



November

Minneapolis, Minnesota U.S.A.

2007

## It Was A Beautiful Day For The TCRC Season Finale

by Mike Timmerman

Saturday, October 13th brought another official flying season to an end when TCRC held its Season Finale at the Jordan Field. It was an absolutely beautiful day for the Season Finale. The temperature started out around 45 degrees near 10AM, but it quickly warmed up and approached 70 degrees. There was a slight breeze most of the morning so it was an almost perfect day for flying. It seems that we have been very lucky lately with fantastic weather coinciding with major TCRC events.



Just a few of the many participants enjoying the day at the TCRC Season Finale on October 13<sup>th</sup>. (Photo by Mike Timmerman)

Mike Timmerman was CD for the event this year. The official start time was 10:00 AM but with the good weather it seems that many

wanted to take advantage of it because there were already a half dozen people at the field prior to the start time. The parking lot was full almost all day long. We had 40-50 people show up throughout the day: members, family members and visitors. We even had a former member from 30 years ago show up. He saw the announcement on our web site and decided to come give us a look again.

There were no officially planned activities for the Season Finale other than flying and spending time with family and friends. For most of the day, there were 5-6 planes in the air at the same time. They ranged in size from small electrics to 1/3 scale gas. The only time there were only one or two planes in the air at a time was when Chris O'Connor was running his pattern practice event.

We had two generators so we had plenty of power to run electric appliances. We had a coffee pot going all day along with 3 crock pots of food. The author made two pots of Sheri Timmerman's chili recipe and Gerry Dunne brought a pot a stew. Thanks to Gerry and all the others that brought bars, chips, cookies and other snack items to share. This was definitely not a day to start a diet.

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# The President's Hangar

by Bill Jennings

As most of you already know, I've decided not to run for re-election next year. Since this is the last column I'll have the opportunity to write as president of TCRC, this is probably the last time you'll see the headline above. I'm sure my replacement will come up with an equally unique title to lead into the monthly column. I have mixed feelings as my two-year stint as TCRC president comes to an end. I'm looking forward to having even more free time for flying my models. But, I'm also going to miss the challenges and satisfaction that helping to run an active club provides. However, at the end of two years, I'm ready to turn the position over to someone else. I'm convinced that the first year as a club officer is spent learning the job and getting comfortable in doing it. The second year provides the opportunity to try some new ideas to improve the organization. After two years, someone else should have the opportunity to contribute their skills and ideas to the running of the club.

I'd like to take this opportunity to thank the other officers and board members for their advice, support, and encouragement provided to me during the past two years. One or two individuals do not provide the leadership of this club. It's a responsibility shared

by eight individuals. Working as a team, I think we've managed to enable a great RC club to become even better. I'm now looking forward to seeing the new ideas and improvements the 2008 officers will bring to their jobs and to the club.

We'll be holding our annual TCRC Banquet on Sunday, November 18th, at Dangerfield's Restaurant in Shakopee. Your hosts, Chris O'Connor and I, are planning a fun evening for everyone and are hoping for an attendance equal to last years'. The event will be held in the Atrium, a private room located on the main level just inside the main door of the restaurant. The menu will include a delicious assortment of menu items to make the evening memorable. The cost has been maintained at last year's level. The dress code for the event will be casual again this year. Neckties for the pilots are optional, but since this is a banquet, nicer casual dress is requested. The program will feature an event review, service awards and door prizes, plus a few surprises . . . For those who receive a paper copy of the newsletter, you'll find a reservation form elsewhere in the newsletter. Please, send in your reservation as soon as possible, so that the final headcount can be determined. There will be further information and a reservation form also available on the website.

The next membership meeting on November 13th will be filled with opportunities to exercise your voting rights as a member. Not only will the members elect the club officers for 2008, but also the last of the Bylaw changes will be

presented for discussion and a vote.

Personally, this has been a great year for flying. Thanks to the drought conditions, the field has been available for perhaps a record number of days this year. I've managed to improve my skills as an RC pilot - I've added a few more planes to my hangar - life is good! I hope to see you all at the field during 2008. ☺

## AMA Dues Statements

Every current AMA member should have received his 2008 AMA Renewal Notice in early October.

AMA dues have not changed from 2007. Currently the dues are:

- Adult: \$58.00
- Senior: \$48:00
- Junior: \$ 1:00

To be classified a 'senior' member, you must be over age 65 on or before July 1, 2007.

To pay your 2008 AMA membership dues, you may either return the renewal notice with your payment in the envelope provided, renew online at [modelaircraft.org](http://modelaircraft.org), or by phone at 800-435-9262.

Remember, to be a member of TCRC in 2008 you must be a member of AMA in 2008.

Take the time to pay your 2008 AMA dues today. ☺

## Season Finale

Continued From Page 1

After lunch the flying continued, with some pilots just getting some air time, and some working hard to do the pattern program that Chris had put together. Without a doubt, making the plane do what you wanted it to do when you wanted it to do it at times seemed daunting, but every pilot profited from the experience.

The Grim Reaper made another appearance this year to once again send off those planes that succumbed to an unplanned re-kitting. I don't know what the Reaper is doing to make himself look so young, but whatever it is, it is working. Too bad we can't use some of the same techniques on some of our aviation offerings. There were a number of planes this year that met their maker. There were rumors floating around that the majority of the carcasses were from one pilot. Who ever could that possibly be?

Although this event signals the end of the official flying season, it does not mean the end of flying for the year. Come out and earn your AMA 'all season flyer' patch. It's a lot of fun and the snow adds a whole new dimension to flying.

Thanks again to all of the members, family and friends that came down to the Jordan field to enjoy another TCRC Season Finale. *(Editor's Note: And a very big thank you to Mike Timmerman for CD'ing the affair and assuring that it was a huge success.)* ☺

## A Very Large Contribution To The Grim Reaper



It was a widespread rumor that all of these plans came from one unnamed pilot. (Photo by Mike Timmerman)

## Putting A Plane Thru Its Paces



Chris O'Connor demonstrates the right way to do fly a plane in a pattern contest. (Photo by Mike Timmerman)

# Pictures From TCRC's 2007 Season Finale



**The Grim Reaper showed no mercy to the hapless planes that didn't survive the season.**



**Lunch was relished by adults and children while they enjoyed the Season Finale.**



**Mike Burk had no shortage of planes to fly on the beautiful day during the Season Finale.**



**Tom and Tynan Thunstedt watch Gerry Dunne put his electric plane through the pattern.**

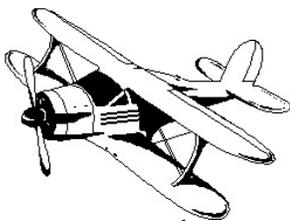


**The parking lot was full and the sky clear.**



**There wasn't a bad seat in the house at the SF.**

# Show & Tell



More neat planes at the October 9<sup>th</sup> TCRC membership meeting.



Wayne Rademacher had his newest plane – an electric Autogyro. This plane was designed by Wayne in a CAD program and he built every part but the blades, which he purchased from Aerobalsa. It was done in a pusher design and powered by a Scorpion 2205 BL motor. He has put three flights on the autogyro and says none could be considered a complete success. The longest flight so far has been about 30 seconds. He has some tilt and hang angles to figure out and then will put more flights on this weekend.

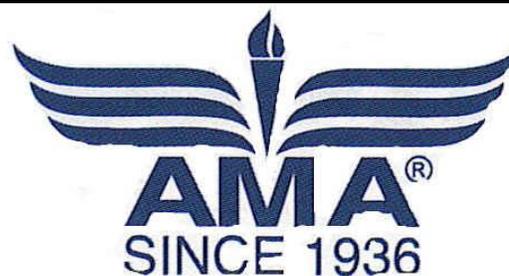
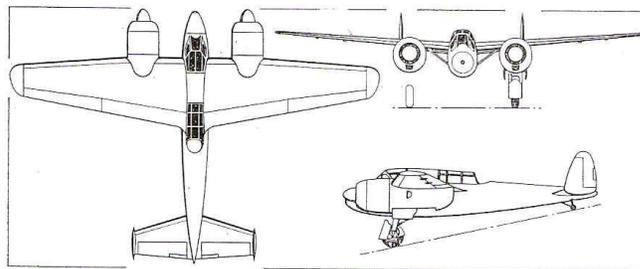


Mark Wolf had a very nice Great Planes Super Decathlon. It was done in traditional red and white with red and white sunrays on the wing. It was powered by a .60 engine and weighed in at 6.5 pounds.



Tom Thunstedt had a Flash 3D electric which was made from deprom foam and powered with an AXI 2212-34 motor. Total weight was 14.5 ounces. Tom got the plans for this plane from 3Dbatix.com. ☺

## November Mystery Plane



**Your 2008 AMA dues are due.  
Have you paid them?**

# From The Co-Pilot's Seat

by Chris O'Connor

Flying season is almost over for some of us, like me. Full speed ahead on building! Some of you will continue flying all winter. I remember learning to fly solo in the winter. We would fly at Bryant Lake, no snowmobiles then, so the surface was smooth and the advantage was I had the whole lake to land on, not just those seemingly small runways. Good luck to all that fly year round.



**Chris O'Connor cuts the Anniversary cake while Bill Jennings and Larry Couture look on. (Photo by Jon Perry)**

We had our 50th anniversary celebration at the last meeting. I think everyone was surprised at the quality of the door prizes, but the best thing was that everyone in attendance received a door prize. So that makes everyone a winner. We had 5 big prizes, including a new 7 channel Spectrum radio, and 4 ARF's. The rest of the prizes were gift certificates to Sky Hobbies ranging from \$15- 50 dollars. Because our 50th anniversary only happens once we wanted the celebration to be special and big. Besides the prizes we had cake and pop. Thanks to all that made it special. The party was also the program for the night. Our next program for the November meeting will be on Scale Detailing – i.e. rivets, panel lines, cockpits, pilots, weathering, etc. Dave Schwantz, noted builder, will share his vast wealth of knowledge on the subject. Many of you know Dave from Sky Hobbies. He is always willing to answer any question that you may have. Dave has done numerous programs for TCRC, so you know the quality and expertise he brings with. In advance I would like to thank Dave for doing this month's

program and the help he has given me with past programs. THANKS DAVE!

Our Season Finale/ Pattern Practice day was a wonderful success. The weather was perfect that day. Thanks to all that participated in the pattern practice. We had about 10 flyers try the pattern that day. As in the past the maneuvers were chosen so any plane could do them. Probably the most difficult thing that I heard was not the maneuver, but the centering, the altitude control, and maintaining the correct heading of each maneuver. I think everyone had fun and the comment of "I practice a couple of these each time I fly" will ultimately make you a better flyer. As I have said in the past, the purpose of these pattern days is to help you learn to make your plane do what you want, instead of you just reacting to what that plane is doing. Congrats to all that gave it a try this year, keep up the good work, it does make a difference. We will do it again next season.

Just a couple of reminders. First our November meeting is also election night, so come and participate. Second, if anyone is interested in scale, The Minnesota Scale Flyers will be having their meetings starting on October 26 and continuing through March. They meet the last Friday of each month at 7 pm at the Richfield American Legion on 67th and Portland. The fun thing about that meeting is that it's all programs and show and tell. For the people interested in electrics, MARCEE does flying during the winter at the Metrodome. I'm not sure of the schedule, but I'm sure Jerry Dunne or Jim Cook will have the info.

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## Vote In The AMA Elections

Every AMA member should have received an official ballot in the mail in October for the AMA National Elections.

In 2007, we will be electing a new president of the AMA. Current president Dave Brown is not running for re-election. We have only had two presidents of AMA in the last 20 years, so this is a very momentous occasion.

In addition to the office of president, three District VP's are up for election – Districts I, V and IX. We are in District VII, so will not vote for any of these candidates.

Three candidates are running for AMA president. They are:

- Rich Hanson
- Dave Mathewson
- Bill Oberdieck

The campaign statements for these candidates can be seen in the October issue of Model Aviation, and also at the AMA website, modelaircraft.org.

Bill Oberdieck is our current District VII VP, and has done a very nice job in that position over the past several years.

Please take the time to learn about the three presidential candidates and vote for your choice. We have a great national association in AMA, and your vote is important to keep it great. ☺

## Metrodome Flying Starts Early

MARCEE has again scheduled flying dates in the Metrodome for small electric airplanes. In the past, flying started in December, but this year they also have dates in October and November.

To fly in the Metrodome, you must be a member of MARCEE, or a guest of a member. In addition you must have a valid AMA membership card.

The 20/20 rule applies when you fly in the Dome. This means your electric airplane must weigh 20 ounces or less and fly no faster than 20 mph.

Cost to fly is only \$5 if you are a MARCEE member.

The November Metrodome flying dates are:

Monday, Nov. 5, 3-5 PM  
 Tuesday, Nov. 6 3-5 PM  
 Tuesday, Nov. 13, 12-5 PM  
 Monday, Nov. 19, 8 AM-5 PM  
 Tuesday, Nov. 20, 8 AM-5 PM  
 Monday, Nov. 26, 8 AM-5 PM  
 Wed., Nov. 28, 8 AM-5 PM

Flying in the Metrodome is a great experience. Hopefully we will see you there this year. ☺

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

## From The Co- Pilot's Seat

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Well, this is my last article as VP, so I want to thank everyone that helped me the past 2 years on programs and also thanks to the members for attending. I hope you enjoyed all the programs and maybe learned something new, I know I did.

Thanks and remember bigger flies better. ☺

## Calendar

Nov. 13	TCRC Membership Meeting, 7:00 PM Fellowship Hall CrossPoint Church Bloomington
Nov. 13	TCRC Elections
Nov. 18	TCRC Banquet Dangerfield's Restaurant, 5:00 PM
Nov. 27	TCRC Joint Board of Directors Meeting
Dec. 11	TCRC Membership Meeting, 7:00 PM Fellowship Hall CrossPoint Church Bloomington

**Building Season If  
Officially Here!**

## SAFETY AT THE FIELD

by Larry Couture

Well here we are the season finally is over and as of today it appears the flooding is off the field. The last official flying event – the Season Finale -- is over and only one or two things came to my attention and I will mention them very briefly.

The first one was there was a take off when someone was on the field. Now I know that the people on the field were on one end and the take-off was on the other but the rules state no take-offs or landings should take place when people are on the field, so please let's be more careful in the future.

The second one was a take-off was being done at the same time a landing was in progress, but again the rules state that landings take precedence over take-offs. Now nothing happened but it sure could have, so again let's all be more aware of what is going on at all

times. In spite of all this a good time was had by all, and the food was great! So thanks to all those that helped out or brought something.

I sure had a great time this year as was in evidence of all the airplanes I donated to the grim reaper (kept the fire going for a long time). This also keeps the 'ARF guy' busy.

For those of you who knew I had my surgery on Friday and now this is Saturday, and all went fine and good and I'll be like new shortly if that is possible for an old guy.

As usual all landings from which you can fly again are great but not always graceful so keep the rubber side down. ☺



## TCRC Banquet November 18th

It's hard to believe but the TCRC Banquet has arrived. The year has flown by.

The Banquet will again be held at Dangerfield's Restaurant in Shakopee. It is on Sunday, November 18<sup>th</sup> and start time is 5:00 PM for social hour and 6:00 PM for dinner.

Dangerfield's always serves up a great buffet and this year will be no exception. Great hors d'oeuvres, entrees, side dishes and, of course, dessert. The price this year will be the same as last -- \$25 per person.

As is tradition, president Bill and VP Chris are the official chairs for the banquet, and they have put together a great program following the feast.

Included in this newsletter is a registration form. Fill it out now and be a part of the 2007 TCRC banquet. See you there. ☺



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# Soldering To Cells

By C. L. Scholefield

Soldering to Ni-Cds is not a good idea. Try to use the welded tabs and solder to those if at all possible. Soldering to the positive button will have a very high probability of destroying the nylon seal. You just can't get the button hot enough to get a good solder joint without compromising the integrity of the nylon seal ring. This ring is under compression and raising its temperature will allow it to relax and the sealing properties are history.

If you can hold a penny between two fingers long enough to get a good solder joint with #18 stranded wire or braid, then go ahead and solder to your cells, otherwise get cells with solder tabs. Remember that nylon is a good insulator, electrical and thermal. There is no thermal path for the soldering heat to dissipate when heat is applied to the cover button of a cell.

I realize this flies in the face of all the electric flight 'experts' that assemble their own packs but it is nevertheless fact. You have never seen a pack assembled by a cell manufacturer or any other pack manufacturer (outside of the hobby market) where connections are soldered directly to a cell. There is a reason.

The *Sanyo Cadnica Sealed Type Nickel Cadmium Batteries Engineering Handbook* states the following:

Section 10 General Remarks and Precautions - 5 Safety Instructions (page 48)

"Never solder a lead wire directly to Cadnica battery terminals. Soldering heat may damage the safety vent in the positive cap. After a terminal plate is spot-welded on the battery terminal, solder a lead wire on it."

*Sanyo Twicell Sanyo Nickel-Metal Hydride Rechargeable Batteries Engineering Handbook*  
Section 5 Important Cautions for Handling Batteries 5-3-3 - Do Not Misuse Batteries

"Never solder a lead wire or plate directly to Twicell batteries. The heat generated by the soldering may melt the insulation, damage the gas release vents or protective devices, cause leakage of battery fluid, heat generation, bursting or fire."

*General Electric Nickel Cadmium Battery Application Manual*

"Never solder directly to the nickel-cadmium cells, only to solder tabs or wire leads. A hot soldering iron placed directly on the cell is likely to cause seal ring and vent seal damage as well as damage to the separator systems."

First let me say that I am not on a crusade to stop the modeling world from soldering directly to cells in construction of packs. All that I'm trying to do is to alert modelers that there are some caveats they should consider in making the decision to solder or not. In the electric propulsion application and particularly on the competitive side, the reduction of

pack resistance plays a key role in obtaining maximum performance. Direct soldering has been found as one means to achieve this. Soldering directly to cells that are destined for flight control operation is not justified and can compromise the reliability of the packs. These packs are frequently hidden away in the plane and are not frequently available for inspection for any leakage and corrosion that may have resulted from damage to seals/vents from direct soldering that can compromise the reliability of the control system. The risk (safety-wise) of soldering directly to cells is minimal but quite dramatic on the rare occasion that it does surface. There are probably more 'incidents' resulting from abusive charge regimes than from actually soldering. Of course the question always comes up, "Was the soldering contributory to the ultimate cell burst?"

As far as warnings on the product as sold through hobby channels one has to consider that no cell manufacture sells directly to the public. Sales are through one or more levels of distribution, original equipment manufacturer or pack assembler. It is the responsibility of the cell manufacturer to inform the OEM or pack assembler of possible hazards in assembly. This is done quite adequately in the engineering handbooks made available by the cell manufacturer. If the OEM or pack assembler chooses to ignore them, or passes cells on to the end user without informing him, that becomes his responsibility. Fortunately the hobby market is infinitesimal compared to the overall market for batteries. This

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## Why TCRC Is Special To Me

I joined TCRC by invitation from a long-time member, Bruce Anthony. After having been away from modeling from the early 40's to the late 70's, I was intrigued by the new RC world. From the outset, TCRC provided me with all kinds of help from everyone. Of particular importance was the active, vital club that covered virtually every aspect of RC, from pattern to sport flying, and a very busy schedule of many activities.

There was something for everyone whether novice or the most experienced, club officers, only field clean up, or any number of things. I have seen fields come and go, the demise of designing, scratch-building, kits, to ARF's, and now electrics. I've met many friends, some of which are gone but not forgotten, and belonged to other clubs, but none match TCRC, with its variety of meetings, auctions, banquets, field maintenance, etc. Our club newsletter, the Flare Out, is outstanding, the Walt Billett award is unique to our club, and the fun flies, float flies, etc. are ongoing activities. Too much!

Now in our 50<sup>th</sup> year, we remain a premier club. To sum up, a club that everyone can point to with pride, and satisfaction. I personally want to hereby acknowledge two guys that have helped me so much – Jim Ronhovde and Stan Erickson. Some RNTF people just need constant prodding. J & S, way to go. That is why TCRC is so special to me!!

-- Conrad Naegele ☺

## Soldering To Cells

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makes risk exposure equally infinitesimal to the cell manufacturer and they are further insulated by one or more layers of distribution. This is not to say that the cell manufacturer cannot be held responsible. In several cases I have been involved in as an expert witness the cell manufacturer has been able to show due diligence in conveying information to the OEM or pack assembler so that they were not held liable for misapplication of the product by the end user. This 'minimal risk exposure' is probably the only

reason why a major industrial manufacturer (like Futaba/OS) even messes with the hobby - can you think of anything more dangerous than a model engine with an exposed APC prop? It just tells you how insignificant this hobby is in the overall scheme of product liability.

Bottom line: Soldering directly to cells is not recommended. Do it understanding the risks and possible trade off to performance, safety and reliability.

I hope this is the end of this discussion (for now).

*(Reprinted from Servo Chatter, newsletter of the Anoka County RC Club, Coon Rapids, Minnesota, Stan Zdon, Editor.)* ☺

## Some Really Nice Prizes At The 50<sup>th</sup> Anniversary Party



Chris O'Connor and door prizes that were awarded at the gala anniversary party. (Photo by Jon Perry)

# Candidates For TCRC Election

by John Dietz

The TCRC nominating committee -- Scott Johnson, Chris O'Connor and John Dietz -- for the selection of the 2008 TCRC Officers and Board Members, has been at work for the last couple of months.

As of the moment there are six positions open for your voting pleasure. They consist of: President, Vice President, Secretary, Treasurer, and two Board members.

Currently there are three nominees for the two Board seats. Those candidates are Chris O'Connor, Bill Jennings, and incumbent Jim Ronhovde.

For Vice President, Steve Meyer is running unopposed.

Secretary has two candidates, Jon Perry and incumbent Al Boucher.

Treasurer has incumbent Mike Burk running unopposed.

As you can see, the position of President still needs an interested volunteer or two.

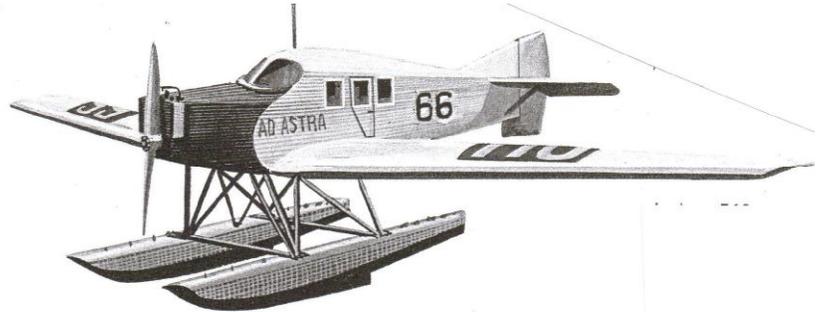
Long time club members and past presidents Scott Anderson and Jim Miller have tentatively offered to run again, but both are encouraging some 'new blood' to run for the position of president.

With the election set to take place at the November 13th club meeting, please consider running for any one of the six open positions. Contact

# Junkers F -13

by Conrad Naegele

The October Mystery Plane was the German Junkers F-13.



From its single-seat fighter and 2-seat scout fighter of 1918, both all metal monoplanes that saw limited service in WWI, Junkers developed Europe's single most important transport of the 1920's and 1930's. This was the classic F-13 low-wing monoplane with a single nose-mounted engine, and a fixed tail wheel gear. This used the metal construction patented by Dr. Hugo Junkers in 1910, and employed a thick-section cantilever monoplane wing.

The F-13 first flew in June 1919, and was based on 9 spars braced with welded dura-aluminum tubes and covered in stream-wise corrugated skinning, to create an immensely strong and durable structure. The plane had an open cockpit and an enclosed cabin for 4 passengers. Although re-engined many times, the first was a 160 horsepower Mercedes inline. Production continued until 1932, with about 350 aircraft being produced.

The main operator was Junkers luftverkehr and in the period between 1921 and 1926 flew about 9,300,000 miles and carried nearly 282,000 passengers in almost all parts of the globe. F-13's were used by civil and military operators, mainly because of the fact that the plane was immensely strong, needed little maintenance, and could operate easily from wheels, skis or floats. This made the plane especially popular in remote parts of the world.

In review, think of carrying nearly 10 million passengers at the rate of 3 or 4 or 5 at a time!

The F-13 had a wingspan of 47 feet, a gross weight of 3,638 pounds, a speed of 140 miles per hour and a range of 450 miles. ☺

Scott, Chris, or John if you need encouragement, or step up and volunteer before the election at the November 13 meeting. Being an officer or board member is very rewarding. ☺

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## The Last Activity Before Snow?



40 to 50 people made it to the 2007 TCRC Season Finale and enjoyed what might be one of the last flying days before the snow flies. But not to worry, just get your skis on a plane and pray for the snow! ☺

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

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