## TOSS-UP



# NEWSLETTER

THOUSAND OAKS SOARING SOCIETY A.M.A. CHARTERED CLUB #1493

JUNE 1995

PUBLISHER: LARRY JIMENEZ 1943 CHANNEL DR. VENTURA, CA. 93001

#### PRESIDENT:

Edgar Weisman (805) 498-8878 752 Camino Valles Thousand Oaks, CA. 91360

#### **VICE PRESIDENT:**

Mike Reagan (805) 529-5513 14705 Loyola Street Moorpark, CA. 93021

#### SECRETARY:

Bob Swet (805) 388-9619 2600 Ponderosa Camarillo, CA. 93010

#### TREASURER:

Larry Jimenez (805) 652-1937 1943 Channel Drive Ventura, CA. 93001

#### **PUBLISHER:**

Larry Jimenez (805) 652-1937 1943 Channel Dr. Ventura, CA. 93001

#### **CLUB WINCHES:**

Mike Stern (805) 492-8452 Art McNamee (805) 526-6292 Edgar Weisman (805) 496-0611

**NEXT CLUB CONTEST:** 

DATE: PLACE: TIME: C/D July 9th 1995 Redwood School 9:00 a.m. Larry Jimenez

**NEXT CLUB MEETNG:** 

DATE: DAY: June28th.,1995

PLACE:

Wednesday Cameron Center

TIME:

7:30p.m.

## **TOSS TALK**

#### MAY MEETING NOTES

#### **OLD BUSINESS**

No old business to report at least none that I could remember.

#### **NEW BUSINESS**

We only had 7 members in attendance, so there isn't alot to report on.

- 1) The April contest was cancelled and will not be re-scheduled
- 2) We will be hosting the SC2 in October and we will need new line for the retriever & winch.
- 3) Edgar reported that some power flyers have been using the Paramount Ranch field without any opposition from the Parks Dept. It appears that we will not be re-newing our contract with the Park since we no longer use the field and could use the money for something else. You could still use the field, but we would have no control of the field.

#### TREASURER'S REPORT

We have about \$275.00 and about \$100.00 in bills to be paid.

#### **COMPUTER UPDATE**

Bob reported last month that my computer went down just before the newsletter was being finished and we had to throw it together at the last minute. I'm happy to report that the computer is fixed and all is well!

#### **RAFFLE WINNERS**

No raffle was held this month.

#### JULY CONTEST

I will be the C/D for the July contest and it's going to be an add'em- up type of contest.

Larry

#### TOSS JUNE CONTEST WINNERS

First	OPEN CLASS Hank Schorz
Second	Thomas Akers
First	2 METERDon McNamee
Eiret	SPORTPLANE Dog North
Second	Don Northern Bob Swet
Third	Devin Holzer
*****	*******

#### MAY SC2 TOSS TOP FINISHERS

р	ace

2nd	Mike Reagan
9th	Art McNamee
33rd	Edgar Weisman
49th	Bob Swet

#### SC2 ANNUAL STANDINGS 1995

place

6th	Mike Reagan
40th	Edgar Weisman
44th	Bob Swet

#### **SC2 TEAM STANDINGS**

1-TPG	6-NCC
2-HSS	7-SULA
3-EDSF	8-TOSS
<b>4-ISS</b>	9-SWSA
5-PSS	10-AVTS

#### TOSS MONTHLY CONTEST STANDINGS

6/11/95		OPEN CLA	SS STANDING	38			HIGH SCO	RE = 2	901.9
pos	NAME	CLUB	TOTAL	JAN	FEB	MAR	APR	MAY	JUN
1	DON McNAMEE	TOSS	4484	953	993	817	0	954	767
2	BOB SWET	TOSS	4213	790	665	844	0	970	944
3	HANK SCHORZ	SCSA	3909	996	953	960	0	0	1000
4	ART McNAMEE	TOSS	3847	897	991	1000	0	959	0
5	GREG NIKOLA	SCSA	3666	1000	893	883	0	0	890
6	MIKE REAGAN	TOSS	2966	972	999	0	0	995	0
7	DEVIN HOLZER	TOSS	2776	975	992	809	0	0	0
8	B.J. WEISMAN	TOSS	2653	653	1000	0	0	1000	0
9	DON NORTHERN	TOSS	2642	865	0	896	0	0	881
10	MYLES MORAN	TOSS	2452	875	996	581	0	0	0
11	LOWELL NORENBERG	SCSA	1914	955	959	0	0	0	0
12	EDGAR WEISMAN	TOSS	1831	0	996	0	0	835	0
13	ED OLDENBERG	TOSS	1688	0	798	0	0	890	0
14	PAUL TRIST	TOSS	1000	0	1000	0	0	0	0
15	THOMAS AKERS	TOSS	962	0	0	0	0	·O	962
16	DANE VANNETT	TOSS	836	836	0	0	0	0	0
17	CLAUS LANGER	SCSA	791	0	0	0	0	0	791

6/11/95		2 METER CL	ASS STANDI	IGS			HIGH SCO	RE = 2°	82.9
pos	NAME	CLUB	TOTAL	JAN	FEB	MAR	APR	MAY	JUN
1	DON McNAMEE	TOSS	3948	0	948	1000	0	1000	1000
2	EDGAR WEISMAN	TOSS	2676	1000	750	0	0	926	0
3	ART McNAMEE	TOSS	1971	0	1000	971	0	0	0
4	JONATHAN SPOER	TOSS	882	882	0	0	0	0	0
5	B.J. WEISMAN	TOSS	718	718	0	. 0	0	0	0

6/11/9	05	SPORT CLA	ASS STANDIN	GS			HIGH SCO	RE = 29	58.0
pos	NAME	CLUB	TOTAL	JAN	FEB	MAR	APR	MAY	JÚN
1	DON NORTHERN	TOSS	5000	1000	1000	1000	0	1000	1000
2	BOB SWET	TOSS	4601	847	994	923	0	944	893
3	DEVIN HOLZER	TOSS	2044	0	985	0	0	287	772
4	MIKE PUCKETT	TOSS	968	0	968	0	0	0	0
5	ED SKOW	TOSS	811	0	811	0	0	0	0



### SAILPLANE TRIMMING CHART 6 1995 by Don Edberg (all rights reserved)

DATE: BIENE IMITALE		DOM: DESCRIPTION OF THE PROPERTY OF THE PROPER	
To test for	Test Procedure	Observations	Adjustments
Ų. Model Control Neutrals	Fly the model straight and level	Adjust the transmitter trims for hands-off straight & level flight, no camber control	Change electronic subtrims and/cr adjust clevises to center transmitter trims
2. Control Throws Note: be sure all aileron & flap horn pairs have matching angles	Fly the model and apply full deflection of each control in neutral setup (6 £9)	Check the model's response to each control input. Set flaps for as much down flap as possible in glide path control. (90° is good) <5°reflex needed	Aileron & elevator rates: set for desired authority Rudder: set for max throw Set flap motions in Steps 4, 5 & 9.
3. Decalage & Center of Gravity (Note: this is an iterative procedure depends on desired handling characteristics Aft CG = less stability but better performance)	Trim for level glide. Enter 45° dive (across wind if any).Release controls when model vertical. CAUTION: beware of airspeed & flutter.	A. Does the model continue its dive without pulling out or diving?  B. Does the model start to pull out (nose up)?  C. Does the model start to tuck in (nose down)?	A. No adjustment     B. Reduce incidence (add down elevator) and/or reduce nose weight.     C. Increase incidence(add up elevator) or add nose weight)
4.Glide Path Control Settings (Part 1) Note: be sure all aileron & flap horn pairs have matching angles.	Fly the model and apply full deflection of glide path control(usually throttle stick).Observe any pitch changes.	A.Nose drops, up elevator required for level flight B. No pitch change C. Tail drops, downelevator required to maintain level flight	A.Several options: 1) more up elevator mixing; 2) reduce aileron reflex*; 3)increase flap motion* B. No adjustment C. Reverse of A
4. Glide Path Control Settings (Part 2)	Fly the model and apply full glide path control. Observe any roll motion	A. Model rolls to the right when glide path control (throttle stick) activated B. No roll motion C. Model rolls left	A. Mix in less right & more left aileron reflex with throttle motion     B. No adjustment     C. Reverse of A
5.Differential / Coupled Rudder setting	Fly the model and apply alternating left & right aileron commands. Observe path of fuselage line.	A. Model Yaws to right with left aileron and vice versa B. Puselage traces straight line C. Model yaws to left with left aileron and vice versa	<ul><li>A. Increase differential and/or rudder coupling</li><li>B. No adjustment</li><li>C. Reduce differential and/or rudder coupling</li></ul>
6. Camber (full wing, aileron & flap droop or reflex) setting	Put the model in a straight glide passing in front of you. Apply camber control.	A. Model slows down & stalls or sinks rapidly B. Model slows slightly C. Model speed unchanged	A. Reduce amount of droop B. No change needed C. Increase droop amount.
7. Launch settings (Part 1)	Switch to Launch mode. Launch the model & observe climb angle and required inputs	A. Shallow climb angle; lots of up elevator required  B. Model climbs steeply with little control input needed  C. Too steep climb, weaves back and forth, down elevator required	A. Move towhook rearwards small amount, increase up elevator a little.  B. No adjustment  C. Move towhook forward, increase down elevator preset
8. Launch Settings (Part 2)	Switch to Launch mode. Launch the model & observe climb angle and required control inputs	A. Model banks left on tow B. Model climbs straight ahead with no roll input needed C. Model banks right on tow	A. Reduce left ail & flap droop or increase right ail & flap droop B. No adjustment C. Reverse of A. above
9. Speed settings	Switch to speed mode (entire TE reflexed slightly, no more than 1/16° or 1.5 mm)	A. Nose drops B. No pitch change C. Tail drops	A. Increase up elevator preset B. No adjustment C. Reverse of A. above
10. Elevator -to-Camber Coupling Setting	Fly model at high speed, bank & pull up	A. Model keeps speed B. Model slows down	A. Increase down flap B. Decrease down flap

<sup>\*</sup> Note: Swept wing planform may cause opposite reactions emperiment until proper behavior is attained

From P.S.S. 6/95

FYI

This is a reprint from an article on Contest Timing. Source Torrey Pines Gulls newsletter August 1994.
The Fledgling- Contest Timing

The Fledgling- Contest Timing By Tom Dean

#### **CONTEST TIMING**

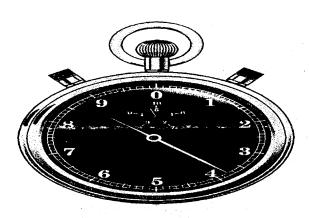
Thermal contests are team efforts. The team consists of a pilot and his timer. You may be timed by anyone, and you may time for anyone. You can change timers during the contest if you wish. Sometimes during the course of a contest, your favorite timer may be unable to time for you because he must fix his plane or is busy with other matters. Likewise you may be asked to time for someone for the first time. No problem, as long as you are prepared.

#### **PREPARATION**

It is a very good idea to come to the contest with your own stopwatch. There are many types of stopwatches available: the old stand by analog (big hand, little hand) type, and a variety of digital watches with lots of features. Such as, count up, count down, alarms, etc. Some wrist watch's feature stopwatch settings, but the

buttons are really small as are the displays. It's very important that you are familiar with the operation of your watch and it's features. If you get confused or accidentally switch off the watch or otherwise screw up the timing the pilot that you timing for is authorized to kill you. ( also, a "0" time could be the out-come. What the watch reads is what you get as a time) Ed.

Spend some time at home practicing with the



watch. If you are using the type that counts up only, ( that is it starts at "0" and goes up) you will especially want to practice counting down. Most pilots prefer counting down. Most pilots prefer the time remaining to be called out. You must be able, in an instant, to convert the elapsed time to time remaining. It sounds hard, but it just takes practice. If you have the type of watch that counts down you will still need to do some mental calisthenics when you

have to preset the watch for a seven minute flight. You will have to subtract the appropriate time from what the watch displays.

## PREFLIGHT RESPONSIBILITIES

As a timer you are responsible for making sure that you understand the task that the pilot has to fly. What duration he is attempting and the type of landing that must

be made. You should understand how he wants the landing tape preset for a circle landing. Some pilots want the 0 end of the tape at their feet, some want it to be away from them. Discuss with him how he wants the time called out. Most pilots prefer 1 minute updates until 3 minutes remain in the flight. Then 15 second updates until 2 minutes remain. 10 second updates until 1 minute to go, then 5 second updates until 30 seconds remain. Then

count down every seconds until landing. Some pilots want you to stop talking with 10 second to go so that they can concentrate on their landing. (again talking this out with the pilot before the flight helps prevent confusion) Ed.

## LAUNCHING RESPONSIBILITIES

Verity that the pilot has his frequency clip, and his score card. After you and the pilot have planned the flight by watching the other planes or

birds to determine where there may be lift, go to the next available winch. Check with the winch master to verify that the winch is ready and ask him what condition the battery is in. Will it give a killer or mushy launch? Retrieve the winch line and hook it to the plane. Ask the pilot to wiggle the controls to verify that all control surfaces move properly. Visually verify that the control surfaces are in the proper orientation. Make sure that no planes are in, or approaching the launch corridor. Verify that the winch and retriever lines are clear. Make sure no one else is launching. Give the pilot the "all clear". The pilot should ask the retriever operator if he is ready,\. He should ask you if you are ready, (check your watch for the proper setting) announce "timer ready" Pilot says" LAUNCHING". We're off.

Start the watch the instant that the plane comes off the winch line. Advise the pilot "you'er on the clock". Assist the pilot in walking at his own pace away from the launch area. Don't rush him. Let him get comfortable with the controls of his plane. Watch the ground for holes, rocks, or wing tips. Lead him safely through them.

During the whole flight, your eyes should be very busy. Watch for obvious signs of lift, such as other planes or birds circling. Keep your pilot advised of the time remaining. Stand behind the pilot. Don't babble or talk to other people. He needs to concentrate, and

he needs your input. If the plane is getting very high, it's very important that you keep your eyes steadily focused on it. (If he is that high, he is not looking for more lift). It is not unheard of a pilot to lose sight of his plane. If you can still see it, you should be able to help him regain control.

During his landing approach watch for the other planes that might also be landing. Advise others in the landing area that you are coming in for your landing. Make sure that everyone is clear of your landing zone. Stop



the watch the instant any part of the plane hits anything on the ground. This includes tree tops or weeds outside the landing area. After the plane has come to a rest take the appropriate measurement and enter the flight time and landing on the pilots score card.

#### **POST FLIGHT**

Verify that all entries on the card are correct, and turn it in to the scoring table. Talk over the flight with the pilot and find out if any changes should be made in the timing or strategy for the next flight. Assume full credit when he receives his blue ribbon.

#### From the editor

I have timed many people in contests from club level to the Masters of Soaring. The same pilots continue to ask me to time. At the Masters of Soaring I timed for Joe Wurts, Keith Kindrick and Mike Reagan and asked, " why do to have me time for you?". The common response was, that I looked out for the pilot. I kept them from harms way( i.e. other pilots and planes) Also, I keep a steady count-down with no voice change. I made sure the pilot had a game plan so I know where he wants to go. Finally we talked about how the pilot wanted to hear the count-down.

I use many of the ideas in this article and have had only one problem. The battery in my watch went bad at Visalia when I was timing Eric Blanke. He received a **ZERO** for the round. I now replace the battery every six months. I don't want to repeat that mistake again.



The **Deadline** for the PSS newsletter is the First day of the month. You can submit information at **70412.2423@compuserve.co m** if you have access to the internet, or any other on-line service(Ed).

# Useful Soaring Tactics and Tips

by Skip Miller

The purpose of this article is to assist the thermal pilot in improving one's performance during the upcoming season, and take some of the frustration out of "shooting blind" locating lift. This advice is in no way meant to be complete, but rather just some practical tips that when put to use, work. My first and foremost rule before getting near the launch device, is to know approximately when you fly, and make a conscious effort to tune in at least a few minutes before. It is helpful to know who you follow. who is a consistent flyer that might be presently flying, and observing the aircraft that might be in some air (I have seen great numbers of pilots circle in sink just because they witnessed someone a few minutes earlier find air in that particular spot). Usually, but never always, the lift has moved downwind. I personally always try where I think the air has moved to. It's funny, because of the lack of predictability in Colorado air, I will often times do a 180 straight off tow downwind chasing after a thermal that my senses tells me has passed through. This appears to be an aggressive tactic, yet in reality it is quite conservative. The things I pay attention to are of course windshifts, temperature on your skin, and particle matter in the air.

# Pay attention to ...windshifts, temperature...,and matter in the air

A bird circling will get you excited, but isn't always a sure thing. At Visalia three years ago a hawk was circling fairly close in, maybe 50 yards away, and climbing slowly. I came off tow headed downwind behind the hawk, and proceeded to work upwind to what I thought would be an easy max. As I moved I was sinking like a stone, still worked the area thoroughly as the hawk proceeded to leave flapping. I fortunately pulled the plug and got away from the area as fast as I could, finally finding a new patch of lift 300 yards upwind. (As you know I already came into it from well downwind, otherwise I would have chased). My preconceived notion would have sunk me on the spot. I have seen numerous pilots go down with the ship; if your preconceived notion doesn't pan out in reasonably short order, keep moving. Lift works in mysterious ways. it slides, reforms,

bubbles, and does all sorts of antics that can drive you crazy... There really is no set pattern, more so just be thorough and patient with your search. Have you ever had a thermal track upwind? I have many times, although certainly not the norm. How about a bubble slide to the side? Sometimes I am well downwind and feel the lift is dying; before I move, and never straight upwind by the way, I take a deep pass one more time. Nine out of ten times the thermal just drifted away out running me; that final search has saved my flight many times. When I leave usually I run a diagonal course, tacking upwind, trying to cover as much air as possible. If the air gets bad where you are, it is usually better somewhere else... You must move without hesitation. I constantly inform novice flyers to go deeper on their circles; let the ship drift downwind.

# If the air gets bad... it is usually better somewhere else...

Back to some advice. Know where you think you are going before you hook up to the line at the winch. The biggest mistake I witness when someone asks me to call air is that they have no idea where they are going. In Colorado this is deadly as usually you can't just park off tow; in many pats of the country you can, but not here. I usually stop them and say pick a direction. Baseball players are at least trying to do something specific before they step to the plate. They aren't just trying to hit the ball, they are trying to hit it somewhere. When my son Dusty and I practice, I have him tell me where he is going before I interject any parental advice, consequently he is developing his own decisive judgement. The fun part is his opinion really is maturing. He called for me for five days at the AMA NATS, with both of us putting in a respectable performance. Remember, your caller is always only an opinion; be ready to override if your gut instinct says something different. I have seen the world's best be right and be wrong. (They are usually right, but not always). Your own instincts are the ones you must trust. Try to stick to your plan, yet be ready to adjust. In conclusion, if you incorporate some the tactics and ideas I have listed above, you will see a marked improvement in your scores in no time.

### HOT FLASH

#### The Heart of Toxas Scaring Society

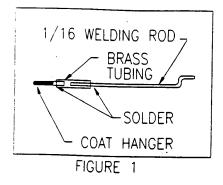
C.A.S.L 4/95



through the soft balsa rib and the boost tube. Sand away the extra and soft balsa and install the steel wing rod for a perfect joint.

## AILERON SNAPLINK RODS

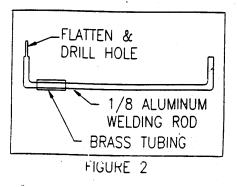
Obtain a 2 - 56 tap and die for about \$7.00 to make your own threaded push rod ends. You will need a handle to hold the die. Certain cleaners use coat hangers that are made of the correct soft ron wire for cutting 2 - 56 threads. After cutting about 1/2 of threads on a 1 inch piece of coat hanger. and the paint from the other end. in this end and the inside of some rass tubing to use as a collar to educe the wire size to 1/16 inch. The smaller is from 1/16 x 36 inch oft IRON brazing rod obtainable by the pound from welding supply nouses and is perfect for making Z ends. See Figure 1.



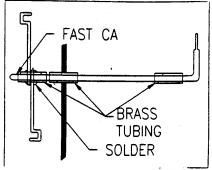
#### TORQUE RODS

Another useful product from relding supply houses is 1/8 x 36 ach annealed aluminum welding od. This will fit snugly inside

standard 1/8 inch ID brass tubing. The welding rod is easily flattened to about 1/16 inch thick and drilled to receive the snap end of our snap links. The welding rod will take a sharp 90 degree bend. See Figure 2.



The rod will work nicely as flap torque rods if the required force is not too great or the rod is not too long. I had an aileron flutter and failure on a .40 sized power plane a few years back but the welding rod was about 12 inches from aileron to the wing root. You can use them at about 8 inch long to actuate spoilers on sailplanes with safety. See figure 3.



## EXACTO BLADES CAN BE EXPENSIVE

I guess I have a fetish about sharp tools. At least that is the impression I get from other modelers when they visit my shop and watch my ritual of sharpening my knives before working on some project. My reasoning is that I save time and do a better job when the tools are sharp. Most of the Exacto knives will stay sharp for just so long and they become expensive if you keep using new ones when they become dull. In fact it is a good idea to sharpen new blades just out of the box.

A good edge can be produced using a fine grit oil stones followed by a medium Arkansas stone. The sharpening process can be made faster by the use of a pair of diamond laps. Start with medium or fine grit for fast cutting then an extra fine grit for the final shape followed by a few strokes, away from the edge, on a piece of leather for a nice razor sharp edge.

Most hardware stores have a supply of Stanley knife blades just slightly larger than the Exacto blades. They are a little heavier and hold an edge much better. Diamond Honing Stones obtainable from: WOODCRAFT, 210 Wood County Industrial Park, P. O. Box 1686, Parkersburg, WV 26102-1686. Call 1-800-535-4482 for a catalog. If you don't sharpen your blades now, give

# FOR SALE

#### LARGE SCALE GLIDERS

MULTIPLEX DG 600 3.0 METER N.I.B. GRAUPNER VENTUS C (Fuse painted white by body shop, some wor retract included).	\$100.00 obo
SLOPE	
BLUE CURRY 2 METER (fiberglass fuse, obechi wings, fast aerok COMBAT MODEL A-4 SKYHAWK 48" N.I.B. SAILPLANES INT'L SITAR SPECIAL 100" (fiberglass fuse, Obechi & glass wings, do SAILPLANES INT'L SITAR SPECIAL-built (built & flownneeds minor repair) SITAR SPECIAL SPARE WING SET CR AIRCRAFT F-3B RAIDER (built & flown) 2 METER T-TAIL SLOPE (almost finishedfiberglass fuse, sheete	\$ 40.00 \$225.00 puble taper planform) \$200.00 (w/o wing servos-4) \$275.00 (w/ wing servos-4) \$100.00 \$425.00 \$ 75.00
THERMAL	
GLOBAL HOBBIES GRIFTER good condition ACCIPITER XL KIT w/carbon spar material (fiberglass fuse, toam wings w/ sheeting) RER GENISIS PIERCE PARACON N.I.B.	\$425.00 (w/ 4 94141 servos) \$115.00 \$350.00 \$ 55.00
HANDLAUNCH MONARCH 94 GLOBAL HOBBIES WHIPIT	\$90.00 \$110.00
MONARCH 94 GLOBAL HOBBIES WHIPIT  POWER  HOUSE OF BALSA P-5 40 SIZE COLLECTABLE	
MONARCH 94 GLOBAL HOBBIES WHIPIT POWER	\$110.00  IF YOU ARE INTERESTED IN ANY ITEMS
MONARCH 94 GLOBAL HOBBIES WHIPIT  POWER  HOUSE OF BALSA P-5 40 SIZE COLLECTABLE (fiberglass fuse, built up wing, N.I.B) ROYAL CORSAIR 1/2A N.I.B.	\$110.00  IF YOU ARE INTERESTED IN ANY ITEMS ON THIS PAGE  \$ 50.00 CALL - Dane Vannett (805) 532-2473
MONARCH 94 GLOBAL HOBBIES WHIPIT  POWER  HOUSE OF BALSA P-5 40 SIZE COLLECTABLE (fiberglass fuse, built up wing, N.I.B) ROYAL CORSAIR 1/2A N.I.B. PACIFIC MODELS ARF SUKHOI N.I.B.  RADIOS	\$110.00  IF YOU ARE INTERESTED IN ANY ITEMS ON THIS PAGE  \$ 50.00 \$115.00  CALL - Dane Vannett (805) 532-2473  \$115.00  SOLD
MONARCH 94 GLOBAL HOBBIES WHIPIT  POWER  HOUSE OF BALSA P-5 40 SIZE COLLECTABLE (fiberglass fuse, built up wing, N.I.B) ROYAL CORSAIR 1/2A N.I.B. PACIFIC MODELS ARF SUKHOI N.I.B.  RADIOS  JR PCM 10 S (like new just serviced) (new batteries, new touch screen, less th	\$110.00  IF YOU ARE INTERESTED IN ANY ITEMS ON THIS PAGE:  \$ 50.00
MONARCH 94 GLOBAL HOBBIES WHIPIT  POWER  HOUSE OF BALSA P-5 40 SIZE COLLECTABLE (fiberglass fuse, built up wing, N.I.B) ROYAL CORSAIR 1/2A N.I.B. PACIFIC MODELS ARF SUKHOI N.I.B.  RADIOS  JR PCM 10 S (like new just serviced) (new batteries, new touch screen, less th AIRTRONICS VISION N.I.B. P.C.M.	\$110.00  IF YOU ARE INTERESTED IN ANY ITEMS ON THIS PAGE  \$ 50.00
MONARCH 94 GLOBAL HOBBIES WHIPIT  POWER  HOUSE OF BALSA P-5 40 SIZE COLLECTABLE (fiberglass fuse, built up wing, N.I.B) ROYAL CORSAIR 1/2A N.I.B. PACIFIC MODELS ARF SUKHOI N.I.B.  RADIOS  JR PCM 10 S (like new just serviced) (new batteries, new touch screen, less the AIRTRONICS VISION N.I.B. P.C.M.  MISCELLANEOUS  FLYING WING CORES & HARDWARE	\$110.00  IF YOU ARE INTERESTED IN ANY ITEMS ON THIS PAGE  \$ 50.00
MONARCH 94 GLOBAL HOBBIES WHIPIT  POWER  HOUSE OF BALSA P-5 40 SIZE COLLECTABLE (fiberglass fuse, built up wing, N.I.B) ROYAL CORSAIR 1/2A N.I.B. PACIFIC MODELS ARF SUKHOI N.I.B.  RADIOS  JR PCM 10 S (like new just serviced) (new batteries, new touch screen, less the AIRTRONICS VISION N.I.B. P.C.M).  MISCELLANEOUS  FLYING WING CORES & HARDWARE SCALE 3.25 METER WINGS.(balsa sheeted)	\$110.00  IF YOU ARE INTERESTED IN ANY ITEMS ON THIS PAGE  \$ 50.00