



THE KNIGHT FLYER



**Oct-Nov-Dec
Editors:**

**2001
Jim Devlin - Tim Ellis**

2001 Rally

It was the worst drought in a decade.

The farmers of Western New York hadn't seen a good rain in over three months.

Although dawn broke dark and dank, there was no rain in the forecast.

In fact, the weather prognosis was for another 90 degree day.

Many of our pilots come from all over western New York and have been coming for many years so the pilots meeting is more of a formality for many.

Yet because of our concern for safety it is a necessity. Each pilot must be aware of any new changes that have been instituted.

In fact, the weather prognosis was for another 90 degree day. Over 100 pilots had set up along the flight line. Early in the grey dawn, some one launched a replica of the Spruce Goose. With eight tiny electric motors whirring, the plane rose into the air and silently flew back and forth along the length of the runway.



It was surprising to learn that the motors cost a mere dollar and half each.

Most were sampling the hot coffee and making last minute preparations for the day's flying but soon the call came for the traditional pilots meeting.

Finally, the strains of the National Anthems of our neighbor to the north and our own great land ring out across the field and all the activity comes to a momentary halt.

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Then, They're Off.

The sounds of two cycle and four cycle engines come alive and for the next seven hours planes and engines rule.

distant cousin of the lawnmower.

What! Well, they both have rotating blades.

In any case, the tree coughed

The team of More, Or and Les keep participants and spectators on the edge of their seats with colorful commentary of the mayhem unfolding in the skies above them.

The 2001 rally brought a fine selection of beautiful large scale models to our field. Of course one of the more memorable objects is the perennial Toro lawnmower.



This was not its year. Shortly after take off the lawnmower went down in the distant woods.

A search party located the errant mechanical grass beater in what was reported to be the top of the tallest tree in Hamburg.

But all was not lost, for what should appear but a chain saw, a

up the mower and I'm sure that it will return to the skies over western New York on some future day.

As the day wound to a close, the fliers and their families settled down to a great meal, put on by the knights.

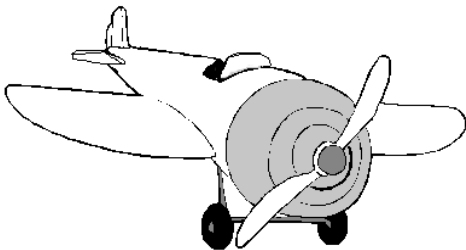
On Sunday, the good weather continued and planes filled the sky throughout the day. Unfortunately the big beautiful Gee-Bee went in along with several other fine specimens, but



when the rally closed down we could look back on a splendid two days of great flying, great food and priceless camaraderie.

It was at times a lot of work but memories will be with us long after the drone of model airplane engines has faded and silence once again settles over the runway at Lake View.

10th Annual Auction



Sept 29,2001

Bring your planes
and engines.

Auctioneer
Tom Filipiak

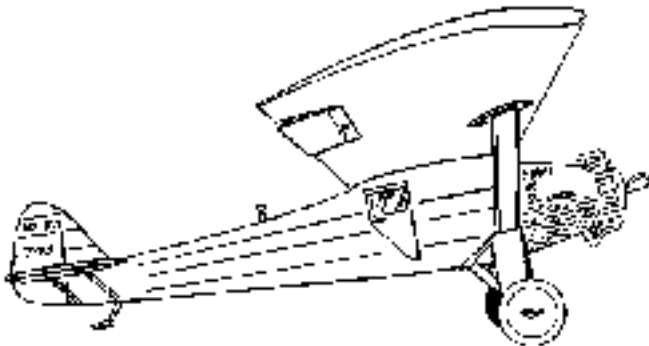
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Refreshments Available

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Women & Children
under 12 FREE

10% commission- \$10.00 max
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Well Digging

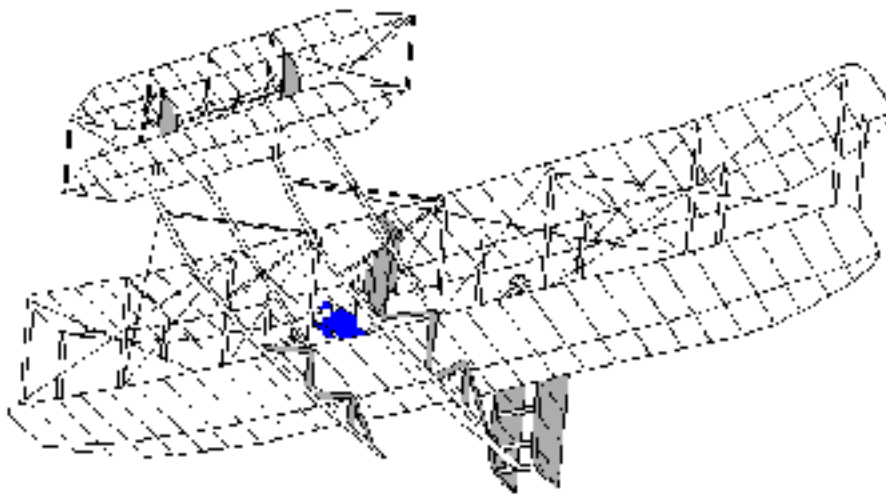
Often as we build our models we tap into a vast reservoir of knowledge that has been handed down to us over the years.

We seldom think of the times when airplane builders constructed their crafts and lack this store of information.

We put our pieces together from the plans that came in the box.

What about the time when airplanes didn't come in a box.

In 1901, Wilbur Wright wrote that for heavier than air flight to be successful, three things were needed.



First, Wings capable of lifting the weight of the machine and the pilot into the air,
Second, a reasonably light propulsion system,
and third, a means of balancing and steering the craft in flight.

"Of these, the first two are to a certain extent solved." Balance

and steering are the hardest parts.

The story of their success is the story of how to balance and steer an aircraft. One of their first attempts to achieve this goal was in the summer of 1899.

Wilbur first flew a 5 foot biplane glider especially designed to test a new method for roll and pitch control.

By pulling on two strings he could twist the wing "so as to present their surfaces to the air at different angles of incidence and thus secure unequal lifts on the two sides" according to Orville.

The Wright brothers were familiar with the data that others had obtained and published, such as the lift tables of Otto Lilliental in Germany.

In order to measure the combined lift and drag of the kite, they attached a grocers scale to the kite line.

They used an anemometer to record wind speed and measured the angle of the line with an inclinometer.

Based on their measurement they determined that the kite was only producing 2/3 of the lift predicted by the calculations.

In spite of this, they were successful in achieving their goal of "roll control".

However a new problem arose.

Following a winter of detailed experiments using their own wind tunnels and measurements they built a much larger kite and tried for longer duration flights in the sustained winds of Kitty Hawk.

They realized that the "well digging" problem was the result of "adverse yaw".

It resulted from an increase in drag due to the increased lift of the wing with the greater attack angle.

The drag caused that wing to lag behind producing the spinning that veered the aircraft in the opposite direction from the intended turn.

Oops!

We understand the problem today, because we know that "all" lift produces "drag", and the greater the lift the greater the drag.

Well, the Wright brothers solved the problem with something that didn't come in the box.

A rudder.

By designing and building the vertical stabilizer they corrected the tendency of the craft to turn in the opposite direction. This let the plane continue on its intended path.

As the kite began its controlled turn under the gentle pull of the control line, it would suddenly veer up and plunge in the opposite direction.

The brothers called it "well digging".

The next winter was one of intense study and extensive experimentation, involving accurate balances in their wind tunnels.

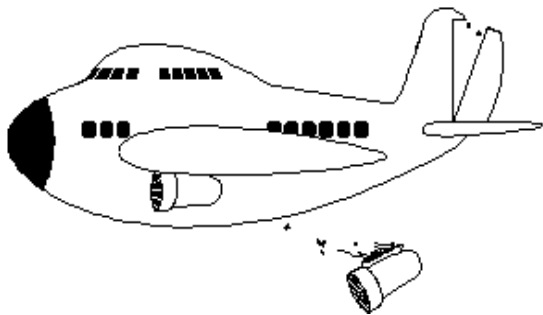
Many of the parts of the airplane that we take for granted and never think twice about are essential to the proper flying of the aircraft.

Someone has put them there for a good reason, long ago, often to correct a problem by trial and error.

Today all of the pieces just come in a "box".

RULES OF THE AIR

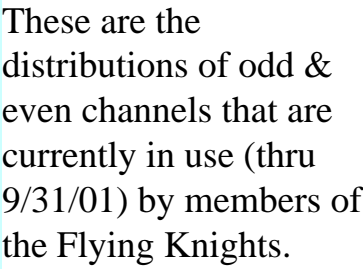
From cyberspace (for our flying friends)



1. Every takeoff is optional. Every landing is mandatory.
2. If you push the stick forward, the houses get bigger. If you pull the stick back, they get smaller, unless you keep pulling the stick all the way back, then they get bigger again.
3. Flying isn't dangerous. Crashing is what's dangerous.
4. It's always better to be down here wishing you were up there than up there wishing you were down here.
5. The only time you have too much fuel is when you're on fire.
6. The propeller is just a big fan in front of the plane used to keep the pilot cool. When it stops, you can actually watch the pilot start sweating.
7. When in doubt hold on to your altitude. No one has ever collided with the sky
8. A good landing is one you can walk away from. A Great landing is one after which they can use the plane again.
9. Learn from the mistakes of others. You wont live long enough to make all of them yourself
10. You know you've landed with the wheels up if it takes full power to taxi to the ramp.
11. The probability of survival is inversely proportional to the angle of arrival. A Large angle of arrival has a small probability of survival and vice versa.
12. Never let, an aircraft take you somewhere your brain didn't get to five minutes earlier.
13. Stay out of clouds. The silver everyone keeps talking about might be another airplane going in the opposite direction. Reliable sources also report that mountains have been known to hide out in clouds.
14. Always ny to keep the number of landings you make equal to the number of takeoffs you've made.
15. There are three simple rules for making a smooth landing. Unfortunately no one knows what they are.
16. You start with a bag full of luck and an empty bag of experience. The trick is to fill the bag of experience before you empty the bag of luck.
17. Helicopters can't fly; they're just so ugly the earth repels them.
18. If all you can see out of the window is ground that's going round and round and all you can hear commotion coming from passenger compartment, things are not at all as they should be.
19. In the ongoing battle between objects made of aluminum going hundreds of miles per hour and the ground going zero miles per hour, the ground has yet to lose.
20. Good judgment comes from experience. Unfortunately, the experience usually comes from bad judgment.
21. It's always a good idea to keep the pointy end going forward as much as possible.
22. Keep looking around. There's always something you've missed.
23. Remember gravity is not just a good idea, it's the law. And it's not subject to appeal.
24. The three most useless things to a pilot are the altitude above you, runway behind you, and a tenth of a second ago.

Getting a new transmitter for Christmas? Check this section out before you buy. You don't want to go out to the field on your only day off and find three other guys on your channel.

Odd Number Channels



Data collected by Ron Wojic and Les Hanks

