

THE TRANSMITTER

INDY NORTH R/C MODELERS



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MEETING NEWS (from June 13th)



Some technical consulting going on during the June meeting.

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- ◆ Rick reports that he has explored several ways to get that big pile of gravel spread onto the parking lot, but so far has not been too successful getting donated machine time.
- ◆ The membership approved the proposal to rent a "Bobcat" to spread the gravel. At the same time, low and rough areas in the runways can be filled with dirt.
- ◆ Rick and Mark reported that on at least two occasions night-time trespassers have been caught at the field.
- ◆ The county sheriff was called and they were very supportive. They followed up using license plate numbers with visits to the homes of the trespassers. In both cases they were high school kids. After the sheriff was done putting the fear of God into them, they won't be back at our field real soon. Maybe the word will get around that our flying field is not the place to hang-out anymore.
- ◆ As described in previous reports, the runways, the pits, and spectator areas are starting to change. Please volunteer to help out with this effort.
- ◆ Thanks to Rick for continuing to spray the weeds! With Dave Hammack keeping the tall grass cut short, the field has never looked better. Make sure you express your appreciation when you see these guys.

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: Richard Such

Meeting Attendees

Those present at the meeting in June were:

Pete Alexander	Robert Cook	Jacques Leclerc
Matt Baxter	Lee Coy	Mike Leclerc
Jerry Berner	Myron Demaree	Scott Mineart
Rick Castor	Dave Hammack	Jim Robison
Stephen Castor	Matt Kemp	Mark Schofield
Dick Clevenger	Bob Knutson	
Phil Compton	Gene Krodel	

MEETING NEWS (continued)

- ◆ The fencing to the east has been replaced/ repaired, and also extended at the west end to hopefully deter vandals from driving onto the field at that end.
- ◆ Gene gave his Treasurer's report indicating that we are still in decent financial shape. Gene also provided a list of all those that have generously contributed to the "Mower Fund". Thanks to all of those that have so generously contributed!!
- ◆ See you at the next meeting on July 11th 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	Myron Demaree	Prop Reamer	Gene Krodel
X-acto knife	Bob Knutson	CA glue	Dick Clevenger
Clevis Tool	Mark Schofield		
CA glue	Jim Robison		

"Show and Tale"



President Rick providing some good tips....

Michael Leclerc brought his new RTF trainer to the meeting. Michael's dad, Jacque, helped carry in their new Hobbico Super-Star 40 Select. Mike got lots of helpful "expert" advise on how to finalize engine and radio installation. They were both quite excited to get to the field the next weekend to get some stick-time on this new airplane. This type of airplane is perfect for getting started into the wonderful world of R/C flying.

Since Mike was the only member to bring something to show at the last meeting, he has the honor of having "THE PLANE OF THE MONTH" !!

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.

"The Deere Donors"

Pete Alexander	David Cook	Robert Knutson	Steve Percifield
Sarah Barker	David Hammack	Gene Krodel	James Princell
Matt Baxter	Matt Kemp	Thomas Maxam	James Robison
Rick Castor	Richard Kernodle	Scott Mineart	Mark Schofield
Philip Compton	Jeff Kingston	David Morris	

Many thanks for all of the donations toward the purchase of the new mower !! As previously reported, the loss of our beloved John Deere mower could have been a bigger disaster without a strong, committed membership. This type of problem would have destroyed a lesser club. Congratulations to Indy North R/C Modelers!!

"Basic Aerobatics" *from members.tripod.com/flyboy19*

Ed: I know this stuff is way beneath most of you experts, but we do have lots of new people that might have heard these descriptions before, but have never heard how to perform them. So here's some basic aerobatic maneuver instructions I found on the internet:

THE SPLIT "S"

The Split S is really a vertical turn-around, instead of the horizontal turn you learned as a student pilot. Employing a vertical turn-around makes it easier to hold your relative in-out flight path and it also helps hold the proper altitude, which is why the Split S is almost universally used in model aerobatics. When you reach the far end of your flight corridor and desire to bring the plane back toward you, you perform the Split S by pulling the model into a moderate climb, anywhere up to 45°. Then roll the model on its back by applying full aileron, adjusting the wings to level. Once the wings are level, pull back on the elevator (up) which means you are now coming down out of an ordinary inside loop, back into level flight, and back toward the field. Diagrammatically you will find the Split S to be almost identical to a one-half reverse Cuban 8. The only difference is that it is not necessary to achieve a perfect 45° upward climb in a Split S turn. In fact, when flown by full scale aircraft, or in combat situations, the plane may simply stay in level flight, roll inverted, and then do a downward half loop, coming out in the desired opposite direction, but at a much lower altitude. But since we are flying so close to the ground, and since we are also interested in coming back at the same altitude we went out, we introduce the upward climb at the beginning of the maneuver, as discussed. Once you have the feel for the Split S, simply spend time practicing your straight and level flight corridor, back and forth. You will tend to fly too close to yourself. The 300 foot distance that is recommended for aerobatics is further out than you think. It will also take some practice to avoid getting your flight path angled away from the flight line. Strive to be parallel. As you burn off fuel, some down trim in the elevator may be necessary.

THE IMMELMANN

This well recognized aerobatic maneuver was invented in 1915 during WW1 by German ace fighter pilot, Manx Immelman. Like the Split S you have already learned, it is a vertical maneuver. The Immelman consists of an upward half loop, rolling out of the half loop at the top into level flight, which means the plane is now traveling back the way it came, but at a higher altitude. It is the mirror of the form of Split S that is performed without an initial pull-up, as we already discussed. Pull up, roll-out, complete. Without ailerons, however, the roll-out can be very sluggish on rudder only. In a sluggish roll, the airplane tends to lose some altitude, giving the transition from the half loop to level flight an awkward looping dip. If you have both ailerons and rudder, applying full aileron and partial rudder can give you a brisk, snappy looking roll. Allowing for the delay in your reaction time, and the response to the controls, start the roll-out just before you reach the top dead center of the half loop. Another nice feature of the Immelman is that it sends you back the way you came and you are immediately set to practice the maneuver again.

Indy North R/C Modelers

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NEXT MEETING:

July 11th at 7:00 pm
Public Safety Building on Hwy
32, West of Hwy 31 Westfield

**We're on the Web! Visit us at
www.angelfire.com/in3/indynorth
(see Richard Such for Member's access area!)**

"Basic Aerobatics" (continued)

With other types of maneuvers you'll have to put in a "dead" pass or team it with a downwind maneuver in order to reposition your model for another try. Thus the Immelmann can be diligently practiced in an unbroken series of Immelmann turns and Split S turns.

One drawback to the Immelmann is that you are returning at twice the altitude that you entered. If you then perform your usual style Split S, you'll be coming out of the Split S too high. Two ways to correct for this are: 1) Don't pull up very much on your Split S. Use the full scale technique of rolling in level flight, and then going into a downward half loop. 2) If you would rather pull up some, then make your downward loop larger, adjusting its exit to conform with your target flight corridor altitude. We always want to use that same flight corridor we learned about practicing with the Split S. A very large half loop is almost like a power dive. If you panic a bit and pull out rather sharply, the G forces are enormous. A wing rubber banded on may lift off the saddle somewhat. To guard against this, try throttling back in your power dive. Like loops, the Immelmann is designated as an upwind maneuver, though it can be done credibly well downwind in lighter winds. Also, like loops, the G forces generated in the pull up will cause the heavy wing to roll outwards. At the top of the half loop, you will be faced with a plane showing one wing hanging low. If you have good reactions and can roll-out toward the low wing, you will have a snappy axial roll to upright flight that will look pretty good. But if you roll the other way, the extra time it takes to bring the low wing back to level and then all the way around over the top will make the roll look sluggish, plaguing you with a dip in altitude.

The answer is to study the INSIDE LOOP in next month's lesson. You will learn how to correct for the heavy wing effect by applying aileron or rudder on the way up the loop. That way you will be level at the top and can roll either way.