

THE TRANSMITTER

Hamilton County R/C Flyers



August 2002
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AMA CHARTER #3083
DISTRICT VI

MEETING NEWS (from August 8th)



Chris pretending to pay attention at the last club meeting;
He's really looking at Oshkosh photos.

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- ◆ The date was set for the Family Fly-In: September 28. Put it on your calendar! Please plan on bringing a significant other, kids, and a covered dish to share. Also bring your own soft drinks and paper plates. The club will provide brats, hotdogs, and buns. Terry Hooleback has generously offered to provide the hamburgers! Since Porta-potties proved to be too expensive, we will make sure that a curtain is installed on the outhouse for the event. (Rain date is September 29th.)
- ◆ Rick will invite the near-by neighbors. If you have a trainer type airplane with a buddy cord, please consider bringing it out to let them have a go at it!
- ◆ Well, we peeled the old club name off the sign out at the flying field. Therefore our new club name, Hamilton County R/C Flyers, is official! Rick says he will make arrangements to have new letters cut to put back onto the sign for the new name.
- ◆ The AMA has been informed of our name change and our charter number will carry-over.
- ◆ Phil has volunteered to make necessary updates to the Club Constitution and By-Laws reflecting the name change.

2002 CLUB OFFICERS

- President: Rick Castor
- Vice Pres: Pete Alexander
- Secretary: Matt Kemp
- Treasurer: Gene Krodel
- Field Marshal: Phil Compton
- Librarian: Gene Krodel
- Safety Officer: Matt Kemp
- Editor: Laurie Kemp
- Webmaster: Scott Mineart

Meeting Attendees

Those present at the meeting in August were:

Chris Atwood	Lee Coy	Gene Krodel
Matt Baxter	Myron Demaree	Dave Morris
Rick Castor	Dick Drake	Jim Robison
Steve Castor	Terry Hollenback	Mark Schofield
Dick Clevenger	Matt Kemp	Ed Sheets
Phil Compton	Bob Knutson	Rodney Williamson

MEETING NEWS (continued)

- ◆ Rick will contact the Red Onion in Sheridan to reserve a space and time for us to have a Christmas meeting/dinner. December 12th is the target date, but confirmation and details will follow.
- ◆ Treasurer Gene gave his report: We're still liquid even after the \$1000 advance payment on the new mower (made on 7/11/02). The mower donations have amounted to almost \$2000!! This has allowed us to pay off the old mower and make a real dent in paying for the new one. Thanks to all the donors for their generosity!
- ◆ See you at the next meeting on September 12th at 7 pm. We will meet again at the Westfield Public Safety Building, next door to the Fire Station on Hwy. 32, about 1 mile west of Hwy 31.

Winning Raffle Results:

Fuel	Phil Compton	Monokote	Rick Castor	Futaba Stickers	Dave Morris
X-acto blades	Bob Knutson	Squares and Angles	Gene Krodel		
Tubing Bender	Mark Schofield	Wrench	Mark Schofield		
CA Glue	Matt Kemp	Knife	Lee Coy		

"Show and Tale"



Steve's new Edge 540 just before its first flight.

Amazingly there were no planes brought to the July meeting !!
Please bring 'em: New, old, unfinished, still in the box, for-sale, anything...

They're all interesting to us!!

Editor's Reminder

Let Matt or Laurie know if you have any news, articles, pictures, or for-sale items to put in the club newsletter. Use the address or the e-mail addresses on the last page. Notify us by the 15th of each month.

"Sealing Hinge Gaps" by Clay Ramskill

OK, you've finished up the plane; a pretty covering job, all the radio gear working properly, balanced fore and aft, AND laterally— all ready to go. Maybe not—did you seal the hinge lines?

Why should I, you ask. We've all seen lots of planes fly OK without any fuss over hinge lines.

How about less drag, quicker rolls, better turns, more precise control?

Note that we're speaking of fairly small improvements here. But with many planes, you can get at least noticeable improvement over a wide range of performance criteria. All this with little work, expense, or extra weight!

Let's take a simple peek at the principles involved—you'll see better how all this works. For example, we'll look at a typical aileron installation. Our aileron, shown here (Fig. 1) in its trim position, un-deflected, acts as part of the wing. The wing depends on reasonably smooth airflow around it to generate higher air pressure on the bottom, lower air pressure on top. It is this pressure differential, spread over the area of the wing, that gives us the lift we need. When our aileron is deflected down, we get a higher (in the case shown) pressure differential, causing extra lift. On the other wing, raising the aileron would cause less pressure differential or even reverse it (in the aileron area), decreasing lift on the wing—and we get a roll.

With our gaps unsealed (Fig. 2), we get the same type of result but not as efficiently. There are two detrimental effects: 1) Air bleeds through the hinge gap, from high to low pressure, decreasing the pressure differential in that area; 2) The air bleeding through the gap causes some disruption in the airflow over that part of the wing. These two effects will decrease lift and increase drag, by small amounts.

Deflecting our ailerons makes the situation worse. The deflection of air increases the pressure differential, and even more air will pour through the unsealed gap, magnifying the detrimental effects!



Fig. 1 Smooth Flow

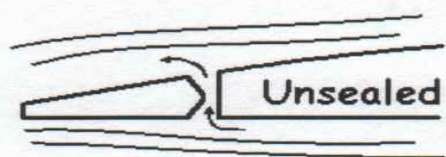
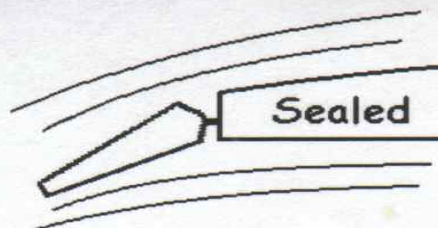


Fig. 2 Less Efficient Flow

Hamilton County R/C Flyers

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DELIVER TO:

Email: lauriekemp@spitfire.net
Or mattlkemp@excite.com

NEXT MEETING:

September 12th at 7:00 pm
Public Safety Building on Hwy
32, West of Hwy 31 Westfield

We're on the Web! Visit us at
www.hamiltoncountyrct.org

"Sealed Hinge Gaps" (continued)

Notice that the problems associated with an unsealed gap would also apply to our elevator or rudder, when those surfaces are deflected.

The 'more precise control' effect is a bit harder to explain. But looking at Figure 2, you can deduce that the flow lines across the aileron are not as smooth, and there is an area near the aileron surface that has more turbulent air. When you make a small aileron correction, the response will not be as positive.

Your plane WILL fly more precisely and efficiently with hinge gaps sealed. And more often than not, the difference will be at least noticeable! This is a situation where you can 'do something nice' for your airplane (and for yourself, the pilot) without much hassle.

DECATUR EAGLES (Decatur, Indiana)

FLY-IN !!

SUNDAY, SEPTEMBER 15, 2002

- > Gate opens at 9:00 AM.
- > Pilots meeting at 11:00 AM.
- > Open flying from 11:30 'til sundown.
- > Refreshments and food concessions will be available.
- > Tailgate swap meet: buy, sell, trade....

1.5 miles west of US27 on 450N. (Formerly the Adams County Landfill)