

TriState Helicopter Club



TRI-STATE HELICOPTER CLUB

The Collective Pitch

From The President's Desk

It's hard for me to believe that March has come and gone. I've been hard at work trying to get my Agusta ready for paint and the MegaStar 2000 completed.

Attendance at last months meeting was excellent as usual. I figure that you guys must becoming for the pizza and the great comraderie that we all share.

The weather has been great so take advantage of it and join us behind Slim's on Saturday and Sunday to fly, this the best time of the year.

At this months meeting I would like to talk about a bulk fuel purchase, this would be a case type purchase from Morgan fuels, they offer 12.5% and 30% heli

blends. I hope this would be of interest to the membership!

Toledo has come and gone for another year, we'll have a full report on all the must have cool chopper stuff!! Did you order your new Caliber yet, John?

I'm looking forward to a full report on the Bama funfly from Milt Bridges, I was great to see Milt become active in our club, I'm not sure his wife feels the same, last I heard Milt is practicing his switchless inverted.

This presidential stuff is tough work! See you at the meeting!!!

Bob Belluomini.

PHOTO's to Inspire...



RCS Airwolf : Schluter Champion Mechanics,
Pilot: John Anast (circa 1990)

AMA Chartered Club #3373

See us on-line at www.tshc.org

CLUB OFFICERS

President:	Bob Belluomini	(513) 245-0590
Vice President:	Gayl Rotsching	(513) 761-1266
Treasurer:	Al Drees	(513) 791-5412
Safety Officer:	John Anast	(513) 829-3950
Secretary:	Brady Pack	(513) 831-4900
Lowly Scribe:	Dale Mercer	(606) 689-5953

Safety First, Last & Always

A smooth helicopter is a safe helicopter! Probably the biggest cause of vibrations that can be easily cured is main blade balance. I've included an old article I wrote some years ago when I was in the mass blade building business. It has some old references and does not talk about modern balancers etc. but the techniques will work today as well as any, guaranteed! In future articles I'll try to address some of the new goodies available to help with this job but first lets learn some principles. I speak to wood blades here but the basics work for composite blades as well. Have fun and fly *smoooooooooooooth*...

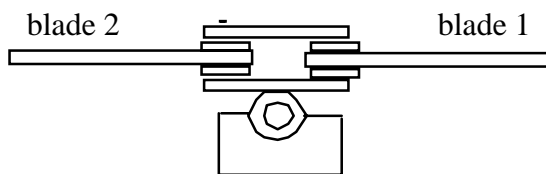
Editors note: This article by John will be presented in a 2 part series: Just another reason to read the monthly Collective Pitch!! Enjoy!!

John's Simple Wood Blade Building

There may be more difficult methods or more precise methods but I have found this method to be "good enough" for 99.99% of all your flying. I've probably built a couple of hundred blades by now, heck at one point I was making five sets at a crack! I've had real good luck with this method and I think you will too. With a little practice you can whip out a set of blades in about 30-40 minutes (with weighting perhaps 40-50 minutes).

First lets see what materials you'll need:

- 1) Gram balance (<0.1 gram accuracy is nice)
- 2) Teeter-totter blade balancer
- 3) Thick hot stuff CA glue
- 4) Kicker CA accelerator
- 5) Ruler (I like metric)
- 6) Fine line marker
- 7) Scissors
- 8) Bounce dryer sheet
- 9) Rubber band
- 10) Sand paper 180 grit and 360 grit and sanding block



Now lets get started. When you open your blade package carefully inspect the blades to be sure they are not cracked or warped and that the root doublers have been glued on securely. If you are building Miniature Aircraft blades, install the root grips per the manufacturer instructions. Most other blades have wood root doublers. Next take the blade covering mate-

rial and roll it into a 2" diameter tube with the film side out (do this only if your material is folded length wise like Schluter covering. If it is already flat you are in good shape.) I like to do this the day before I plan to cover the blades.

Next lets do some preliminary measures. Weigh each blade on the balance to at least 0.1g (better if you can get to 0.05g) and mark the light blade. Now place the blades on the teeter-totter blade balancer. Make sure that the blades are square with the balancer and that each blade is inline with the other, length wise. Note which blade tips up. This blade is said to be **tip light** (it has a center of gravity, CG, that is too far towards the root).

If the up blade is the light blade you marked before, you're in luck, a little weight at the tip will make the blades nearer in total weight and bring them closer to "tip" balance. If its close, a little tracking tape when we are done should do. If its not too close, I like to dig a little hole in the hardwood at the tip of the blade (about 20% cord) with a MotoTool and CA a little lead in to get the total weight and tip weight close to equal. Note: if the total weight is the same and the tip weight is the same (balanced on the blade balancer), the CG **HAS** to be the same! No need to measure the CG.

If the up blade is the heavy blade we have some work to do. What we need are two pieces of lead (or tape etc.) that make the blades the same total weight. On the tip up blade we need to add this weight to the tip and on the tip down blade we need to add the weight to the root of the blade (always add the weight in the hardwood of the leading edge at about 20% cord). Practice this by laying the weight on top of the blades and making the pieces bigger/smaller until you can get the tip weights and the total weights the same. You can make some small adjustments by sliding the weight a little away from the tip or the root. (This doesn't change the total weight but does change the tip weight, experiment with this concept a little till you get the hang of it. Try different combinations by adding a washer or some other weight to one of the blades to simulate an out-of-balance condition and try to "dry" fix it by making and sliding weights around. Once you have achieved a rough balance, we can finish the blades and cover them. Next lets prep the blades. Start by sealing the root of each blade. I like to use thick CA for this. Place a scrap of plastic bag over your finger and then drop some CA on the root and spread it around with the bag/finger. When you get a nice even coat over the whole root, extending slightly out to where the covering will over lap, kick it off with accelerator. Sand the entire blade with 180 grit sand paper on a sanding block. Sand across the grain so as not to score the balsa, and remember the balsa sands LOTS easier than the hardwood leading edge so go easy. I like to final sand with 360 grit. Once the surface is smooth and flat, clean the blade thoroughly with a lint free cloth. A little bit of alcohol can help here, but I

Continued on page 3

Treasurer's Report\$\$\$\$

We **STILL** have 27 members! We lost 3 members due to non- payment of dues — so if you see Brian Huber, Kurt Koschnitzke or Steve Walker please ask them to contact me if they are still interested in being club members!

Our bank balance is still in the black and my reprot for this month is as follows:

Beginning Balance	\$ 964.18
Due's Received	\$ 120.00
Expenditure's	\$ <u>73.96</u>
New Balance	\$ 1010.22

Please check the attached Membership Roster to confirm if all of your information is correct. We are still missing some information from some of you (**especially AMA numbers**) and we cannot update our club roster to the AMA without your AMA number.

You can contact Dale Mercer or myself for any updates that you have to provide.

Al Drees, Club Treasurer.

AMA Information Corner

- 1) Plan your travel to include a trip to the Grad Event / Homecoming that will be held in Muncie on June 10-11 !
- 2) Don't forget the Nationals, July 7th through August 4th. You don't have to compete - just come and watch !! It's great fun for you and the family to join together in.
- 3) Membership renewal season went relatively smoothly with membership renewals up 6% (compared with the same time last year).
- 4) CLUB RE-CHARTERING KITS were sent to the designated club contact person and should have been received by the time you are reading this in your newsletter. If you designated Club Contact person has not received the packet, please contact Lois Pierce at her e-mail address loisp@modelaircraft.org or call her at (765) 287-1256, ext 291.
- 5) We have two new Vice Presidents. Bill Oberdieck, District VII (replaced Ed McCollough) and Bruce Nelson, District X (replaced Dave Gish). Both outgoing Vice Presidents were presented with Meritorious Service awards for their past service.

Joyce Hagar, Executive Director, AMA

Classified Ads

Bob Belluomini 513-245-0590

1. Robbe CSC-4 Helicopter Speed Control - \$75 obo
2. Hitec 325 Fast Field Charger - \$35

John Anast 513-829-3950

1. JR Vigor - upgrade swashplate, built but new and never flown \$750
2. Vario Viper - low hours (maybe 4 tanks) OS61SXWC , Zimmerman steel tuned muffler, NHP 680 blades, Carbon fiber fins \$1275.
3. Schluter Scout II 60 - tons of Futura updates - carbon tube drive - OS61SX - \$550 obo
4. Robbe CSC-4 Helicopter Speed Control - \$75 obo
5. Ace Digipace II - autocyclus 4 and 8 cell packs simultaneously then autotrickle charges. Great for checking out your pack capacity...\$80
6. Hitec CG-320 fast delta peak charger - 4-5 cells at 4.5A, 8 cells at 1.8A - \$40 obo

Dale Mercer 606-689-5953

1. Hattori #777 Tuned Pipe and #778 Header (60HTS-3) \$100 obo.
2. TSK MyStar 60. Built – but never flown – with the **new YS 61 ST2 motor**, Robbe battery monitor switch and NHP 680 blades. \$900. (over \$1100.00 invested. New low price for the start of the flying season!!!)

Craig Gologowski 513-248-1864

1. Robbe/Schluter Moskito, Webra 50, Robbe tuned pipe, GRP blades, ACT H.Hold gyro, FMA servos, numerous upgrades. Flys great! Just add radio. \$575 w/electric's, \$425 w/out. Pictures to be posted soon .

Blade Balancing—Continued from page 2.

prefer to lightly wipe the blade with a Bounce anti-static dryer sheet. This picks up the dust and keeps any new dust from settling. Dust is VERY obvious under the covering so keep the blade very clean. Recheck the total weight and balance again, and make adjustments if you changed them much with sanding and glue. My goal is always - never use any tracking tape but to get the balance just right before adding the covering. After a little practice it can be done! Sometimes I get it and sometime a little tracking tape is needed. The next time you check out someones blades see how much tracking tape he had to use to get final balance and just smile knowingly! You can cheat a little on this by adding extra layers of glue when sealing the blade end to add a little tip weight without using tracking tape.

That's about it for this month. There is only so much room on the ol' newlsetter—even for the important stuff like Blade Balancing. Stay tuned for the May issue.....John Anast, Safety Officer and Webmeister.

March Club Meeting

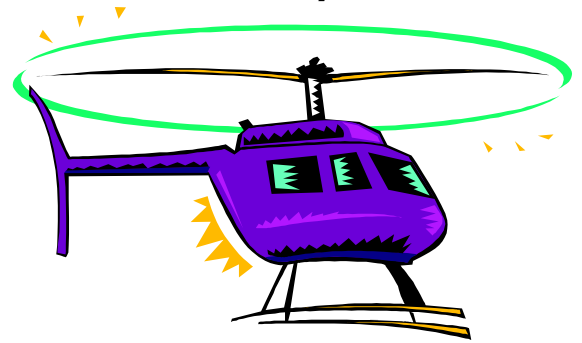
"Keep them rotors

WHEN: April 11th, 2000

TIME: 7:30 PM

WHERE: Slim Helson's Aerodrome

See You There!



Services and Such

Slim's Chopper Repair *"IF YOU CAN DRAW IT, HE CAN MAKE IT!"*

Machine shop services are available from Slim Helson, call him at 831-3173. He offers a full range of machining services and custom fabrication. Slim also has an extensive Robbe/Schluter parts supply. Slim's shop is conveniently located at 1033 St. Rt 131 in Milford.

Vector Helicopters (Authorized Robbe Field Representative)

Building, setup or repair services for all makes of helicopters is now available. You can also get your wood rotor blades professionally built, weighted and covered to your specifications. Prices range from \$15-\$35 depending on size and complexity. Call John Anast at 829-3950 for an estimate. Remember - **No job is too BIG!** You can also e-mail John at: jmanast@worldnet.att.net or visit his website at Vector Helicopters <http://home.att.net/~jmanast/vh.html>

Web Sites

Bryce's R/C Heli Page	http://www.byelectric.com/~fribab/
East Coast Model center	http://www.ecmc.com/#rc
Heli-fever Web Page	http://helifever.com
Leisure Tech	http://24.113.44.156/~heli/
Rick's RC Heli	http://www.rcheli.com
Tailrtr's R/C Heli Links	http://www.pcez.com/%7etailrtr/links.htm

Hobby Shops

<u>Name</u>	<u>Phone Number</u>	<u>City / Area</u>
Al's Hobby Shop	630.832.4908	Elmhurst, Il.
Flight Zone	746-0015	Boone Co.
House of Hobbies	248-9220	Milford
Northern KY Hobbies	283-1110	Florence (YA'LL)
Phil's Hobbies	385-8616	Cincinnati
Pit Row	891-7487	Kenwood
Slim's Chopper Repair	831-3173	Milford
Starfleet Hobbies	984-9889	Blue Ash

News from Down Under.

My sincere appreciation and heart-felt thanks goes out to Roger Chapman of the Melbourne Radio Control Helicopter Club Inc. in Australia.

As most of us do when we travel, I looked in the Yellow Pages of the Melbourne Telephone book and found a listing for R/C Club. The chap that I spoke with (fixed wing type) was more than happy to share Roger's number with me and so I rang him up and introduced myself. Of course with my shy nature and all it was a difficult thing to do, but in the name of R/C heli's...

Roger and I spoke on the phone and he invited me to go out their club field and meet some of their members. Their club has about 60 members, 1/2 of which are regular fliers. (where are you guys??) They fly from a School yard that is quite large and affords ample opportunity for more than one flier to be air borne at the same time.

Lindsay Henderson (the Club CD) shared some information about their second annual Shepparton International Helicopter Spectacular. There were 84 pilots with over 130 machines. Curtis Youngblood and Manabu Hashimoto were on hand to fly

a bit and teach a bit too.

I must admit that the wind was blowing a bit hard for my taste, and the sun was beating down on us the whole day to the tune of 35 C! (95F). I guess most of the guys fly mode I so I didn't give it a go.....

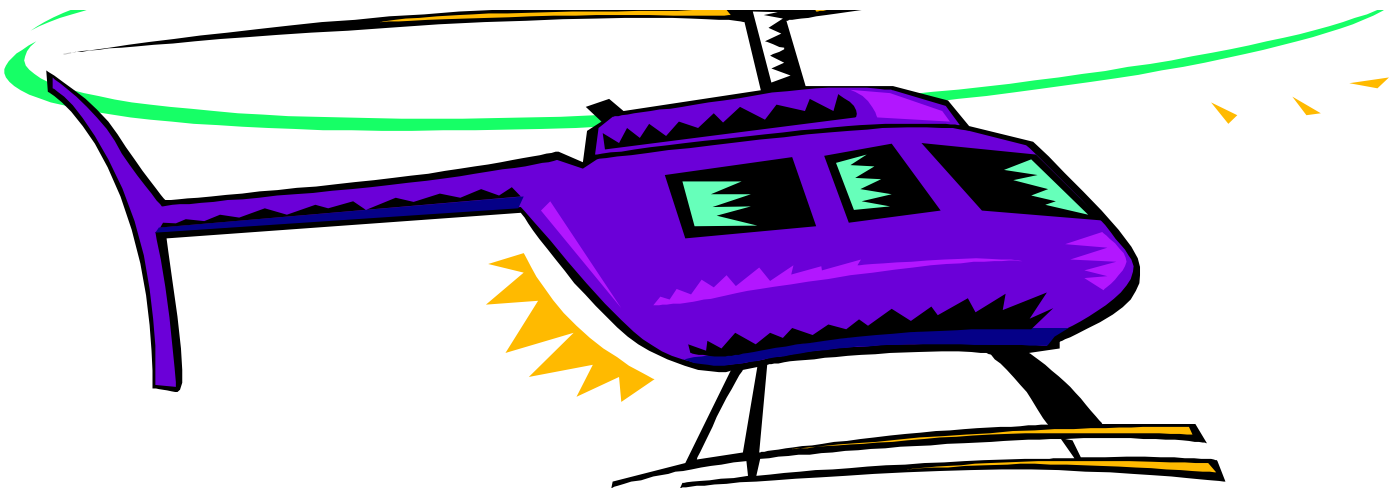
Costs are quite high. 30% was about \$36/Gal and a Raptor with engine and 49 BB was \$537. So stop your whining already and go burn some of that cheap fuel.....

Roger is the club secretary and shared one of their bi-monthly club newsletters and a pamphlet that they use to spread the word about R/C Model Helicopters. I'll try to remember to bring them both to our next meeting.

Roger was a very gracious host and even invited me into his home. I really had a great time and I already have plans to go back at least one more time this year.

If any of you are interested in seeing their Web Site, it is as follows: www.Eisa.net.au/~attwood. Glenn Attwood is the News Letter Editor and Webmaster.

That's all for now. Maybe more in the meeting -so I'll see you there. I'm leaving right now to go to Ernie's.....



Tri-State Helicopter Club
c/o Dale Mercer
6132 Woodcrest Drive
Burlington, Ky 41005

Mark your calendar now for the
April 2000 Meeting
Tuesday the 11th
Slim's Aerodome

Tri-State Helicopter Club

Membership Roster

Last Name	First Name	Member Type	Street Address	City	State	Zip	Telephone	AMA	P/c
Anast	John	Full	5752 Lake Michigan Drive	Fairfield	OH	45014	(513) 829-3950	167274	Y
Barrow	Dave	Full	5236 Madison Pike	Independence	KY	45051	(606) 357-1258	002534	Y
Belluomini	Bob	Full	8872 Colrain Ave.	Cincinnati	OH	45251	(513) 245-9580	077207	Y
Bridges	Milt	Full	5319 Bonnell Road	Guilford	IN	47022	(812) 487-2100	208151	Y
Cooper	Scott	Associate	113 Cornell Drive	Bainbridge	NY	13733	()	648750	Y
Davis	Bob	Full	3935 Montgomery Road	Norwood	OH	45212	(513) 531-4765	??????	Y
Drees	Al	Full	7810 Hartford Hill Lane	Cincinnati	OH	45242	(513) 791-5412	523403	Y
Dustrude	Ray	Full	8555 Lynnhaven Drive	Cincinnati	OH	45236	(513) 793-3982	042260	Y
Fuschen- Fanker	Cindy	Associate	Al's Hobby Shope	Elmhurst	IL		(630) 832-4908		Y
Haerttner	Bob	Full	8311 Weller Road	Cincinnati	OH	45242	(513) 530-9676	000321	Y
Holgowski	Craig	Full	5845 Price Road	Milford	OH	45150	(513) 248-1864	439037	Y
Harrison	John W	Full	1757 Marquette Avenue	Cincinnati	OH	45230	(513) 232-8833	609808	Y
Harrison	John C	Full	1757 Marquette Avenue	Cincinnati	OH	45230	(513) 232-8833	607543	Y
Helson	Slim	Full	1033 St. Route 131	Milford	OH	45150	(513) 831-3173	183940	Y
Hnott	Tim	Full	7757 Thomas Road	Middletown	OH	45042	(513) 423-5747	159321	Y
Joel	Daryl	Full	3811 Locke Street	Covington	KY	41015	(606) 491-2613	616833	Y
Kosar	Richard	Full	1336 St. Route 131	Milford	OH	45150	(513) 831-1641	420322	Y
K Mercer	Dale	Full	6132 Woodcrest Drive	Burlington	KY	41005	(606) 689-5953	629712	Y
Killigan	Rod	Full	4169 Heritage Glen	Cincinnati	OH	45245	(513) 752-9032	457808	Y
Klack	Brady	Full	5917 Price Road	Milford	OH	45150	(513) 831-4900	577629	Y
Kennell	John	Full	6512 Turtle Point Place	Mason	OH	45040	(513) 754-1577	427502	Y
Klotsching	Gayl	Full	263 Lux Avenue	Cincinnati	OH	45216	(513) 761-1266	097474	Y
Koysdon	Daniel	Full	2649 Thomasville #1603	Cincinnati	OH	45238	(513) 481-5757	665017	Y
Kshaw	Jesse	Full	6685 Oakland Road	Loveland	OH	45140	(513) 722-8335	660435	Y
Khurley	Carey	Associate	PO Box 953303	Lake Mary	FL	32795	(407) 771-7759	165910	Y
Ktephens	Dwayne	Full	9193 Sunderkand Way	West Chester	OH	45069	(513) 755-9193	006571	Y
Kviebold	Bill	Full	5950 Park Road	Cincinnati	OH	45043	(513) 831-3731	??????	Y

Don't forget to visit us on the web at: www.tshc.org