



Official Newsletter of the Southern Ontario Glider Group

TASK



Affiliated to the Model Aeronautics Association of Canada

OFFICIAL NEWSLETTER - JULY, 1990

Vol. 6 - #4

PRESIDENT:	OTTO BANDMANN R.R. #1 Dundas, Ontario L9H 5E1	519-623-2560
TREASURER:	G. FRITZ 19 Pepperwood Crescent Kitchener, Ontario N2A 2R4	519-893-7558
SECRETARY/ NEWSLETTER EDITOR:	F. J. FREEMAN Unit 17- 11 Colmar Place Dundas, Ontario L9H 4L1	416-627-9090

THE NEWSLETTER IS PUBLISHED BI-MONTHLY

Any material for inclusion should be sent to:-

The Editor
F. J. Freeman
Unit 17 - 11 Colmar Place
Dundas, Ontario
L9H 4L1

MIDSUMMER, 1990

"Summer dayscould they but last forever", as some poet said.

We have been fortunate that up to this time (late June, as I am writing this) the weather has been almost perfect for our hobby/sport, and several members have been observed at the field trying this and that to squeeze an extra few seconds from even the smallest thermals. Winds have been, for the most part, moderate, and attendance at the field much improved from previous years.

One highlight, for me at least, has been the long-awaited emergence of our ALGEBRAS - five have been completed and test flown to date, and some were unlucky enough to be damaged - all flew well on their first outings and all indications are that every plane that suffered injury is well on the way to recovery. We are discovering that this is a very different breed of cat to anything we have flown before, but each of the examples I have seen has performed in a similar manner - straight, high tow with good transition. We have had one wing failure, and there are thoughts that maybe some reinforcements may be necessary - but it's too early yet, to make definite decisions. Every innovation has to be checked out thoroughly, and the Algebra is no exception. More later.

FIELD:- By another stroke of luck, we are still able to use the Community Centre field, which is very convenient. We cannot be sure just when we will have to move on, but we are again fortunate because we have the field at Lynden to fall back on; I personally haven't used it yet, but I've had reports that a couple of people have been down there. We may have to move suddenly, as it were, in which case it's up to all of us to pass the word to others in our immediate area, and to someone on the Executive (Telephone No's on front page) if they have not already been informed - it's not unusual to arrive on the sod farm and find strippers and loaders already at work; that's the situation and we cannot change it - we have to live with it!

MEMBERSHIP:- Our club roster now lists 43 names - a situation that was not imaginable 2 years ago - many have joined on recommendations from Hobby shops, some introduced by long-standing members and still others have "found" us at the field. Not everyone will be able to get out there at the same hour of the same day unless it's by arrangements, but it should be pointed out that if even 5 or 6 are flying we should have a Frequency Board in operation - that is an immediate necessity - we can't go on relying on the good nature of Stan Shaw to allow us to use his own personal property. WE NEED A VOLUNTEER TO MAKE UP A BOARD, AND FIND A SECURE PLACE TO STASH IT so that the first one out can set it up and get things moving - we owe ourselves the security of this item - it may save more than one "incident". WHY DON'T YOU VOLUNTEER?

F.J.F.

A REMINDER -
SUNDAY, AUGUST 19th,
NOVATHON - BILL W. AND FRED F.
0900 HRS

Thermal Hunting

By Bob McGowan

When you release from the tow line you have a limited amount of altitude which you must use wisely to search for a thermal. You should have an efficient search pattern planned BEFORE you launch.

Look around the field for potential lift sources. On a calm day it's easy to make predictions; perhaps a paved parking lot, a dry dirt field, the roof of a large school building, or a hillside which is more perpendicular to the sunlight. These types of areas should warm up faster and generate thermals more often than green grass for instance. There will not be constant thermal lift over any given area, they all cycle. The air warms to a point where it is lighter than the surrounding air, and starts rising. The cooler surrounding air comes in and is sucked up behind the warm air bubble but at some point things equalize, the lift is over, and we have to wait for another bubble of air to warm up. Think twice before heading to the area where your buddy found a thermal a few minutes ago, it may have already cycled to sink.

I generally make a search pattern that takes me around the left or right side of the field over a couple of potential thermal generators. I end my search with the plane downwind of the landing area about 100 feet above my last chance, ace in the hole, likely thermal spot. When searching, fly in a strait line with your wings level as much as possible and NEVER cover the same air twice. Keep the planes speed at it's best L/D (Lift/Drag or Glide Ratio) so that the most air possible will be searched. This speed will be slightly faster than your minimum sink speed. Remember, you're a sailplane pilot not a paratrooper. If you encounter bad sink, I recommend staying on your original course but fly faster and get out of there. What goes down must come up; often you'll find lift just beyond the bad air you are speeding through.

Before and during your flight you should be looking for lift marked by birds, other sailplanes, or debris being sucked up. Also, be aware of warming air where you are standing or a sudden wind shift that would indicate a nearby thermal that is sucking in the surrounding air. Of course, if the marked lift is within your gliding range you should consider dumping your flight plan, putting the nose down, and going for it. Remember though that this is not a sure thing, depth perception can make it difficult to get into the same air and dust devils are often surrounded by strong sink and turbulence.

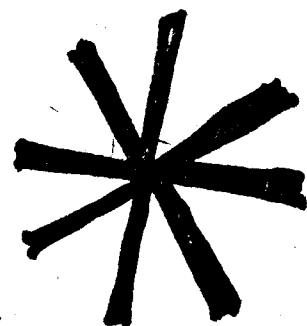
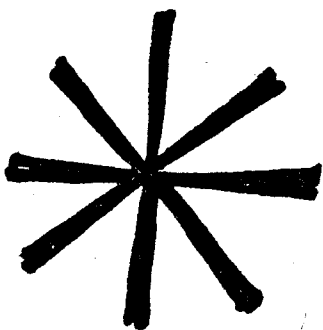
Predicting where the lift is becomes harder when the wind comes up. The thermals are not attached to their originating source, they break loose and drift downwind. Thermals you find at launch height originated way up wind of the flying field. If you get down to a couple hundred feet of altitude try to search above structures, tree lines or hills that have a large open area upwind of them. I've found that weak thermals drifting across the open area hit these obstructions and are kicked off; they become stronger and the rate of climb increases to a level where we can afford to drift with them and gain enough altitude to get back home. Another place to search when you get low is over sheltered areas like small valleys or among buildings where air can warm without being blown away. Forget trying over parking lots because the air is blown through before a bubble can warm.

I hope you're not thinking "I can't do this stuff with my 2 Meter Floater" because you can. In fact, it's even more important for you than the Super Ship filers to use every advantage possible.

Sometimes the whole field will seem to cycle: No one will get lift and then everyone will. This seems to happen most often at wide open flying sites with no hills nearby. When you notice this happening at a contest you should try to observe the pattern closely. If there is any wind you have a good chance of getting good air even if you launch during a down cycle. At the start of the down cycle you will feel a temperature drop and the wind will get a little stronger. If you can, launch immediately and head down wind, you can still catch the good air that blew through. If you did not launch immediately, don't hurry (Could Bob possibly be suggesting that you Sand Bag?...ED.). When you do have to launch, fly as far upwind as possible to get to the next lift cycle that will be blowing your way. If it's a calm day and you notice this large scale cycling and you are called to fly during a sink cycle you have only one hope: To fly straight, far, and fast out of the bad air, the direction you should go is anyone's guess!

The real key is to fly aggressive. Go get that thermal, Don't wait for it to come to you...usually they show up late!

NOTICE TO MEMBERS



CLUB DAY, 1990

TO BE HELD AT CLUB FIELD.

"BY PRESIDENTIAL DECREE"
SUNDAY, JULY 22, 1990

HAS BEEN DECLARED AS "CLUB DAY" -
A DAY ON WHICH WE SHALL HOLD A FUNFLY
CONTEST FOR MEMBERS ONLY. EVENTS
FOR SAILPLANES - NO POWER - IF YOU CAN'T
HI-START IT - YOU CAN'T FLY IT!

AWARDS



PRIZES

PLAN TO ATTEND - MAKE THIS DAY A
SUCCESS!!

TIME 9:00 AM TO 6:00 P.M.

HI-STARTS

A simple 8-letter word - but what a bag of worms one opens up when raising the subject.

Every one, it seems, has a different concept of how to go about each aspect of tow-line use, care and maintenance, so we thought it might be a good idea to put down on paper a few observations about this particular type of launching device.

First of all, let's start by defining the word - it literally means "high-launching device" (or something like that) and is basically a catapult - no more, no less. Not like the catapult the ancient warriors of Greece and Rome used, but the purpose is very similar - to project a "missile" (your sailplane) into the air with great speed.

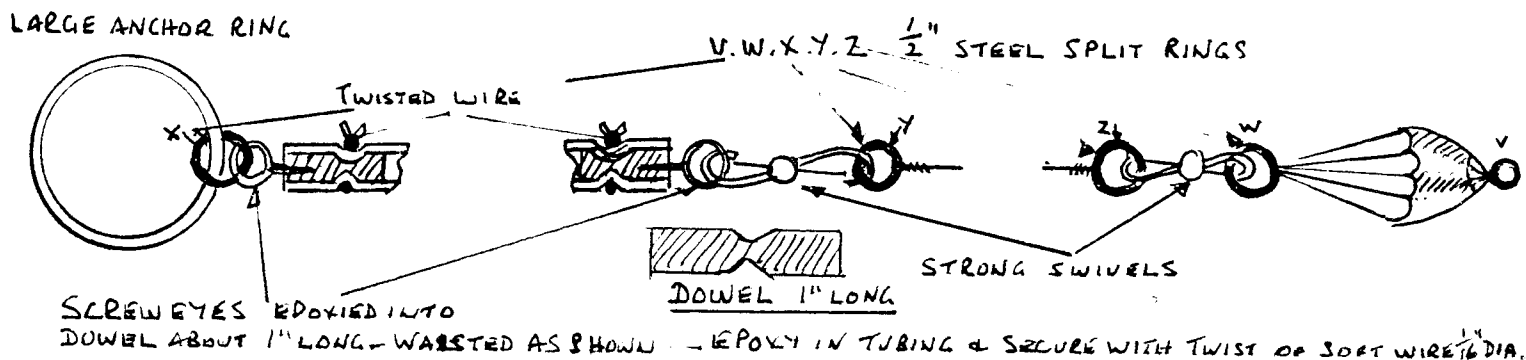
Our Hi-starts come in many sizes - small ones for small models, larger, more powerful types for heavier models. They consist, as I'm sure you are all well aware, of a length of "rubber" cord, to which is attached a "towline" of strong nylon/cotton cord. The final section comprising a parachute (or flag) fitted with a metal ring. The rubber cord (or tubing if you like) is anchored firmly to the ground, and by hooking the model to the parachute and stretching the line, tension is placed on the rubber, thus providing energy to boost the aircraft into the air on release; so much for that - a simple straight-forward conversion of tension to energy.

But there's more to it than just pegging out the line, stretching and releasing to make a flight. The whole thing can become a nuisance if you go about it in the wrong way. Rubber tubing chafes, dries, cracks, loses its elasticity and breaks - usually at the most inconvenient time. The line can become a tangled mess, if you have the wrong stuff. Rings can let you down, knots can become loose in the most unexpected ways, even the wrong choice of pegs can affect the operation.

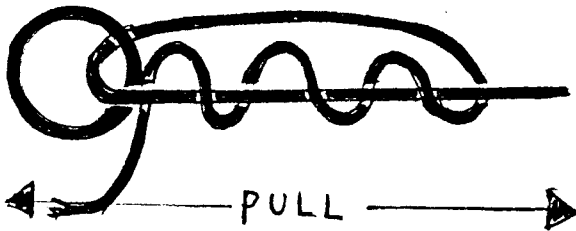
The most vulnerable component of any hi-start is that length of rubber (surgical tubing mostly). To begin with it must be securely fixed to a ring, and here's a couple of things to look out for:

First, use solid steel rings wherever possible, about 1" in diameter; if not, steel split rings of similar size. Make sure that the rings are large enough to take the pin, peg, nail or whatever you are using as an anchor. The ring on the chute end of the Hi-start also deserves some consideration - it should be about $\frac{1}{2}$ " dia. solid steel or split, and firmly attached to the shroud lines of the chute. Line may be braided nylon, nylon/cotton, monofilament, but be sure that it is right for the plane - it's not much use launching a 12 foot sailplane with 12 + sq.ft. of area on a 30 lb. line. By the same token the thicker braided lines may be unsuitable for GENTLE LADY, or similar designed planes. It is always best to use braided cord, since this helps to avoid the snags and snarls caused by the twisting moment generated during relaxation of the rubber/line/chute combination after launching.

In addition, good strong swivels should be tied into place between rubber and line, and also between line and chute. Chute should be multi-panelled and made from substantial material, the best being some kind of oiled silk; the more panels there are the more stable the chute will be, and will cause less tangling of the line.

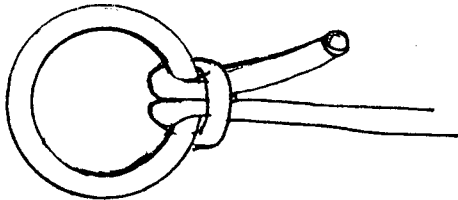


Knots should be reliable, and firm, the best perhaps is the grinner, for attaching lines and chute to swivels. This is a very easy knot to tie and will remain firm once it has been pulled tight.



Pass through-attach point, then make turn around standing part. Take several turns between loop formed by standing part. Finally, pull tight to lock.

For attaching rubber to anchor ring the knot I use is called, I believe, an Overhand Knot.



Pass upwards through ring, behind standing part, then downwards inside bight to complete - pull tight.

CARE & MAINTENANCE:

Always make sure to wrap the Hi-start carefully with very little tension. Try to keep the rubber clean at all times by avoidance of use in areas where grit and gravel is exposed. Nothing contributes more to wear and chafing than small particles which grind their way in between the knots.

With a new Hi-start break it in gently, even if it means making several launches with minimal tension - your Hi-start will love you for it! It will last longer and give you better service.

At the end of each season, dismantle the line, rubber and chute. Place the rubber in about 6" of water in the bath, (if you don't have a bath a bucket will suffice!) add about 2 tablespoons of detergent and leave overnight - if you use a bucket for this purpose you should use less detergent - too much liquid soap will leave the rubber sticky - rinse it thoroughly, and dump it into a sealable plastic bag along with a handful of talcum powder until ready to fly next year.

NEVER, NEVER USE A HI-START IN WINTER!!!

There are many things that affect the performance of these devices and there probably are many more wrinkles to be added to the list, but these are the things which seem to have worked for me, and I hope that this article has helped others.

Fred

WASSMER WA 30 "BIJAVE"

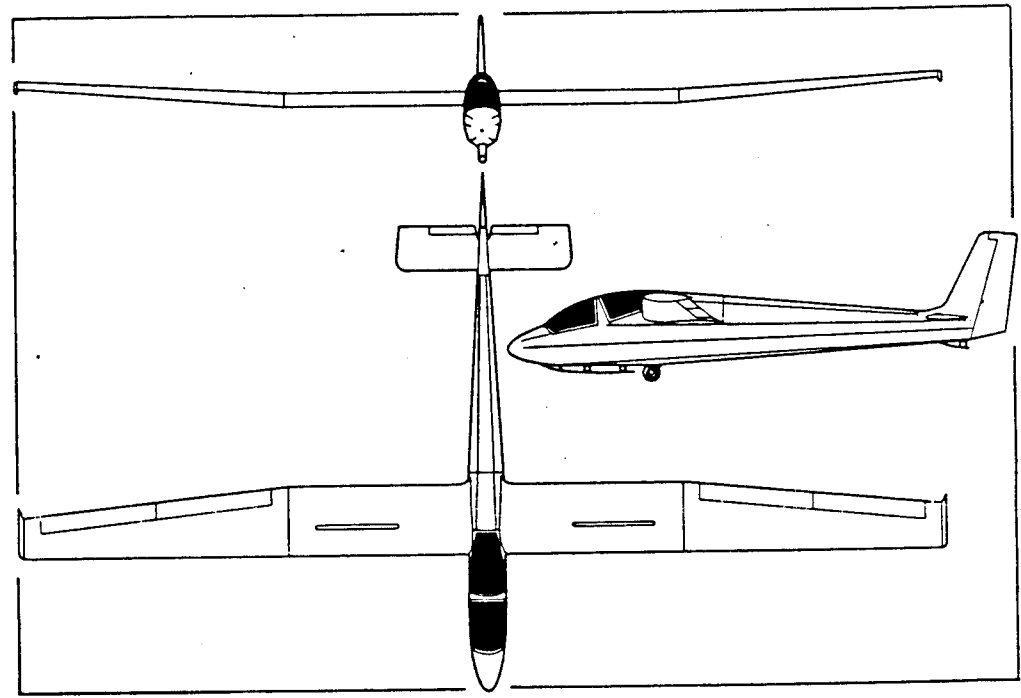
A product of the post-war era, our subject comes from Issoire in the Massif central of France, just a little south of the city of Clermont-Ferrand - a name familiar to many wartime aviators.

A development of the earlier WA 21 Javelot, the Bijave was intended as an advanced trainer, the first prototype making its debut in 1956, with an improved version following in 1970. Some examples are still flying, mainly in French Gliding Clubs. Performance was good for a 2-seater, and many French glider pilots had their secondary training on this machine.

Tandem seating, with individual blown canopies make access easy for both instructor and pupil. With a 3-piece shoulder mounted cantilever wing of birch ply reinforced construction, the Bijave has a span of just over 55 ft. A plywood leading edge torsion box and plywood ribs are the basis of the wing, which has fabric covering to the area behind the spar, and perforated Schempp-Hirth airbrakes operating on both upper and lower surfaces. Fuselage is of welded steel tube with a glass-fibre nosecone and sprung monowheel landing gear. The stabilator has large anti-balance tabs.

Nose and tail moments are almost perfect for R/C modelling; 1/5th. scale would come out to about 11 ft. span - a very convenient size.

- Span: 16.85M (55' 3½")
- Length: 9.5M (31' 2")
- Airfoil: N.A.C.A.
63821/63615
- A/R 15.0



(Details are taken from JANE'S WORLD SAILPLANES AND MOTOR GLIDERS)

F.J.F.

S.O.G.G.

JULY 22nd. 1990 - CLUB DAY

For the purpose of this contest the membership has been divided into three categories, or classes as follows:-

- CLASS 1) AB INITIO - NO CONTEST EXPERIENCE, OR LIMITED FLYING SKILLS.
- CLASS 2) INTERMEDIATE - MODERATE FLYING EXPERIENCE - LITTLE OR NO CONTEST FLYING.
- CLASS 3) INSTRUCTORS (OR EXPERT) - EXPERIENCED CONTEST FLYERS.

PLEASE NOTE: With regard to classification. We ask that this rough assessment of your flying skills be accepted at this time. These classifications are somewhat arbitrary and only apply for this contest.

On REGISTRATION, you will be asked to fill in a score card which will be identifiable by one corner (top right) being marked in appropriate colour.

- GREEN - AB INITIO
- RED - INTERMEDIATE
- BLACK - EXPERT/INSTRUCTOR

As to the rules for the contest, the following will apply:-

All classes will be categorized as "OPEN" i.e. No restrictions on size or type of model.

AB INITIO contestants will receive unlimited assistance from Instructors viz: Launch or landing (or both) may be handled by the Instructor. AB INITIO contestant must fly the MIDDLE part of any flight.

Landing outside the field boundary, as defined by the C.D. will result in 0 (zero) score. Except in the AB INITIO class aircraft must land rightside up, no detached parts etc. Where landing requirement is specified 25 ft. circle, any part of aircraft in circle - 20 pts.

SPECIFIC RULES

- 1) AB INITIO - Requirement - Best total of 3 flights from 4 attempts - 3 POP-OFFS allowed - no landing requirements.
- 2) INTERMEDIATE: Requirement - 15 min. target - no maximum - no spot landing except in fly-off (if necessary) - 1 pop-off allowed (2 min.rule)
- 3) INSTRUCTORS: Requirement - 15 min. accumulator - 7 min. maximum - spot landing - no pop-offs.

GENERAL: Emphasis on this day is on BEGINNERS. Give all the help you can. Most important of all is that we HAVE FUN!

* DATES TO REMEMBER:

AUGUST 12 - C.O.C.G. NOVATHON, ALLISTON

AUGUST 19 - S.O.G.C. NOVATHON. ROCKTON *

S.O.G.G. MEMBERSHIP LIST - JANUARY, 1990
 =====

Name	Address	Phone	Frequency
ARMSTRONG, Keith			72.190 (20)
ASHTON, Peter	200 Edwin St., Kitchener, Ont.	(519) 576-6750	
BANDMANN, Otto	R.R. #1, Dundas, Ont.	(519) 623-2560	72.590 (40), 72.840
BEWLEY, W.	147 Glendale Ave. N., Hamilton, Ont.	(416) 544-7548	72.540 ??, 72.550 (38)
COPPIN, Paul	22 McKay Rd., Dundas, Ont.	(416) 627-5672	
CRAWFORD, John	Box #1, Hanover, Ont.	(519) 364-2513	
CRHA, Stan	1207-2185 Sheridan Pk. Dr. Miss. Ont.	(416) 822-1934	72.270 (24), 72.470 (34)
FALLADOWN, Jason	R.R. #1, Cambridge, Ont.	(519) 621-1529	
FRANK, Steve	1546 Fletchers Rd, R.R. #1 Hannon, Ont.	(416) 692-4781	
I* FREEMAN, Fred	U 17-11 Colmar Place, Dundas, Ont.	(416) 627-9090	72.080, 72.400, 72.470 (34)
I* FRITZ, Kurt	Rock Chapel Rd. R.R. #2, Dundas, Ont.	(416) 689-4171	72.160, 72.960, 72.240, 72.670 (44)
I* FRITZ, Gerry	19 Pepperwood Cres., Kitchener, Ont.	(519) 893-7558	72.320
FUND, Albert	73 Beech St. Hespeler, Cambridge, Ont.	(519) 658-9495	72.910 (56)
KLEBERT, Norm			72.430 (32)
I* KLEBERT, Werner	59 Byron Ave., Stoney Creek, Ont.	(416) 578-9431	72.080, 72.320, 72.800
LEACH, J.R.C.	10 Belvidere Ave., Hamilton, Ont.	(416) 383-5024	
LINGHORNE, Jack	55 Anglesey Blvd., Islington, Ont.	(416) 233-0230	72.030 (12), 72.910 (56), 72.240
MOAR, William	944 Concession #6 W, Milgrove, Ont.	(416) 659-1053	72.960
I* PACKHAM, Craig	R.R. #1, Caistor Centre, Ont.	(416) 957-3672	72.400, 53.100
I* PACKHAM, Jason	R.R. #1, Caistor Centre, Ont.	(416) 957-3672	72.760, 72.720, 72.840
RADER, Charles	41 Ivygardens Cres., Beamsville, Ont.	(416) 563-4108	72.240, 72.400
ROGERS, Bill	500 Orkney Rd. R.R. #1, Troy, Ont.	(416) 628-8907	72.550 (38), 72.870 (54), 72.470 (34)
SARBOIU, Julian	4 Killarney Rd., Toronto, Ont.	(416) 440-0985	72.190 (20), 72.310 (26)
SCHMIDT, Karl	122 Marshall St. Waterloo, Ont.	(519) 885-4141	72.550 (38), 72.590 (40)
SHAW, Stan	16 Aylesbury Rd., Islington, Ont.	(416) 231-7050	72.590 (40), 72.710 (46), 72.750 (48), 72.790 (50)
TAYLOR, P.	579 Clare Place, Burlington, Ont.	(416) 333-9073	27.045, 72.960

... Continued

THAYER, Bob	1514 Upper Middle Rd., U3, Burlington Ont	L7P 4M5	(416) 336-3290	72.630 (42)
VANDER BYKEN, Gerry	56 32nd St. Etobicoke, Ont.	M8W 3G4	(416) 255-4517	72.190 (20), 72.760, 72.800
WALLACE, Bud	1060 Eastmount Ave. Mississauga, Ont	L5E 1Z3	(416) 274-3177	72.670 (44), 72.400
I* Woodward, Bill	520 Pine St., Cambridge, Ont.	H3H 2S6	(519) 653-4251	72.240, 72.350 (28)

I* - Available for assistance.

S.O.G.G. 72 MHZ BAND FREQUENCY UTILITY HISTOGRAM

CHANNEL	FREQUENCY
12	72.030 *
14	72.070 **
Br/Wh	72.080 **
16	72.110
18	72.150
Blu/Wh	72.160 *
20	72.190 ***
22	72.230
Red/Wh	72.240 ****
24	72.270 *
26	72.310 **
Pur/Wh	72.320 **
28	72.350 *
30	72.390
Or/Wh	72.400 ****
32	72.430
34	72.470 ***
36	72.510
38	72.550 ***
40	72.590 ***
42	72.630 *
44	72.670 **
46	72.710 *
Nil	72.720 *
48	72.750 *
Nil	72.760 **
50	72.790 *
Nil	72.800 **
52	72.830
Nil	72.840 **
54	72.870 *
56	72.910 **
58	72.950
Yel/Wh	72.960 ***
60	72.990