



March

Minneapolis, Minnesota U.S.A.

2007

31st Annual TCRC Auction Draws Lots Of Praise

by Jim Cook

Judging by all of the very positive comments received, TCRC's 31st Annual Auction was a great success. The club received comments on how well organized each department was, how quickly we moved all of the items over the auction block, that we got very fair prices for the items sold, and that we provided a very enjoyable atmosphere for the event.



Jay Bickford keeps track of the bidding on a pretty nice plane during the TCRC Auction. (Photo by Jim Cook)

The comments about the fair price being received for each item sold was reinforced by the fact that the club only had 2 'buybacks' out of the 402 items that came up for bid. It is believed this is the lowest number of buybacks the auction has experienced.

The club turned out in good numbers such that every area had adequate manpower for the duration of the event. A very big thank you to the members that showed up and made the auction the big success it was.

Kathy Dietz chaired the concessions again this year. Her kitchen staff were: Kiera Dunne, Rachael Smith, Janice Ronhovde, Bobbi Jo Dziuk, Carmen Smith, Sherri Timmerman and Kathy Dietz. The coffee pot was perking and donuts were available early as the basement of St. Patrick's Church was set-up for registration and check in. As the day wore on, pop, cookies, hot dogs, chips etc. were on the menu and the concession crew just about sold out by the time the last item went on the auction block. When the dust had settled, the concessions had netted the club \$803! Great job ladies!

By 8:00 AM the lines to check-in items to be sold and to enter as a bidder or spectator had grown and stayed full for the next hour and a half. About 40 sellers had pre-registered their items on the website and this really helped the item check-in process.

Gerry Dunne and son Gerry were hard at work hawking raffle tickets.

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The President's Hangar

by Bill Jennings

I always look forward to flipping my calendar ahead to the March page. This annual ritual indicates that winter should be ending in another four or five weeks. Until recently, I was beginning to think that the flooding at the field this year might be minimal during the spring thaw. However, it appears that Mother Nature may be trying to catch up for the lack of snow earlier in the season. As always, we'll just have to be patient and see what develops. I'll be making arrangements for the use of our alternate flying field at the Scott County Fairgrounds fairly soon, just in case...

Another successful Annual Auction has just been completed, and I wish to thank all the members who participated in the event. The large number of volunteers not only enabled the auction to run smoothly, but also allowed everyone a chance to take some breaks during the day and bid on a few items. Four attendees actually took the time to compliment the club's efficient handling of the event. The profit from all of the areas – admissions, sales, raffle, and concessions – came close to setting a record. Job well done!



**The crowd filled just about every available chair at the TCRC Auction.
(Photo by Jim Cook)**

The Winter Fun Fly is only a few days away, and I'm looking forward to trying out some new skis on my Viper 500 speedster. With all of the snow we've received recently, the field should be in a perfect condition for winter flying. The forecast is for a temperature of around 30 degrees; with some gentle breezes, the flying conditions should be ideal. There will be plenty of hot dogs, brats, and chili available, along with the usual potato chips and pop to keep the pilots fueled up for flying. If you haven't yet tried flying with skis off of snow, this would be a great opportunity. There's still time to visit your local hobby store to purchase a set of skis to try out this year...

Those of us who fly during the winter know how damaging a single trail of footprints across the snow can be to the runway areas... I may have a solution: Do any members own a pair of snowshoes? If you're planning to attend the Fun Fly, bring them along with you. They may be the ideal method for retrieving planes that can't be taxied back to the pit area after a flight. At the very least, the tracks left behind won't create the deep "pot-holes" that snag the skis on our planes.

It's not too early to start thinking about volunteering to help out with the field mowing chores this year. I think many members take it for granted that the field is always in prime condition when they show up to fly. The grassy areas at the flying field grow at about the same rate as the lawn around your home. Our manicured flying field is made possible only through the efforts of a dedicated mowing crew that takes turns at maintaining the close to 25 acres of our total land area that we use for flying. It would be great to be able to add a few additional names to the mowing crew roster this year. The club owns two well-maintained tractors that are actually *fun* to operate. If you're interested, we'll show you how to operate them safely at the Field Cleanup Day, scheduled for May 5th. The mowing schedule, which is put together during the month of April, runs from May through early October. A volunteer signup sheet will be passed around at the March and April meetings, or you may contact me directly at president@tcronline.com for more details.

Correction: I inadvertently omitted Jon Perry's name last month from the list of members who helped with the most recent brush-burning project at the field. Jon is a frequent volunteer for our various club projects, and I regret the error. I hope to see you with your skis (or maybe snowshoes) at the field this Saturday! ☺

TCRC Auction

Continued From Page 1

They had some really great prizes and the tickets were selling pretty easily. Gerry said that the club had done a great job of selling the \$15 of tickets each member had received and that was a huge key to the success of the raffle. The 2007 winners were: Bruce Plante, Matt Smith, Jim Cook, Carl Rubner, Tim Engel and Roger Johnson. Gerry said gross sales ended at \$1,031 and net profit to the club was \$581, which was even higher than last year. A special thanks to all of the TCRC members that sold their tickets and supported the raffle.

Jeremy Steinmueller and crew again set up a booth and sold new items from their newly-named Sky Hobbies store (Hobby Warehouse). Jeremy made a nice contribution to the club again for this opportunity.

At precisely 10:00 AM, the first item, a very nice Big Stik 60, went on the auction block as auctioneer Scott Anderson geared up for a long day. From that point on, until almost 5:00 PM, Scott, Jim Cook and Jay Bickford kept the action fast and furious, as they sold 402 items to a crowd of 220 buyers over a period of 420 minutes. That worked out to be one item every 63 seconds!

The 'sales registration' crew were kept busy recording the sales activity, and obviously did a great job as the sellers books and buyers books and the cashier's receipts all agreed at the end of the day. Gross auction sales receipts exceeded those of 2006, and net receipts from those sales were \$3,214.

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The Ladies Made Selling Concessions Seem Easy



Bobbi Jo Dziuk, Kiera Dunne, Carmen Smith, Rachael Smith, Sherri Timmerman and Kathy Dietz were only part of the Concessions crew. (Photo by Jim Cook)

This Is The Only Break The Impound Guys Got



Once the action started there was no rest for this group as they took planes to and from the auction block. (Photo by Jim Cook)

Pictures From TCRC's 31st Annual Auction



The impound area was full of some really sharp planes just waiting for a new home.



Gerry Dunne and his hard working son Gerry Jr. made the raffle a big success.



Scott Anderson, Allan Boucher and Jay Bickford really look the part as an auctioneer's crew.



Jim Ronhovde, Morgan Larson and Orv Schneewind recorded all of the auction action.

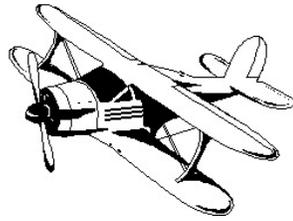


Sky Hobbies had a table at the auction.



The clean-up crew did a great job!

Show & Tell



Neat stuff just keeps on showing up at the membership meetings during Show & Tell.



Corey Kaderlik had his first ARF ever – a Carl Goldberg Eaglet. The plane was nice looking, done in white Monokote with blue trim. It was powered by a new OS LA40. Corey said he like the LA because of the remote needle valve it comes with. He was hopeful that he was going to put lots of flights on the Eaglet and become a proficient pilot. Possibly the maiden flight will be at the Winter Fun Fly on March 3rd.



Mike Burk had a really neat electric motor test stand that he designed and built. The motor would easily attach to a probe that would measure ounces of thrust

the motor put out. He also had a built in watt meter to measure current draw, and a tachometer for rpm. He even had a temperature sensor to measure how hot the motor would get. Mike said it was great to determine what prop to use on an electric plane. Some things he has already learned from the stand are: If an APC prop and another brand of prop has the same specification, the APC will always be better; Diameter is the most important factor in developing static thrust. Since Mike flies a lot of 3D electrics, he was asked what thrust to weight ratio was needed to give a 3D plane adequate performance. He said a 20 ounce plane should have at least a 40 ounce thrust.



Chris had the fuse of his giant-scale P-51 he is building at the meeting. He said he wasn't there to show the plane, but rather an easy way he has learned to determine the exact placement of needle valve holes, exhaust holes, etc. in a cowl. The method was easy for Chris to demonstrate but is hard to put into easy words. See Chris if you missed the demo. ☺

TCRC Auction

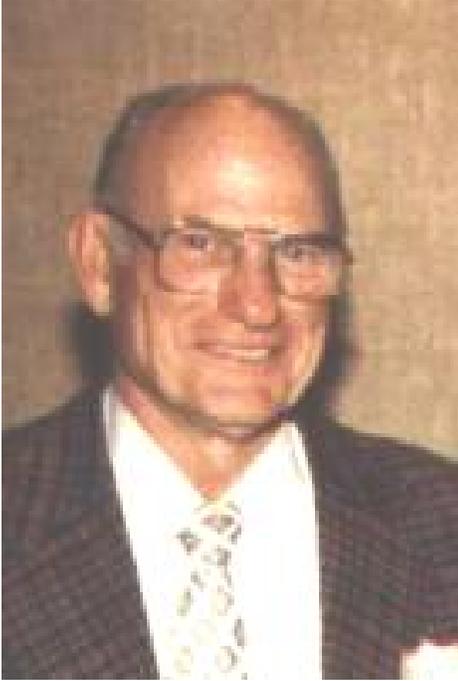
Continued From Page 3

The clean-up crew hit the floors running as the cashiers and bookkeepers checked the buyers out. At 6:00 PM as everyone was leaving, the kitchen and activity rooms looked clean and neat.

Treasurer Mike Burk reported at the February 13th meeting, that proceeds from admissions, concessions, raffle and auction sales gave TCRC a net profit of \$4,900! A huge thank you goes out to every member and spouse that worked so hard to make the 31st Annual TCRC Auction another great success! ☺

Bruce Anthony

Long-time TCRC member Bruce Anthony passed away on February 7th.



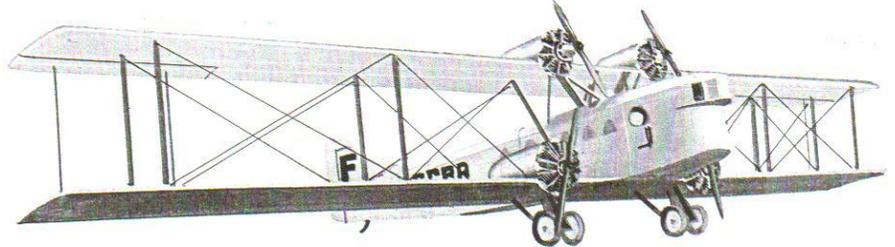
Bruce was a member of TCRC in the early years and was very active in the club, having served as president and most every other officer position over his 41 years as a member. Bruce acted as historian for the club in those initial years and had several photo albums of the flyers and the events that the club put on in the 60's and 70's. He was also a staunch guardian of the club's bylaws, and would remind the newer members of proper parliamentary procedure necessary to make any changes to the structure and operation of the club.

Bruce was very interested in pattern flying and was an expert flyer. TCRC held many pattern contests over the years up through the early 80's, and Bruce was there as an organizer and as a participant.

Bleriot 135

by Conrad Naegele

The February Mystery Plane was Bleriot 135.



The mid 20's were great times for airplane designers and builders. Some good and some bad. Among the good were the Dorniers and Fokkers, Bellancas and a host of American Planes. The Bleriot was a preview of what was to come, a sort of transition plane.

The Bleriot 135 was, most everyone would agree, one ugly airplane! The predecessor, the model 115, flew in 1923, and was not a success, but most of its ideas were useable for the 135. As for many contemporary planes it utilized a mixture of 'rag and tube', and the more modern stressed-metal skins. This 'aluminum' skinning was relied on more and more.

The 135 was used as a passenger plane, carrying 10 to 17 passengers on the popular Paris to London route, and then all over the continent proper. It was quickly obsolescent and soon phased out. The Bleriot-Spad Company was very much a leading company in the first 40 years of the 20th century however.

The civil transport plane had a wingspan of 82 feet, a gross weight of 12,125 pounds, a speed of 83 mph and a range of 370 miles. It was powered by 4 Salmsen 9-cylinder radial engines that each developed 230 horsepower. ☺

Most of the club members can name his two favorite airplanes – a red & yellow Waco Bipe that Bruce could really put through its paces and a brown Sheithe. The Sheithe was a swept-wing pattern plane that Bruce designed, based on the Taurus that was very popular in the 60's. He competed in many pattern contests over the years with modified versions of this plane.

All of the members of TCRC offer Bruce's wife Shirley and her family our deepest sympathies. Bruce loved the hobby of RC flying and he gave a lot to the sport. He will be missed greatly. ☺

From The Co-Pilot's Seat

by Chris O-Connor

I don't know about you, but this winter is going by very fast. We are well into our kit building workshops and also our workshop tours. We have two (2) shop tours scheduled for the month of March. The first one is on March 10 at Allan Boucher's shop and our second tour is on March 24 at Morgan Larson's shop. We still have openings for two more the month of April. Please open up your shop -- it's fun and we all get ideas for our own shops. Our last two shop tours were at Scott Johnson's shop and at my shop. Thanks to everyone that participated.

At the last kit building workshop on fuselages, I talked about a product for fuel proofing your engine and tank areas. The product is Smith's penetrating epoxy. I have used it on boat restoration and also on my planes. The CPES (clear penetrating epoxy sealer) has the consistency of water and was designed to penetrate well below the surface of the wood and seal it without any increase in weight. The product can be purchased from Classic Boat Connection in Mankato. They sell it for \$33.25 for a 2-pint kit. Two or three people could use one kit. This epoxy soaks in better than thin CA glue. Try it, you will like it.

Hopefully everyone is progressing well on his new winter project. Let's see how many we can have for the building contest in May.



A big thanks goes to Dave Schwantz for his second program at our last meeting on the ABC's of turbines and anything related to jets. Dave had two beautiful jets at the meeting, one was even an ARF, from Composite ARF Company. As an added bonus Dave even started one of his turbines in the parking lot. So simple and quick to do. Everything is self-contained. What an awesome sound! Thanks very much Dave. Dave works part-time at Sky Hobbies and can give all the info you need to start in jets.

Our next program for our March 13 meeting will be on electrics. Bob Savre is back for his second installment on the ins and outs of electric modeling. Don't miss this one, Bob is an expert at everything electric.

Just a reminder that the big Toledo Expo is coming next month on April 13-15. If you have never gone, it's well worth the time to see. There is nothing that exists in this hobby that can't be seen at Toledo. Several members are planning on going -- check the Forum at TCRConline.com if you are looking to go with somebody.

We'll see you at the next meeting, or at one of the Kit Building Workshops, or at one of the Shop Tours, or maybe at the field. ☺

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.

Dave Schwantz explained the workings of his turbines in two of his beautiful jets at the February meeting. (Photo by Jim Cook)

Do You Know This TCRC Member?



See page 9 for the answer. ☺

Have You Renewed Your TCRC Dues?

by Pat Dziuk

It's past time to renew your TCRC dues. Regular membership dues are:

- Regular \$75.00
- Junior \$37.50
- Social \$30.00

The 2007 TCRC Roster is being printed the 2nd week of March, and if you haven't renewed by then you won't be listed in the roster.

Remember you need to include a copy of your AMA card with your renewal.

Contact treasurer Mike Burk and pay your 2007 TCRC dues today! ☺

A History Of The Glow Plug

by Charlie Riech

Shortly after the war a person named Ed Chamberlin formulated and developed a potent new model engine fuel called 'Liquid Dynamite'. The fuel testing was done using the Bantam .19 engine. During the test Ed and Ben shut the ignition off, and much to their amazement, the engine kept running. Quickly removing the spark plug they realized that the ground electrode had broken off and the center electrode was glowing red-hot, which allowed the engine to continue to run using the new hot fuel.

Ben, ever the engineer, experimented and wound small ni-chrome wire elements to replace the center electrode therein making an early prototype glow plug; however the ni-chrome material didn't prove successful and burned out very quickly.

During this same time period, Ray Arden was also experimenting with the same Liquid Dynamite fuel on his Arden 19. Ed Chamberlin excitedly advised Ray of his and Ben's discovery. Ray experimented further and discovered that an alloy of platinum and iridium wire provided a superior catalyst for methanol and the modern glow plug was officially born.

Ben Shereshaw made a manufacturing agreement with Ray Arden and Ben thereafter produced millions of glow plugs

under the brand name of XL for the OK-Herkimer Company in his Miniature Motors factory. Arden manufactured his own glow plugs for a short time until selling his rights to Ben Shereshaw.

Shortly afterwards, O.K of Herkimer, NY also started making glow plugs, and not far behind them, Champion jumped on the bandwagon by introducing their glow plugs in three sizes. To my recollection, the first engine to be manufactured specifically for glow (without ignition) was the O.K. Cub .049, a great running little engine.

Comment from Dennis Ford:

The O.K. Cub .049B was my very first model airplane engine. In July 1956 I mounted it in a Berkley 1/2A Privateer. I (filled) the attached metal gas tank and happily hand launched it into the blue. The Privateer flew great. And it flew and flew. It flew away! I never saw it again. I am still mad about it, 50 years later.

(Reprinted from the Duluth/Superior R/C Newsletter, Knife River, Minnesota, Joan Johnson, Editor.) ☺

For Sale

New in box. **1/3-scale Piper Super Cub** from Balsa USA, complete including new Robart scale-landing gear for the Cub. This kit is very scale and very complete. New, the total is \$800.00, I will sell for \$600.00. That's less than the kit alone.

Call Chris O'Connor, 952-473-5210. ☺

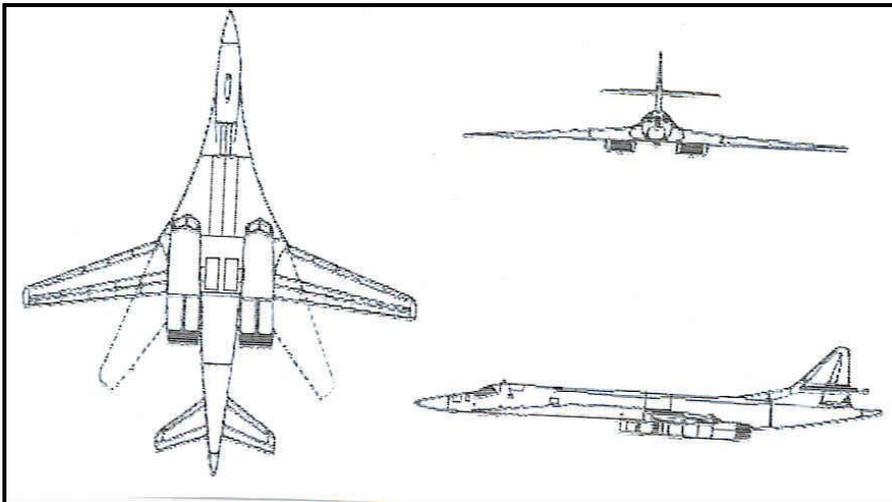
Do You Know This TCRC Member?

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The Mystery Member picture from page 8 was Bob Swenson. Above is a 2001 photo of Bob with a plane of his own design. The photo on page 8 was Bob in the late 70's after he won a TCRC contest with another of his planes of his own design. ☺

March Mystery Plane



Calendar

- Mar. 3 **Winter Fun Fly**
Jordan Field
Bill Jennings

- Mar. 10 **Kit Building**
Workshop
9:00 AM, CrossPoint

- Mar. 10 **Shop Tour, 2:00 PM**
Allan Boucher

- Mar. 13 **TCRC Membership**
Meeting, 7:00 PM
Fellowship Hall
CrossPoint Church
Bloomington

- Mar. 24 **Kit Building**
Workshop
9:00 AM, CrossPoint

- Mar. 24 **Shop Tour, 2:00 PM**
Morgan Larson

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

- Apr. 14 **Kit Building**
Workshop
9:00 AM, CrossPoint

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

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

**The Programs At
The Meetings Are
Fantastic!**

Snowbird's New Electric



TCRC member Larry Edelman leaves Minnesota's snowy winters for the more hospitable climate of Florida. He keeps quite active flying however. Here he is with his new electric RC plane – a Mini-Pulse, powered by a 480 outrunner motor. It had its maiden flight on February 21st and Larry was pleased with its performance. ☺

Excitement At The Meeting!



Dave Schwantz fires up his turbine jet in the parking lot after the February 13th meeting. What a beautiful sound! (Photo by Jim Cook)

2007 TCRC Roster To Be Printed

Pat Dziuk and Mike Timmerman will be publishing the 2007 edition of the TCRC Roster in March.

Every TCRC member should review his information that is in the 2006 Roster (look in the printed copy or in the 'members only' section of TCRCOnline.com and get any changes you have to Pat or Mike right away. Email changes to pdziuk@gmail.com

Remember, if you haven't renewed your 2007 TCRC dues, you will not be in the 2007 Roster.

Deadline for getting your changes to Pat or Mike is March 15th. ☺

Winter Fun Fly March 3rd

TCRC's Winter Fun Fly is scheduled for Saturday, March 3rd at the Jordan Field, and chair for the event, Bill Jennings has gone out on a limb and actually promised that there will be plenty of snow for the use of skis. (That promise is helped by the fact that as this article is typed on the last day of February, Shakopee is receiving about 10 inches of snow, on top of the 10 inches of snow that arrived two days ago!)

Start time is 11:00 AM and Bill is serving a bill of fare that includes hotdogs, brats and chili for lunch.

So get your plane tuned up, put the skis on, and head for Jordan on March 3rd for the Winter Fun Fly. ☺

Windy Weather Flying

by Clay Ramskill

All too often, on an otherwise nice but windy day, folks just don't fly. Obviously, for a beginner, that's common sense – but for someone who has some experience, the wind can be a challenge that adds some spice to flying.

While it's easy to see that experience level has a lot to do with how much wind is too much, it may not be quite as apparent that the type of model can have a great effect on your ability to handle the winds.

Let's go through some airplane design features to see which ones give us the best flying characteristics to handle winds and the resulting turbulence:

Size: In general, the larger the airplane, the better it will handle winds of all kinds; large models don't 'Hop around' as much!

Dihedral: The more dihedral in a model's wings, the more they are going to be affected by crosswind gusts; it is hard to keep the wings level, therefore lineup to the runway is difficult in a crosswind situation.

Wing Loading: The higher the wing loading, the less an airplane will be affected when hit with a gust.

Aspect Ratio: Lower aspect ratio (stubby) wings will be less bothered by gusts; there is less leverage for side forces to upset the airplane, and lower aspect ratio wings have a greater tolerance to changes in angle of attack caused by gusts.

Power: Having the power to overcome the force of wind is necessary. The same thing goes when you get into a sticky situation.

Lateral Control: Ailerons are beneficial in a crosswind landing and takeoff phases. The ability to dip a wing into a cross-wind without changing heading is essential, as is the ability to rudder the airplane parallel to the runway heading while keeping wings level with aileron while landing. Landing Gear: Models with tricycle landing gear are easier to land and take off in a crosswind than tail draggers; in addition, the wider the spread on the main gear, the better.

Maneuverability: This one is a bit harder to quantify. You want a model with stability, yet you do need good maneuverability to cope with gusts. Therefore, you want a model that is stable, yet responsive.

Wing Mounting: Generally, a low-wing airplane will handle crosswinds better. This is because the center of gravity of the airplane is nearer, in a vertical sense, to the aerodynamic center of the wing. Therefore, a side gust does not roll the model as easily. Moreover, by mounting the main landing gear on that low-wing model, they can be spread wider.

It's unfortunate that almost every item above is in direct opposition to the characteristics found in many popular trainers. The main exception is the requirement for tricycle landing gear. But even with trainers, there are differences. Compare a Senorita with the Kadet Mk2. While the Senorita may be a bit slower and a bit easier to fly, the Kadet, with its ailerons, higher wing loading, lower aspect ratio, and lower dihedral, is a far better airplane when flying in windy conditions. Going a step further with the same kit manufacturer, the Kougar (.40)/Kobra (.60 size) kits embody all the right characteristics for windy flying. In closing, I offer Confucius' only known saying about RC flying: "To learn to fly in wind, one must fly in wind!"

(Reprinted from the newsletter of the Middle Point RC Flyers, Murfreesboro, Tennessee.) ©



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Another Neat Workshop!



Mike Bellefeuille checks out the controls on an antique radio at Chris O'Connor's recent workshop tour. Pictured (l to r) are Chris, Dave Kurschner, and Mike. Also present were Bill Jennings and Scott Johnson. ☺

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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