



AMA Charter Club #128
<http://www.1hss.org>

HSS is the oldest AMA chartered R/C Soaring Club in the USA
Founded 1964

MAY 2004

VOLUME 41

This Month's Featured Model – A Heinkel He-100 D

Rob Askegaard has been supplying beautiful pictures of other member's aircraft, and finally we get to see one of Rob's most recent efforts.



This is a gorgeous Heinkel He-100D that Rob has built from scratch using Hobby Horn plans. It has a 61" wingspan, is powered with an Astro 40 motor driving an 18 x 10 three bladed prop through a 3.1:1 Superbox. It has yet to fly, and Rob suspects it is underpowered, but he is still refining this beauty. Right now, the prop is more for show, and may be replaced with a more appropriate prop. You will see it at our Fun Fly. This plane was never put into final production, having lost out to the Me-109.

RCX 2004 Show Report

The RCX show held April 23-25 at the Anaheim Convention Center, was bigger than before, but still emphasized R/C cars. The most significant item at the show was the introduction of the Sensor (brand) digital radio system by Nomadio Corporation. This is the coming thing in all radio control, because of the following features.

This R/C radio control uses cell phone technology with a base band of 2.4 GHz. It is spread spectrum, with each plane having its own address (like a phone number). This means no more frequency control, and no more problems with interference. The radio still uses standard servos, and the receiver contains a transmitter which can down link data such as battery voltage, temperature, and speed. Initially this product is for cars, but will be available for planes, next. Check out their web site at www.nomadio.net.

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May President's Message

Hello again. As I write this message I hear the rumble of radial engines going over my house and it is a nostalgic feeling. They are the sounds of the B-17 and B-24 giving rides out of John Wayne this past weekend. Not that I was around to see these beasts in their prime, but as a lover of aviation it gives me chills to see them in the air flying and not stuck under glass and roof in some museum. I was out at the field on Sunday and the B-17 went right across our field at minimal altitude (estimated 1500-2000ft). It was a great moment to see the aluminum overcast but at the same time it got me thinking about some of the problems the club has had with low flying, full size aircraft in the skies above. Recently the Costa Mesa police helicopter had sent a message to one of the park rangers that a glider was very high and that he needed to come down in altitude. I know that this has been an issue before and has been researched by the club to see where exactly we stand in the case of altitude limits. It is my understanding and the clubs understanding that because we are outside of the critical John Wayne Airport zone, we did not have any restriction on altitude. However, the flight patrol of the helicopter brings them across our field at times and as AMA states, any model aircraft shall yield to any full size aircraft that shall pass through. Whether the full size pilot is in the right or wrong, the model shall give right away to them, period. If any of you have done full size flying then you know it is unsettling to see small, unknown objects (birds, trash, etc) in your flight path so do your part and stay aware. If you are spotting or just standing by and see an aircraft in the vicinity, make it known to RC pilots in the air. The club officers are trying to communicate with the city with regards to this issue and I know that they are interested to hear from us as well. I would say that until we figure out what the final verdict is, all members should be mindful of the helicopter (or any other low flying aircraft) and avoid any unnecessary conflict. It has already been made official that if this sort of conflict occurs in a contest setting, you are required to bring the model down and a re-flight is to be granted. This common sense rule shall be applied to sport flying as well. I personally like seeing our Costa Mesa helicopter on patrol, as I know it is doing a very important duty. I would like to make sure we present our hobby as a positive activity and not a nuisance.

BTW, if you did get to go up on one of the warbirds bring in your story and any pics to the next meeting!
Happy Flying,

Troy Peterson

April 6, 2004 Harbor Soaring Society Meeting Minutes

Troy Peterson opened the meeting at about 7:30 PM. Three officers and 11 members were present.

Old news:

Troy informed the meeting that OCMA just incorporated in order to strengthen the club legally and financially, and restructured their by laws for signing up. OCMA Meets the 4th Tuesday of the month for those interested.

New news:

April 18th is Earth Day at the park that will be a Sunday HSS will have a booth at the field.

Karl Hawley and Troy Peterson spoke further with Ron Mullendike about a faucet for watering the field. It would be nice to have a soft green spot to land on.

The Costa Mesa fish fry is planned for June 5th-6th we need volunteers to man a booth, and some impressive planes for a static display. Please see Jim Parsons who is organizing the activity.

Karl Hawley will be holding an RES contest June 19th Saturday. Karl is expecting a great turn out and needs help with registration, scoring, frequency control, and the winches.

Jim Hanson will be holding his electric contest and fun fly May 23rd. Again, club members are needed to help Jim with registration, raffle, and all the rest.

Possible power source at the field container for electric fliers to use was also discussed, the plan is to have a 12v power source on the outside of the container.



Mike Gaczowski will mail a membership renewal notice to last years members who are not signed up as yet , otherwise they will be dropped from the mailing list.

Fred Hesse is looking into teaching flying classes through the city of Costa Mesa.

Jim Parsons brought his 3 meter legend model which he has converted to RES.

Jim Hanson brought his Trick 800 Lite (purchased from North East Sailplanes). He has an AXI outrunner brushless motor, three lithium polymer 1.9Ah cells. He says one charge can last up to 45 minutes.

Troy Peterson brought in his Shure-Flight Bipe which is made of polyurethane and depron sheet. It has a Lexan cowl, wheel pants, and canopy. The kit is about \$60, and he uses a Hacker B-20L motor with 3:1 gears and an 11.4 x 4 prop on 10 cells.

The meeting was adjourned at about 9 PM.

Respectfully submitted for Don Ramsay (Secretary) who was ill,
Chris Adamczyk and Fred Hesse

Additional Meeting Notes

Club Shirts - Karl Hawley has just placed the order for club shirts. There is still time to get yours if you contact Karl before 8 May. Polo shirts will be about \$38, and T-shirts will be less (about \$12 to \$14). The proposal is for an embroidered logo on the front and a three-color silk screen on the back.

May 4th Meeting Notice

The next meeting will be Tuesday May 4th, 2004 at the Irvine Water District. The address is 15600 Sand Canyon Drive. There are exits for Sand Canyon Drive on both the 5 and 405 freeways.

The executive council meets at 7:00 PM, and the business meeting starts at 7:30 PM. We had 14 members present at the last meeting. There are lots of things being planned, and we need your help.

Coming Events For 2004

Sunday	May 2	Fifth HSS thermal duration contest for 2004. Fairview Park, Costa Mesa.
Tuesday	May 4	HSS monthly meeting, 7:30 PM, at the Irvine Water District offices. Address is 16500 Sand Canyon Avenue, in Irvine.
Sat-Sun	May 1-2	CVRC Bent Wing Competition, Russell Pond club field, Visalia CA.
Sunday	May 23	Electric Fun Fly sponsored by HSS. All electric planes. Open to all AMA members in Southern California. Info: www.1hss.org .
Sunday	May 23	4 th SCSC thermal duration competition, winch launch, SWSA, Las Palmas Middle School, Covina, www.swsa.8K.com for map and field photos.
Tuesday	June 1	HSS monthly meeting, 7:30 PM, at the Irvine Water District offices. Address is 16500 Sand Canyon Avenue, in Irvine.
Sunday	June 6	Sixth HSS thermal duration contest for 2004. Fairview Park, Costa Mesa.
Sat-Sun	June 5-6	Lyons Park Fish Fry. HSS will have a booth and static display on Saturday.
Sunday	June 13	Be advised that Orange County Track Club has a race at Fairview, 8AM.
Saturday	June 19	Over The Edge Bent Wing thermal duration competition, sponsored by HSS. Open to all AMA members in Southern California. www.1hss.org .
Sunday	July 4?	Seventh HSS thermal duration contest for 2004. Fairview Park, Costa Mesa.
Tuesday	July 6	HSS monthly meeting, 7:30 PM, at the Irvine Water District offices. Address is 16500 Sand Canyon Avenue, in Irvine.
Sunday	July 18	Inland Soaring Society, Inland Empire RES Challenge, Riverside CA.
Sunday	July 25	5 th SCSC thermal duration competition, HSS, Fairview Park, Costa Mesa.
Sunday	August 1	Eighth HSS thermal duration contest for 2004. Fairview Park, Costa Mesa.
Sunday	August 29	6 th SCSC thermal duration competition, Thousand Oaks Soaring Society.



Coming Events For 2004 (Continued)

Sunday	Sept 5	Ninth HSS thermal duration contest for 2004. Fairview Park, Costa Mesa.
Sat-Mon	Sept 4-6	Vintage Glider Meet (Info will be provided by Larry Tuohino).
Sunday	September 26	7 th SCSC thermal duration competition, Inland Soaring Society, Riverside.
Sat-Sun	October 2-3	CVRC Fall Glider Festival, Russell Pond club field, Visalia CA.
Thurs-Sun	October 7-10	Hobby Vision Show, Sands Expo and Convention Center, Las Vegas NV.
Sat-Sun	October 16-17	CVRC 3 rd Fall Aero Tow (Giant scale), Russell Pond club field, Visalia CA.
Sunday	October 24	8 th SCSC thermal duration competition, Torrey Pines Gliders, Poway.

HSS Contest Report

The following are the results of the monthly thermal duration contest for April 4, 2004.

Class	Name	Total	Norm by Contest	Norm by Class
E	MARK BROWNING	4,595	1,000	1,000
S	CASEY ADAMCZYK	4,060	884	1,000
E	LARRY JOLLY	3,835	835	835
RES	KARL HAWLEY	3,185	693	1,000
RES	CHRIS ADAMCZYK	2,685	584	843
E	TOM COPP	2,635	573	573
RES	ROSS THOMAS	2,480	540	779
S	ARNOLD FRANKENBERGE	2,478	539	610
E	JIM PARSONS	2,320	505	505
RES	JOHN KRUG	1,727	376	542
S	TAK TAKAYAMA	1,600	348	394
S	STEVE VASQUEZ	335	73	83

HSS Competition To Date

EXPERT	Jan	Feb	Mar	Apr	TOTALS
Mark Browning	998	931	956	1000	3885
Tom Copp	978	975	986	573	3512
Jim Parsons	957		963	505	2425
Jim Sneed		615	989		1604
Ben Clerx	0	1000			1000
Ross Thomas	981				981
Dan Fink			963		963
Mark Taylor			960		960
Kevin Andersen		504			504
SPORTSMAN	Jan	Feb	Mar	Apr	TOTALS
Casey Adamczek	951	934	932	1000	3817
Arnie Frankenberger	951	831	976	610	3368
Steven Vasquez		591	941	83	1615
Tak Takayma			1000	394	1394
Jeff Gortatowsky			525		525
3 FUNCTION		Feb	Mar	Apr	TOTALS
Ross Thomas		1000	1000	779	2779
Karl Hawley		913	0	1000	1913
John Krug		908	190	542	1640
Chris Adamczyk		166		843	1009



Public Relations

The following article was published in the July 2003 edition of AMA's Model Aviation, originally prepared by the Sarasota Radio Control Squadron, Florida.

Suggestions For Improving Club Public Relations:

1. Put a large "Visitors Welcome" sign up marking your field.
2. Most importantly, have someone at the field during flying hours who can meet and greet visitors, explain what is going on, and then thank them for coming. Explain the cost of getting into the hobby.
3. Offer free flight training when joining your club.
4. Have an RC flight simulator at your club for new students to practice on before they ever touch the real controls.
5. Have three instructors sign up as Introductory Pilots and let interested people fly with them.
6. Have Boy or Girl Scouts, Big Brother or Big Sister clubs, YMCA and YWCA and other youth organizations come out to your field to watch and get on the sticks.
7. Get your club members to understand the importance of PR. Have someone in charge of PR for your club.
8. Have a Web site and link to as many other sites as you can. Update it regularly.
9. Go Online and find Web sites that have a list of community events in your area. Go to your community Web site and list your events at no cost.
10. Get involved with your school system by offering classes or be an outside resource speaker on aerodynamics and RC modeling.
11. Get involved with local youth using AMA's Education Program.
12. Provide free back issues of aero modeling magazines to the local libraries and youth in your programs.
13. Offer to start an aviation unit in the kids' section of the library.
14. Get AMA tapes and show them as a program for the Kiwanis, Lions Club, etc. These groups are always looking for a program.
15. Do as many mall shows or county fairs as you can in your county and neighboring counties.
16. Have a food/can drive to benefit the families in your area, or collect teddy bears for the children traumatized in auto accidents and give them to the EMS, fire, or sheriff department. Make sure the local paper runs a photo of the donation in the paper.

These are some great suggestions, and look! We already do a bunch of them. To begin with, items 3,5,8,10 and 11 can be checked off. Those are done deals. Item 2 is something that all members do simply because HSS is a friendly bunch. The idea of establishing a Public Relations position in our executive council is really good, because the person in that position could implement the remaining suggestions. Do we have anyone in the club that has public relations experience? Also do we have anyone that tosses their AMA Model Aviation magazines after a quick review? Those copies could go to the Costa Mesa public library. Contact the editor if you have some ideas.

Beyond what is suggested by the Sarasota Radio Control Squadron, HSS also works with the Costa Mesa City Council, the Costa Mesa Parks and Recreation Department, and we participate in Friends of the Park activities. As mentioned previously in this newsletter, it is recommended that we join the Costa Mesa Chamber of Commerce.

Flight School

The following article was first published on the Charles River RC Club internet site which is the home of a number of highly qualified modelers such as Dr. Mark Drela, and in this case, Dr Dick Williamson of MIT. He published this article in September 1998 and updated it in March 2000. The site has a number of great articles and free design plans, www.charlesriverrc.org/articles/design .



Some Simple Physics and Dimensions for High Starts

The following table is a reproduction of that prepared by Rich Hollyday (www.hollyday.com/rubberdata.htm), and generally confirmed by Jeff Reid, with the inclusion of the weight of a typical glider suited to a particular tubing size. Also two Pinnacle brand high starts are included. In each case, the peak tension (assumed to be at 300% elongation) is 5 times the nominal weight of the glider. Warning: The typical descriptions for different sizes of tubing vary from one high start supplier to another.

High Start Type (or application)

Tubing Characteristic	Hand Launch	Two Meter	Pinnacle* Standard	Pinnacle* Type L	Heavy Duty
Inside Diameter (in.)	1/16	1/8	5/16	1/4	1/8
Outside Diameter (in.)	3/16	1/4	7/16	7/16	7/16
Wall Thickness (in)	1/16	1/16	1/16	3/32	5/32
Cross-section Area (sq. in.)	0.024	0.037	0.074	0.100	0.138
Tension-3 x elongation (lb)	4.2	6.5	13	17.5	24
Nominal Glider Weight (oz)	13	21	41	55	77

* Pinnacle is the brand of high starts carried by North East Sailplanes www.nesail.com .

The tension per unit area at 4:1 stretch or 300% elongation (e.g., a 100-foot length of tubing stretched by 300 feet to a total of 400 feet) is assumed to be the same (175 lbs. per sq. in.) for all sizes of tubing meaning that they are all stressed the same amount. A point to note is that the important measure is the cross-sectional area of the tubing (unstretched), not the diameter or the wall thickness separately. In order to know if a particular ' high start matches your application, you need to know (or calculate) the cross-sectional area. At 300% elongation, the tension is 5 times the weight of the glider in all cases listed in the table. This gives a robust launch. For reference, I launch my 26-oz. Dove with 10 lbs. of tension or 6.1 times its weight. It really zooms up! My 36-oz. Spirit is also launched with 10 lbs. of peak tension, 4.4 times its weight. If you are a little aggressive, the tubing can be stretched to give some more launch tension and a higher launch. However beyond 300% elongation, most latex tubing gets stiff and provides little added launch height.

Having picked the appropriate tubing size, the next step is to choose the length. The height to which a glider can be launched is limited only by the size of your field and your pocket book. A typical rule of thumb is to choose a length of rubber that is 13% of the length of the field. Attach to this a length of tow line which is about 45% of the length of the field. For this choice, the length of tow line is about 3.5 times the length of the rubber. This is a good compromise between dimensions appropriate for launching in still air and in a wind. For still air, you want more rubber and less tow line. The opposite is true for launching in a wind.

Some Additional Physics - (probably more than you wanted to know):

The basic physics says that the potential energy gained in rising to launch height is no more (in still air) than the energy stored in the rubber. This energy is given by:

$$(\text{average tension}) \times (\text{distance that the rubber is pulled back})$$

Tension data from Jeff Reid and Rich Hollyday show that the tension rises steeply at small elongations and then rises more slowly out to about 300% elongation. Beyond 300% elongation, the force may begin to rise faster as the rubber gets stretched beyond its recommended range of use.



Flight School (Continued)

The force is definitely not linear as would be the case for a simple Hooke's Law material. For 300% elongation, the average of the two data sets predicts that the stored energy is given by

$$0.64 \times (\text{peak tension}) \times (\text{distance that the rubber is pulled back})$$

If we assume that peak tension = 5W, where W is the weight of the plane, then the stored energy is given by

$$3.2 \times W \times (\text{distance that the rubber is pulled back})$$

This energy must be degraded by some efficiency factor to estimate the energy converted to launch height. The energy at launch height (if we ignore the kinetic energy of the glider) is given by

$$W \times (\text{launch height})$$

Note: If we give the glider a good toss at launch time, the extra kinetic energy at the start of the launch will be about the same as that at the end of the launch. Combining these equations yields the simple relation (for still air):

$$\text{launch height} = 3.2 \times (\text{efficiency factor}) \times (\text{distance that the rubber is pulled back})$$

At 300% elongation, the rubber is pulled back by 3 x L where L is the unstretched length of the rubber. This yields the simple relation:

$$\text{launch height} = 9.6 \times (\text{efficiency factor}) \times (\text{unstretched length of the rubber})$$

In practice, launch height in still air (with a peak tension around 5W) is about four times the unstretched length of the rubber. This implies that the efficiency factor is around 40%, a not unreasonable value. Most of the rest of the energy is lost to air drag on the plane and tow line as well as to hysteresis in the rubber. Gliders designed for high efficiency and low drag at high speed may yield a higher efficiency factor and higher launch.

These energy considerations alone would imply that to achieve maximum launch height, you want the longest piece of tubing that will fit into your field when stretched out. However, some tow line must be added to the rubber for several reasons. The most important reason is that you don't want the rubber pulling down on the glider at any time during the launch (except for a possible zoom launch which usually isn't very effective off a high start). Since the rubber is capable of storing enough energy to launch the glider to about four times the unstretched length of the rubber, you want a towline that is at least three times as long as the rubber. If you allow for the bowing of the line due to air drag and for release some distance before the glider gets over the stake, then the tow line should be closer to four times the length of the rubber. This shorter rubber has some side benefits including the fact that less of the heavy rubber is being pulled into the air and the impact on your pocketbook is reduced.

If you launch into a head wind, the kite action of the glider in the wind will lift the glider considerably higher than the height obtained in still air. With a head wind, a longer towline and shorter rubber are desirable.

Dr. Richard C. Williamson,
Phone: 781-981-7857 Room C-317
FAX: 781-981-0122
Lincoln Laboratory



Adopt-A-School Status Report for March 2004

As Delivered at the 6 April 2004 HSS Meeting

Funds provided by the AMA are being used to repair some of the donated equipment. Two Futaba and one Airtronics transmitters have new batteries, which now make them operational. A donated Sport Cub electric powered plane is now operational with the addition of a new speed control and a flight battery. The Paragon 2 meter glider needed a receiver battery pack.

The classes at Fulton Middle School in Fountain Valley have now been concluded. Seven class lessons have been completed and those students that have developed significant interest now attend flying classes on Saturdays at Fairview Park. The follow on classes at Mesudo Middle School did not materialize but are being planned for the fall semester.

The Thursday classes at the Boys and Girls Club of Huntington Valley are continuing, but a two-week vacation break will interrupt flying in mid April.

Dan Monahan, Branch Director for the Boys and Girls Club of Costa Mesa, Westside Branch, missed the meeting at the Boys and Girls Club of Huntington Valley. We will reschedule a planning meeting in the next few weeks so as to introduce our Adopt-A-School flying classes at his branch. They are located at 661 Hamilton St. Costa Mesa CA 92627. We particularly want to offer our classes in the Costa Mesa area since that is the city that allows us to fly at Fairview.

Another area of public service is being considered. Most cities have a Community Services Office that provides classes to children and adults at the various recreational and community centers. These weekly classes are up to 8 weeks in length and cost the participant anywhere from \$20 to \$100 per series. Topics include arts and crafts, dance, exercise, and special interests, and are offered seasonally. It is proposed that HSS provide a series of classes in radio controlled model aviation for adults and older children, the same as our Adopt-A-School program. For the City of Costa Mesa, the manager of instructional classes for the Recreation Division is Rob Waite. He requires a class proposal by April 29, 2004 for the fall season, and is sending his requirements outline. Unfortunately summer has been planned already, so we would not be able to offer the classes this summer. The proposal is then submitted to the Recreation Department for approval. This approach seems like a good method to provide community services to Costa Mesa specifically, and to reach a more mature audience that could bring growth to HSS.

Editors note: The above paragraph was presented at the April meeting but received little support. The concept was judged as being too difficult. No further effort will be expended in this direction.

Donations to HSS Adopt-A-School Program

In order to run the RealFlight G2 Simulator which we intend to purchase, a personal computer is needed. If any one has an old PC that is not being used, and it meets the following requirements, we would be delighted to take it off your hands.

Minimum Requirements: Intel Pentium 300 MHz, Windows 95/98/2000/ME, DirectX 8.0 compatible video and sound card, 3D accelerated video card with 8 MB RAM, 32 MB RAM, 500 MB hard drive space, 4X CD-ROM drive, 15 pin game port, 15 inch monitor.

Preferred Requirements: Pentium 600 MHz, 3D accelerated video card with 16 MB (or more) RAM, 64 MB RAM (or more), USB interface, 17 inch monitor.

This system would be primarily for school children, but will also (in the near future) be made available to adult flying students, and club members. The components need to be in working condition. We can't afford to fix it.



Adopt-A-School Status Report (Continued)

We have a donation of a complete Airtronics Aquila Sailplane kit (99" span) that we would like to sell. It is a classic, and commands over \$100 on E-Bay. This kit is in perfect shape with all hardware, canopy, wood and plans. Price is \$100. Club members get first chance. Contact Fred Hesse (Last page for details).

We truly appreciate these donations, and are now challenged to bring our students up with the capability to fly these magnificent planes. Thank you all.

Used Equipment for Adopt-A-School

Anyone wishing to sell used radio or aircraft that are too valuable to give away should contact Fred Hesse (Adopt-A-School instructor). We have a steady market of young students that would appreciate purchasing used planes and equipment for a reasonable price.

Almost 30 Years of HSS Newsletter Archives

These archives are open to all members. Copies can be made upon request, or issues may be checked out for temporary use. If you have any of the missing issues, contact Fred Hesse (information on page 12).

1964 through 1974: All issues missing.

1994: Nov missing.

1999: Dec missing.

Plane Rap Classified Ads

Planes for sale: Contact Rudy Calvo AMA 97707, 24 Summerwind, Irvine, CA 92614 Phone (949)786-9783.

#1. Elipsoid electric glider. 110 inch span, rudder, elevator, ailerons. Receiver and servos in place. Flown several times. Excellent shape. Red transparent wing and tail feathers. Install your own motor (was a Phasor 15-4) or add nose ballast for slope or hi-start. Asking \$400 OBO.

#2. XL3200 electric glider, 3.2 meter span, rudder, elevator, ailerons, flaps. Receiver and servos in place. Flown several times. Excellent shape. Red transparent wing and tail feathers. Install your own motor (was a Phasor 30-3) or add nose ballast for slope or hi-start. Asking \$550 OBO.

#3. Great Planes Spirit Elite electric glider for Astrflight 020 planetary motor or equal, rudder, elevator, ailerons, flaps. All servos in place. Factory white fiberglass fuselage. Multi-color wing and tail feathers. Looks great. Need motor, BEC, battery, receiver. Never flown. Add motor or add nose ballast for slope or winch.

**OCMA RC SWAPMEET**

Saturday, May 1, 2004

Start at 7:00 a.m. - end around 3:00 p.m.

**NO PARTICIPANT OR SPECTATOR WILL BE ADMITTED
WITHOUT AN INVITATION**

**Invitation available from the OCMA web site
(www.flyocma.com)**



HSS Sponsors

The following companies are the proud sponsors of Harbor Soaring Society. They give us special offers, and make contributions to our Adopt-A-School program. In return, please support them, and mention that you saw them advertised in the HSS Plane Rap newsletter.

Wireless Video Cameras.com is a recent sponsor who has some neat airborne video systems designed specifically for radio controlled planes. Check out their products at www.wirelessvideocameras.com .

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Hours:
 Mon. - Fri. 10:00 - 8:00
 Sat. 10:00 - 6:00
 Sun. 10:00 - 5:00

As a courtesy to HSS members, 10% will be taken off regularly priced items. Special price adjustments will be made on sale items. Mention HSS club affiliation prior to ring up.

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 (949) 646-3603
 E-mail
 tog4rc@pacbell.net

H.S.S. ELECTRIC FUN FLY





SUNDAY MAY 23rd, 2004 8:30 am till 4:30pm
HSS Flying Field at Fairview Park Costa Mesa, CA

EVENTS

Balloon Bust, Limbo, Spot Landing, Slow Stick pylon races, stock, and open. Park flyer combat with streamers. Plus scale, aerobatic, and 3D demo flying!!

OVER THE EDGE R.E.S. CONTEST




Saturday June 19, 2004
9:00am to 2:00pm
HSS Flying Field Fairview Park.
Costa Mesa



Hobby People®

DISCOUNT HOBBY STORES

Sale

MONEY SAVING COUPONS - USE BEFORE 6/20/04

<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; font-weight: bold; color: red;">Hobby People. CLUB COUPON</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> <p>Sport Flyers No. 160502</p> </div> <div style="text-align: center;"> <p>Tattler for \$109.99</p> </div> <div style="text-align: right;"> <p style="color: red; font-weight: bold;">SAVE \$20.00</p> </div> </div> <p style="font-size: 0.8em; margin-top: 5px;">ONE COUPON PER CUSTOMER. OFFER EXPIRES June 20, 2003.</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; font-weight: bold; color: red;">Hobby People. CLUB COUPON</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> <p>Sport Flyers No. 160501</p> </div> <div style="text-align: center;"> <p>Aero-Phibian for \$129.99</p> </div> <div style="text-align: right;"> <p style="color: red; font-weight: bold;">SAVE \$30.00</p> </div> </div> <p style="font-size: 0.8em; margin-top: 5px;">ONE COUPON PER CUSTOMER. OFFER EXPIRES June 20, 2003.</p> </div>	
<p style="font-weight: bold; color: red;">Innovative Products</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center; font-weight: bold; color: red;">Hobby People. CLUB COUPON</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> <p>Sport Flyers No. 160515</p> </div> <div style="text-align: center;"> <p>Timeless flyer for \$99.99</p> </div> <div style="text-align: right;"> <p style="color: red; font-weight: bold;">SAVE \$20.00</p> </div> </div> <p style="font-size: 0.8em; margin-top: 5px;">ONE COUPON PER CUSTOMER. OFFER EXPIRES June 20, 2003.</p> </div>	<p style="font-weight: bold; color: red;">Extreme low prices</p>	
<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; font-weight: bold; color: red;">Hobby People. CLUB COUPON</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> <p>Sport Flyers No. 160502</p> </div> <div style="text-align: center;"> <p>Float set with Gear for \$39.99</p> </div> <div style="text-align: right;"> <p style="color: red; font-weight: bold;">SAVE \$10.00</p> </div> </div> <p style="font-size: 0.8em; margin-top: 5px;">ONE COUPON PER CUSTOMER. OFFER EXPIRES June 20, 2003.</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; font-weight: bold; color: red;">Hobby People. CLUB COUPON</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> <p>Sport Flyers No. 161565</p> </div> <div style="text-align: center;"> <p>480Motor with in-line gearbox and folding prop For \$49.99</p> </div> <div style="text-align: right;"> <p style="color: red; font-weight: bold;">SAVE \$20.00</p> </div> </div> <p style="font-size: 0.8em; margin-top: 5px;">ONE COUPON PER CUSTOMER. OFFER EXPIRES June 20, 2003.</p> </div>	

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HARBOR SOARING SOCIETY OFFICERS FOR 2004

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Contest Coordinator	Tom Copp	(949) 645-7032	tom@f3x.com
Assist. C/C	Jim Hanson	(949) 646-3603	tog4rc@pacbell.net
Editor	Fred Hesse	(714) 963-5838	fhesse@socal.rr.com
Publisher	Mike Gaczowski	(949) 582-9390	ppagano@concentric.net
Winch Engineer	Karl Hawley	(949) 574-9379	www.1hss.org
Webmaster	Steve Hendry	(714) 996-6183	4hendry@adelphia.net
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