

TriState Helicopter Club



TRI-STATE HELICOPTER CLUB

The Collective Pitch

From The President's Desk

Okay gang it's that time of year Again. That means election of officers.

It really is a pretty simple club to run and keep organized. So don't be bashful and take a turn at the helm or one of the other great positions. I want to thank all of the current officers for their efforts and especially Dale Mercer for the all the work he puts into the newsletter. I know that Dale has a very busy work schedule and becomes a little frustrated at times pulling information from

everyone in order to put together the newsletter. I know Dale enjoys it we just need to make his job a little easier! I am planning more of a Christmas party than a meeting (read BS session) after we elect officers for 2001. It would be great if you bring your latest project to show and encourage your fellow club members. You'll have to ask Slim how his Skyflex is flying.

If you were at last months meeting you saw my Robin 280 fly, I now have about 40

PHOTO's to Inspire...?



Photo By Mark Smith.

Curtis Doing it for the Camera's in Australia at the 1998 Shepparton International Helicopter Spectacular.

Oh, to be 'Down Under' again...

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
Editor:	Dale Mercer	(859) 689-5953

From the President's Desk.....continued

flight and I am really enjoying this little chopper. The few crashes I've had have been simple enough to fix and it sure beats flying in the cold outdoors now that winter has set in, I understand MIA has a high performance micro planned for this coming spring, it goes by the Falcon name. It appears that the GCRCC

club is open to the idea of holding a fun fly at their field next year I should have the no or GO by the next board meeting! Enough of this rambling for now see you on the 11th at Slim's and I'd like to get started by 7:30.

Bob Bellumomini, President

Safety First, Last, and Always!

Safety

Protect the Environment....RECYCLE!

Did you know that 100% of that old flight box battery is recyclable?? Sure is....so before you give it the whip, ask at any local battery vendor if they will take them off your hands. If you have a hard time locating one, Cantor Battery just south of Este on Center Hill Road takes them. I finally got around to dropping off the ones that have accumulated in my utility room. Adding old batteries to the trash heap leaches toxic lead into ground...not good!

Next month I'll hope to have a good place to recycle NiCad batteries (I forgot to ask Cantor...duh). These little buggers are even worse than gel cells and lead/acid batteries since the Cadmium is nasty stuff. You DEFINITELY don't want to give these the whip.

Can I squeeze one more flight in???

Last month Dale printed a great article on safe use of battery packs vs the number of flights you have on a fresh charge. The bottom line was that there is no fixed VOLTAGE that you can safely fly above. I whole-heartedly agree with this however I'd like to add a little bit to that. There IS a safe CAPACITY you can fly above. For this reason I recommend you invest in a battery cycler. Let me expand. Take for instance you have a new 1500mah battery pack on board your new chopper. You dutifully

slow charge the battery to the manufacturers recommended specs, then cycle the battery a few times....1500 mah capacity...perfect. Now you go out and fly a safe three flight (okay two if you want to be on the real safe side.) Don't charge that pack yet...slap it on the cyclor and find out how much charge you have left. Say those three flights used 500mah (you cycled 1000mah out of the pack). At this rate you should be able to safely get 6 flights out of a fully charged pack with a wide margin left of 500mah. Now every flight isn't the same so I like to check this many times until I feel pretty good about how much current I use per flight. The only watch out is if the battery starts to go south on you, there may not be 1500mah in the full charge capacity anymore. Its always best to monitor the voltage to head off any premature failure of a pack....low voltage, don't fly! Routine cycling of packs will help you follow the health of your battery and assure there's plenty of capacity for safe flying. Over the years I've gotten comfortable with flight packs being better than 90% capacity on recycling or I retire them to running my digital camera. After 4 years, they are retired no matter what... its cheap insurance for an expensive model. I like to use an indelible marker and write the date right on the batter pack. That way its obvious when its time to retire em.

Till next month keep them rotors outta the dirt....

John Anast, Safety Officer

Hints and Tips for the everyday Helicopter Pilot

Cleaning & Lubing:

I like a Clean Helicopter. I use a spray bottle with Denatured Alcohol. Its best not to use Isopropyl Alcohol (rubbing alcohol) because it has a certain percentage of water in it and will cause rust to build up. Then I spray a rag and wipe down the rest of the machine. Denaturd Alcohol won't damage any part of the machine. Just don't continually spray your bearings, our you'll dry them out. For lubing, I use Tri-Flow Teflon lubricant on the tail pitch slider. And after run oil in other parts. I put a drop of after run oil on the ball in the center of the swash plate after a day of flying. That will keep the ball and the bearing lubricated just fine. I also use after run oil on any exposed bearing that is not sealed. On my machine Concept 46VR), the top main bearing is kinda out of site between the upper risers of the frame work. But, its easy to get a drop of oil into that spot by placing a drop of after run oil on a tooth pick and dropping it around the outside of the collective pitch rod carrier. Its very important to keep that upper main bearing and swash plate bearing properly lubricated for good auto performance. I use a alcohol soaked rag to wipe off any excess. You would be surprised what you can find by cleaning your machine down thoroughly after a day of flying. I have found many missing bolts, nuts, and loose fitting ball links by cleaning thoroughly after a day of flying.

Dennis Lafond

Don't Need To Spend Big Bucks On Those Fly Bar Alignment Tools:

Have you ever been in need of a tool you had a hard time justifying the price and the amount of use it will get? Well, I believe we have all been there..... "Did I really need to buy the \$35 dollar ball link pliers when the \$5 one would have done the Job?" Probably not, but they look good in the flight box.

One tool that I have needed and wanted since I got my first helicopter is a set of paddle gauges. But, the \$30 price tag on the nice ones, seemed a bit much. Well, I found a solution while visiting my local hobby shop. I was buying some blades for my exacto knife when I saw some clamps made by exacto. They are just two inch plastic and have a notch molded into them the center of the clamping surfaces which fits perfectly on the paddles of your chopper. The best part about these "paddle gauges", is that they were only \$4 a pair and have been just as good as the high dollar gauges. So, if you find yourself in need of some some paddle gauges, then I would suggest you find some of these exacto clamps at your local hobby shop.

Brian Schwinn

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

We have a record **37 members!**

DON'T FORGET THAT YOUR DUES ARE NOW DUE!

Please welcome our new full and associate members.

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

Beginning Balance	\$ 517.49
Due's Received	\$ 0.00
Expenditure's	\$ 0.00
Postage	\$ 0.00
<hr/>	
New Balance	\$ 517.49

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 our Clubs' Newsletter Editor, Dale Mercer, or myself for any updates that you have to provide.

Al Drees, Club Treasurer.

AMA Information Corner

Don't forget that your AMA dues are also due this month for your 2001 flying season.

Let's all make an effort to *Fly Safely* this year and reduce the number of "incidents" that we have had at the flying field.

Only by working together to keep this hobby safe will we be able to protect it for the future members (and our selves) and our children.

Next Club Meeting:

WHEN: December 12, 2000

TIME: 7:30 PM

WHERE: Slim Helson's Aerodrome

See You There!

"Keep them rotors outta the dirt!"



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: janast@tshc.org or visit his website at Vector Helicopters www.tshc.org/VectorHeli/vh.html

Web Sites

Helibuf's Home Page	http://www.helibuf.com
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

Classified Ads

Bob Belluomini 513-245-0590

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

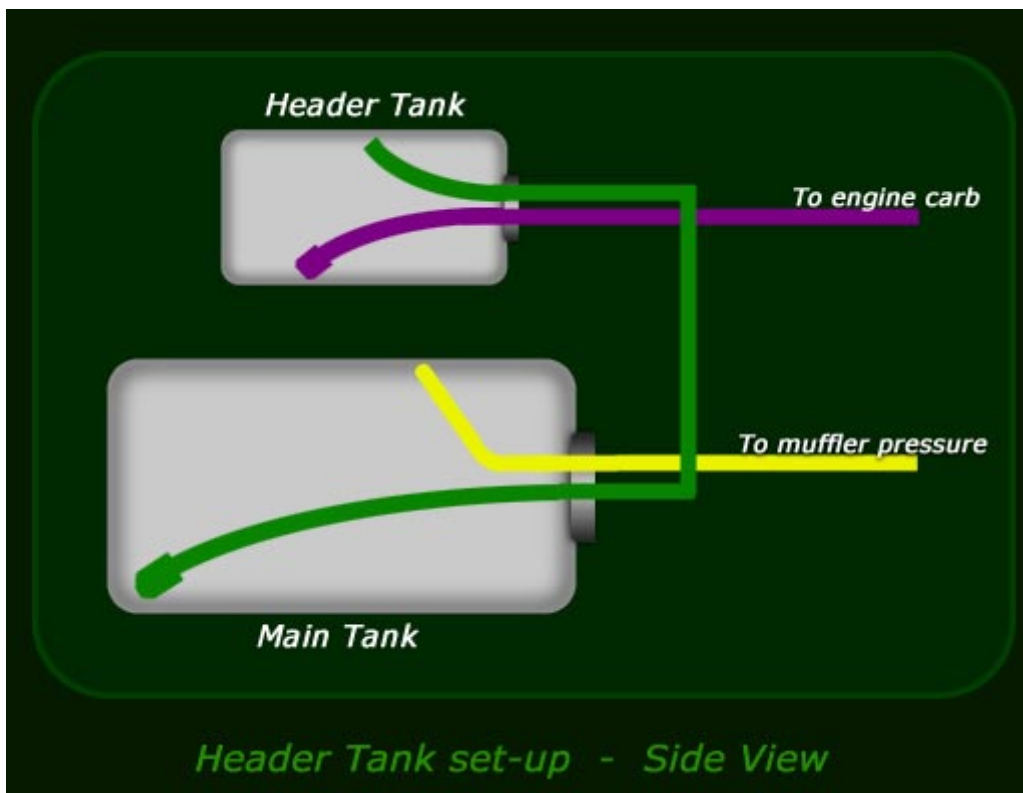
John Anast 513-829-3950 .

1. Robbe CSC-4 Helicopter Speed Control - \$75 obo
2. Hitec CG-320 fast delta peak charger - 4-5 cells at 4.5A, 8 cells at 1.8A - \$40 obo

Craig Golgowski 513-248-1864

1. Robbe/Schluter Moskito, numerous upgrades. Flies great! \$199

How to Plumb Your Header Tank By D J Vegh



Many articles have been written about the venerable Header Tank. Some are "Pro", some are not.

Whether or not you choose to plumb your helicopter with this set-up is your choice, but some pilots have attributed the lack of a Header Tank to flame outs and other unruly occurrences that could happen to you at the most unpleasant moment.

We are a membership made up of pilots that love to fly. We are not Democrats nor Republicans. Just Pilots. No header tanks will be counted. Or re-counted.

Cyclic to Throttle Mixing made easy

This technique does not require you to readjust your throttle end points (EPA/ATV) or throttle curve. It's very easy to do.

Step 1 Pop the link loose from the throttle servo arm

Step 2 Turn on the radio/heli and move the throttle stick all the way up. Note: the top of your throttle curve should be 100%

Step 3 In your radio adjust the center position of the throttle up until the servo no longer moves. As you increment this value, the servo arm will move a click each time until you have reached the limit. Stop right there and don't go beyond that. The center position is named different for different radios. Airtronics RD6000 labels it CNT. Futaba and JR radios call it sub-trim.

Step 4 The servo arm is now extending to far to put the link back on, so take the servo arm off the servo and reposition it so that it aligns back

up with the link. Confirm that the link is not in a bind and snap the link back on the servo arm.

You have done the magic steps now that will keep the servo from binding the linkage due to the cyclic mixing. For some strange reason the radio manufactures allow the mixes to overdrive the servo. You would think that when you set the end point for a servo that it would consider that the stopping point, but no, the mixes will ignore this stop point and go right past it.

The way this technique works is it sets the top end point to the maximum that a servo can go. So if your throttle is all the way up and the mix try's to go further, it can't because the servo is already as far as can physically and electronically go so the extra amount is just ignored. Your radio gives a position command by using a pulse width that

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Tri-State Helicopter Club

Membership Roster

No.	Last Name	First Name	Member Type	Street Address	City	State	Zip	Telephone	AMA	Paid /owe
1	Anast	John	Full	5752 Lake Michigan Drive	Fairfield	OH	45014	(513) 829-3950	167274	YES
2	Barrow	Dave	Full	5236 Madison Pike	Independence	KY	45051	(606) 357-1258	002534	YES
3	Belluomini	Bob	Full	8872 Colrain Ave.	Cincinnati	OH	45251	(513) 245-9580	077207	YES
4	Bridges	Milt	Full	5319 Bonnell Road	Guilford	IN	47022	(812) 487-2100	208151	YES
5	Cooper	Scott	Associate	113 Cornell Drive	Bainbridge	NY	13733	(607) 967-3937	648750	YES
6	Davis	Bob	Full	3935 Montgomery Road	Norwood	OH	45212	(513) 531-4765	?????	YES
7	Drees	Al	Full	7810 Hartford Hill Lane	Cincinnati	OH	45242	(513) 791-5412	523403	YES
8	Duke	Terry	Full	12450 Stafford Road	New Carlisle	OH	45344	(937) 845-1306	055910	YES
9	Dustrude	Ray	Full	8555 Lynnehaven Drive	Cincinnati	OH	45236	(513) 793-3982	042260	YES
10	Fuschen-Zanker	Cindy	Associate	Al's Hobby Shop	Elmhurst	IL		(630) 832-4908		YES
11	Gaertner	Bob	Full	8311 Weller Road	Cincinnati	OH	45242	(513) 530-9676	000321	YES
12	Galvin	William	Full	2252 Whitmer Road	Batavia	OH	45103	(513) 732-8659	598588	YES
13	Golgowski	Craig	Full	5845 Price Road	Milford	OH	45150	(513) 248-1864	439037	YES
14	Harrison	John W	Full	1757 Marquette Avenue	Cincinnati	OH	45230	(513) 232-8833	609808	YES
15	Harrison	John C	Full	1757 Marquette Avenue	Cincinnati	OH	45230	(513) 232-8833	607543	YES
16	Helson	Slim	Full	1033 St. Route 131	Milford	OH	45150	(513) 831-3173	183940	YES
17	Hughes	Rick	Full	6591 Devon Drive	Middletown	OH	45042	(513) 779-3021	675987	YES
18	Knott	Tim	Full	7757 Thomas Road	Middletown	OH	45042	(513) 423-5747	159321	YES
19	Noel	Daryl	Full	3811 Locke Street	Covington	KY	41015	(606) 491-2613	616833	YES
20	Kosar	Richard	Full	1336 St. Route 131	Milford	OH	45150	(513) 831-1641	420322	YES
21	Jacobs	Terry	Full	6653 Paxton-Guinea Road	Loveland	OH	45140			
22	Lynch	Tim	Full	6977 Panther Drive	Middletown	OH	45044	(513) 777-1054		YES
23	Mercer	Bryce	Full	6132 Woodcrest Drive	Burlington	KY	41005	(859) 689-5953		YES
24	Mercer	Dale	Full	6132 Woodcrest Drive	Burlington	KY	41005	(859) 689-5953	629712	YES
25	Milligan	Rod	Full	4169 Heritage Glen	Cincinnati	OH	45245	(513) 752-9032	457808	YES
26	Pack	Brady	Full	5917 Price Road	Milford	OH	45150	(513) 831-4900	577629	YES
27	Pennell	John	Full	6512 Turtle Point Place	Mason	OH	45040	(513) 754-1577	427502	YES
28	Rotsching	Gayl	Full	263 Lux Avenue	Cincinnati	OH	45216	(513) 761-1266	097474	YES
29	Roysdon	Daniel	Full	2649 Thomasville #1603	Cincinnati	OH	45238	(513) 481-5757	665017	YES
30	Shaw	Jesse	Full	6685 Oakland Road	Loveland	OH	45140	(513) 722-8335	660435	YES
31	Shurley	Carey	Associate	PO Box 953303	Lake Mary	FL	32795	(407) 771-7759	165910	YES
32	Stephens	Dwayne	Full	9193 Sunderkand Way	West Chester	OH	45069	(513) 755-9193	006571	YES
33	Wiebold	Bill	Full	5950 Park Road	Cincinnati	OH	45043	(513) 831-3731	?????	YES
34	Walton	Major	Full	1945 Lawn	Cincinnati	OH	45237	(513) 731-4284	339888	YES
35	Yingling	Chris	Full	20811 Bellemeade Drive	Lawrenceburg	IN	47025	(812) 637-6309	359654	YES

Cyclic to Throttle mixing continued from page 5...

varies from 1 milli second wide to 2ms wide. For example 1ms would be full clockwise and 2ms would be full counter-clockwise while 1.5ms would be center. Your radio uses end point values from -150 (1ms) to +150 (2ms) note: -150=2ms & +150=1ms if servo is reversed. So if your end point is say 88 then by changing the center (CNT on RD6000, sub-trim on JR) from 0 to 62, that will make the top of the throttle $88+62=150$ which is equal to 2ms. Servo control standards only except 1-2ms so the mix can not cause the radio to go beyond the 1-2ms range. Therefore the mix will only add throttle up to but not past your top end point.

Step 5 Set the elevator to throttle

mixing. On the Airtronics RD6000 go to the "etc" menu and down to the "MAS 1" and put "EL", then go down one to "SLV 1" and put "TH", then go down one to "E->T 1". Move the elevator stick up and set the up mix to 20%. Move the elevator stick down and set the down mix to -20%

Step 6 Set the aileron to throttle mixing. On the Airtronics RD6000 go to the "etc" menu and down to the "MAS 2" and put "AI", then go down one to "SLV 2" and put "TH", then go down one to "A->T 2". Move the aileron stick left and set the left mix to 20%. Move the aileron stick right and set the right mix to -20% (Thanks to Mark Kiner and Raptor Tech) nique.

Name this Chopper and WIN!!!

This photograph bears witness to the statement that "Helicopters Don't Fly – they are just sooo ugly tha the Earth repels them.





TriState Helicopter Club
c/o Dale Mercer
6132 Woodcrest Drive
Burlington, Ky 41005

Mark your calendar now for the
December 2000 Meeting
Tuesday the 12th
Slim's Aerodome

"Once man has experienced flight,
he shall forever walk the earth gazing into the heavens,
for he has discovered the joy which makes birds sing..."