



EAGLE'S NEWS

Eagle's News
November 2005

PRESIDENT'S COLUMN

Wow! What else can I say? It's been a roller coaster of a month! We finished off September with a presence at the Daniel Webster College Aviation Heritage Festival. Thanks to Norm Ellis for organizing our table display and everyone who helped man the both over the weekend. Special thanks go to District 1 Associate Vice President Bob Langlois for giving up a good chunk of his weekend by helping out both Saturday and Sunday. The weather was perfect and the crowd was huge. I spent the last part of Saturday afternoon at the table and talked with so many interesting folks. A good number of people expressed interest in flying R/C. For those who were local we gave out the Flying Eagles business cards. Norm was a virtual atlas of the area R/C clubs and could list off two or three clubs in any given region of New England for those folks who traveled a distance to the festival. Everyone who was interested was also given AMA materials and pointed to the AMA website. We've already seen the fruits of our labor with visitor activity and new memberships picking up late September and early October.

As everyone is aware, October has brought flooding to the region and our field was

underwater. If you didn't get to see it at its worst, let me paint this picture: The water came up to the bottom of the porta-potty. It was up to the locks on the container. The entry gate and entire fence was underwater. One picnic table floated away and was found beyond the fence (that means it had to float over the fence!). We're still evaluating the extent of the damage inside the container, with the tractor being biggest concern. On the plus side, I think the water killed off any creatures hanging out inside the container!

The New Hampshire Flying Tigers R/C club extended us a very kind invitation to use their field for Toys for Tots in the event that our field remained flooded. They also extended an offer for Flying Eagles members to fly at their field as guests while our field was under water (Contact Bob Kilmon for more info. Bob is a member of our club as well and his info is available on the club website). These offers were greatly appreciated and showed true camaraderie between clubs.

Fortunately for us, the water receded enough to hold the Toys for Tots Fly-In. The weather was marginal and the field was soggy, but we had a respectable turnout all

the same. We gave the Marines over \$550 cash and more than a dozen toy donations. Very well done! Thanks to Gary Aubin for organizing the event, Dave Beach as the CD, and everyone who helped out and made donations.

AN IMPORTANT REMINDER: You can renew your AMA memberships NOW, and submit your club application ASAP to receive the \$25 early renewal discount! The early renewal discount ends March 4th!

As I write this, the rain is pounding on my window and the flood predictions for the field are looking grim. I think it might be time to put the floats back on my Avistar...

See you at the field,
Jay



Special points of interest:

- Toys for Tots report back.
- Pictures from the Airfest.

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OCTOBER EAGLE'S CUP

BY JAY FRANCIS

October's Eagle's Cup was "Touch and Go". Pilots had two minutes to perform as many touch and gos as possible. If aircraft stayed within the boundaries of the field, pilots had to perform at least a 180 degree turn between touches. This prevented the contest from turning into a looping or skipping event. Time was announced, so no one had to count the seconds in their head. In the event of a prop strike killing the engine, pilots were allowed to restart the airplane. However, the timer kept running. I don't think anyone was fast enough on their feet to restart their engine and make any significant progress.

A few cases of bad luck resulted in some low scores. Dave Beach lost his landing gear on a touch. Dave Majchrzak and Stratton Gatzimos both had some bad luck and were destined for a runoff, until Dave realized his luck was worse and his plane needed repairs.

Congratulations to Geno Santaskas for flying very well on his first Eagle's Cup attempt!

Placing	Pilot	Touch & Gos	Eagle's Cup Points
1	Bob Terry	15	10
2	Jim Burns	14	9
3	Brian Henderson	10	8
4	Brian Redmond	9	7
5	Jay Francis	5	6
6	Geno Santaskas	4	5
7	Stratton Gatzimos	3	4
8	Dave Majchrzak	3	3
9	Dave Beach	2	2

NH AVIATION HISTORICAL MUSEUM AT MANCHESTER AIRPORT, AIRFEST, AND DICK ZOERB'S DC-3



MEETING MINUTES

SNH Flying Eagles: October 05, 2005 Club Meeting

Meeting called to order at 7:30pm by Jay Francis

Approximately 15 members present.

New Members: Brandon Waite

Officers Reports

President : Jay Francis :

Please announce intentions when flying: taxi, takeoff, land, approach. Please make yourself heard.

Flying glow planes outside of the pilots stations is prohibited. 4 pilots at most flying at any time.

Stooges are highly recommended. A run-away plane was observed. Stooges also recommended for electronics anytime a battery is connected.

VP : David Beach :

Instruction continues on Tuesday evenings until daylight savings ends.

Treasurer : Jim Austin :

Treasury was reported. Contact Jim for details.

103 members. 70 gallons of fuel sold to date.

Tonights raffle : Dubro skis

\$15 for SNHFE hats

When purchasing fuel or other items, put money in fuel envelope please. Also write down what was purchased on fuel log. This is required for book keeping.

Secretary : Dave Majchrzak

Donations for Toys for Tots continue to roll in: 50% off YS Engine, Firebird Commander 2's etc..

Field Marshall: Gary Aubin

Fall cleanup on October 16th at 8AM – one week before Toys for Tots.

Bob LaCroix will get the audio truck

We'll get the canopy from the town.

Spoke with Sgt. Jose from the Marines. Form was filled out. 2 Marines will show up to event.

Safety Officer: Chris Frost : Absent

No report

Newsletter Editor : Michael Gruenbaum : Absent

No report

Old Business

Aviation Heritage Festival. Norm Ellis

Wonderful event. Enjoyed manning the table. Coverage was good. Lots of traffic. Over 200 business cards were handed out.

With 2 months notice, Tower Hobbies will give gifts to hand out.

Thanks to everybody involved!

Toys for Tots. David Beach

Look for the TFT ad in Model Aviation magazine.

Ad for Frozen Fingers Fun Fly showing up in MA in Dec and Jan.

New Business

Jay Francis:

Jay Francis: Frozen Fingers CD = David Beach

Banquet

Jay Francis: Banquet in February. Feedback is welcome. We did the Ground Round last year. Jay will start organizing.

Officer Vacancies

Jay Francis: Jim Austin is at term limit for Treasurer. Dave Majchrzak is not running for Secretary next year. Elections in March.

Atlantic Flier RC column

Norm Ellis: Steve Cunningham (Editor for Atlantic Flier [Nashua]) would like to add an RC column to his full scale aircraft publication. Norm gave Steve Bruce's contact information.

Plowing:

Brian Henderson: It would be nice to have the lot plowed before Sunday morning. Frozen Fingers was not plowed last year.

Officers: Usually a \$500 budget for snow plowing.

Access Road

? Club should contact with the town about the poor condition of our field's access road.

Event DVD

Geno: Made 5 DVD's of events at the field. They are free for the taking.

Meeting adjourned at 8:21PM.



Above: Toys for Tots

Upcoming Events

- **2 (7:30pm) - Club Meeting at the St. James United Methodist Church in Merrimack.**
- **6 (10:00am) - Eagles Cup at the club field. Bruce will CD the Carrier Touch and Go event.**
- **18 (11:59pm) - Newsletter Submission Dead-Line. Email: editor@snhflyingeagles.org**

NOVEMBER 2005

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			

TOYS FOR TOTS REPORT-BACK BY DAVID BEACH



but we were plagued by dark skies and chilling dampness all day.

Many of the clubs most faithful members showed up to make the event a success. It was



The Flying Eagles held their annual Toys For Tots Fly-In and Toy Drive for the Marine Corps charity on October 23, 2005. Unfortunately a lot of the success of many of the club's outdoor activities are dependent on the weather, and this was no exception.

The month's torrential rain storms had flooded the Merrimack river, and just a week earlier the field was under several feet of water. There were discussions about rescheduling, or holding the event elsewhere, or just pitching the tents in the parking lots above the field. Thankfully, the water subsided in time for the event,

clear that several folks who showed up "dug a little deeper in their wallets" at the registration desk due to the anticipated low turnout. All in all, we registered 18 AMA members but given the conditions, only a few put their planes in the air. There were also a few guests who brought donations and took a turn at the sticks on the club trainer.

the Town's tent, tables, and chairs. Thanks also to Jay Francis for his work as chief chef.



Thanks go to everyone who came out to help and donate, but a few deserve special mention. Gary Aubin organized the event and coordinated the use of

Due largely to the efforts of Dave Majchrzak and the generosity of raffle prize sponsors, we were fortunate enough to be able to draw 20 tickets for a fine variety of prizes.

By the time it was done, we collected \$574 and 13 toy donations for the Toys For Tots program.



TRADING ALTITUDE AND AIRSPEED BY BRUCE GRUENBAUM

This amazing hobby we have bears a remarkably close resemblance to its full-scale counterpart. The airplanes we fly behave in very much the same way as their full scale counterparts do and the rules of physics that must be adhered to by a Boeing 747-400 cruising at 38000 feet at speed of 480 knots are the exact same rules that your little Avistar has to adhere to each time it leaves the ground.

“Well, duh!!!” you may say, but as I was pondering what to write for this month’s newsletter, I got thinking about one of the lesson’s that I had while I was doing my pilot’s license and it dawned on me that the majority of people that fly radio-controlled aircraft would never get to experience that lesson. This article is intended to describe that lesson and some of the theory associated with it, and hopefully, as you think about it, it will turn you into a better RC pilot.

David (my instructor) and I were on the way back from the practice area over Mason, New Hampshire when David decided to reinforce some of the theory that was spouting out of my ears. I had been having trouble with my airspeed on landings and David felt that a practical experience would reinforce the theory.

In the Cessna 172, you’re supposed to approach the runway at around 60 knots. I was allowing this to creep up because I was coming in too steep. So when I got to touchdown I was way too fast and it was causing all kinds of problems with my landings. When I found I was too steep, my natural inclination was to push the nose down so that I was diving at the runway. Of course, my natural inclination was completely wrong and that was what David wanted to illustrate.

So we were midfield right downwind for runway 32 at Nashua – basically directly over the Ground Round where we have had our annual dinner for the last couple of years. David called up the tower and asked for a short approach and the option. That means that he wanted the freedom to do with the runway on that approach whatever he felt like. There was no one else in the pattern so the tower cleared us for the option.

“Make sure your seatbelt is properly fastened.” David said. “You’re going to need it.” With that he turned on the carb heat and pulled the throttle back to idle. He then pulled back slightly on the stick to keep the nose up and made me pay attention to two instruments – the altimeter and the airspeed indicator. The altimeter measures altitude and the needle was dead still at 1200 feet. The airspeed indicator measures the speed of the air hitting the wing and it was dropping from 90 knots – 80 – 70 – 60 – 50... we were getting really close to stall speed.

At that point David pointed the nose down and banked right. “Keep your eyes on those instruments.” he said. He put the plane in a fairly steep dive without adjusting the power and the airspeed climbed 60 – 70 – 80 knots. We were down to around 700 feet and we had picked up 30 knots of airspeed without using any power at all.

While we were in that dive David made me hold onto the stick. He didn’t trim the nose down – he forced it down by pushing the stick in and as the airspeed picked up, the amount of force applied to the stick to keep the nose down increased. He asked me to explain why. This is where the theory that was coming out of my ears kicked in.

As the speed of the air flowing over an airfoil increases, so does the amount of lift that it produces. Therefore, the faster a plane flies, the more it wants to climb. Conversely, the slower it flies, the more it wants to sink because there is not as much lift to be applied against its weight.

“So what does that mean?” David asked.

“What do you mean?” I retorted.

“What do control do we use to adjust altitude and what control do we use to adjust airspeed?” he asked.

And then I got the point. While the elevator will cause the plane to pitch the nose up or down, the elevator does not produce lift. It changes the angle of attack of the wing.

Changing the angle of attack of the wing will do two things. It increases (or decreases) the amount of lift produced by the wing which, in turn, increases (or decreases) the amount of drag induced by the greater (or lesser) lift. More drag means that the plane slows down. Less drag means the plane speeds up. Therefore, pitching the nose of the aircraft up will slow the plane down whereas pitching it down will cause the aircraft to speed up.

So where does this leave us with the throttle? Well the more drag you induce by pulling back on the elevator, the more thrust you will need to sustain the same forward momentum. As the amount of thrust that is produced exceeds the amount of thrust needed to maintain the airplane’s current attitude, the airfoil will start producing more lift. So more throttle means more lift.

In short, you need to use the elevator to adjust airspeed and the throttle to adjust lift. This is the opposite of your natural inclination and it’s probably one of the most

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**SOUTHERN NEW HAMPSHIRE
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We're on the web!

<http://www.snhflyingeagles.org>

Yahoo Group:

groups.yahoo.com/group/snhflyingeagles
(click the "Join this group!" link)



TRADING ALTITUDE AND AIRSPEED

important lessons you can learn about flying.

At this point, David had turned base and he leveled the plane at 650 feet, still without adding throttle. The plane immediately started slowing down. He turned final onto the runway and let the plane sink to 300 feet as we went over the fence at Charron Avenue. He then pointed the nose down so that we came in over the runway at around 20 feet and as we saw the REIL lights disappear under the propeller he fed the throttle in all the way and switched off the carb heat. He also fed in a whole lot of down elevator trim to make the airplane fly down the runway straight and level 20 feet off the deck.

Halfway down the runway we were doing 100 knots and David told me to try

and push forward on the elevator. I was surprised at how much force was required to make any impression at all.

As we came to the end of the runway, David said "Now let's trade some of this airspeed for altitude." and he pulled back on the elevator. Sure enough, the airplane climbed up to 600 feet in no time, but as it did, the airspeed bled off until we reached 78 knots – standard climb speed for the 172 – at which point David pushed the elevator down slightly to reduce the climb angle and sustain 78 knots.

This is a lesson that will always stick in my head. This whole session took no longer than 3 minutes, but the experience of the lesson is something that stuck with me completely.

After this lesson I went down the Radio-

Control field and flew my Twist. The lesson that I had learned instantly helped me improve my landings, not only with the full-scale Cessna, but also with the Twist. In fact, this lesson did more for my RC flight than I could ever have imagined and I hope that by relaying the experience, you will take the experience and use it yourself.

As soon as I learned to trade airspeed for altitude and control airspeed with the elevator and altitude with the throttle, my own RC flying improved dramatically. Next time you come in over the field and you think you are too low, don't just pull back on the elevator – feed in some throttle so that you have the power to climb. Next time you are too high on approach, pull back completely on the throttle and a little on the elevator and let the airplane sink.