my new friends fly. Yes that is an ocean just a few yards behind them.

Events Calendar

July 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

August 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

October 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

November 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

December 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	Jan 1					

HCH dates

Events around the area

AMA District VII Fly-In	Radio Control Club of Detroit	*www.rccd.org*	July 29 - 30 10:00 am
Open House	*HCH* Flying Field		August 5 12:00 pm
Annual Big Bird Fly In	Aero R/C Club of Flint - Baker Field		August 5- 6
Electrics Over White Lake	PMAC Field		August 13
Grand Miniature Aircraft Fly In	Chesaning Area Model Flying Club		August 13
Midwest Regional Float Fly	Island Lake State. Park, Brighton		Sept. 9-10
Last Bash Potluck	*HCH* Flying Field		Sept. 23 4:00 pm
Joe Jacobs Memorial Scale Fly In	PMAC Field		Sept. 24
Winter prep	*HCH* Flying Field	*See Misc.News for info*	October 21 12:00 pm
Chili Fly	*HCH* Flying Field		January 1 (2007) 11:00 am

◄ 2 **Editor:**

I just got back from two week vacation where I hung out with a great group of modelers on a few separate occasions. These modelers are just like us, except they have a rather unique flying field and near perfect flying weather just about every stinkn' day of the year. I took plenty of pictures and have loads to talk about. However, since most of this issue was completed before I left, there just isn't enough room to do a good story and include pictures too. I do have space for one picture that is on the previous page . So next time be sure to find out what it's like to *Fly R/C In Paradise*.

RANGE CHECK ANYONE?

BY Dick Pettit

Below is an excerpt from Dick Pettit's column, ***The Big Picture,*** *in* ***R/C Report Magazine****. Mr. Pettit discusses a very important issue that I've noticed too few flyers in the HCH take the time to do.*

If asked to identify the single most important factor that can determine the success or failure of an R/C model airplane, I'd have to say the radio system, When the receiver can't detect the signals emitted by the transmitter the results are not pretty. I can't begin to tell you how many times I go to flying events, other flying fields, or even my own club field, and see how few people take the time to make a radio range check before they launch their models. When I ask why, I get various answers and excuses. Here are some of the common replies, and my comments on why I disagree:

Some people just trust their radio systems to perform flawlessly each and every time they turn the switches on. I trust my radio systems too, but blind trust goes only so far. Radio systems are a combination of mechanical and electronic system, both of which can develop problems. I think these systems should be checked at least once or twice before the first flight of the day, if for no other reason than to ensure that bond of trust is still justified. Besides, the radio might be working perfectly, but we may have done something wrong during installation and set-up.

"I range checked my radio at home, before coming to the field." Well that's better than no range check at all, but there are several things to be considered here.

First, the conditions at the modeler's may not be the same as at the flying field. There may be interference or other problems at the field that weren't detectable at home. Second, did the modeler remember to turn the receiver and transmitter off before heading for the field? If left on, the batteries may have significantly discharged now making flight unsafe. Third, did the modeler actually perform a realistic range check, or was it just a flick of the switches and wiggle of the stick? Who knows?

When I get a new radio, I set it up in my back yard and do a thorough checkout. Using a servo with a brightly colored flag on it. I start walking away from the receiver, carrying the transmitter in my hands, with the antenna fully collapsed, I keep walking until the signal is lost and either the servo no longer responds to the transmitter, or the servo begins to move on it's own. I then walk back toward the receiver to find the distance at which the signal is restored, and control over the servo is regained. This distance is then recorded for future reference.

Some weeks later I'll have that new radio installed in a model. I turn the receiver system ON, and walk away the same distance I recorded earlier. I should again have good control over the servos in the model. If so, I'm ready to take that plane to the flying field for testing, If not, I have to find out why, and correct the problem.

Whether it's the first time you check a new radio, or you're checking an old system on an old plane. If you're using an engine with any sort of an ignition system, be sure to check it with the engine running as well as not running. If I'm able to get 200' of range with the engine stopped, I think I should get no less than 80% of that with the engine running at any speed.

I'm now ready to head to the flying field with my new plane and seemingly good radio system. I first unpack and assemble everything that will fly, and make sure the plane is sitting away from any large metal objects such as chain link fences, automobiles, or tin roofs, Then I go get the frequency pin and note if anyone is using adjacent channels. If so, I will postpone my range check until those channels are free. Then, after extending my transmitter antenna about half way, I turn on the receiver battery switch and wiggle the controls. If everything moves, I start walking away from the model. I still have the transmitter antenna extended at this point, to save the RF section of the transmitter from being damaged by a mismatch to a very short antenna. Once I get to a point about 15 paces (50') from the airplane, I'll collapse the antenna and wiggle the stick. If everything moves, great. If not, I'll move a little closer to the plane and check again. If there's still a problem I'll try to find the cause and fix it before range checking again.

On a new plane I'll do the same range check with the engine running, no matter what type of power is being used. I'll check at several engine speeds, and have a helper watch the controls for erratic movement. If everything is fine, then it's ready to fly.

This brings up another interesting point. Exactly what does one look for when range checking? I look to see

► **Range check, 5**

◄ **Range check, 4**

that the control surfaces move when I move the stick around, and note that they move in the correct direction as well. I usually have my dual rates switch in the high rate position so I can see more movement. I also consider it important that the control surfaces *Don't* move unless I move the transmitter stick. Radio interference will usually jiggle, jitter, or otherwise erratically move control surfaces even when there's no transmitter stick movement. Granted, PCM systems don't do this but I've seen many PPM systems exhibit this tendency. Make sure the control surface movement corresponds to control stick movement.

This is by no means the one and only way, or even the ultimate way of range checking your radio. If you have a favorite way that works well for you, then by all means keep doing it your way. The important point here is simply to do it, and do it properly.

Please don't think that a PCM radio system eliminates interference. It does not. Radio interference can only be eliminated by eliminating the cause of interference. PCM systems only mask the interference from the receiver and servos. When interference overpowers the good signals, a PCM radio system just stops doing anything until it sees a good signal again. The recovery period may take more time than your models has altitude, in which case the results are not pretty.

I hope these words of wisdom from Mr. Pettit has changed the minds of those that feel a proper range check is not necessary prior to a models first flight of the day. Frequently I see a range check reveal some sort of radio interference. These planes were not flown and taken home for evaluation and were able to fly another day.

This article can be found in the February, 2006 issue on pg. 22

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Misc News

By Scott Rhoades

- The ever popular *HCH* Open House is just around the corner on August 5th. Remember this is when our raffle winner will be drawn. So if you took tickets to sell, be sure to bring the stubs, any unsold tickets and, of course, the money you collected to the open house! If you will not be attending that day, be sure to give them to another member or club officer soon!

- In the previous issue of this newsletter, (Spring 06) a refresher guide to *HCH* frequency control was published. Within the article were practices or habits that had developed that are inconsistent with established procedures. Since that article was published a lot of you took what was presented to heart and have incorporated necessary changes. Many people and their airplanes thank you.

  One additional practice was mistakenly not addressed. That would be flyers taking the frequency pin and attaching to… starting stands, flight boxes, shirt pockets, belt loops etc. Please keep in mind the purpose of removing the frequency pin is NOT to identify pilots that are in compliance with frequency control but rather the TRANSMITTER! It is imperative that frequency pins get attached to the transmitter, either at the antenna or carry handle. This procedure is the mainstay of the take-a-pin frequency control system. It provides an important secondary safeguard so that fellow modelers can identify, with a quick glance, whether the frequency for a specific transmitter has been reserved or not. Mistakes do happen and having a procedure so other eyes can catch them before tragedy happens, is just smart modeling. As stressed in the original article, the success of frequency control lies largely in continuity (everybody using the system the same way without fail). If you see a fellow member using the frequency control in a manner inconsistent with procedure, politely bring it to their attention. Rest assured, your fellow members have your back, checking transmitters, making sure nobody but you crashes your baby.

► **Misc. News, 6**

- Congratulations to Ed Kincer for claiming this year's *HCH* Fun Fly bragging rights. The weather was quite nice and for the first time in many years, participants out numbered the observers. That is, for a little while, until a few participants made themselves observers by some heartbreaking means. As usual, the day was filled with plenty of good natured ribbing and many great laughs. I would individually list those that helped make this event so much fun but because so many people helped I'm afraid I'd forget someone. Thanks so much to everybody that was a part of this year's fun fly!

- Every spring we have a work party to open the field and make sure everything is in order for the upcoming flying season. However, there is no organization system in place to make sure that equipment gets put away properly for the winter. Considering some club stuff was damaged last winter by some idiots with a shot gun and the fact that I'm getting tired of wrestling the frequency/impound box by myself, a winter prep party has been scheduled for Saturday October 21 at 12:00.
Not a ton of help is need just about half a dozen guys or so to help take down and lock things away for the winter.

Classifieds

Robinhood 63
Enya four stroke 60
w/servos.
$150

Frank Robinson
810-629-3963

Astro Hog
O.S. 70 Surpass four stroke
Complete except receiver

Eindecker
Magnum 53 four stroke
Complete except receiver

Pattern Plane
Two stroke YS 61 w/tuned pipe
Complete except receiver

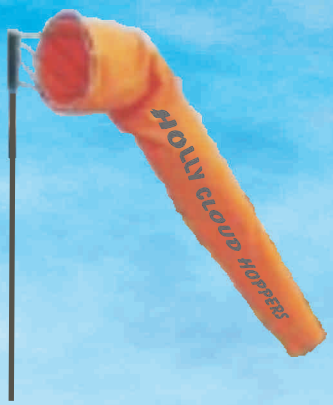
Ed Kincer
810-629-0928

Floats
33" Plastic w/hardware
$15

Dura Fun Fly
Aerobatic plane, 44" wingspan
Airframe only
$15

Scott Rhoades
810-923-3799

2006 Club Officers



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