



April

Minneapolis, Minnesota U.S.A.

2007

TCRC's Winter Fun Fly A Windy Event!

by Bill Jennings

The Winter Fun Fly held on Saturday, March 3rd turned out to be a match for all but the bravest pilots. The day started with a quick computer check on the Weather Bug for suitable weather conditions. As is customary for flying events, the "10-10-10" rule applies. The rule states that, "At 10 a.m. if it's colder than 10 degrees or the wind velocity is greater than 10 mph, the event will be cancelled.

After checking the weather stations at both Lakeville and Jordan and seeing winds of 7 and 9 mph, and a temperature of 22 degrees, I decided to hold the event. However, sometime between the weather check at 9:30 a.m. and my arrival at the field, Mother Nature decided to have some fun...

your hands" velocity. It took the cooperation of three members to get the tarp hung on some nails around the northwest corner of the shelter and anchored down by two picnic tables!

As it turned out, another wise decision was to bring my propane-fired Coleman stove, to avoid the fight to get the charcoal grill going. It didn't take long before there were hotdogs and brats simmering in a pot, and the large pot of chili I had made earlier in the morning was bubbling. A line immediately formed for the hot food, and then it was time for some flying.

But where were all the pilots? It seemed that almost everyone who attended seemed content to just have another hot dog and a 2nd or 3rd bowl of chili... After some challenges were made, a few pilots ventured out into the icy wind to fly a couple of electric-powered planes. Scott Johnson was the only pilot that managed to fly a glow-powered airplane.

Curiously, the only food items left were the two cases of icy-cold pop that I had chilled in my garage overnight. Everyone had a good time and the occasion provided an opportunity to shovel the snow out of the shelter and share a few flying stories from past gatherings at the field. ☺



I'm thankful that I had picked up a 10 x 18 foot tarp at the local Fleet Farm store several days earlier – "just in case"... I'm guessing the wind velocity was 20 mph at 11:00 a.m. with gusts at "yank the tarp out of

The President's Hangar

by Bill Jennings

Spring is here... and now that the season has finally arrived, everyone's waiting for the water to drain from our flying field once again. I'm hopeful that we'll experience a repeat of last year – only with a much shorter period of flooding. Our alternate flying field at the Scott County Fairgrounds is available for use, and there is an aerial view of the field on the web site home page and this newsletter that shows the flight path boundaries. Our deal at the Fairgrounds is a “pay per use” arrangement, so we must keep an accurate record of each day we use the facility. Anyone who uses the alternate field must take the responsibility to call our treasurer, Mike Burk, to let him know. If there's a group of pilots, one person should be designated to call Mike with a headcount of those who were there.

The Kit Building Workshop is now about at the halfway point, and there have been many interesting topics presented. Each session focuses on several individual topics, so it's not too late to attend a few of the remaining sessions. Not only will you learn some techniques for completing a part of the kit building process, you'll learn how to skillfully repair an aircraft that has sustained some crash damage.

There have also been a few surprises. Most of the time, members bring one or two planes to the field to fly. It's been really amazing to discover that most of the hosts have extensive aircraft fleets! The tours have also given everyone attending a glimpse as to just how involved some of our members are with the hobby. Many thanks to Larry Couture, Chris O'Connor, Scott Johnson, Allan Boucher, and Morgan Larson for sharing their workshops and their hobby with us...

This is a “last call” for volunteers to help out with the field mowing chores this year. Our manicured flying field is made possible only through the efforts of a dedicated mowing crew that takes turns at maintaining the portion of our total land area that we use for flying. The club owns two well-maintained tractors that are actually *fun* to operate. If you're a new volunteer, we'll show you how to operate them safely at the Field Cleanup Day, currently scheduled for May 5th. The mowing schedule will be posted on the website some time during the month of April. The schedule runs from May through early October. If you missed the opportunity to add your name to the signup sheet at the March meeting, contact me directly at president@tcrconline.com to have your name added to the list. It would be great to be able to add a few additional names to the mowing crew roster this year.



Morgan Larson's workshop was the latest on the tour schedule.
(Photo by Bill Jennings)

There have been five workshop tours held this winter. Each has provided the opportunity to see how another member has set up his workspace, organizes his tools and supplies, and stores his models.

Our next event is the April Fools Flyer, scheduled for Saturday, April 7th. In case the field is still flooded or too wet to use, the event Champion, John Dietz, will be preparing the usual “pilot's feast” at the Fairgrounds, instead. If you've never flown at the Fairgrounds, bring a plane and check it out! ☺

From The Co-Pilot's Seat

by Chris O'Connor

April already, and Mother Nature has given us some extended building time by putting 8 feet of water on our field. If you are ready to fly there's the Scott County Fairgrounds, or possibly one of the other flying fields in the area with prior approval. Lots of options!

Remember that before that first flight of the season you have given your plane the annual inspection, i.e. -- check hinges, pushrods, control horns, engine mounts, radio gear, etc, and of course checked your batteries by charging and discharging to check their status. These checks are very worth while to saving a plane and also for safety reasons.

Don't forget all the flying events that are scheduled this season, be a participant not a spectator!

Our monthly meeting on April 10th, will include a building demo, how to make those little parts for your plane by vacuum-forming them. Dave Andersen will be demonstrating the in's and out's of vacuum-forming. Don't miss this program, Dave is an expert at this.

Last meeting we had 'everything you wanted to know about electric's' given by Bob Savre. Bob is a wealth of knowledge, and a big thank you goes out to him for sharing his time with all of us.

For those of you that are interested, The Toledo Expo is coming soon. April 13-15. If you have never been there, it's worth attending. All those neat things you see in the magazines, you can see and touch there, and buy if you so desire. I know of about 6 TCRC members that are planning on going. Why don't you consider making a trip this year also. You will certainly not regret it.

Remember bigger flies better! See you at the field. ☺

New Member

Our newest member is Duane Cote who lives with his wife Tanya at 9915 Brookside Circle in Bloomington. Duane is currently building an all-metal airplane of his own design. His phone number is 952-346-0187 and his e-mail address is cotedw1@msn.com.



When you see Duane at a meeting or at the field, be sure to introduce yourself and welcome him to the club. ☺

When You Miss The Meeting, You Miss A Great Program!



Bob Savre, the electric guru, gave a great program at the March meeting. (Photo by Bill Jennings)

Pictures From TCRC's Winter Fun Fly



The shelter was surrounded by knee-deep snow at the Winter Fun Fly.



Scott Johnson gets his glow-powered plane ready with moral support from several members.



Scott wades through the deep snow to get his plane onto the runway.



After the trek through the snow Scott soars into the air for a great flight.



The shelter was a popular place at the Fun Fly.



Scott Johnson's plane gets some pit work.

Show & Tell

by Bill Jennings

The March meeting brought out the largest group of planes we've seen in a long time. This is proof that some of the members took advantage of the long winter months to do a little building.



The first up was Morgan Larson with a Piper Tri-Pacer still under construction. This laser-cut Mosquitobite kit from Canada has *really* impressed Morgan with features like interlocking construction and a super-detailed, fully illustrated assembly manual. When finished it will be powered with an O.S. .61 2-stroke engine.



Next was Jim Ronhovde with a Great Planes Sea-Wind Amphibian ARF that was powered by an O.S. .91 4-stroke. This model had the capability to be truly amphibious with optional retractable wheels.

However, Jim has elected not to go with the wheel option due to concerns about keeping the hull watertight.



John Dietz showed off his Great Planes Super Sportster ARF, which had been modified for electric power. The conversion involved figuring out the appropriate size of the electric components to be used. John finally decided on an AXI 2826 motor, 4100 mAh Li-po battery pack, and a 45 amp ESC. The finished weight came in at 4 lbs., 15 oz.



Jay Bickford brought an electric biplane modeled after the Ultimate 3-D biplane. It featured a Hi-Maxx motor and 25 amp ESC. Total weight is 17.1 oz. The bright red color scheme should be very visible against a bright blue sky.

Mike Burk showed his Quique Somenzini EYak 54 electric combo ARF that weighed in at 13.3 oz. The kit came complete with a geared LX20 L-4200Kv

brushless motor, and a Virtuoso ESC 12-3. Mike expressed concerns about the fragile construction, and all of the parts arrived warped and had to be straightened with a heat gun. The kit cost was \$110.



New member Duane Cote brought a partially completed original design sport plane constructed entirely of metal. Duane has been using the "design as I go along" approach. The finished fuselage was amazingly light for its size, and it will be interesting to see how well the finished aircraft flies.

Finally, Scott Johnson brought a refurbished SIG Kadet MK II that is the original trainer he used to learn his piloting skills. The well-used plane, originally owned by Scott Anderson, had become battered and oil-soaked through the years. Scott's first chore was to remove the oil from the wood by using a heat gun. As the oil rose to the surface of the wood, he continued to wipe it away, until all the oil was gone. After painting the restored wood with Balsarite, he recovered it in some leftover pink and white Monokote. An O.S. .46LA 2-stroke engine powers the rejuvenated plane.

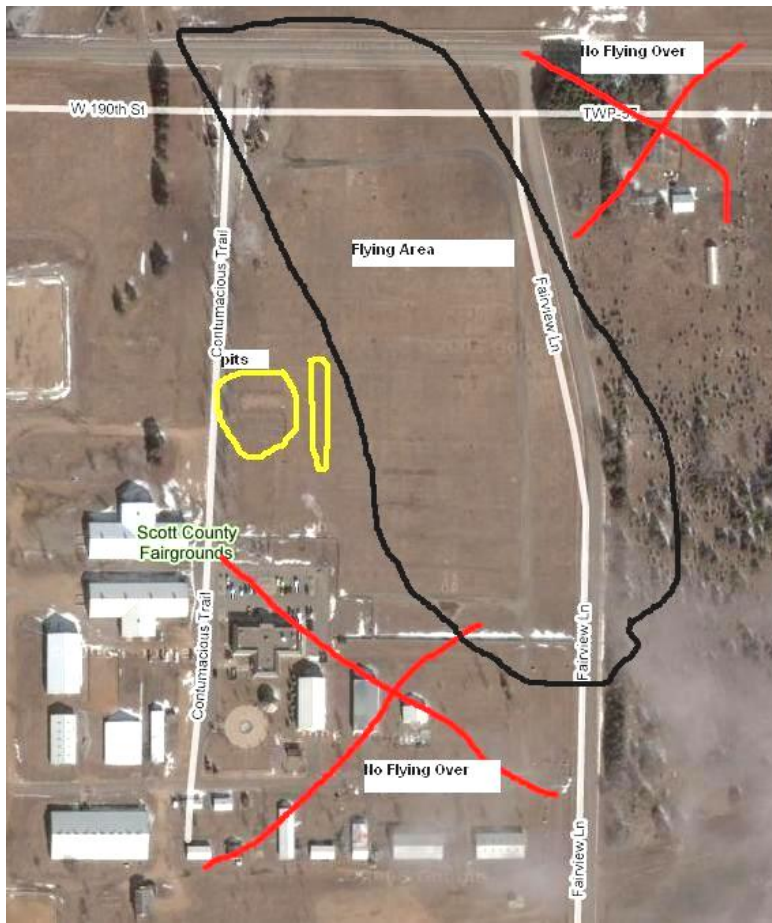
**Bring Your New Plane
To The Next Meeting**

Fairgrounds Current Flying Site

by Pat Dziuk

The warm weather of March coupled with rapid ice melting on the Minnesota River brought water over the TCRC Jordan flying site. Current projections are that this will be a short-term event with the water leaving the field on Monday, April 2nd, barring no heavy rains in the Minnesota River drainage basin.

We now have a signed agreement with the Scott County Fairgrounds to fly there while our main field is flooded. The agreement is setup such that we pay \$18 per day that a member flies at the fairgrounds. If you fly at the fairgrounds it is your responsibility to call or e-mail our treasurer Mike Burk and let him know what day you flew and how many members were out there. If there were multiple people flying on a given day you can designate one person to report to Mike. Mike's phone number is 952-220-5555 and his e-mail address is mirat@ens.net.



Directions on where to park and fly: Enter the Fairgrounds and take an immediate left and drive to the end of the fence and then follow the fence back along down to a gravel parking area on the west side. Remember - do not fly over the fairgrounds buildings or the farm house at the north east corner.

Why Is TCRC Special To You?

With 2007 the year TCRC celebrates its 50th anniversary, the planning committee is asking its members to think about why the club is special to each of them and to put those thoughts into short letters that can be printed in the newsletter.

Jim Ronhovde agreed to write the first letter and that can be seen on page 8.

Each of us can think of that one or two things that attracted us to TCRC. Take the time to put those thoughts on paper and either e-mail them to Jim Cook at jimcook888@comcast.net or give them to him at a meeting. ☺

TCRC meets every month on the 2nd Tuesday at 7:00 PM in Fellowship Hall of CrossPoint Church located on the southeastern corner of the intersection of 98th Street and France Avenue in Bloomington. Guests are welcome to attend these meetings.



Pretty neat looking sticker! See it at the April meeting. ☺

TCRC 50th Anniversary Plans Shaping Up

by Jim Cook

The 50th Anniversary Planning Committee met on Saturday, March 17th at Baker's Square to continue formulating the events that will be used to celebrated TCRC's golden anniversary.



**Jim Ronhovde, Jim Cook, Tom Thunstedt and Scott Anderson pause for a picture during a lengthy planning session.
(Photo by Scott Anderson)**

The committee decided on three items to commemorate the club's anniversary:

- Screened Polo Shirts with the 50th Anniversary logo
- Embroidered Chambray Shirts with 50th Anniversary logo
- Self-stick Vinyl Logos

It was hoped that the committee would be able to wear the first run of the polo shirts to the April membership meeting. It was also hoped that a prototype of the chambray shirt would be at the same meeting.

The self-stick logos are intended for use on airplanes, field boxes, car bumpers and windows, and that the first run of 250 stickers would be available to members in attendance at the April meeting.

Scott has written invitations ready to be sent to AMA president Dave Brown, AMA District VII VP Bill Oberdieck and District VII Associate VP's Bud Gorman and Mark Robotti.

Other dignitaries to receive invitations include the mayor and city council members of Jordan, Scott County commissioners, Scott County Fairgrounds board members, the Soil & Water Conservation officials, and a representative of the Fish & Wildlife department.

The committee looked at different ways the event could be promoted to the membership. These included the showing of old 8mm movies of early club events (the first to be shown at the April meeting); a 'look back' column in the newsletter each month; an article asking members to relate some neat experience that they have had while a member of TCRC; a logo on the website; and a special website virtual hanger for old pictures of club events.

The anniversary activities would be culminated with a rain-or-shine flying event at the Jordan flying site. The date is scheduled for Saturday, August 28th, but members and guests would be encouraged to camp at the field starting on Friday, August 27th. The committee is looking into the cost of a large tent to house the field activities if the weather is less than perfect.

Finally, all members are asked to think about former members that might still be in the area and to invite them to the event.

Come to the April meeting and see how the TCRC 50th Anniversary is progressing. ☺

Tunnel Vision: Watching Where You're Looking

Following an uneventful flight, you complete your final leg and holler "landing." You make a gentle turn and set your airplane into a nice glide path to the runway. You start to level off for your touch down, then ... surprise, surprise! Your wing tip catches a fence post to the right of the runway and your airplane does an abrupt about-face. Your wing is damaged, and you have egg on your face.

The first thing that probably comes to mind is that your depth perception betrayed you. Sorry! That's just not so. Depth perception is effective only on what you are looking at. You were looking, but you weren't watching. You were looking so intently at your airplane that you were unaware of what was on either side. That's called "tunnel vision."

Tunnel vision occurs when your vision centers so intently on the approaching airplane that the focus tends to narrow and you lose your perspective of the surrounding area, kind of like a horse wearing blinders. This is quite common with beginning flyers, but we should all be aware that it happens.

Fortunately, tunnel vision is easily avoided. It is merely a matter of establishing good flying habits. Your eye is much faster than your airplane. It only takes a fraction of a second to glance quickly and determine where your

A Letter to the Fifty-Year Club TCRC

At about the mid-point of TCRC's fifty years, I was introduced to RC Flying at the East Jordan flying field. I remember how excited I was as we approached the field and could see models in the air. It was a fantastic Saturday, the day before Easter, just filled with the promise of spring and summer. My guide, Don Heywood soon introduced Burt Foster who would give newbies a try at the sticks with his no wheels model. With the model 'Sky High' the radio was turned over to me for my first feel of Radio Control. My flight time was filled with errors and horrible control, but I knew my Senior Falcon, purchased a month earlier was going to be my ticket to a fun time.

In a few weeks the Spring Building Contest was held and my wife and I headed to the field as guests, and after the members had reviewed their new stuff, the invitation was extended to bring out my newly completed Orange airplane is in relation to its surroundings. Make it a practice to let your eyes sweep the area several times as your airplane is making its approach. This can also apply to in-flight conditions when you should always be aware of other airplanes.

(Reprinted from The CAM Journal, newsletter of the Central Arizona Modelers, Sedona, Arizona, Marvin Hinton, Editor.) ☺

Falcon to look it over. As I was scurrying to get my crude fuel filler and other field box items, the experts reviewed the plane and with their high-speed fueler and proficient work, I came running along behind, as Jim Miller was taxiing out to the runway and then flying it into the sky. Initial lift off climb was achieved and Pilot Miller did a victory roll at about 75 feet. WWOOWW! My memory function from that time on was shut down so I don't even remember packing up to go home.

That summer, I had many trips to the field and for each trip, four magical flights was the goal for this wonderful hobby. Many days that were too windy to fly, I was there anyway, and the Falcon survived for ninety-eight flights before the Kougarr took over.

By fall and the Annual Banquet, I of course was eager to attend, and my wife and I arrived a bit behind a good number of members. We timidly entered the room, rather expecting to be looking for things and ways to help us look at home even as freshman member attendees. As we walked across the room, we noticed a group of the old timers were seated, clustered around in a circle of chairs. As soon as they spotted us they called for us to join them and widened the circle and brought in more chairs. I was so filled with the spirit of warmth that I still have not decided if that first flight of my Orange Falcon or the gracious inclusion into the TCRC Club is a bigger memory for me.

Thanks TCRC for being such a great part of my life.

-- Jim Ronhovde ☺

Calendar

- Apr. 7 **Kit Building
Workshop**
9:00 AM, CrossPoint

- Apr. 7 **April Fools Flyer**
Jordan Field
11:00 AM
John Dietz

- Apr. 10 **TCRC Membership
Meeting, 7:00 PM**
Fellowship Hall
CrossPoint Church
Bloomington

- Apr. 24 **Board Meeting**
7:00 PM Shepherd of
the Hills Church
Hopkins

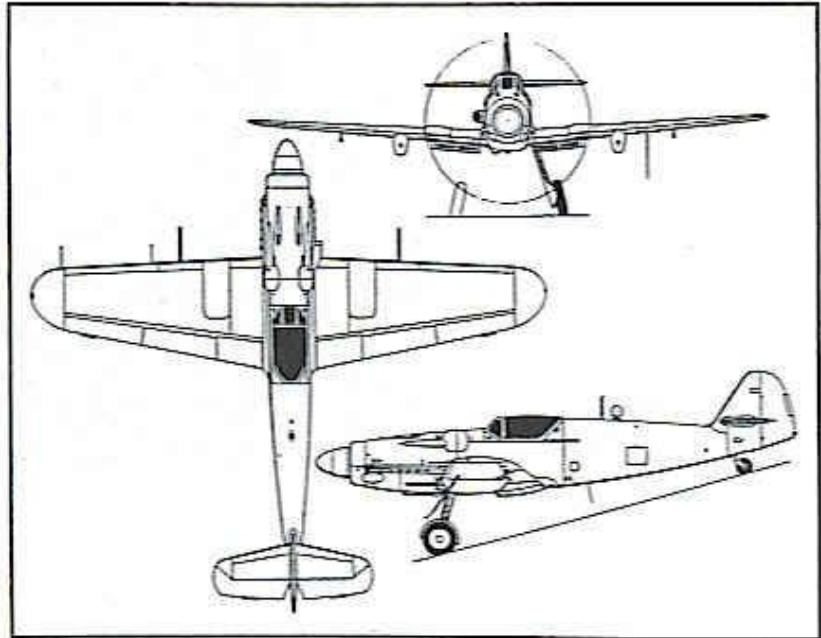
- Apr. 28 **Kit Building
Workshop**
9:00 AM, CrossPoint

- May 5 **Jordan Field Clean-Up
& Fun Fly**

- May 6 **Sky Hobby Swap**
Richfield, 8:00 AM

- May 12 **Spring Float Fly**
Bush Lake Park

April Mystery Plane



TCRCOnline.com

As the warm weather arrives and our thoughts switch from building planes to flying them, TCRC's many field events start occurring. Unfortunately, this is Minnesota, and the weather can be somewhat variable. On the day of the Float Fly or Building Contest, when the skies look iffy, how do you know if the event is really going to happen? Simple! Just pull up TCRCOnline.com and get an up-to-the-minute report on what is happening.

TCRC is blessed with a great website! Use it!





Swap-A-Ganza!
Sundav, May 6th
8:00 AM til ?
Food, prizes, etc.

Sky Hobby

7144 Chicago Ave. S. Richfield, MN

Hours:
Mon - Fri 10 - 7
Saturday 10 - 6
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Servo Setup

by Joe Jackson

Servo mounting should be done with rough treatment and vibration in mind. If you have some leeway with servo location, we suggest you do a preliminary balance check and locate the servos fore or aft accordingly. No need to load the airplane with more balance weight than necessary. We favor maple or other hardwood beams installed across the radio compartment. We also have used plywood plates with servo holes cut into them. Be sure the plywood is thick enough to cover the screw threads. If not, glue on another layer of wood. With either of these arrangements do not rely on butt glue joints. Add pieces of sheet wood above, below, in front of and behind the plywood edges where they butt against the compartment sides.

We have experienced failures with plastic servo trays sometimes included in radio sets. A plastic tray carrying the weight of four servos but mounted in the aircraft with only six screws near the edge of the tray will break at the edge holes during a rough landing. This type of failure is particularly deceptive as the controls may appear to be normal on the ground.

Servos come with rubber grommets which fit into the mounting lugs to provide vibration isolation. To function properly brass ferrules are inserted into the grommets. The ferrule controls the amount of compression applied to the grommet by the mounting screw. When the screw is tightened until it contacts the ferrule, the correct compression is attained. The ferrule must be inserted from the bottom so that its flange contacts the

Herb Peterson 1917 – 2007



Long time TCRC member Herb Peterson passed away in Arizona in March. He was 90 years of age.

Herb was a hard-working member of the club until he and his wife Evelyn moved to Arizona in 1999. He could always be found at the meetings and always had a smile and greeting for everyone. He especially made it a point to head north in August for the Park Rapids Fun Fly and most of us who made that trek north can still picture Herb in his white windbreaker when he was at the PR flying site.

We send our sympathies to Evelyn and his family. He was a special person and will be missed.

mounting surface. If inserted in the other direction the flange will be under the screw head (not needed) and the sharp end of the ferrule may cut into the mounting plate causing excess grommet compression. Position the servo so that it contacts the airplane only through the rubber grommet.

In general it is better to position the servo with its long axis fore and aft. If mounted across the airplane, pushrod pressure will cause rocking. This consideration is less important for throttle servos.

(Reprinted from The Digital Dope Sheet, Paul Yuhas, Dunlo, PA)

Tupelov TU 160 'Blackjack'

by Conrad Naegele

The March Mystery Plane was the Russian Tupelov TU 160 'Blackjack'.



The TU 160 was the outcome of a Russian multi-mission bomber competition between Tupelov, Mvasishchev, and Sukoi. Tupelov won.

This aircraft featured low-mounted, swept-back and variable geometry wings. The range of the sweepback varied between 20 and 65 degrees. At low altitudes, speed was limited to subsonic, but at high altitudes, 1,275 mph was easily attainable. Also, particular attention was given to reducing the radar signature, for stealth purposes. Mid-air refueling was a necessity.

The TU 160 was a heavy hauler in every respect, and was able to carry up to 12 long-range missiles, or 15 short-range missiles, as well as a variety of nuclear, and freefall iron bombs. Strangely, there was no provision for any self defense armament. An advanced 'terrain-following system was available. First flight was in December, 1981, and although 100 units were ordered, only 36 were produced before the production run was halted in 1990, near the end of the 'cold war'. There has been speculation that production might have been resumed, but nothing came of it.

The TU 160 was an extremely versatile all-around post-war heavy bomber. All of its statistics and records have suggested that this airplane was, and is, superior to our B-1, and B-1B in almost all categories. In aviation circles it has been rated the best of the best!

The TU 160 had a wingspan of 183 feet, a gross weight of 606,271 pounds and a range of 7,455 miles un-refueled. ☺

Helpful Takeoff Hints

Like it or not, cross controlling is the only way to make a safe, straight, good-looking takeoff. You have done it many times, but you may not have thought of it in those terms.

A good technique is to taxi and lineup on the runway centerline. Before increasing the throttle, think about using the ailerons to keep the wings level and the rudder to track straight through the takeoff. Initially, apply about half aileron stick into the crosswind. As you increase throttle, the aircraft picks up speed, which means the controls are generating more and more lift. With the increase in lift, less aileron is needed. Meanwhile, continue to track straight with the rudder. As the aircraft cleanly breaks the ground, keep the wings level, and use enough elevator for a consistent rate of climb. Slowly take out all rudder and continue your flight.

Although somewhat confusing and thought-provoking at first, talk yourself through these techniques, then give it a fair chance with practice. Remember: the two most important maneuvers of flight are taking off and landing.

(Reprinted from Prop Wash, newsletter of the Lewes R/C Club, Long Neck, Delaware, Dawson Gillaspay, Editor.) ☺

**April Fools Fly
April 7**

Editor, Jim Cook
@ Flare Out Publisher
1177 Polk Street
Shakopee, Minnesota 55379

Kit Building Workshops Continue



Dave Andersen gives a nice presentation at the last Kit Building Workshop held at CrossPoint Church. The schedule and topics of the Saturday workshops are posted on the website and the newsletter. ☺

THE TCRC FLARE-OUT Monthly Newsletter



** TWIN CITY RADIO CONTROLLERS INC. **

Purpose: To preserve, encourage, and further develop the hobby of building and flying radio controlled model airplanes.

2007 Officers

President	Bill Jennings	952-440-6300
Vice President	Chris O'Connor	952-473-5210
Secretary	Allan Boucher	952-544-8955
Treasurer	Mike Burk	952-220-5555

TCRC Flare-Out

Editor	James R. Cook	952-445-5257
Publishers:	Pat Dziuk	952-445-3089
	& Mike Timmerman	952-496-1631
Website:	http://www.tcrconline.com	