



May Minneapolis, Minnesota U.S.A. 2004

Spring Float Fly May 8th

The Annual TCRC Spring Float Fly is scheduled for 11:00 AM at Bush Lake on Saturday, May 8th.

The Float Fly will be in its normal location at Bush Lake Park on the east side of the lake. The event is for any pilot who has a plane on floats and a valid 2004 AMA membership card. The weatherman is promising great weather and there are always some very nice float planes to see being put through their paces. This event always attracts lots of pilots from other area clubs, and the spectators are always very appreciative of the show the flyers put on.

Jim Cook is the CD for the event and he will have the TCRC retrieval boat arriving at the lake at 11:00 AM.

Bush Lake Park is a part of the Hennepin County Park System and either a daily parking sticker or a season parking sticker is required. A box with stickers or season applications will be available at the gate. Be sure and get a sticker. Un-stickered cars will be ticketed.

We'll see you at the Spring Float Fly on Saturday, May 8th. ☺

TCRC Building Contest Moved To May 15th

The TCRC Building Contest has been moved to Saturday, May 15th at the Jordan Field.

The event was moved from its original May 1st date so that TCRC members could attend Bud Stitt's memorial service.

CD for the building contest is Jay Bickford and start time will be 10:00 AM.

There will be prizes and ribbons for four categories again this year: Trainer; Scale; Sport/Pattern; and ARF. In addition, there will also be a 'Best of Show' award. Judging will be based on construction, modifications, originality, quality of work, and overall craftsmanship.

During the day, the runways will be open for flight for all with a plane, and a lunch will be served after the judging.

Get the finishing touches on your winter projects and have them at the Jordan Field on Saturday, May 8th for the TCRC Building Contest. ☺

Gate Code Changing May 15

The combination to open the lock on the main gates at the TCRC Jordan Field will be changed on May 15th.

Every 2004 member should see the new four digit gate code in the upper right of the address label on this issue of *Flare Out*.

If you are a current member of the club and do not receive a notification of the new code, please call any officer or board member to learn what the combination is.

Please do not give this code out to any non-members of the club without the permission of the board of directors. ☺

TCRC Online.com

Webmaster Pat Dziuk has done a fantastic job on making the TCRC website, TCRCOnline.com functional and very user friendly.

The site is updated almost daily and late-breaking club news makes the site immediately.

Take the time to visit TCRCOnline.com and become a daily user. This is a very valuable and informative tool. ☺

From The Cockpit Of The President

by Scott Anderson



**Bud Stitt and Don Heywood
discussing R/C at the field.**

It's difficult to start out a column with hard news. We were all deeply saddened last Friday to hear of the passing of one of TCRC's icons, Bud Stitt. Bud had been instrumental working with John Krekelberg in finding and purchasing our current flying site. Before his medical conditions restricted his outdoor activities, we would always see him out at the field enjoying the company, helping maintain the site, and occasionally getting a flight in. I could always count on him coming up to me on the flight line and saying "How ya doin' today kid?" You would always see a smile and get a taste of Bud's sense of humor. In one of his last visits to

the field he even apologized for having to leave early as his oxygen bottle was running out. Tsk, tsk, tsk, just like a pilot not to pack extra oxygen. Bud, we'll be thinking of you on those warm flying days and thank you and your pal John for your dedication to the club, your friendship, and your smile.

We're rescheduling the **May Building Contest** to **Saturday May 15th** in order to allow as many members as possible to attend Bud's memorial service Saturday May 1st. Jay Bickford is the CD and has prizes (Hobby Warehouse Gift Certificates) for (4) categories (Scale, Sport, Trainer, ARF) plus a 'Best of Show' award. Look for more details in Jay's column, or on the **TCRCOnline.com** website. If you do not have a plane to enter, you may wish to volunteer as a judge. We'll be judging for construction, modifications, originality, alignment and quality as well as 'Wow' factor.

The **2004 May Float Fly** will be held **Saturday May 8th** and be hosted by the indomitable Jim Cook. The weather looks like it will be cooperating and we may count on plenty of sun! Get your floats on the Cub, or Kadet and get out to Bush Lake Beach for the best Float Fly in the region!

Saturday May 22nd, Gerry Dunne is hosting his son's Bloomington Cub Scout Pack at the field for an **Aviation Day & Fun Fly!** This will be held with our spring fun fly. We'll have food, several fun and challenging flying events (Egg Drop, Limbo, Spot Landing Poker, and possibly a Balloon Bust if the wind

cooperates) for you to participate in and a chance to show the kids what you can do! Look to the **EVENT FORUM** on the website for more information and to let us know that you are coming!

Have you been to the field lately? It's great! The weather's been warm and wonderful and our TCRC Model Air Park has been dry and comfortable. The burn piles will remain for the summer as they dry out for a fall Bonfire! Fortunately they are far out from the normal traffic patterns and should not interfere with our flying fun!

I'm going to be a bit busy this month as I've been asked to participate in a technical conference in Sydney, Australia. I'm hoping to get time to drive the 500 km from Sydney to our sister club's site. I figure it'll be like driving from Minneapolis to Madison for a meet, except the steering wheel will be on the wrong side of the car. Wish me luck!

I'll see you at the field! ☺

TCRC Shirts Available

There are still a few of the new royal blue TCRC sweatshirts, polo shirts and T-shirts available for sale.

Jim Ronhovde says most of the shirts are XL and the prices are \$14 for a T, \$16 for a polo and \$21 for a sweatshirt.

Give Jim a call or see him at the next meeting if you would like to purchase a club shirt. ☺

Bud Stitt

It is with great sadness that we report the passing of long-time TCRC member Bud Stitt on Friday, April 23, 2004.



Bud was a very active member of TCRC in the 80's and 90's and served as president and almost every other board position during that time. It was Bud and the late John Krekelberg that were the driving forces that found and brought to reality the beautiful flying field in Jordan that we now call home.

Bud could be found at every event TCRC held, attending as a worker, a spectator and a promoter of our wonderful hobby. Until his health prevented him from flying, he remained an avid member of the club. Over the years he was a mentor to many of the new pilots in TCRC and it was always an enjoyable experience just to sit and talk with him.

All of the members of TCRC send their deepest sympathy to his wife Kathy and his family. We know how much he will be missed.

Jordan Field In Great Condition

TCRC has one of the most beautiful flying sites in the country and it is in great shape as we enter the spring flying season.

April showers have allowed the grass to green up and the trees to bud. The myriad of wildlife at the site can be seen anywhere you look.

Take the time to throw a plane or two into the back of your car and head for Jordan. Take advantage of the great asset that the club has in its Jordan flying site.

Calendar

- May 11** **TCRC Membership Meeting, 7:00 PM**
Room H195
Hennepin Technical College
Eden Prairie

- May 8** **Spring Float Fly**
Bush Lake, 11:00 AM
Jim Cook

- May 15** **TCRC Building Contest, Jordan Field**
10:00 AM
Jay Bickford

- May 22** **Cub Scout Indoctrination**
Jordan Field
11:00 AM
Gerry Dunne

- May 22** **Spring Fun Fly**
Jordan Field
1:00 PM

- June 11-12** **Electric Fly-In & Camp Out**
Jordan Field
Scott Anderson

TCRC Caps To Be Ordered

At the April 13th meeting, it was decided by the club to purchase new TCRC ball caps with the TCRC logo for sale to the membership.

Jay Bickford and Jim Ronhovde are coordinating the design and purchase of the caps and will announce at a future meeting when they will be available for sale. Let Jim or Jay know if you are interested in purchasing one.



Cub Scout Aviation Day

by Jerry Dunne

On May 22nd I will have 10 + Cub Scouts at our flying site in Jordan so we can show them what R/C is all about and what our airplanes can do.

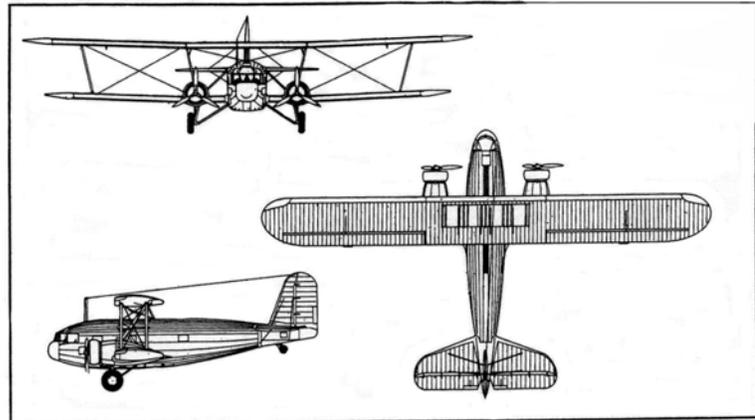
I am asking those members that have trainers and buddybox cords to please bring them so that we can give each scout some stick time.

It would also be great to have lots of planes of every type so that the boys can see them both on the field and flying in the air.

Start time is 11:00 AM and we should conclude by 1:00 PM. At that time the scouts will be cooking brats and hamburgers for those at the field.

A good turn out on our behalf will help the scouts enjoy the day even more. Thank you in advance for your time and talent. We hope to see you and your aircraft at the Jordan flying field on Saturday, May 22nd at 11:00 AM. ☺

May Mystery Plane



Bruce Anthony had some great club flying films from the 60's at the April 13th regular membership meeting. (Photo by Jim Cook)

Hobby Warehouse

Hours:

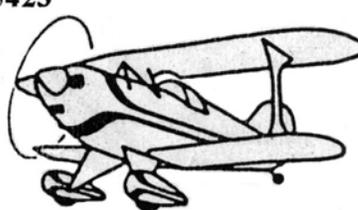
M-F 10-7

Sat. 10-6

Sun. 12-5

Best Prices In Town!

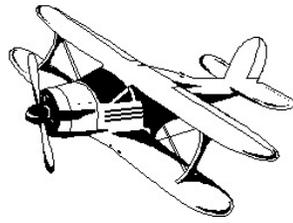




7120 Chicago Ave. S. Richfield MN 55423

Tom Steinmueller, Owner **(612) 861-5587**

Show & Tell



Geoff Barber had yet another plane at the April 13th membership meeting.



Geoff's plane was an electric Slow Stik by GWS, which was a profile of the Big Stik. This ARF was done in red and really looked a lot like its big brother Big Stik. He said the kit was \$250, weighed in at 16 ounces and flew with nice speed. A flight's duration was around 15 minutes and as of the meeting Geoff had about 15 flights on it.



Jerry Dunne showed up with another electric at the same meeting. This was a Scorpio sailplane by Hirundo and was also an ARF. The wings and stabs

were orange and the fuse white. It weighed in at 3 pounds 2 ounces. The entire horizontal stab was elevator. The plane was made for a .15 glow engine but Jerry had replaced it with a 600 direct drive motor. So far, he had only one flight on the sail plane and was happy with how it flew.



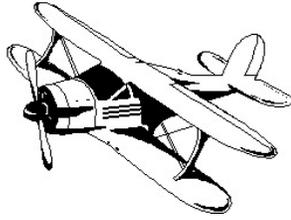
Larry Couture showed up with the same Scorpio sail plane as Jerry. He was not happy with the ARF kit. The holes did not line up in the fuse for the pushrod, and he had to 'hot rod' new ones. Also, the instructions have tiny pictures. Both Jerry and Larry glued their wing halves together rather than have them on a pin.



It must have been 'sailplane night' because Stan Erickson also showed up with one. This was a Dynoflight Bird Of Time ARF. The wing was orange and white and the fuse white. The wingspan was 115 inches. Stan had six flights on the plane, all launched with a Hi-Start and he liked its performance.

Continued On Page 6, Column 1

Show & Tell



Continued From Page 5

John Berk had another plane from the past at the April 13th meeting.



The plane was a Ryan ST and had been built in 1969 by George Zenk. It was originally done in silk and dope but John removed the silk and replaced it with 21st Century fabric. The plane had yellow wings with star roundels and the fuse was done in Rustoleum aluminum, which he said was definitely NOT fuel-proof. George had never had an engine in the plane but John put an old OS Max 40 FP. The wheel pants had been carved from balsa. The plane weighed between 5 and 6 pounds and John has put 10 to 15 flights on it so far. He said it flies very nicely and is quite fast and he has to start the engine rich because the cowl does not allow enough cooling and it leans out quickly. The plane had flaps, but John had them taped off and is planning on using them at some time in the future. ☺

**May Is A Busy Month For TCRC.
Plan On Coming To The Field**

TCRC *Flare Out* Has New Publishers

The TCRC newsletter *Flare Out* now has a new publishing team.

Mike Timmerman and Pat Dziuk work together to get the newsletter printed, folded and mailed after editor Jim Cook has assembled the articles.

Jim e-mails the newsletter to Pat in completed form in Microsoft WORD format. Pat then takes those files and assembles them into a single PDF file. That file is then e-mailed to Mike who prints the final form. Mike and Pat team up to do the final folding, stapling, attaching of the mailing labels and stamping so that it can be mailed to the membership by the end of the month.

The PDF file is also added to the newsletter section of TCRCOnline.com. For those of you who have not viewed the newsletter at the website, take the time to do so. All of the pictures are in color and it is very easy to scroll through the newsletter.

A big thank you to Mike and Pat for taking over the publishing of the *Flare Out*. ☺

Strengthen A Foam Wing

If they want to strengthen a foam wing or even a fuselage, most people use carbon fiber composite material, which you can purchase at the hobby shop.

A much cheaper substitute can be obtained at your favorite home center. It's called landscape fabric. Don't use the kind with holes in it; you want the stuff that looks like a mat of lots of little fibers. It is very strong but a little thick, so you'll have to separate it into layers by pulling it apart. Cost is about \$8 for a 30" x 50' roll.

(Reprinted from *The Wright Flyer*, newsletter of the Wright County Flyers, Monticello, Minnesota, Jean Davids, Editor.) ☺



At The Field

by Klotz the Kat

“Every 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 twist in the wing of up to 3 degrees from root to tip, in rare cases even more. Washout forces the wing near the fuselage to meet the air at a more positive angle than the tip. As the plane 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 very 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 WWII fighter.

A fighter will have a wing incidence at the root of, say, 2 degrees and a washout of, say, 1-1/2 degrees. At top speed, the incidence angle of the tip is zero. Drag at the tip is minimized and there is very little loss of lift by air creeping around the wingtip -- very

efficient for max 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 — 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 or 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. One wing will stall before the other. Ailerons must therefore be on the wing with the lower incidence angle.

But washout has a dark side — it can mess up 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.

See ya at the field. Roll a sandwich at me. ☺



I meet Miss Ohio Janelle Coutts at Toledo Expo in April.

Spring Fun Fly May 22nd

TCRC will be holding its Spring Fun Fly on Saturday, May 22nd, starting at 1:00 PM.

This event will follow the Cub Scout Aviation Day, which will be held earlier in the morning.

We will have lots of flying events for the participants: Limbo, Egg Drop, Spot Landing Poker, and Balloon Bust (weather permitting).

A lunch of hamburgers and brats is being served between the Scout Aviation Day and the Spring Fun Fly.

Plan on being at Jordan on Saturday, May 22nd for both events. ☺

TCRC meets every month on the 2nd Tuesday at 7:00 PM in room H195 at the South Hennepin Technical College located at 9200 Flying Cloud Drive (Highway 212) in Eden Prairie. Guests are welcome to attend these meetings.

From The Co-Pilot's Seat

by Jay Bickford

Concerning Hobbits . . .

At a Field in the Valley on the shores of the Great River Min there lived a group of creatures called Hobbits. Now Hobbits were noble creatures of great intelligence and creativity. Fun loving they were, and full of life.

Almost above all else Hobbits loved to build things with their hands, and they were greatly skilled in the arts of building and crafting items out of wood. But while most Hobbits were content to build everyday useful items like chairs and tables, there were a group of Hobbits, called RC Hobbits by their kinfolk that loved to build items that the other Hobbits thought of as quite strange. The one thing they loved to build above all else were miniature flying machines of fanciful design. They would then spend hours and hours guiding them through the air with magic boxes from the lands of Futaba and JR.

In the spring of the year after all the snow had melted the RC Hobbits would gather at the Field in the Valley on the shores of the Great River Min and compete in contests of building skill and flying courage with their miniature flying machines.

At the beginning of one of these event days called "Building Contest Day" the RC Hobbits

would gather and compare their new flying machines, and see who had done the best job designing and building his. The RC Hobbit Elders would then vote and the ones chosen as the most skilled among them would be given gift certificates from one of their favorite places in all the world, "Hobbit Warehouse." There were prizes for best Sport, Trainer, Scale, and ARF flying machines, as well as a "Best of Show" award given to the most outstanding flying machine built that year.

On another event day called "Fun Fly Day" the RC Hobbits would gather to compete in contests of daring and flying skill. In one particularly challenging contest the RC Hobbits would all see if they could drop an egg from their flying machines directly into the chimney of Old Bimbo Depends. Boy, you should have seen Old Bimbo come flying out of his hole when the first egg dropped all the way down his chimney and landed with a great plop in his breakfast porridge. He was quite a sight too. All covered in porridge from head to toe he was. He was ranting and raving at the top of his lungs, and chasing the RC Hobbits around the Field, yelling for them to stop their infernal flying machines, and to leave his chimney alone.

In another contest they would fly their machines under a ribbon hung between two trees, and see who could fly the lowest without touching the ground. Many times flying machines were lost because one RC Hobbit could not accept that another could fly lower than he.

I hope to see you and all our RC Hobbit friends at the Field in the Valley on the shores of the Great River Min. Oh, and don't forget to bring your flying machine . . . ☺

Workshop Hints

Over the years, people pick up several modeling tips that are useful, especially to the less experienced modelers. Here are a couple shortcuts.

Vinegar

To remove epoxy from yourself safely, use white vinegar. It's smelly, safe, and very cheap!

Flexible Sanding Block

A flexible sanding block can be made by contact-cementing sandpaper to one side of a urethane sponge. Your sanding block can conform to any curve.

Wire Bending

When bending identical parts from small gauge wire, tape the wires together and bend both simultaneously.

Carving Tool

An ordinary potato peeler is a great tool for carving or roughing into shape leading edges, rounded nose pieces, or any solid balsa. The peeler will only cut so deep, making carving to shape a breeze.

(Reprinted from Prop Spinner Chatter, newsletter of the Eugene Prop Spinners, Eugene, Oregon, Mel Marcum, Editor.) ☺

Grumman AF 'Guardian'

by Conrad Naegele

The April Mystery Plane was the Grumman AF 'Guardian'.



On the long list of very successful Grumman aircraft, one of them was not the Guardian. This was called for, at the end of WWII, to replace the Grumman 'Avenger'. Contracts were let in 1948 and in 1949 two prototypes were presented, as anti-submarine warfare aircraft. Originally classified as XTB3F (G-70) this was a torpedo bomber with a composite power plant consisting of the tried-and-true R2800 piston engine in the nose and a Westinghouse 19XB turbo jet in the tail. This was a side-by-side crewed aircraft that was considerably modified during trials. After all the changes were made, the ASW plane was ordered by the US Navy.

The plane carried one 2000-pound torpedo and two 1600-depth charges or two 2000-pound bombs internally. All other stores were external. It did use the latest in radar and had a huge searchlight under the right wing.

Production was ended in 1953 as it was not all that good -- and it really served little purpose. A total of 397 examples in four different configurations were made. Definitely not one of Grumman's best planes.

The Guardian had a wingspan of 60 feet 8 inches, a gross weight of 25,500 pounds, a speed of 317 mph and a range of 1,500 miles. ☺

Burning Only In Fire Pit

If a fire is built at the Jordan Field, it should only be done in the fire pit located to the west of the shelter. This is necessary to keep the possibility of a grass fire to a minimum, and to preserve the beauty of our field. ☺

Drilling Wing Bolt Holes

Many airplanes, particularly warbirds, have a belly pan under the wing that makes getting to the wing bolts a bit tricky. Most kits have you drill a hole in the belly pan sheeting and use the supplied paper tube to create a conduit for inserting and removing the wing bolts. The problem is the paper tube is barely large enough to go over the head of the bolt. If you change to a different type of bolt later or don't get the tube aligned just right, you have a problem.

You can usually take care of this by using a 3" x 5" index card. Drill a hole in the belly pan sheeting directly over the wing bolt holes. Make this hole as large as necessary to accommodate the type of bolt you wish to use. You can use a coin of the appropriate size to mark the outline of the hole. Then, use your hobby knife or a Dremel tool to remove the material. Wrap the index card around a wooden dowel that is smaller than the hole. Insert the card and dowel into the hole and remove the dowel. Be sure the card is touching the wing bolt plate. The rolled up card will expand nicely and should conform to the hole you drilled. Glue the tube in with CyA and sand it flush with the sheeting. If the holes are anywhere near the exhaust, it is a good idea to fuelproof them with resin or fuelproof paint.

(Reprinted from Mission Briefing, newsletter of the Magic Valley Air Force, Jackson, Tennessee, Gary Nelson, Editor.) ☺

Editor, Jim Cook
1075 Miller Street
Shakopee, Minnesota 55379

Nice Looking Plane!



Long-time member Bill Altenhofen gets a close-up look at John Berk's SE5A WWI British warbird at a recent meeting. The plane has a long way to go to have any many flights as Bill has. (Photo by Scott Anderson)

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.

2004 Officers

| | | |
|-----------------------|---|--------------|
| President | Scott Anderson | 952-934-1471 |
| Vice President | Jay Bickford | 952-890-5678 |
| Secretary | Conrad Naegele | 952-545-5421 |
| Treasurer | Rick Smith | 952-949-9648 |
| TCRC Information Line | 763-391-3443 | |
| TCRC Flare-Out | | |
| Editor | James R. Cook | 952-445-5257 |
| Publishers: | Pat Dziuk | 952-445-3089 |
| | & Mike Timmerman | 952-496-1631 |
| Website: | http://terconline.com | |