Flare-out

TWIN CITY RADIO CONTROLLERS, INC. Newsletter

AMA Charter Club Number 383

TCRC

April **Minneapolis, Minnesota U.S.A.** **2012**

Jordan Field Ready For Summer Flying

by Stan Erickson

Wow, it's only March and the TCRC Flying Field is in great shape and just waiting for the pilots to show up and fill the sky with airplanes.

The unbelievable warm and snowless winter that Minnesotans experienced this year has put the Jordan field in a clean and DRY condition.

The pits are neat and the benches in place and waiting at Jordan. (Photo by Stan Erickson)

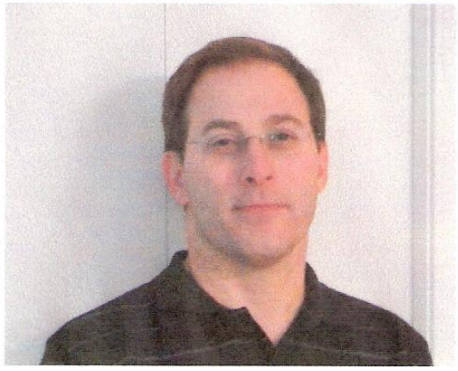
John Dietz, Jim Ronhovde, David Erickson and Stan Erickson got the benches down to the pits, tidied up the parking lot and did some work on the little tractor in preparation for some great flying. Thanks guys! J

Calendar

Apr. 1	**April Fool Fun Fly Jordan Field 10-10-10 Rule**
Apr. 10	**Membership Meeting, 7:00 PM Auction Planning CrossPoint Church Bloomington**
Apr. 13,14,15	**Toledo Air Expo Toledo, Ohio**
Apr. 22	**T-28 Pylon Racing Mini Clinic 1:00 PM Jordan Field Paul Doyle**
Apr. 29	**T-28 Pylon Racing Mini Clinic 1:00 PM Jordan Field Gerry Dunne**
May 12	**Field Clean-Up & Fly In Jordan Field**
May 19	**Spring Float Fly Bush Lake Park Bloomington, MN 10:00 AM Steve Meyer**
May 20	**T-28 Pylon Racing 1:00 PM Jordan Field**
May 25,26,27	**Hanson Family Fun Fly Mayer, MN Kris Hanson 612-702-3609**

From The Flight Deck

By President Tim Len



Hi Everyone!

Welcome to April 2012, we have had great weather, and the field has not flooded for the first time in a long time. I've already been to the field and have seen many of you there. From the looks of things, we are going to have a great flying season this year which may go down as one of the best years yet.

Get your airplanes ready! Don't forget to check and charge those batteries as well as perform inspections, and fix any problems before you head out to do some flying.

We had a very large number of beautiful airplanes at Show & Tell in March. I am really looking forward to seeing all of those planes in the air at the TCRC Jordan field.

I would also like to remind all those interested that the Weak Signals 58th Annual RC Show Expo is fast approaching and will be held in Toledo Ohio on April 13, 14, &15. Check the website for more details.

I look forward to seeing you all at the next monthly meeting, and of course at the field as often as possible.

Happy Flying! J

Field Clean Up May 12th

Saturday, May 12th is the scheduled day to get the TCRC Jordan Field all spruced up and ready for a great year of flying.

The mild winter has kept the Jordan field in pretty good shape and the lack of a flooding threat should make the clean-up a pretty easy task.

Members should bring brooms, shovels, and other hand tools to make any minor repairs that might be necessary.

Several members have already been busy getting the airplane stands down to the pits, doing some picking up, etc. and the field is already looking pretty good.

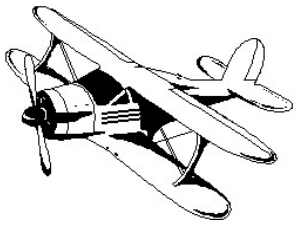
Field Maintenance Manager Corey Kaderlik has gotten a couple of bids to have the road culverts replaced and was also wondering if we should do some sealcoating and striping of the runways.

The field clean up will be followed by a Fly In, so bring a plane or two and plan on flying most of the afternoon.

We will see you at the Jordan Field on Saturday, May 12th for some cleaning up of the pits and runways and then some great flying. J

Let's Have A Big Turn Out For The Field Clean Up!

Show & Tell



March was a great month for Show & Tell!

Larry Couture had a shiny CriCri that he scratch built. It was done in chrome covering and had a 48-inch wingspan. This twin-engined plane had a unique design and he built it from pictures in an article of the full-scale plane. It was powered with two Turnigy electrics and swung 7x5 props. Although quite small it was actually ¼-scale and weighed 4-1/2 pounds. It has not had its maiden flight at this time.

Loren Temple had a very nice AT-6 Texan that was an ARF done by Herr Engineering Corporation. It was done in gray fuse with red and blue trim and had a 36-inch wingspan. It was powered with an E-Flight 480 and swung an 8x5 prop. The pilot in the cockpit was a dog because Loren said he would be dogfighting with the plane. As of the meeting, the Texan had not had its maiden flight.

Joe Neidermayr had three planes at the meeting. The first was a very nifty ARF of a Cirrus SR 22 done by Great Planes. The plane was done with yellow fuse and white wing and tail feathers. The wingspan was 50-inches and it weighed in at 2.8 pounds. It was powered by an electric KDA 36-16M motor and swung a 10x7 prop. The plane had not had its maiden flight as yet.

Joe also had a Nitroplanes C160 cargo plane at the meeting. This plane had a white fuse with yellow wing and red trim and had a 57-inch wingspan. It

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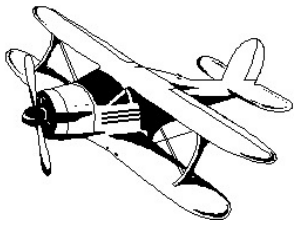
Show & Tell



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weighed in at 5.6 pounds. This plane was powered with twin 2217 electric motors and swung 9x7 4-bladed props. The manufacturer was Nitroplanes and Joe said the quality was very good. This plane also is awaiting its maiden flight.

Joe's third plane was a foam Mosquito done by Hobby King. This plane was done in gray camouflage and had a wingspan of 53-inches. Weight was 5 pounds. The twin engines were Bell and the props were 9x7 3-blade. This plane has flown 3 times.

Gerry Dunne had a Sapac ARF Hawker that was done in black with a red tail. The wingspan was 37-inches and it weighed in at 30 ounces. The power plant was an HP-3400 motor. As of the meeting Gerry had not done the maiden flight.

Gerry also had MIG-15 done by Blitz RC. This plane had a Chinese patterned yellow on the fuse and wings. The wingspan was 44-inches and it weighed in at 3 pounds 12 ounces. It had a Weflo Tec ducted fan powered by an HET 2W 20 motor.

John Rosenberg had a nice looking Toledo Special 40 that was done by Hanger 9. The plane was done in light blue and beige, with blue scallops on the wings and horizontal stab. The covering was Monokote and the quality was quite good. The Special had a wing-

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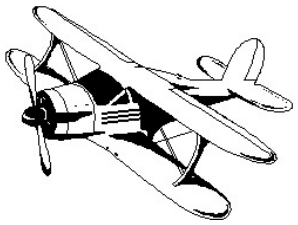
Show & Tell



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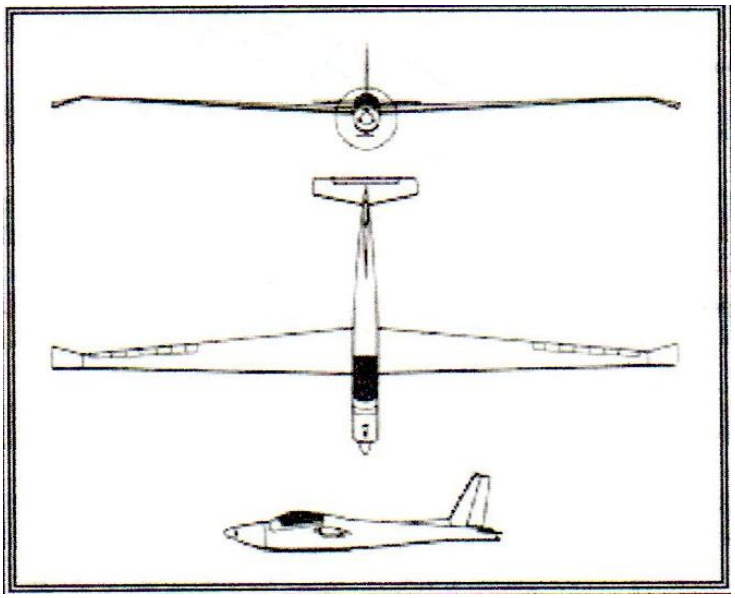
span of 70-inches and weighed between 5.5 and 6.25 pounds. The engine was and OS Max 55 AX glow. John said the quality of the kit was excellent. The maiden flight is scheduled for this spring.

The final plane at the March S&T was Sherwood Heggen's giant-scale Laser 200. This plane was a Lanier kit and had a wingspan of 97-inches and a weight of 22 pounds. The covering was Ultrakote with Rustoleum paint. The fuse and wings were done in black with red trim. Sherwood purchased this plane at the TCRC auction. Originally it had a Zenoah G62 gas engine but Sherwood replaced that with a DLE 55. This reduced the weight by 1.5 pounds. The plane was tail-heavy and Sherwood rebuilt a lighter turtledeck on it and also added weight to the nose. As of the meeting, Sherwood had not yet planned a maiden flight. **J**

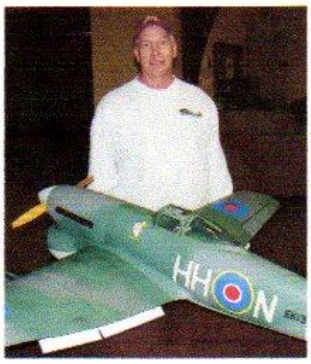
April Mystery Plane



Pylon Racing Mini Clinics
April 22nd and April 29th

Veep's Corner

By Chris O'Connor



It seems as though the months are getting shorter.

I don't need to tell you that it looks as though our flying season is beginning early. With that in mind, have you checked all your equipment to make sure it's in top shape, i.e. batteries, field box, radio equipment, and of course your plane. Make sure all is in good condition.

As a reminder, when flying at the field with multiple planes in the air, a pattern or traffic pattern should be followed. Upwind flying over the runway in the direction of your takeoff and then on the downwind flying towards the North side of the field, making what looks like an oval shape in the air. This will help prevent mid-airs. Saying I can't do that is not a good reason, ask for help, it's not hard.

At the March meeting all members in attendance had a chance to win one of several gift certificates to Hobby Warehouse, which were donated by Tom Steinmueller.

Stan Erickson helps in the gift drawing. (Photo by Jim Cook)

During previous discussions at the meetings we have talked about stalling. One idea was to put washout in the wingtips. While this will help at slow speeds and maybe prevent the tip from stalling on landing, we have to be aware that a plane can stall at any speed and any attitude. Technically a stall is when the wing reaches its critical angle of attack. The critical angle of attack is the angle between the chord line of the wing (from leading edge to trailing edge) and the relative wind or airflow over the wing. The airflow will separate from the airfoil, lift is decreased and drag is increased. A stall is affected by many factors. Some are heavier planes stall at higher speeds on landings, the bank angle, the steeper the bank the higher the stall speed. For your info, and this applies to all planes, in a bank angle of 30 degrees the stall speed is increased by around 10%, while a bank angle of 60 degrees the stall speed is increased by 40%, and at 80 degrees the stall speed increases by 140%. Many people call this a tip stall when in fact it is called an accelerated stall. (Bank angle is increase and g-loads are also increased.) A plane experiences 2g's in a 60 degree bank. That means the wing has to support twice the weight. This scenario comes into play on every landing approach. The downwind turn to base leg and the base leg turn to final. The only way to recover is lower the nose, level the wings, and increase power. Lowering the nose may be impossible because of the lower altitude for landing. Try to avoid the very steep turns on landing. Make your pattern a little bigger or lose more altitude in a descending turn instead of a level turn. Other related factors can come from the popular all-foam planes, when put in steeper turns and more G's are applied the wing could be flexing or twisting, changing that critical angle of attack.

Hope that helps. Have fun flying. **J**

Congress Acts To Protect Aeromodeling

by Rich Hanson
AMA Government and Regulatory Affairs

On Monday, February 6, Congress passed the FAA Modernization and Reform Act of 2012. By a vote of 75 to 20, the U.S. Senate sent the $63 billion, four-year spending bill to the President for his signature. On February 14, 2012, the President signed the bill into law.

This is the first permanent aviation funding bill providing the FAA long-term operating authority since 2007, ending a string of 23 extensions. This bill culminates in a nearly five-year effort to develop long-term legislation to deal with updating FAA's antiquated air traffic control (ATC) structure and install a new GPS-based next generation (NextGen) system that will allow greater capacity, efficiency, and safety.

Although ***very*** important to aviation and the future of the National Airspace System (NAS), passage of such a bill would not normally be of great significance to the aeromodeling community. However, for the first time in the history of model aviation, Congress has acted to protect model aircraft from burdensome regulation.

The FAA Air Transportation Modernization and Safety Improvement Act includes a specific provision that recognizes the effectiveness of community-based safety programming for hobby and recreational model aircraft, and instructs the FAA Administrator not to enact regulations affecting model aircraft operations occurring under a safety program such as AMA's.

The bill spells out minimum safety criteria, which mandate that model aircraft be operated in a manner that does not interfere with, and gives way to, manned aircraft. The bill also establishes criteria for operating in proximity (5 miles) to airports, which require contacting the airport and ATC where applicable prior to flight, and establishing mutually agreed-upon operating procedures for permanent flying locations.

Passage of the model aviation provision in the FAA reauthorization bill is a monumental achievement for the hobby and for the Academy of Model Aeronautics. It is, at least in part, the fulfillment of AMA's commitment to advocate for its members and the aeromodeling community, and for the first time gives footing for model aviation in its interaction with the federal regulators. Although it may only be one bite of the apple, it is a significant step forward.

As good as this news may be, this does not indicate that model aviation is totally exempt from regulation. Congress's action made it clear that the model aircraft provision does not limit the authority of the FAA to pursue enforcement action against persons who endanger the safety of the NAS by operating model aircraft.

AMA recognizes that the FAA is tasked with maintaining the safety of the NAS and the Academy will seek to work cooperatively with the FAA in establishing mutually agreed upon operating procedures for model aircraft activity within the NAS.

So, what does this mean for the proposed small Unmanned Aircraft Systems (sUAS) rule? There are still many unanswered questions regarding the implications of the model aircraft provision in the FAA re-authorization bill, and it will take some time to iron out the details. It may be several weeks, if not a few months, before we have a clear understanding of how the bill will be enacted.

The Notice of Proposed Rulemaking (NPRM) for the sUAS rule will likely come out as previously proposed, if for no other reason than it's much too late in the rulemaking process to make any substantial changes. Any changes necessary to enact the model aircraft provision in the bill will likely occur when the FAA goes back to the drawing board and crafts the final sUAS rule.

If the sUAS NPRM has not been published by the time you read this, it's only a matter of time before it is released. Although Congress has given us a leg up in the process, attention to the proposed rule is no less important than it was before. The most current information regarding the NPRM can be found on the AMA website. When the rule is published, the AMA will provide guidance and information on how to respond to the call for public comment.

Please make sure that everyone you know is aware of the impending regulation, and ensure that everyone who shares our love for this hobby is well informed and participates in the response to the proposed sUAS rule. Timely updates regarding the sUAS rulemaking can also be found on Facebook by Liking AMAGov' and on Twitter at <Twitter.com/AMAGov>

FAA Modernization and Reform Act of 2012

Senate Bill, Section 607(g)

.. .exempts most model airplanes used for recreational or academic use from any UAS regulations established by the FAA.

Conference Committee Report
Senate bill with modifications...

Continued On Page 8, Col. 1

Congress Protects Aeromodeling

Continued From Page 7

Language including model aircraft for the purposes of sports, competitions and academic purposes is removed and replaced with "hobby". The modified section includes language requiring that the model aircraft must be operated in a manner that does not interfere with and gives way, to all manned aircraft. In addition, language that requires that model aircraft flown within five miles of an airport will give prior notification to the airport and the air traffic control (ATC), and that model aircraft that are flown consistently within five miles of the ATC will do so under standing agreements with the airports and ATC. Lastly, language is added that will ensure that nothing in this provision will interfere with the Administrator's authority to pursue enforcement action against persons operating model aircraft who endanger the safety of the national airspace system. In this section the term "nationwide community-based organization" is intended to mean a membership based association that represents the aeromodeling community within the United States; provides its members a comprehensive set of safety guidelines that underscores safe aeromodeling operations within the National Airspace System and the protection and safety of the general public on the ground; develops and maintains mutually supportive programming with educational institutions, government entities and other aviation associations; and acts as a liaison with government agencies as an advocate for its members.

SEC. 336. SPECIAL RULE FOR MODEL AIRCRAFT.

(a) *In General.* Notwithstanding any other provision of law relating to the incorporation of unmanned aircraft systems into Federal Aviation Administration plans and policies, including this subtitle, the Administrator of the Federal Aviation Administration may not promulgate any rule or regulation regarding a model aircraft, or an aircraft being developed as a model aircraft, if-

(1) the aircraft is flown strictly for hobby or recreational use;

(2) the aircraft is operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization;

(3) the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;

(4) the aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; and

(5) when flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport) with prior notice of the operation (model aircraft operators flying from a permanent location within 5 miles of an airport should establish a mutually-agreed upon operating procedure [with the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport]).

(b) *Statutory Construction.* Nothing in this section shall be construed to limit the authority of the Administrator to pursue enforcement action against persons operating model aircraft who endanger the safety of the national airspace system.

(c) *Model Aircraft Defined.* In this section, the term "model aircraft" means an unmanned aircraft that is-

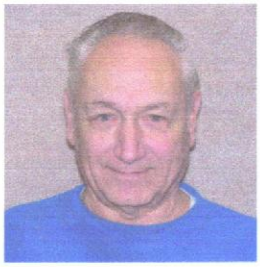
(1) capable of sustained flight in the atmosphere;

(2) flown within visual line of sight of the person operating the aircraft; and

(3) flown for hobby or recreational purposes. **J**

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.

Safety At The Field



By Larry Couture

Ideas for the new flying season:

The Safety item for this month will be: Did you check your plane before takeoff?

When you fly with a commercial airline, if you watch closely you'll see the pilot walking around the airplane and inspecting it. The reason for this is that he is going to get in the plane and fly and he does not want to crash or have any kind of problems.

That being said it seems that our planes should be carefully inspected so that a loose or malfunctioning part does not cause a crash. It takes just a few minutes to check all hinges, moving surfaces and electronics before takeoff. I know for a fact that had I done this more often and better I would have a few less crashes on my record because they were not all pilot error. Just think of how many times in conversation you have heard someone say the crash was because of equipment, broken hinge, faulty servo etc. This may have been found by a good inspection before takeoff. So I am all for inspection, inspection and more inspection.

Things that need inspection from winter storage are batteries, electronic connections, gas tanks, servo movements, bolts holding motor tight, and all hinges on the moving surfaces. These are the things that the storage gods mess with while you're not looking.

Reread the TCRC field rules and make sure you follow them. Make sure you call out landings, takeoffs, etc. making sure others have acknowledged said calls before you execute them.

All landings from which you can fly again are great but not always graceful, have fun and keep the rubber side down when landing. J

TCRCOnline.com

Your TCRC News Source

Are You Using It?

Mowing Schedule Needs Volunteers

by Corey Kaderlik

The 2012 TCRC Mowing Schedule has been posted and the club is looking for several members to volunteer to mow the Jordan field for one week of the summer.

The schedule was e-mailed to those members who have email addresses. As of that mailing the schedule indicated that the club still needed volunteers to cover 13 weeks between May 1 and the end of September.

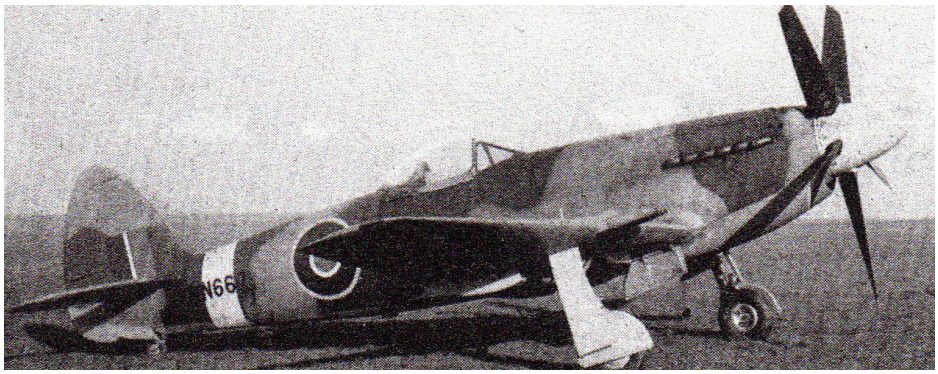
Please take the time to look at the schedule and select a week that you can cover. If you do not have e-mail and haven't seen the schedule, please talk to Corey Kaderlik or one of the officers at a meeting and get signed up to help out.

Thanks for helping to keep the Jordan field looking great for the summer flying season. J

Supermarine 'Spiteful'

by Conrad Naegele

The March Mystery Plane was the Supermarine 'Spiteful'.



Everyone interested in aircraft is familiar with the Spitfire' story and it was such a successful airframe that it resulted in several other planes. One of these was the Spiteful, similar but in actuality was a completely new design. In 1941, at the request of the Air Ministry, Supermarine asked Joseph Smith to develop a plane with a laminar-flow wing (reference the P-51, B-24 and the B-29, for example).

The prototype used a single spar with an auxiliary spar, the Spit V11 tail surfaces, and a new 2,035 horsepower Griffon RR engine. This all called for more fuel consumption so the fuse was redesigned, deeper, wider, and more robust and at that point the Spit lost its elegant design! The laminar airfoil had excellent results, but proved impractical from a manufacturing point, so it was shelved. During this time a navalized version was requested by the Fleet Air Arm, so a folding wing and arrester hook was devised. Carrier trials were successful, the Navy version was called the Sea Fang, and required another engine, due to all the added weight. The new engine developed 2,375 horsepower.

All told, a total of 393 planes were ordered, but in actuality only 8 flew. The Sea Fang was rated at 475 mph. However in 1947, the Sea Fang attained 495 mph, and was the fasted piston-engined plane produced by Great Britain, and was only exceeded by the experimental Republic XP47 J, which attained a speed of 504 mph.

The Spiteful had a gross weight of 9,950 pounds, a wingspan of 35 feet, a top speed of 494 mph and a range of 585 miles, extended to 1,315 miles with aux fuel. For armament it carried 4-20 mm cannon. **J**

Pylon Racing League

by Paul Doyle

Stock T-28 Racing League

Hello everyone!

Well with the beautiful weather we've been having it's time to prepare to start racing! Tom from Hobby Warehouse and Jeremy from Sky Hobby have both agreed to give TCRC racers a special deal on the Parkzone T-28 we will be using as our pylon race planes, so if you don't have a STOCK PKZ T-28 in your hanger, now is your chance to get a great deal on one. Just make sure you mention you're part of the TCRC race league when making your purchase to get the bargain.

Official races will start in May but for those of you who would like to hone your skills ahead of time either Gerry Dunne or I will be holding mini clinics and mock racing on Sunday April 22nd and Sunday April 29th at 1 pm, weather permitting.

I'm trying to get a head count of how many racers we will have so please send me an email (ppe74@yahoo.com) if you are planning on racing this season or even if you are thinking of racing. Come out to the mini clinics and give the sticks a try to see how much fun this can be. Late entries are always welcome to join us once the season starts and I look forward to seeing you all out at the field! **J**

Spring Float Fly May 19th

TCRC's annual Spring Float Fly will be held at Bush Lake Park in Bloomington on Saturday, May 19th.

Chair for the event is Steve Meyer and he is planning on holding a pilots' meeting at 10:00 AM to set up the days flying rules, flying pattern, general safety requirements and any other information the pilots will need. It is planned that the club retrieval boat will be on hand at 10:00 AM also so flying can commence right after the pilots' meeting.

The Spring Float Fly is always a very well-attended event with a large contingent of TCRC pilots as well as pilots from several other local R/C clubs.

This event always attracts a lot of spectators to witness some really nice looking airplanes taking off and landing on the water.

The weatherman is hopefully promising beautiful weather for the float fly with bright sunshine and only a light breeze to give a nice ripple on the water for easy take-offs.

If you haven't flown off of water, now is the time to make it happen. Bush Lake Park is an ideal place to float fly, since it has a nice sandy point that allows pilots to fly no matter what direction the wind is. Be at Bush Lake Park in Bloomington on Saturday, May 19th for the Spring Float Fly. J

Pylon Racing Schedule

by Gerry Dunne

May 20	Rain Date May 27
June 17	Rain Date June 24
July 22	Rain Date July 29
August 19	Rain Date Aug. 26
September 16	Rain Date Sept. 23

If we need more races because of rain on both days we will decide that as it happens.

Please contact Paul Doyle or Gerry Dunne if you are thinking of racing.

Thanks, and let's go racing! J

Hanson Family Fun Fly May 25, 26 and 27

TCRC member Kris Hanson is again scheduling his Family Fun Fly at his home in Mayer Minnesota. Dates are May 25, 26 and 27, and all members and family are invited to partake.

The event includes camping at his home, flying on his runways and flying field, swimming in his pool, and all-around good fun.

Anyone interested in being a part of the Hanson Family Fun Fly this year should give Kris a call at 612-702-3609 and plan on enjoying a great weekend of flying, camping and friendship. Kris promises that there will be some nice weather for the event. J

TCRC Dues Renewal

At the December 2nd TCRC Joint Board Meeting, after careful consideration, the TCRC board approved a modest dues increase for the purpose of funding future runway improvements:

- Regular $85.00
- Junior $42.50
- Social Affiliate $30.00

Dues payments are due on January 1, 2012.

Remember, to be a member of TCRC you must be a member of AMA and supply proof of that membership at the time of your TCRC renewal.

Your TCRC dues can be paid to treasurer Tim Wirtz at a meeting or by mailing them to Tim at:

Tim Wirtz
2422 Downing Avenue
Shakopee, MN 55379

The TCRC board also increased the initiation fee for new members or members who had not paid their dues for the previous year. The initiation fee is now $75.

Take the time to pay your 2012 TCRC dues today. J

TCRC Is A Great Club!

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

Is It Really March?

TCRC's Jordan Field has enjoyed a very mild winter that has allowed the ground to stay dry. Pictured above is the club's tractor doing some grading in mid-March. The field is already in great flying shape! **J**

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.

2012 Officers

President	**Tim Len**
	407-304-0295
Vice President	**Chris O'Connor**
	952-473-5210
Secretary	**Scott Anderson**
	952-934-1471
Treasurer	**Tim Wirtz**
	952-941-5357

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**	