P. O. Box 1303
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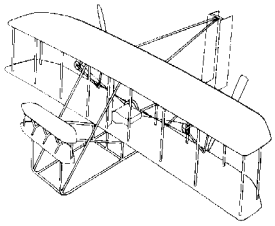
The Wright Flyer



VOLUME 19 ISSUE 11 **AMA# 4143** **NOVEMBER 2005**
NEWSLETTER OF THE WRIGHT FLYERS R/C CLUB

Meeting Highlights

On Tuesday October 11th, the Wright Flyers held the monthly membership meeting at the Monticello Middle School. This was the first monthly meeting of the winter season at the school.

The meeting was called to order about 7:30 PM by president Scott Leiferman. There were 10 members present including three club officers. The secretary was not present to read the minutes of the September meeting.

Under old business, Garth Landefeld will be invoicing the club for the last two cuttings of the field (eleven so far this season). The sign at the park entrance still does not list the R/C flying field as a facility but Rich Johnson will continue to press the County to add this to the sign.

Under new business, John Kossieck needs assistance eradicating the gophers at the field. If the club purchased a stock of smoke bombs, they could be distributed to any members that frequent the field on a regular basis. A contract with the Monticello School district was signed and returned for use of meeting room #30 for 8 sessions during the winter. The charge paid was $54 for the use of the school.

Jeff Pederson suggested the club hold a swap meet at the field for R/C related stuff. The timing could be sometime this coming spring.

Because of the increased mowing of the field this past season it could be necessary to increase the field maintenance fee part of the annual membership dues by $5 to keep the annual expenses in line with the membership revenue. This would bring the total membership cost to $50 per person. After notification of the members this could be voted on by the January due date for renewal.

The next meeting is scheduled for 7:30 PM on Tuesday, November 8th, 2005. It will be held in room 30 of the Monticello Middle School.

Portable toilet sign - The club should make some sort of sign that attaches to the door that lets users know it is provided by the Wright Flyers Club. It is thought that park users think it is provided by the park. It is (in fact) entirely paid for by our club. We approached the park and they declined to share the cost of the unit with the club. Rich Johnson will come up with some ideas and create the sign for 2006.

Non-members flying at the field - There are a couple of users of the field that have abused their welcome and continue to fly at our field. What is the club's stance on such use? We agreed that someone is welcome to fly at the field a couple of times as a guest but must join the club after that. The specific individuals were confronted and their response was less than enthusiastic about joining the club. This is the first our club has had this type of problem as most people are not freeloaders who do understand the benefits of sharing the costs of running the club in order to allow us to fly at such a great field.

Metrodome Winter Flying

MARCEE has again worked with the Metropolitan Sports Commission to get some flying dates at the Metrodome. Currently MSC has offered to MARCEE November 14th & 15th and December 5th, 8th, 9th and 13th contingent on a MARCEE member volunteering to coordinate each session. Flying typically starts at 9 or 10 AM and closes up at 3 or 4 PM at the discretion of the MARCEE coordinator for that date. Final dates and times will be worked out at the MARCEE monthly meeting on Monday November 7th and can be checked by monitoring the MARCEE Yahoo Group web site (http://groups.yahoo.com/group/marc98/) or the MARCEE web site (http://www.marcee.org/). Pilots must have a valid AMA membership and admission is $5 for MARCEE members and $10 for non-MARCEE members for each date.

There is frequency control for the 72 MHz and 27 MHz bands with eight flight stations. The operating limits for electric powered aircraft are 20/20/20; 20 oz. max weight, 20 mph speed, 20 minutes max flight duration. Parking is free at the southeast lot at the dome.

An Inexpensive Locator For Models

The sound generator of a musical greeting card has some specifications that make it a good locator for lost aircraft—especially electric models.

It has the following characteristics:
1) It only weights .2 oz or six grams.
2) It only requires .15 mA at 1.5 VDC. This allows a theoretical use of 2.2 years from a receiver pack.
3) The sound level is 55 dB at one meter—audible to the undead at 100-feet.
4) It is only 1 - 1/8-inch in diameter and 1/4-inch thick.
5) They only cost $0.10 per resistor, $0.35 per capacitor, and one servo plug.
6) It's simple—if it has power, it has music.

Most greeting card sound boards are powered by 1.5 VDC, but some might use three-volt-batteries. By adding a resistor you can step the voltage down for your receiver pack. You will also need a .1 F capacitor to smooth out the pulsation from the different tones.

To calculate the values for the resistor just follow this formula below where
V1= receiver pack voltage,
V2= sound board voltage
I avg= is the average current (amps)

R= (V1 - V2)/I avg
example: R= (4.8 - 1.5)/.00015
R= 22,000
or the closest standard value.

by Greg Lee
HINTS & TIPS
from Planaphonre
Rockland County Radio Control Club
Louie Triozzi, editor, White Planes NY

Weather Tips Flying in the cold

from the Twin City Flyers

Now that the cold is here again, here are a few reminders about flying in freezing weather.

1. Keep the batteries in your flight box, ni-start, and radio equipment well charged. The cold cuts back on the efficiency of batteries. They don't hold their charge as long as in summer. Leave your radio, flight box, etc., inside your car or somewhere warm when not in use (as long as you leave your car running like almost everyone does).
2. Switch to a higher nitro content in winter (15%). The engine will run better because of the higher operating temperature. Keep your fuel warm too, if possible.
3. Keep your airplane in a warm place. It usually is the difference between getting your engine started and ready to fly or just going for a nice drive. A

(Continued on page 3)

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trick to try—set your airplane under the engine of your car if you have the ground clearance to do so. If you keep your airplane in your car with the skis on, make sure when you bring it out you immediately push it around in the snow until the skis are cold, otherwise the snow sticks to the skis and the airplane won't glide well.

4. After you get your engine running, leave the ni-start or plug lead on for a little while. Let the engine run until it warms up. You don't need to rev it up or stab at the throttle. Just let it run for a few minutes. You'll probably have to set the idle speed up slightly higher, even after the warm-up period.

5. In the winter, you can also connect an exhaust tube to the muffler in order to keep the fuel from freezing to your airplane. If fuel freezes to the muffler, it is difficult to remove until you warm up the airplane. Then it runs all over. You'll probably have to richen the engine some, but it's nice having a clean airplane to take home. For tubing, I use a piece of clear plastic fuel line that can be purchased in any auto store. A hose clamp will hold the tubing on, and to keep the clamp from coming loose due to vibration, Hot Stuff or epoxy works well.

from the Twin City Flyers Newsletter
Dan and Yvonne Twomey,
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Modifications
Washout: Advantages and Disadvantages

"**E**very airplane needs washout, even a biplane," said Claude McCoullough, the famous designer for Sig.

I'm not sure that every airplane needs washout, but most do, especially the scale airplanes that Claude designed.

Washout is a twist in the wing from root to tip. This twist is usually three degrees but in rare cases can be more.

Washout forces the wing near the fuselage to meet the air at a more positive angle than the tip. As the model pulls its nose up and increases the overall angle at which the wing meets the air, it will eventually achieve the stall angle at which lift ceases.

With washout, the inner wing will stall first and gradually progress towards the tips. This is desirable because the loss of lift at the center will lower the nose and prevent further stalling. Meanwhile, aileron control is maintained even though the wing is partially stalled.

But there's much more. Consider the typical World War II fighter. A fighter will have a wing incidence at the root of about 2-degrees and a washout of about one and a ½-degree. At top speed, the incidence angle of the tip is 0-degrees. Drag at the tip is minimized and there is very little loss of lift by air creeping around the wingtip—very efficient for maximum speed. In addition, the up-going aileron causes the same drag as the down-going aileron, so that roll causes no yaw. Yawing with the rudder does not change the lift at the tips, so yaw does not induce roll. This is just what the fighter pilot needs for gun aiming, and what the modeler needs for precise scale flight.

Washout is a must in airplanes with long, thin, or pointy wings. Some can't fly without it. Next time you are at the airport, notice the washout of the airliners there. It's huge for safety and fuel efficiency. Most biplanes don't need washout because one wing is typically set at a higher incidence angle, and one wing will stall before the other. Ailerons must therefore be on the wing with the lower incidence angle.

Washout has a dark side; it can interfere with aerobatic performance. In inverted flight, washout becomes washin and all the bad things that washout prevents in upright flight become worse in inverted flight. Snap rolls and spins, which require the wing to stall on command, can be difficult to start and control. Adverse yaw varies with airspeed. Scale models of fighters are only mildly aerobatic. Fully aerobatic airplanes generally do not include washout.

Summary: Washout improves aileron response at all airspeeds, reduces adverse yaw and softens the stall, but only in upright flight.

from the Twin City Radio Controllers
from Flare-out
Twin City Radio Controllers
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In this Issue

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If you have news or ideas for articles you would like to see, you can email me at **jedavids@charter.net**
Or call me at 763-263-3577.

Keep Track of Your Hobby

I keep a log book for each of my aircraft. It is a small ringed notebook, one per airplane, which I assiduously update after each trip to a flying field. Even so, I could not keep track of all costs, modifications, add-ons, and all the other paraphernalia that I would like to keep track of-until I found the Flight Log at: http://www.lammers.ca/FlightLog/.

I started using it and found it extremely useful. Shawn Lammers, the creator, is constantly updating the program, listening, and helping the users. It is free, although I think he will get an offer eventually, and then it will cost!

He uses a Microsoft Access database as an engine, and is able to pull together different views of equipment, models, log books, transmitters, etc; to provide a variety of reports. Not the least amongst them, and quite fearful in its purport, is a cost summary. Ouch! The amount I spent over the years is, perhaps, best not known, but easily done by simply not entering dollars.

by Lawrence Hare
Scott Allen, editor
from the Capital Area Soaring Association,
Rockville MD