

# Plane RAP

## IN THIS ISSUE

- Presidential Lounge
- Nicks Views
- Cyber Central
- Contest Results
- Wing Tidbits

Feb 1999

Harbor Soaring Society

AMA Charter #128

Vol XXXVI Issue 2

## TwinStar Plus



Joe Rodriguez

Club Information

1999 Officers:

President

Les Kenyon -kenyonles@aol.com  
404-3832

Vice President

Karl Hawley  
645-4722

Secretary

Steve Schupak  
548-4647 -shipwreck@compulink.net

Treasurer

Larry Reed lreed@mti.com  
642-6830

Contest Director

Ross Thomas  
638-0705

Editor

Tom Vincent  
792-0125 -tvom@access1.net

Training Coordinator

Roger Saville  
549-7976 -rogerhss@juno.com

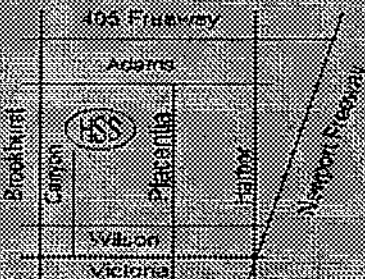
Winch Coordinator

Dick Pantzar  
645-4722

General Director

Roger MacGregor  
642-6830

Flying Site



Cover Page - Joey shows off his new 4 engine TwinStar Plus. The plane certainly performed as expected at the field. Joey mentioned that the additional speed was worth the effort in building it.



The Kenyon Chronicles

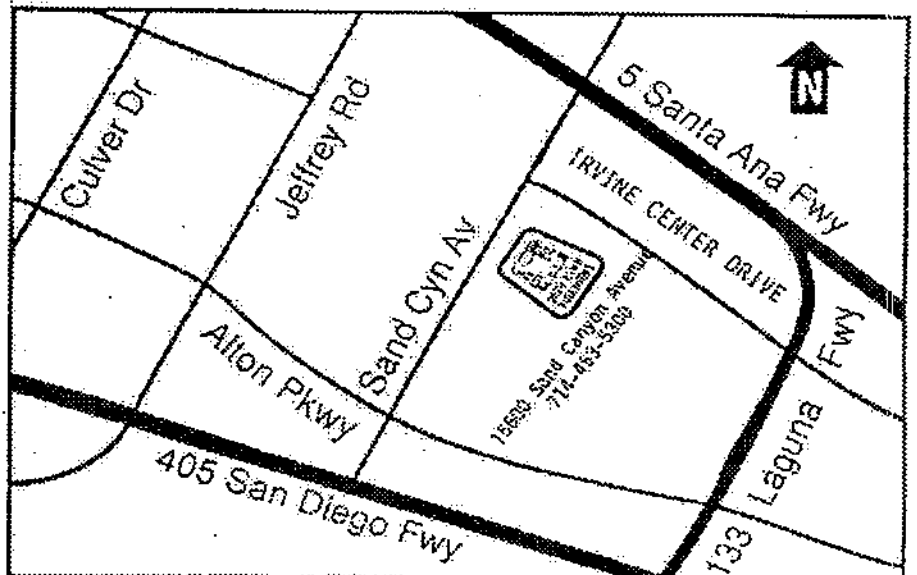
A Message from the Pres. -

Les Kenyon

Happy New Year to All!

With the New Year underway, so far so good. I'd like to clarify how our monthly meetings will be run. First, these changes are an effort to keep the business of the Board in the Board meetings and not let things carry over into long-winded discussions. Most of us who attend the club meetings come to hear an overview of what's going on, and to then enjoy our monthly guest. Therefore our Board meeting will start at 7pm SHARP and end no later than 7:30pm. The general meeting will start with a brief report from the club officers. Next will be

**Notice: Meeting Tuesday 2-2-99 at the Irvine Water District Office**



## The Kenyon Chronicles Continued

a mention about old business before any new business is discussed. After all this formal stuff is done the meeting will be turned over to the VP for his guest presentation.

Board meetings are open to all who wish to sit in, yet we follow an agenda that won't permit anyone but Board members to participate, unless previously placed on the agenda. During old business anyone from the floor can be recognized to bring up old business. **Old business, by parliamentary definition, is a motion that was previously brought before the club and was tabled or sent to a committee. New business, by parliamentary definition, is a motion for the club to vote on something.** The motion **needs** a second, once a second for the motion is received, discussion of the motion takes place. The person entering the motion will be the last to talk on it. **At anytime during the discussion a person who is recognized by the chair can "call for the Question",** At which time the Pres., Me, shall ask for a vote to close discussion. If the motion carries, discussion is closed and we vote on the motion. If the vote doesn't carry, we continue to discuss. **Motions can be tabled, or sent to a committee, and these are brought up by anyone recognized by the chair.** This simple Parliamentary procedure should keep things running fast smooth and clean, thus allowing for more meeting time and less BS. "Roberts Rules of Order", has further in-depth explanation of parliamentary rules for those who may be interested.

Until next month- Good flying

*Les*

*TwinStars TwinStars  
TwinStars TwinStars*

**SUN Feb 21<sup>st</sup>.**  
**9 AM at HSS**

*This will be a fun fly for the twin star enthusiast*

*We will have a multi task course scored by total elapsed time. The tasks will include a pylon run, a touch and go in a circle, shoot the limbo, a few flight maneuvers that require any form of inverted flight, maybe a thermal duration round and a carrier ribbon pick up. Could be more if we can figure out a few more tasks. Pilot mtg. at 9am sharp*

### THE NEW PRESIDENTIAL RESEARCH CENTER



**COME ON IN! - SEATS AVAILABLE NOW**



# Nick's Views

Nick Buzolich

In the R.C. soaring scene, most flyers are Sportsman or Advanced. Next, there are a good number of Expert flyers followed by a much smaller contingent of Master's as dictated by the achievement standards of the A.M.A. and L.S.F. Then finally, we have a small, elite group that out perform and shine brighter than all the rest. They have participated in national championships and meet the qualifications in being part of the U.S.A. Soaring team at the world championships.

In "Nick's View", these individuals belong to a "World Class Group!"

I've come across some "original art labels" that say "World Greatest Flyer". These labels were made shortly after Lindbergh's historic flight across the Atlantic in the "Spirit of St. Louis." I am planning to present these to some flyers, who in "My View" are deserving recipients.

I would be honored if those selected would accept them in the spirit they are being given, as an appreciation of talents displayed and support for the improvement of the soaring scene.

The best of lift always,

*Nick*

"heartstrings of history". These lithographs were used as signs, labels, posters & other promotional ways. Some of the illustrations were chosen to commemorate:

- Patriotism & National Pride
- Transportation
- Old West
- Native Americans
- Mining
- America at Work & Play
- Sentimentality
- Youthful Innocence
- Man's Best Friend
- Love & Courtship
- Victorian Society
- Humor & Whimsy
- Seasons

## Nick Presents First Two Awards



Larry Jolly Accepts Award



Bart Clark Accepts Award



Nick's Awards

### History of the Original Art Label

Decades ago, a label was a company's main calling card, something to "WOW" the eye. These colorful remnants have become prime collectibles because of their tie to the

*Editors Note: Until Nick approached me about this form of art, I was completely unaware of it's existence. This practice originated some years ago for decorating everything from walls to cigar boxes. There is quite a following with folks buying and selling this art (similar to the craze with baseball cards.) You can see some of this art work on the Internet by opening your favorite search engine like Yahoo and entering "cigar art". See for yourself!*



# Winch Corner

*Dick Pantzar*

Well, we survived our first contest of the year. I appreciate all of you who helped with the winch duties. Since we can't recharge the winch batteries in our shed, we need volunteers who would be interested in taking a battery home to be charged. If you think you can help out, please see me.

**Until next month, I hope my winches get you off.**



## KARL THE VICE-PRESIDENT

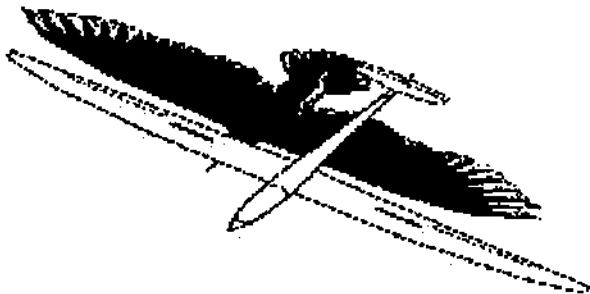
Karl V. Hawley

I've been having allot of fun flying my TwinStar electric from Multiplex. You can get yours at Gyro Hobbies for less than \$80 bucks. Also, they are offering us a 10% discount if you mention that you belong to Harbor Soaring. By the way, if you get a TwinStar let me show you how not to apply spray paint.

For this months meeting I have Jerry Bridgeman speaking about electrics. Jerry is a USA electric champ and competes in the Worlds for the USA team. Jerry has this subject wired so make it a point to be at our monthly meeting.

As usual, they know a hell of a lot more about flying than I do.

**And that's all I have to say about!**



## Cyber Central

The internet is a great source for information. You name it and someone, someplace has probably written about it. Of course you need to use some common sense when determining the quality and accuracy of the material that you are obtaining. There is lot's of trash on the internet so be careful of your source.

There are some interesting and fun RC Soaring sites available on the net for your viewing. In future additions of this newsletter, I will try to include some internet addresses that seem to be of importance to our club. (NOTE: If you come across some sites during your travels while searching the web, please email me with their addresses so I can publish them for everyone to enjoy.)

Here is Manny Tau's yellow pages for soaring information. Lot's of links to other soaring sites. Check it out .

<http://www.ocpapsych.com/yelloww.htm>

### SOARING ON THE INTERNET BY STEVE HENDRY

So you've over heard a couple of really neat people talking about what Joe Wurts or Daryl Perkins or other interesting stuff that was said on the Radio Controlled Soaring Exchange? RCSE is a Re-mailer on the Net with 1,233 subscribers as of today. The subscribers consist of glider pilots from around the world. Subscribing will get you 40-80 E-mails a day.

To get on, send your E-mail to [soaring@airage.com](mailto:soaring@airage.com)

Type nothing in the subject and type Subscribe in the body of the E.-mail. RCSE is using SPAM resistant software so you will receive a verifier with verification numbers in the body asking if you really want to be on this re-mailer. Click reply and send it back to soaring-request. This program doesn't like html so send in text only. The kids using Microsoft Internet Explorer need to shut off the html. To get out of RCSE do the same only use Unsubscribe in the body instead of Subscribe.

Our Harbor club also has a web page. It's not to sophisticated but it does alert the rest of the cyber community of our existence. Our home page is <http://www.rcsoaring.com/hss/hss.htm>

Check it out !

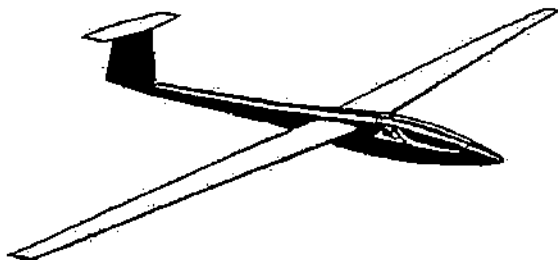
## HSS Contest Results

### OPEN

M Larry Jolly	1000 1M
E John Roe	908 1E
M Steve Hendry	900
E Tom Vincent	898 2E
E Chris Jolly	816 3E
E Ben Clerx	793
S Karl Hawley	787 1A
E Ross Thomas	775
E Tom Copp	739
E Mark Navarre	723
M Joe Rodriguez	722
E John Brown	681
E Roger Saville	671
A Chris Kenyon	671 2A
E Roger MacGregor	583
S Jonathan Alpert	465 1S
E Dan Fink	181
S Scott Southall	0

### CLASSIC

Larry Jolly	1000 1st
Roger MacGregor	978 2nd
Ross Thomas	886 3rd
Gordon Paulsen	884
Larry Enger	751
Roger Saville	746
Bob Sliff	744
Larry Reed	666
Dick Pantzar	628
Will Conrad	604
Chris Adamouck	590
Tom Harbin	470



## January Contest



### Contest - Sun. Jan 10, 1999

Are we lucky to be in Southern California or what? As most of the country is freezing under the wrath of Winter, SPF 30 was the call of the day. This unusually warm and dry Winter so far has allowed HSS to kick off their 1999 contest season on time. Last year saw intense rains because of "El Nino". Now, "La Nina" is in control posting very dry conditions. The contest format was 3 rounds of 10 minutes. The beauty of this format was that the weather conditions did not support the flight times (this contest became a flying contest and landings were not as important.) Even though 70 degrees sounds warm enough to kick off some good thermals, only a few 10 minute flights were obtainable. The density of the air seemed less than usual and those all important buoyant pockets of air were far and few between. Overall, the contest format was perfect for that day.

## GYRO HOBBIES

Specializing in Radio-Controlled  
Plastics & Trains

(949) 583-1775

(714) 378-8924

23052 Lake Forest  
Unit C-2  
Laguna Hills, CA 92653  
(Lake Forest & Moulton)

17431 Brookhurst  
Unit 107  
Fountain Valley, CA 92708  
(Brookhurst & Slater)

COME ON IN AND GET YOUR 10% DISCOUNT.

# WING TIDBITS

[RCSE] Fixing Servo Chatter

from Baltimore Area Soaring Society News December 1997

By Tom Hoopes

Do you get weak in the knees when you are about to launch your dream creation and see one or more of the surfaces glitching wildly? Have you had to resort to having someone else launch your plane because the glitching seems worse when you are next to the plane? With the advent of micro servos, it has become increasingly more popular to embed servos in the wing or tail to eliminate long or complicated mechanical linkages. High performance designs demand such configurations which may use up to four servos in the wing alone.

Electrical connections from the receiver to a wing or boom mounted servo can conveniently replace equivalent mechanical linkages, but a new set of problems may appear in the form of electrical noise. To understand this phenomenon, you must first know a little theory on servo operation. Modern servos require three wires for operation which are: power (+4.8 volts), ground, and signal. Although the power and ground leads are self-explanatory, the signal lead may not be as evident. All servos, whether connected to AM, FM, or PCM receivers, are positioned by issuing a positive pulse from the receiver to the servo whose width determines the servo arm/wheel position. Typically a pulse width of 1.5 milliseconds (that's 1-1/2 thousandth of a second) will center the servo, a pulse width of 0.8 milliseconds will rotate the servo to one extreme, and a pulse of 2.2 milliseconds will rotate the servo to the other extreme. The resolution or granularity of servo movement can be dependent on the make and type of servo. Servos also have a characteristic called "dead band" which is the amount the width of the pulse may change before the servo will actually try to move to the new position. It is desirable to have a certain amount of dead band or else the servo will always be attempting to align itself with very minute changes in the pulse width which can result in buzzing, chattering, and higher than normal current consumption.

When servos are located in the wing or tail boom, they must be located further away from the receiver, which generally means 12" to 36" extensions. These extensions seem innocent and simple enough that little thought is ever devoted to them, but these extensions can be the source of servo jitters and potential loss of control. Extension wires can cause two problems: first, the wires must be of sufficient gauge to carry adequate current to the servos especially nearing a stalled condition, and second, the extensions act as a crude antenna that can pick up RF (the radio frequency signal that is emanating from your antenna, or the pilot's transmitter that may be next to you) and feed it into your servos. Both of these situations can cause servo glitches and jitters.

Now that we have identified the problem, how do we solve it? Let's attack the first problem. How much current will a servo draw when stalled? Well, that depends again on the servo, but it can exceed 100 milliamps. I would recommend using 26 gauge wire as a minimum with 24 gauge preferred. For reasons that are too lengthy to explain in this article, another referable quality to have in your extension cable is a continuous twist throughout the cable length. This can be done quite easily. Cut three wires approximately 1-1/2 times longer that what you require. Wrap a piece of tape securely around each end of the three wires. Anchor one taped end of the three wires and insert the other three ends into the chuck of a variable speed drill. Carefully run the drill until a tight twist is formed in the cable. It is normal for the cable to untwist slightly when it is released. As a reminder, use wire colors that make sense (i.e. red = +4.8, white = signal, and black = ground). This should help avoid a costly wiring mistake.

The solution to the second problem may not be quite as clear. Logically, we need some way of eliminating or filtering out the high frequency RF noise from the signal line, but still allowing the positioning pulse to pass without being altered or else our servo positioning will be destroyed. We can do this by using a passive component - a capacitor. In this application, the capacitor will appear as a direct short or "shunt" to the high frequency noise, but look like an open circuit to the low frequency (remember our 1.5 millisecond pulse?). Not any capacitor will do! It must be of the proper value. A little math and collecting of empirical data (testing different values) indicates that a small monolithic or ceramic disk capacitor of 150pf - .001 uf (pf = picofarad) will do the trick. Solder the capacitor as close to the servo as possible, and connect it from the signal lead to the ground lead. Remember to use heat shrink tubing to avoid short circuits.

I have never had a case of the jitters that I couldn't solve by following the guidelines that I have presented here. Good luck!

Feeding the servo leads through a ferrite bead causes the servo lead to act as a small RF choke at high RF frequencies. In other words, this is another way to attenuate the superimposed RF noise as is done with a capacitor as described above. I believe Kariton sells a set of "clamp on" ferrites. Other sources include Amidon Associates, Digi-Key, J. S. Miller, etc. The capacitors are generally cheaper and easier to acquire. At your closest Radio Shack, look for P/N 272-125 (470pf) or P/N 272-126 (.001uf). They'll run about \$0.25 each. Remember, solder the capacitor as close as possible to the servo.

**MEMBERSHIP APPLICATION 1999,**

*Harbor Soaring Society  
AMA Chartered Club # 128  
P.O. Box 1673  
Costa Mesa, CA 92628  
AMA's Oldest Chartered Soaring Club*

I understand that by applying for membership in the Harbor Soaring Society, I must be a current member of the AMA.

Please Print

NAME \_\_\_\_\_ Home Ph # \_\_\_\_\_

ADDRESS \_\_\_\_\_ Work Ph # \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ Zip \_\_\_\_\_ E-Mail \_\_\_\_\_

AMA # \_\_\_\_\_ (PROOF OF STATUS REQUIRED)

DATE OF BIRTH \_\_\_\_\_ Frequency channels used \_\_\_\_\_

NEW APPLICANTS. (W/Name Tag)--(17 years and older) = \$25.00  
SENIOR MEMBER (Renewal W/O NameTag)(17 years and older) = \$20.00 NEW/RENEWAL (circle one)  
JUNIOR MEMBER \_\_\_\_\_(16 years and under), = \$10.00  
FAMILY MEMBER \_\_\_\_\_(At same address) = \$ 5.00  
Extra HSS Name tag \_\_\_\_\_ = \$5.00

Applicants making application for senior membership between July 1st and October 31st pay a reduced rate of \$10.00. New applicants making application between November 1st and December 31st will pay the annual rate indicated above and such dues will make the new member paid in full for the following year. A signature is required by all Harbor Soaring Society members, agreeing to comply with the current AMA Safety Code and the current HSS General Field Rules and Field Safety Rules

*The undersigned attests that: I will operate my model using only radio control frequencies currently allowed by the FCC. Further, any transmitter that I use at any designated HSS flying field must have a certified R/CMA-AMA gold sticker affixed indicating that it was manufactured or modified for operations at 20 KHz frequency separation. I understand that my failure to comply with the above restrictions will result in nullification of liability coverage for damages caused or claimed*

SIGNATURE: \_\_\_\_\_ DATE \_\_\_\_\_

Total Dues Owed and attached: \$ \_\_\_\_\_

SIGNATURE OF CLUB OFFICER RECEIVING APPLICATION \_\_\_\_\_



The Inland Soaring Society  
presents the

# Inland Empire Soaring Championships

March 21 and 22, 1999  
in Riverside, California



## *Events in Open Class and 2-meter Sailplanes*

Tasks	
Saturday:	Sunday:
3 min. Precision Duration	4 min. Precision Duration
8 min. Modified AMA Triathlon	8 min. Modified Triathlon
10 min. AMA Triathlon	3 min. Precision Bell Curve
3 min. Precision Bell Curve	

Prize Raffle on Sunday. Awards 1-5 Place  
Entry Fee: \$25.00 first entry, \$20.00 second entry.

Contest T-shirt available for \$12.00

*Fly with the ISS in an event with the emphasis on flying!*

## ENTRY FORM

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Class \_\_\_\_\_ Open \_\_\_\_\_ 2 Meter \_\_\_\_\_

(all pilots may enter two classes)

AMA Number \_\_\_\_\_ Frequency \_\_\_\_\_ 2nd \_\_\_\_\_

Amount enclosed: \_\_\_\_\_

Make checks payable to: ISS

Mail entry to: Mike Lee, 619 Coronado Dr., Redlands, CA 92374

Contest Director: Vince Botkin. Info sheet sent on request or entry.

Call (909) 792-8424 for information and details.

## Calendar Of Events

HSS Club Meeting 7:00 Irvine Wtr Dst. Presenter - Jerry Bridgeman (USA Electric Champ)	Tues. Feb 2
CASL Contest in Arizona	Sat Feb 6 - 7
HSS T.D. Contest (10,8,6 min)	Sun Feb 14
TwinStar Contest	Sun Feb 21
HSS Club Meeting 7:00 Irvine Wtr Dst. Presenter - Dave Sanders (Combat Foamies)	Tues. Mar 2
HSS T.D. Contest	Sun Mar 7
SC2 T.D. Contest	Sun Mar 28
HSS Club Meeting 7:00 Irvine Wtr Dst. HSS T.D. Contest	Tues. Apr 6
SC2 T.D. Contest	Sun Apr 11
	Sun Apr 25
HSS T.D. Contest	Sat May 2
HSS Club Meeting 7:00 Irvine Wtr Dst.	Tues. May 4
Mothers Day	Sun May 9
Visalia Classic Contest	Sat May 15-16
SC2 T.D. Contest	Sun May 30
HSS Club Meeting 7:00 Irvine Wtr Dst.	Tues. Jun 1
HSS T.D. Contest	Sun Jun 6
SC2 T.D. Contest	Sun Jun 27

At the time of this publication, the dates listed have not been reviewed by the board. They may change so keep an eye out.

More Dates will be provided once schedules become available.

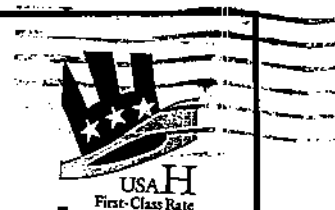
## HSS SPY REPORT



This photo was taken on November 24, 1947 at approximately 12:30PM. Seen in the foreground is Howard Hughes Sr. holding one of the early Spruce Goose prototype models as Howard Jr. takes flight through Long Beach Harbor. Shortly thereafter, the largest aircraft ever built took to the skies. Seventy seconds later the HK-1 flying boat came back down, ending the one and only flight. (An all-together too familiar scenario, right Nick?)

**Harbor Soaring Society**  
**P.O. Box 1673**  
**Costa Mesa, CA 92626**

[www.rcsoaring.com/hss/hss.htm](http://www.rcsoaring.com/hss/hss.htm)



WILL CONRAD  
 9359 SHRIKE AVE  
 FOUNTAIN VALLEY, CA 92708

**Notice: Meeting Tuesday 2-2-99  
 at the Irvine Water District Office.**

**The February HSS monthly contest  
 date is Sunday 2-14-99.  
 10, 8, 6 mins format in that order.**