



April

Minneapolis, Minnesota U.S.A.

2005

TCRC Winter Fun Fly A Farewell To Cold Weather

by Jim Cook

Saturday, March 5th was scheduled for the TCRC Winter Fun Fly and CD Rick Smith was at the Jordan field early in the morning getting everything ready.



All of the pilots at the TCRC Winter Fun Fly on March 5th.
(Photo by Jim Cook)

The weather was suppose to be moderate, but at 10:00 AM the wind was picking up and the clouds were low making for a gray overcast. Even though the temperature was in the 20's, the wind made the day feel pretty cold.

Rick was first into the air with one of the many planes, both glow and electric, that he brought. Pat Dziuk was not far behind him and Scott

Johnson was also flying early. By 11:00 AM there were 11 or 12 members present and the flight line was busy.

It was evident how much electricians have become part of winter flying. The huge improvement in batteries, both in power and flying time, plus the ease of getting an engine started certainly play a key part in their popularity.

Rick brought the club grill down to the field and soon the hotdogs were ready for eating. The warmth of the grill and the aroma of the hotdogs made the area around the grill a very congested place.

The field was covered with a sheet of crusty ice, so planes could use wheels, skis or floats. All on that list were present at the field that morning. John Dietz had his electric on floats, and it got a flight or two using the floats as skis.

By 2 or 2:30 in the afternoon, the pilots started heading for home. The day had remained gray and windy but the sky had been full of airplanes the entire day. By the way, Sunday was bright, sunny, warm and had no wind.

Thanks to Rick Smith for CD'ing the event and to all the members who came down to say goodbye to the Winter of 2005. ☺

From The Left Seat

TCRC President's Report

by Jay Bickford

As I sit here writing this article it is very obvious that spring has arrived in Minnesota. With the 60 degree plus temps we have experienced over the past few days most of the snow in the Twin Cities area is gone, and we are getting ready for a great flying season to come. Daylight Savings time starts this coming Sunday, so we will even have some extra time in the evenings for flying. Let's just hope there is no flooding of our field this year to interfere with our flying. If there is, I'll really be wishing I had finished that float building project that I never seemed to get to this past winter.

Even though I was not able to attend our last monthly meeting, I understand that the new location as Cross Point Church in Bloomington worked out really well. Thanks again to Scott Johnson for setting up this location. Please join us again this month on Tuesday, the 12th of April at 7:00 PM for our next monthly meeting. Cross Point Church will be our permanent monthly meeting location until further notice.



The facilities at Cross Point Church in Bloomington proved to be quite adequate as a meeting place for TCRC. (Photo by Jim Cook)

Long-time club member John Dietz has now been officially confirmed as our new club treasurer and the duties have now been officially transferred to him. Thanks again to John for taking on this

important responsibility within the club, and to outgoing treasurer Bill Jennings for the efforts he put forth while in the position.

I also wanted to say thanks to the 10 people that have already sent in their TCRC Field Improvements Survey form. Your feedback is appreciated and will be helpful to us in managing the future efforts and direction of the club. However, since this only represents less than 15% of the club membership, I would really like to hear from the rest of you as well. If you have not taken the time to fill out the survey and mail it back, please take a few minutes to do so now. If you have lost your survey form, please let me know and we can get you an extra one. Please e-mail me at president@tcronline.com or phone me at 952-890-5678. I feel it is very important to exercise our right to voice our opinion, and I want you to know that your opinion is valued and appreciated. I would really like to hear back from at least 50% of our club membership to really get a good feel for what is important to each of you. After I have received more forms I will report back on the results of the survey.

Until next month . . .



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

Notes From Don Olson In Florida

Florida email: rolson100@cfl.rr.com

Believe it or not, I miss not being an All-Season Flyer in Minnesota. I still put planes in the air 12 months a year, but wouldn't take a patch for flying winters in Central Florida . . . too easy!

From March 3-6, 2005, the Florida Jets 2005 event was held at Lakeland Linder Regional Airport. They had approximately 300 jets at the 4-day event with Static and Flying competition. This precedes the Top Gun event held at the same site by one month. Some of the best flyers from all over the nation, along with international flyers participated. These are both always great events. Top Gun will have both propeller-driven and jet aircraft.

I had the pleasure of visiting with Vince and Vicky Anderson (TCRC) who stopped at the Florida Jets event on their annual trek to 5 weeks of sunshine by the beaches in Sarasota

They, along with my brother and myself enjoyed the many displays and all the action. The picture shown here is Bob Violett's F-100 which has placed 1st in the nation in past events. Many of the jets were products of his company (BVM).



See you all at the field in May. (Be careful not to freeze your fingers!) ☺

TCRC'ers Heading To Toledo Expo

When this issue of the newsletter goes to print, five members of TCRC should be on their way to Toledo, Ohio and the Toledo Expo.

Jim Ronhovde, Stan Erickson, John Dietz, Scott Anderson and Jim Cook are renting a motor home and making the 550 mile trek to Ohio. Arrival time is scheduled for 7:00 PM on Thursday, March 31st. The Expo officially opens at 8:00 AM on Friday, April 1st.

The Toledo Expo is the biggest R/C convention in the country, and if it is made for R/C flying, it can be found at the Expo.

The group plans on attending the Expo all day Friday, and again on Saturday until around noon. Then they are all climbing back into the motor home and heading southwest to Muncie, Indiana and the AMA National Flying Site. Most of the guys are taking a small plane so they can put a flight or two on the tarmac of the AMA. They also plan to spend some time visiting the AMA R/C museum.

While at the Expo, the guys will see TCRC'er Dave Anderson who will be in the *RC Modeler* booth during the event. A former member, Scott Gerber will be coming to Expo from Missouri and plans on meeting with the group on Friday.

Jim Cook will have an article and lots of pictures for the next newsletter. ☺

Pictures From The 2005 TCRC Winter Fun Fly



The heat and the aroma of hotdogs being cooked on the grill attracts a crowd at the TCRC Winter Fun Fly.



Scott Anderson hand launches his electric Extra plane into the cold wind during the morning at the Winter Fun Fly.



John Dietz gets his electric on floats ready for a flight while Jim Ronhovde looks on.



Dave Erickson's pattern ship is caught in mid-flight by Scott Anderson's camera.



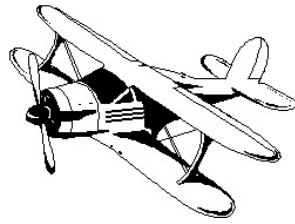
Pat Dziuk and Rick Smith show how the grill gets to the Winter Fun Fly.



There was some snow to be seen at the TCRC Winter Fun Fly, but not a lot.

Photos by Jim Cook, Scott Anderson and Pat Dziuk

Show & Tell



The planes still keep rolling in to the TCRC meetings. At the March 8th meeting we had three more.



Brand-new member Mike Burk had his first aircraft since getting back into the hobby. He had his Great Planes UCanDoIt, which is an electric 3-D plane that is supposed to be pretty indestructible. He is shown above bending the soft foam wing. The plane had a HiMaxx brushless motor powered with a Lithium battery. The plane hadn't been flown yet but he is hoping to see it fly soon.



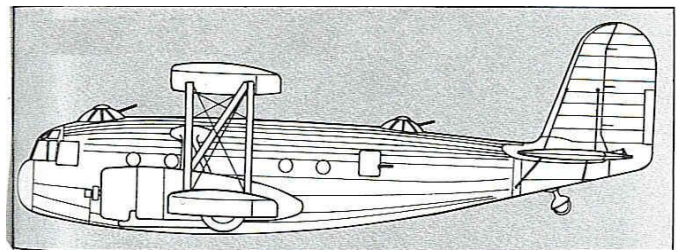
Bernie Gaub had his new plane a J-3 Cub done in military colors, which I believe turns it into an L-4. The plane was built from a Carl Goldberg kit and

covered with Monokote. He had a 46 OS Max FS for a power plant and was also planning on putting floats on it. As of the meeting, it also had yet to fly.



Sherwood Heggen had a nice Sig Four-Star 40. This plane was covered in yellow Ultrakote and was done in the Sig 4-star design. He built it from the kit, but modified it by adding a hatch for the fuel tank and another hatch for the batteries. It was powered by an OS 46 FX two-stroke engine. As of the meeting it had not flown either. ☺

April Mystery Plane



TCRC Rosters Distributed

The 2005 edition of the TCRC Roster was distributed at the March 8th meeting. For those not in attendance, the new roster was mailed. If you have not received your 2005 TCRC Roster, give Pat Dziuk a call.

Thanks to Pat and to Mike Timmerman who put a lot of work into the 2005 Roster. ☺

New Meeting Location Well Attended

TCRC held its first meeting at its new location at Cross Point Church at the intersection of 98th Street and France Avenue in Bloomington on Tuesday, March 8th. There were lots of members present to see what the facility was like.



Every seat was full as those at the March 8th meeting listened to Gerry Dunne present his program at the new location in CrossPoint church. (Photo by Jim Cook)

Hennepin Technical College had raised the room rate substantially in 2005 and forced the club to seek a new site. Scott Johnson was integral in finding CrossPoint church. The Fellowship Hall where the club meets proved to be nice sized and has all of the audio-video equipment the club would need for almost any program. It was decided on March 8th to continue holding the meetings there for the next few months, but the general consensus was that this facility was very nice.

If you did not attend the March 8th meeting at CrossPoint, make sure you note the address and don't accidentally drive to Hennepin Technical College. If you need driving directions, they were published in the March issue of the *Flare Out* on page 6.

Special thanks to Scott Johnson for his work in procuring CrossPoint. Make sure you attend a meeting in the near future to see for yourself the amenities that the church has to offer. ☺

Calendar

- Apr. 1-3 Toledo R/C Expo
Toledo, Ohio
- Apr. 12 TCRC Membership Meeting, 7:00 PM
Fellowship Hall
Cross Point Church
Bloomington
- May 7 Building Contest & Fun Fly
- May 14 Spring Float Fly
Bush Lake Park
11:00 AM,
CD - Jim Cook
- May 21 Night Flight Fright
Jordan Field
Time TBD
CD- Gerry Dunne

New Officers

TCRC's board of directors had two changes in the month of March.

John Dietz became TCRC's treasurer, replacing Bill Jennings who stepped down in February.

Pat Dziuk became TCRC's secretary, replacing Aaron Sybrant who also stepped down in February.

Thanks to John and Pat for stepping up and filling these positions. ☺

**TCRC
Building Contest
May 7th**

From The Co-Pilot's Seat

by Gerry Dunne

Hi TCRC'ers!

What a week we are having one minute it is snowing 10 plus inches of snow the next day we have 50 plus temperature! What a great state we live in -- where else could you fly off skies one day and wheels the next, or for that member off of either on the same day, as we did at the Winter Fun Fly. Speaking of the Winter Fun Fly, a special thanks to Rick Smith and all of the members who came down to a cool and windy field on Saturday, March 5th for the fun fly. We had a good turn out and there were lots of flights. Of course there were lots of electricians in attendance.



My program went over better than I thought it would at the March 8th meeting. I didn't realize so many members were interested in electric flight. Judging by the large number of questions almost every member either has an electric plane or is seriously thinking about getting one. If you missed the meeting or still have questions, please let me know and hopefully I can answer them.

Last I heard there were at least five TCRC'ers heading for Toledo and the Expo at the end of this month. Jim Cook has a note on the Forum at TCRCOnline.com detailing the trip. He indicated that Scott Anderson, John Dietz, Stan Erickson, Jim Ronhovde were going with them. They are renting a motor home to get there and I believe they are also going on to Muncie to visit the AMA National Flying Site. I am sure Jim will have a nice article with lots of pictures in the next *Flare Out*.

Did everyone take the time to fill out the questionnaire that was in the last newsletter and return it to president Jay? This is your chance to say what you would like to see changed at the Jordan field.

Remember we have the TCRC Building Contest coming up on Saturday, May 7th. With all of the new planes we have seen at 'Show-and-Tell', we should see lots of entries in the event. Get those planes polished up for the building contest.

Well that is all for now, so fly fast, fly safe and try to land on the wheels. ☺

Hinge Installation Is Critical

by Jim Bronowski

If you are working with an Almost-Ready-to-Fly aircraft or are building from a kit or scratch, you will be installing hinges. This is a critical step in model construction. If the control surface binds or has too much of a gap, your baby is going to be a dog and you will have definite control problems.

There are two basic types of hinges: the 'living' hinge that is installed using CyA glue, and the 'pinned' hinge that is put in with epoxy. There are advantages and disadvantages to using either type.

I have used the living hinge for several years and like the fact that it only takes a few drops of CyA to set the hinges in the control surface; however, I have had these hinges break and always seem to get the

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Savoia-Marchetti SM 91

by Conrad Naegele

The March Mystery Plane was the Savoia-Marchetti SM 91



Although twin-fuselage, twin-boom combat aircraft were fairly common during WWI, the popularity died down during the early 20's and 30's. In 1936, the Fokker G-1 twin-boom fighter appeared at the Paris air show, and interest was revived. While it never achieved universal acceptance, it did have certain advantages. Classic examples are the Lockheed P-38, the P-61 Black Widow, and the Fairchild C-119, and of course many more.

In 1941 Italy issued specifications for a 2-seat, multi-purpose, long-range escort fighter/bomber. These specifications requested long-range, heavy forward firepower, high speed, and a very high service ceiling. Strangely, maneuverability was secondary. The 'societa Italiana Idrovolante' (savoia-Marchetti) developed the SM-91 (and the improved SM-92). Powered by the splendid Daimler Benz DB 605 engines, the prototype was first flown March 10, 1943, and was supposed to be

Italy's answer to the British DeHavilland 'Mosquito'. All metal, 2 crew members in the central nacelle, with heavy centerline armament, plus capacity for a fairly substantial bomb load, the SM 91 was fast and surprisingly, very maneuverable. Only one prototype was built and tested as production was then directed to the improved SM 92. These appeared just as Italy surrendered, and production ceased.

The SM 91 had a wingspan of 64 feet 7 inches and a gross weight of 19,599 pounds. Its armament was 3-20 mm cannon, 2-151 machine guns and a combo of 220, 353 or one 1,100 pound bombs. ☺

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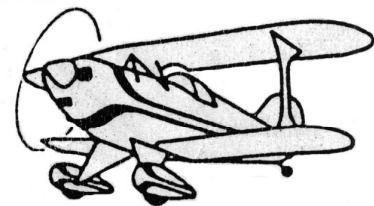
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At The
Field

by Klotz the Kat

Strength & Stiffness

“What wonderful fabric,” a modeler said after retrieving his crashed airplane. “The wing was completely busted up, but the covering wasn’t even torn.”

In this case, the fabric covering was contributing nothing to the strength of the wing. It was so flexible that it stretched with the wing even when the wing was disintegrating. Structurally, it was dead weight.

Strength isn’t the whole story. Equally important is flexibility and its cognate, stiffness. In a model structure that consists of a variety of materials, designers try to make all structural members share the load by matching stiffness. Think of stress as a liquid that flows thru the structure, taking the path of least resistance. It flows thru the flexible stuff and builds up at the stiffer parts. In order to spread the load evenly we need to match both strength and stiffness.

Consider what happens in a wing with poorly matched structural members. Consider, for example a wing with oak spars, balsa sheeting and a very flexible heat-shrink plastic covering. Imagine this wing pulling thru a 20-G pylon turn.

Oak is very strong, but it’s also very rigid. So nearly all of the G-load is borne by the oak spars. The rest of the wing feels no stress and bears no load. Until the spars break. Then all of the stress is transferred to the wing sheeting. Chances are it will break too, putting all the stress on the stretchy plastic covering. If it is flexible enough, it merely acts as a bag to hold all the broken parts together on their way to the ground. It’s like the old party trick of ripping a phone book in half by tearing one page at a time.

Now consider a wing with more equally matched flex -- spruce or basswood spars (it’s hard to get spruce anymore), balsa sheeting and a stiffer covering such as Monokote or fiberglass cloth.

In the dreaded 20-G turn, the spars bear a lot of stress, but they flex to flow a major part of the load thru the ribs to the 9.

Good design puts the strength where the stress is and distributes the stress as evenly as possible throughout the entire structure. Making a part overly strong adds unnecessary weight that increases the load on other parts. Super flexible covering materials may be easy to iron on, but, if applied to a stiff structure, add little to strength.

Strength-to-weight ratio is the end product that we wish to maximize. ☺

Rejoice!
Spring (and the flying season) Has Arrived!

Hinge Installation

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CyA all over the covering, no matter how careful I am. I also have glued the control surface to the wing and tail.

Recently, I went back to pinned hinges. These hinges move with much less resistance and are more durable. I cover the hinge with lip balm before installing it with 5-minute epoxy. When the epoxy dries, the excess can easily be removed from around the hinge.

The Great Plane’s Slot Machine is a good investment, and it makes hinge installation much easier. Just hang on tight when you start it or you’ll have a hinge slot where you probably don’t want it.

Finally, after you have a control surface that moves easily and permits adequate throw, don’t forget to seal the gap. It is amazing how much difference this will make in the performance of your aircraft. A roll of clear MonoKote will seal the control surfaces of all the aircraft you have. It also keeps the hinges secure and helps prevent control surface flutter.

(Reprinted from Prop Talk, newsletter of the Riverside Radio Control Club, Riverside, California, Jim Bronowski, Editor.) ☺

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Photo Of The Flightline



Pat Dziuk takes video footage of John Dietz, Jim Ronhovde and Rick Smith on the flightline at the TCRC Winter Fun Fly on Saturday, March 5th. The entire field was covered with ice allowing any form of landing gear on the planes to be used. ☺

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.

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